Appendix A:
Additional Site Information

This page intentionally left blank.

APPENDIX A – ADDITIONAL SITE INFORMATION

This appendix provides an overview of the study site and the individual treatment features that were studied. Greater detail is available in the project Quality Assurance Project Plan (QAPP; King County 2015).

Echo Lake is a small stormwater-fed lake that drains to the larger Lake Ballinger, and is part of the McAleer Creek basin. The Echo Lake drainage basin is 207[1] acres and comprised of seven stormwater conveyance subbasins. Land use in this basin is predominantly urban, with 30% designated as commercial and 40% as residential landuse (City of Shoreline). Over 56% of the basin is impervious surface (HDR 2011). The Aurora Corridor runs north to south within about 350 feet of the western edge of Echo Lake.

Section 1.1.2 of the project QAPP (King County 2015) provides a detailed account of the changes to stormwater infrastructure in the basin, but a brief description is provided here. The basin did not include any targeted water quality treatment until retrofits were implemented by the City of Shoreline. Retrofitting along the Aurora Corridor from N 185th Street to N 192nd Street was initiated in 2011 and completed in 2012. Retrofitting along the Aurora Corridor from N 192nd Street to N 200th Street began in 2014 and was completed in 2016. The retrofit included a number of best management practice (BMP) installations, but the most numerous were the bioretention planter boxes (BPBs) and Filterra®, which were evaluated in this study. The BPBs were installed to treat 1.02 acres in total and the Filterra were designed to treat 1.86 acres in total. A detention tank system was also added to provide flow control to stormwater in route to Echo Lake through the main outfall.

The retrofit included additional changes to the stormwater system that impacted the comparability of pre- and post-retrofit samples collected to assess system-wide stormwater quality (Section 2.2 of the main report). Drainage from a relatively large subbasin (>70 acres), which previously discharged to a separate outfall, was rerouted in December 2014 to the DTS and now discharges through the main outfall starting. Representative sampling was no longer possible at the main outfall after the retrofit and other nearby construction. Instead, samples from the DTS outlet were used in the comparison. This location does not incorporate drainage from a small subbasin (8 acres) that joins the stormwater line to the main outfall after the DTS outlet point. These changes are also documented in the project QAPP (King County 2015).

Figure A-1 is a map of the study site including details about the stormwater system, and the installations included in the study. Figure A-2 illustrates how the installations are connected within the stormwater system. The following pages include descriptions, illustrations, and sampling strategies for the BPBs, Filterra, and DTS.

[1] The basin used to be 215 acres before the most north-western portion of the stormwater system was rerouted to a different basin as part of the retrofit.

This page intentionally left blank.

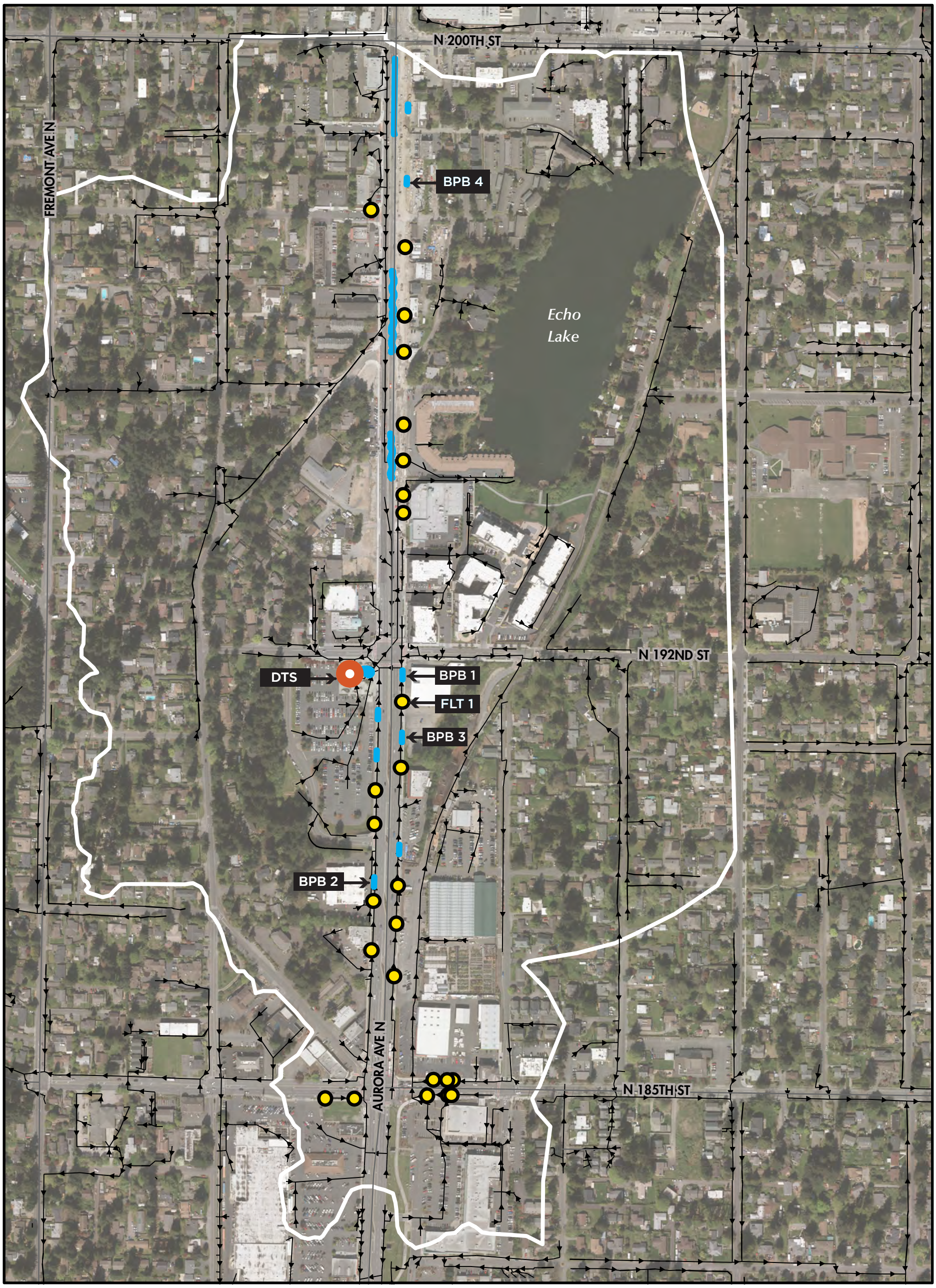


Figure A-1

Current Stormwater Conveyance System in the Echo Lake Drainage Basin

BPB 2 Sampling Location Name

Detention Tank System (DTS)

Filterra (FLT)

Bioretention Planter Box (BPB)

Stormwater System

Basin Boundary

King County

Department of Natural Resources and Parks
Water and Land Resources Division

N

0 200 Feet

November 2017

Note: The information included on this map has been compiled by staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

GIS File: \\dnrp1\projects\wlrd\15032\ShorelineStormwaterMapAerial.mxd 3/12/2015 HK
VC File: 1711_8761L_EchoLkAERIALstormMap.ai

This page intentionally left blank.

Figure A-2

Echo Lake Basin Stormwater Treatment

King County

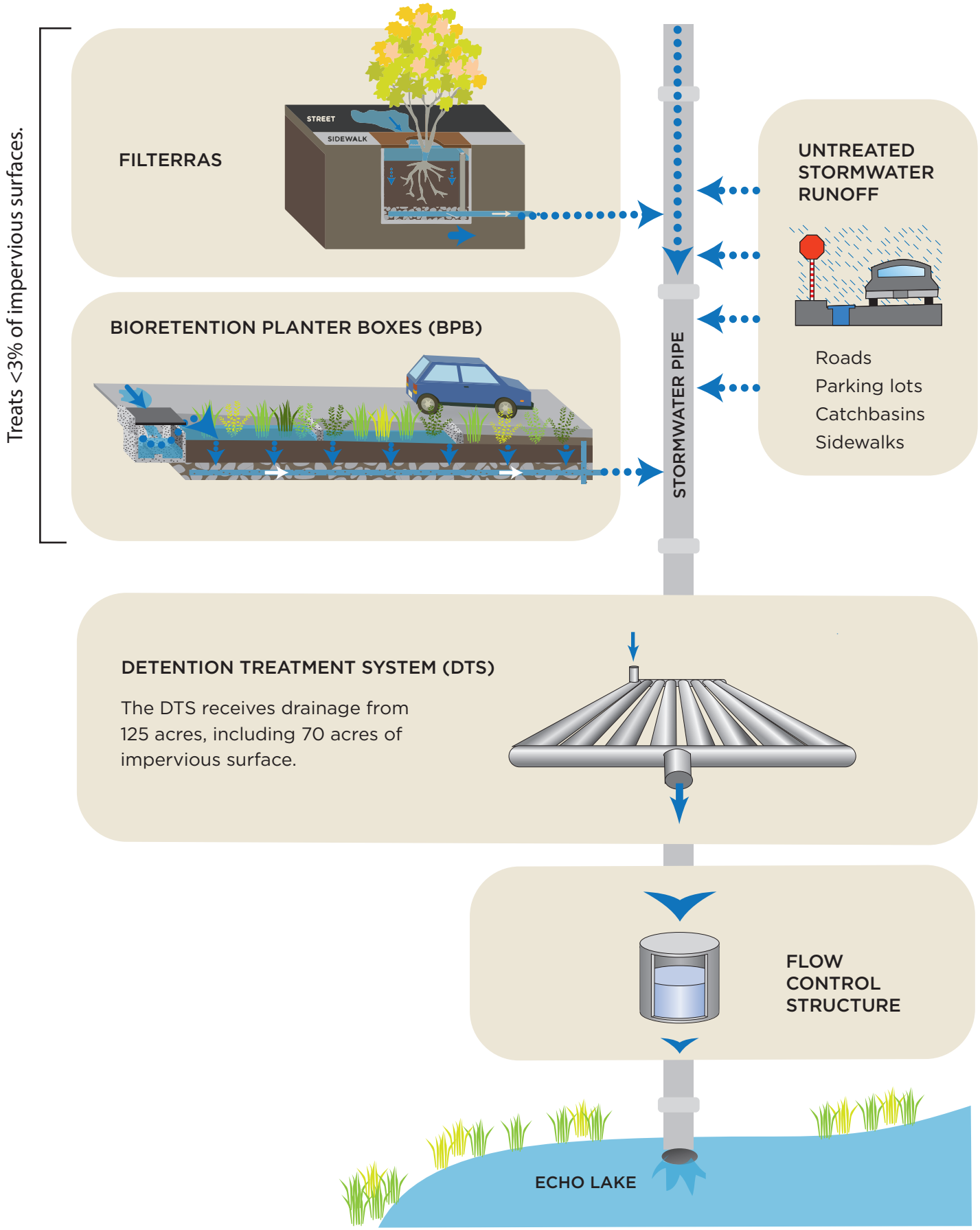


Table A-1. Bioretention planter box design and comparability to Stormwater Management Manual for Western Washington (SWMMWW)

Installation Type	Design Description	2012 SWMMWW Citation	Design Deviation
Bioretention Planter Box	Designed soil mix (40% cedar grove compost, 60% mineral aggregate, by volume), planted with trees, shrubs, and grasses within a vertical walled concrete and cement container. The planter boxes are completely impervious, and include an underdrain. Each feature treats between 0.05 and 0.13 acres. These are designed for enhanced treatment (basic and dissolved metals treatment)	BMP T7.30	No, follows 2005 and 2012 SWMMWW

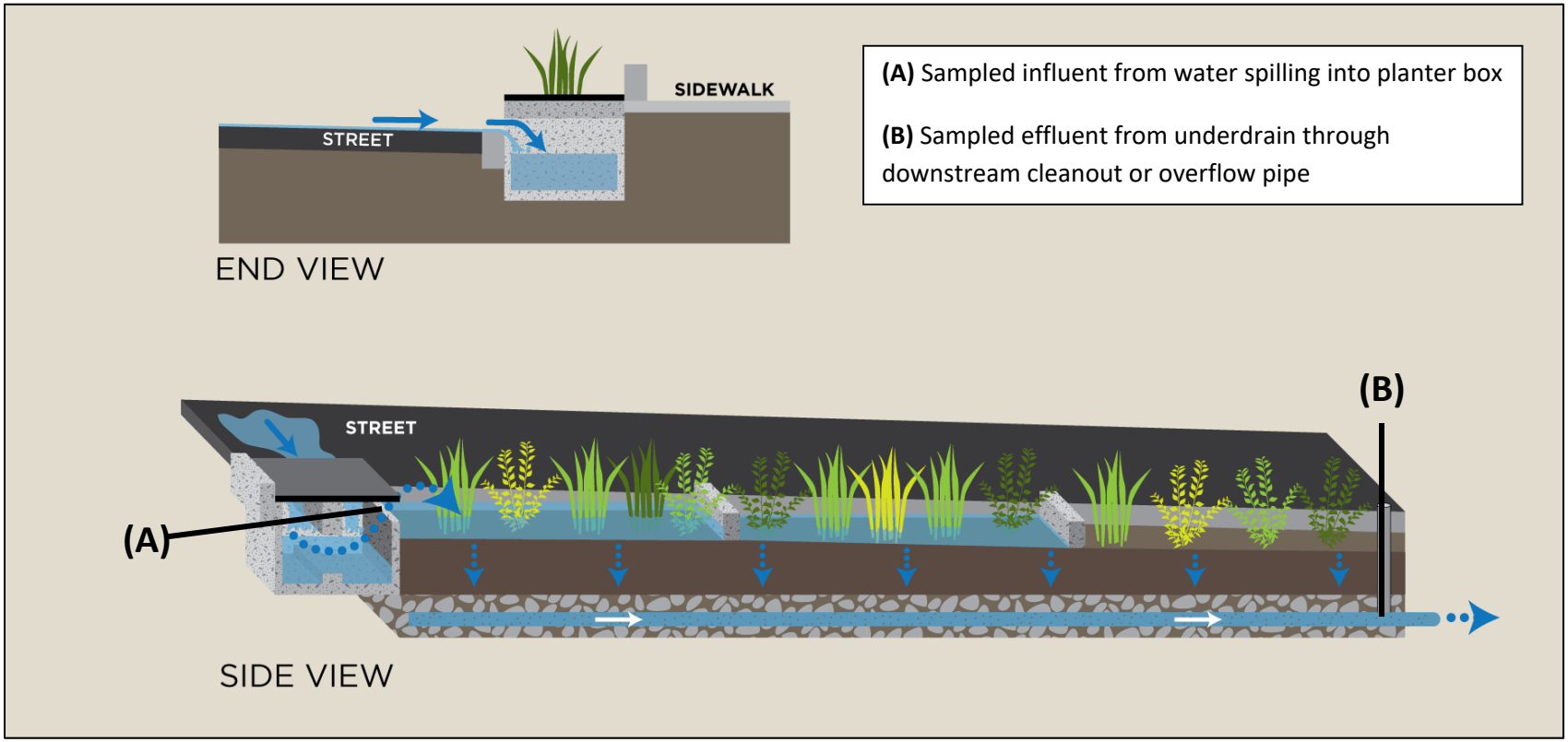


Figure A-3. Bioretention Planter Box Design and Sampling Strategy

Table A-2. Filterra® design and comparability to Stormwater Management Manual for Western Washington (SWMMWW)

Installation Type	Design Description	2012 SWMMWW Citation	Design Deviation
Filterra®	Proprietary soil mix planted with a single tree. Higher infiltration rates than bioretention. Are concrete-lined and underdrained. These are intended for enhanced and phosphorus treatment. Each feature treats between 0.05 and 0.23 acres.	Section 12.5; GULD for Americast Filterra® [1]	No

[1] GULD – general use level designation;http://www.ecy.wa.gov/programs/wq/stormwater/newtech/use_designations/FILTERRAguld.pdf

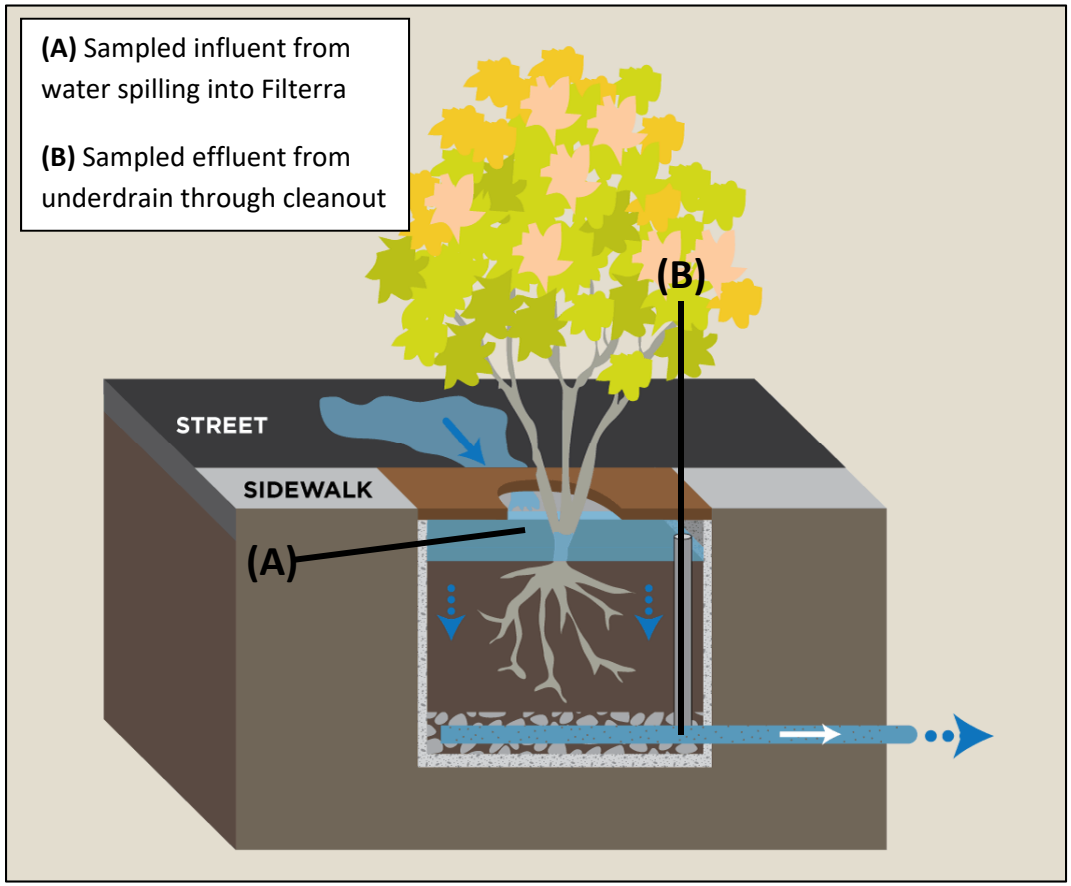


Figure A-4. Filterra Design and Sampling Strategy

Table A-3. Detention tank system design and comparability to Stormwater Management Manual for Western Washington (SWMMWW)

Installation Type	Design Description	2012 SWMMWW Citation	Design Deviation
DTS	Detention tank with a system of eight-foot diameter corrugated metal pipes, for a total length of 350 feet. The total capacity is 17,600 cubic feet. The tank is followed by a multiple orifice restrictor. This system is designed to handle all flow for the drainage basin (125 acres), but will provide flow control for 1.58 acres (total net new impervious surface).	Sections 3.2.2 and 3.2.4	TBD*

The final pages of this appendix include drainage details for the BPBs, Filterra, and DTS, with one page each.

Appendix A References

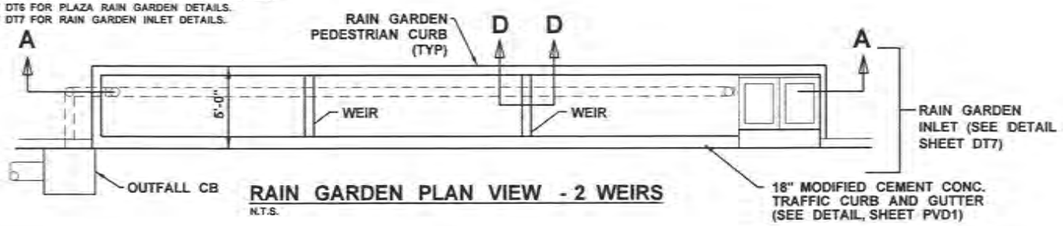
City of Shoreline. Land.gdb.zip. December 11, 2017. http://www.shorelinewa.gov/our-city/maps-gis/download-gis-data.

HDR. 2011. Aurora Corridor Improvement Project: N 185th Street to N 205th Street, Update: N 192nd Street to N 205th Street, Drainage Report. Prepared for the City of Shoreline.

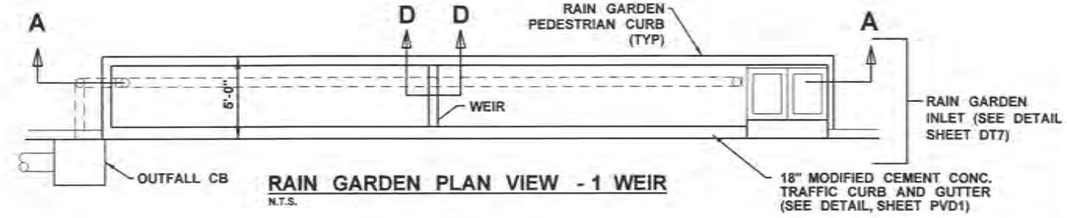
King County. 2015. Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

GENERAL NOTES

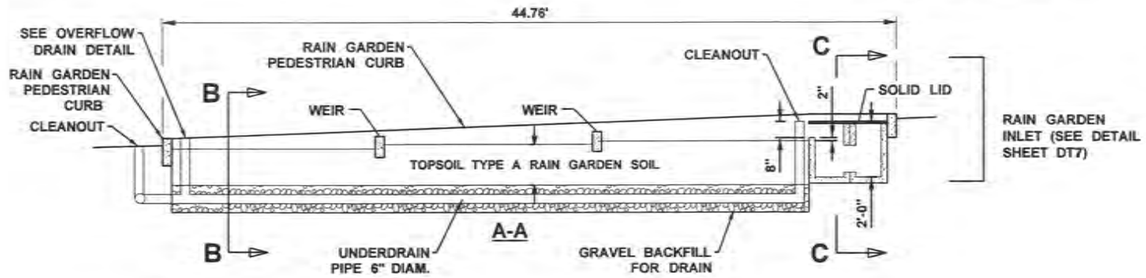
1. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN FEET.
2. SEE SHEET PAVD4 FOR RAIN GARDEN PAY LIMITS AT CONCRETE SIDEWALK.
3. SEE SHEET DT3 FOR RAIN GARDEN OUTLET PIPE PROFILES.
4. SEE SHEET DT6 FOR PLAZA RAIN GARDEN DETAILS.
5. SEE SHEET DT7 FOR RAIN GARDEN INLET DETAILS.



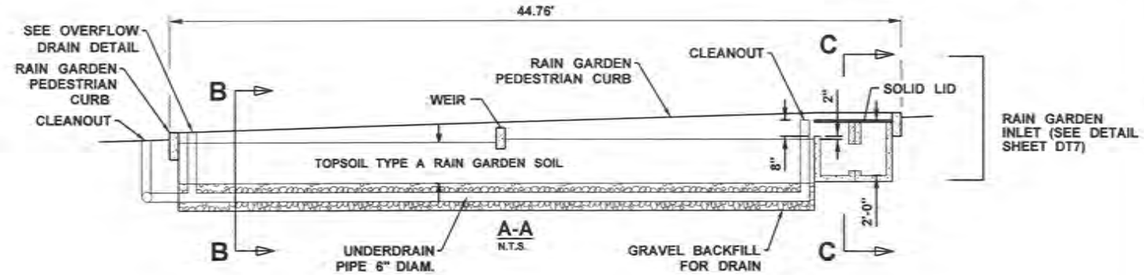
RAIN GARDEN PLAN VIEW - 2 WEIRS
N.T.S.



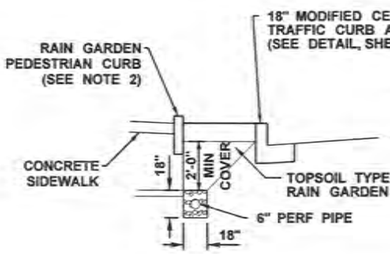
RAIN GARDEN PLAN VIEW - 1 WEIR
N.T.S.



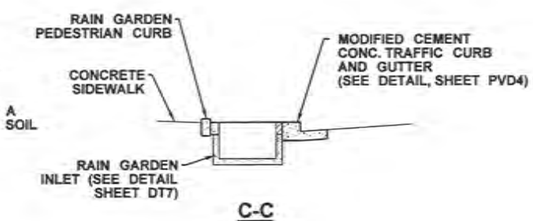
A-A
N.T.S.



A-A
N.T.S.

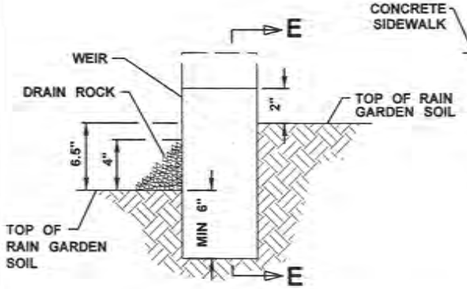


B-B
N.T.S.

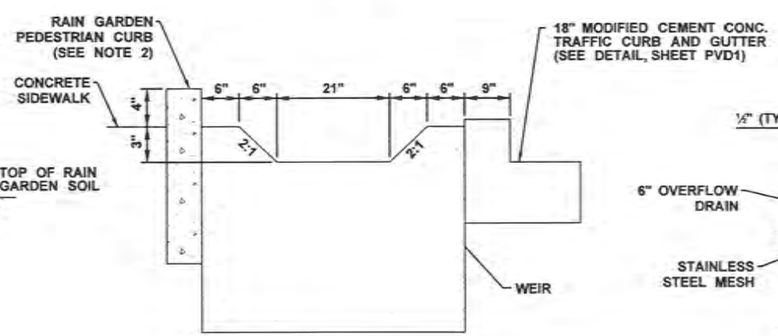


C-C
N.T.S.

STRUCTURE NUMBER	LOCATION	NUMBER OF WEIRS
DR2-21	SH 214+63.86 (45.75' LT)	2
DR2-24	SH 215+89.42 (45.75' RT)	2
DR3-12	SH 219+47.53 (45.75' LT)	2
DR3-13	SH 220+15.75 (45.75' RT)	2
DR3-15	SH 221+01.03 (45.75' LT)	2
DR4-25	SH 222+52.27 (45.75' RT)	1

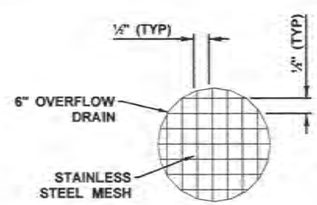


D-D
N.T.S.

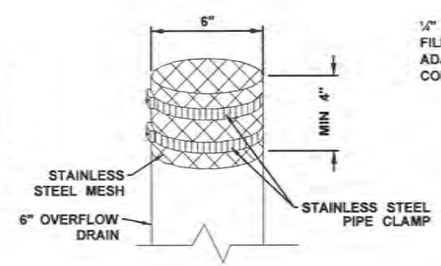


E-E
N.T.S.

RAIN GARDEN WEIR

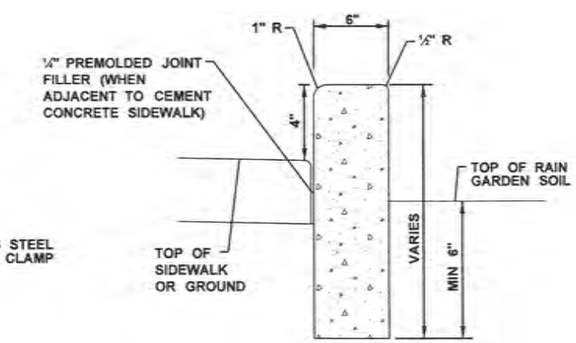


TOP VIEW



SIDE VIEW

OVERFLOW DRAIN
N.T.S.



RAIN GARDEN PEDESTRIAN CURB
N.T.S.

FILE NAME	c:\pwworking\sea\d0379728\124463_DT1a_P3.dgn				REGION NO. 10	STATE WA	FED.AID PROJ.NO.
TIME	2:20:32 PM				JOB NUMBER 124463		
DATE	9/10/2010						
PLOTTED BY	cwilcox						
DESIGNED BY	MJS				CONTRACT NO. CON0050153		LOCATION NO.
ENTERED BY	BRG						
CHECKED BY	LJL						
PROJ. ENGR.	PAF						
REGIONAL ADM.		REVISION	DATE	BY			

MICHAEL STARR LALY, STATE OF WASHINGTON, 44740, REGISTERED PROFESSIONAL ENGINEER
9.15.10
DATE
P.E. STAMP BOX

CITY OF SHORELINE

HDR ENGINEERING INC.

AURORA CORRIDOR IMPROVEMENT PROJECT
N 185TH ST – N 192ND ST

DRAINAGE DETAILS

PLOT1 DT1

SHEET 104 OF 389 SHEETS

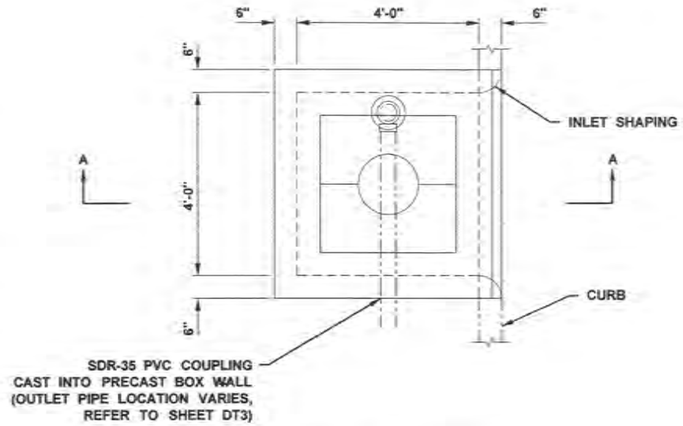
ProjectWise Vault:

CONSTRUCTION NOTES

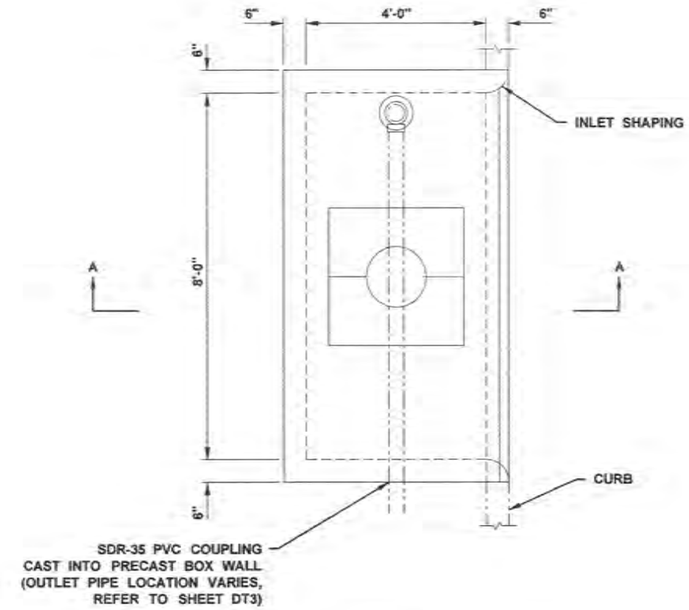
1) EACH UNIT SHALL BE CONSTRUCTED AT THE LOCATIONS AND ELEVATIONS ACCORDING TO THE SIZES SHOWN ON THE APPROVED DRAWINGS. ANY MODIFICATIONS TO THE ELEVATION OR LOCATION SHALL BE AT THE DIRECTION OF AND APPROVED BY THE ENGINEER.
2) IF THE FILTERRA IS STORED BEFORE INSTALLATION, THE TOP SLAB MUST BE PLACED ON THE BOX USING THE 2X4 WOOD PROVIDED, TO PREVENT ANY CONTAMINATION FROM THE SITE. ALL INTERNAL FITTINGS SUPPLIED (IF ANY), MUST BE LEFT IN PLACE AS PER THE DELIVERY.
3) THE UNIT SHALL BE PLACED ON A COMPACTED SUB-GRADE WITH A MINIMUM 6-INCH GRAVEL BASE MATCHING THE FINAL GRADE OF THE CURB LINE IN THE AREA OF THE UNIT. THE UNIT IS TO BE PLACED SUCH THAT THE UNIT AND TOP SLAB MATCH THE GRADE OF THE CURB IN THE AREA OF THE UNIT. COMPACT UNDISTURBED SUB-GRADE MATERIALS TO 95% OF MAXIMUM DENSITY AT +1 – 2% OF OPTIMUM MOISTURE. UNSUITABLE MATERIAL BELOW SUB-GRADE SHALL BE REPLACED TO THE SITE ENGINEER'S APPROVAL.
4) OUTLET CONNECTIONS SHALL BE ALIGNED AND SEALED TO MEET THE APPROVED DRAWINGS WITH MODIFICATIONS NECESSARY TO MEET SITE CONDITIONS AND LOCAL REGULATIONS.
5) ONCE THE UNIT IS SET, THE INTERNAL WOODEN FORMS AND PROTECTIVE MESH COVER MUST BE LEFT INTACT. REMOVE ONLY THE TEMPORARY WOODEN SHIPPING BLOCKS BETWEEN THE BOX AND TOP SLAB. THE TOP LID SHOULD BE SEALED ONTO THE BOX SECTION BEFORE BACKFILLING, USING A NON SHRINK GROUT, BUTYL RUBBER OR SIMIALR WATERPROOF SEAL. THE BOARDS ON TOP OF THE LID AND BOARDS SEALED IN THE UNIT'S THROAT MUST **NOT** BE REMOVED. THE SUPPLIER (AMERICAST OR ITS AUTHORIZED DEALER) WILL REMOVE THESE SECTIONS AT THE TIME OF ACTIVATION. BACKFILLING SHOULD BE PERFORMED IN A CAREFUL MANNER, BRINGING THE APPROPRIATE FILL MATERIAL UP IN 6" LIFTS ON ALL SIDES. PRECAST SECTIONS SHALL BE SET IN A MANNER THAT WILL RESULT IN A WATERTIGHT JOINT. IN ALL INSTANCES, INSTALLATION OF FILTERRA UNIT SHALL CONFORM TO ASTM SPECIFICATION C891 "STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST UTILITY STRUCTURES", UNLESS DIRECTED OTHERWISE IN CONTRACT DOCUMENTS.
6) CURB AND GUTTER CONSTRUCTION (WHERE PRESENT) SHALL ENSURE THAT THE FLOW-LINE OF THE FILTERRA UNITS IS AT A GREATER ELEVATION THAN THE FLOW-LINE OF THE BYPASS STRUCTURE OR RELIEF (DROP INLET, CURB CUT OR SIMILAR). FAILURE TO COMPLY WITH THIS GUIDELINE MAY CAUSE FAILURE AND/OR DAMAGE TO THE FILTERRA ENVIRONMENTAL DEVICE.
7) EACH FILTERRA UNIT MUST RECEIVE ADEQUATE IRRIGATION TO ENSURE SURVIVAL OF THE LIVING SYSTEM DURING PERIODS OF DRIER WEATHER. THIS MAY BE ACHIEVED THROUGH A PIPED SYSTEM, GUTTER FLOW OR THROUGH THE TREE GRATE.
8) EACH FILTERRA UNIT SHALL USE THE UA CHINOOK ORNAMENTAL GRATE.

ACTIVATION

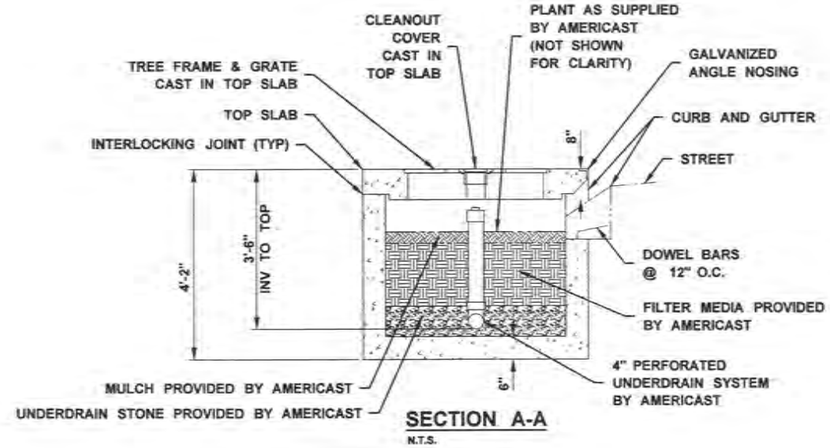
1) ACTIVATION OF THE FILTERRA UNIT IS PERFORMED ONLY BY THE SUPPLIER. PURCHASER IS RESPONSIBLE FOR FILTERRA INLET PROTECTION AND SUBSEQUENT CLEAN OUT COST. THIS PROCESS CANNOT COMMENCE UNTIL THE PROJECT SITE IS FULLY STABILIZED AND CLEANED (FULL LANDSCAPING, GRASS COVER, FINAL PAVING AND STREET SWEEPING COMPLETE), NEGATING THE CHANCE OF CONSTRUCTION MATERIALS CONTAMINATING THE FILTERRA SYSTEM. CARE SHALL BE TAKEN DURING CONSTRUCTION NOT TO DAMAGE THE PROTECTIVE THROAT AND TOP PLATES.
2) ACTIVATION INCLUDES INSTALLATION OF PLANT(S) AND MULCH LAYERS AS NECESSARY.



PLAN VIEW - 4'x4' FILTERRA
N.T.S.



PLAN VIEW - 4'x8' FILTERRA
N.T.S.



SECTION A-A
N.T.S.

PRECAST FILTERRA® UNIT
NARROW WIDTH CONFIGURATION

FILTERRA DETAIL

FILE NAME	c:\pwworking\sea\d0379728\124463_DT2a_P3.dgn						
TIME	1:13:12 PM						
DATE	9/2/2010						
PLOTTED BY	cwilcox						
DESIGNED BY	MJS						
ENTERED BY	BRG						
CHECKED BY	LJL						
PROJ. ENGR.	PAF						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WA	
JOB NUMBER 124463		
CONTRACT NO. CON0050153		LOCATION NO.

P.E. STAMP BOX — 9.15.10 DATE

CITY OF SHORELINE

HDR ENGINEERING, INC.

AURORA CORRIDOR
IMPROVEMENT PROJECT
N 185TH ST – N 192ND ST

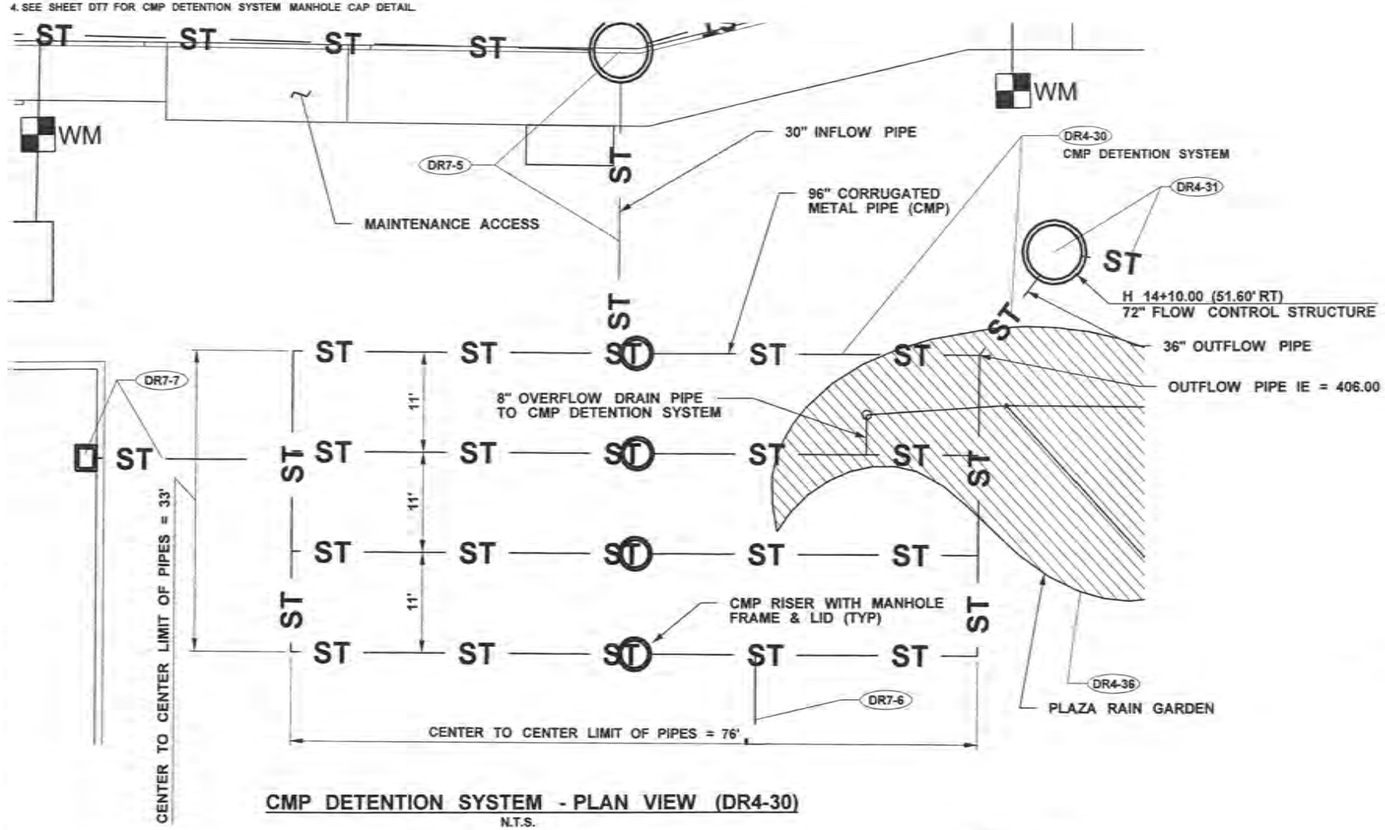
DRAINAGE DETAILS

PLOT2
DT2
SHEET 105 OF 389 SHEETS

ProjectWise Vault: DR

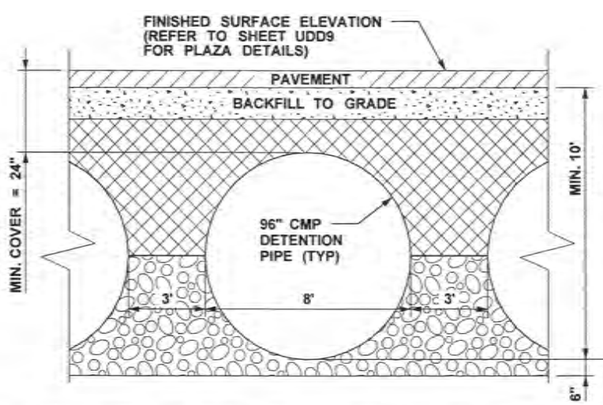
GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN FEET.
2. SEE SHEETS UDD9 - UDD11 FOR PLAZA DETAILS.
3. SEE SHEET DT6 FOR PLAZA RAINGARDEN DETAILS.
4. SEE SHEET DT7 FOR CMP DETENTION SYSTEM MANHOLE CAP DETAIL.



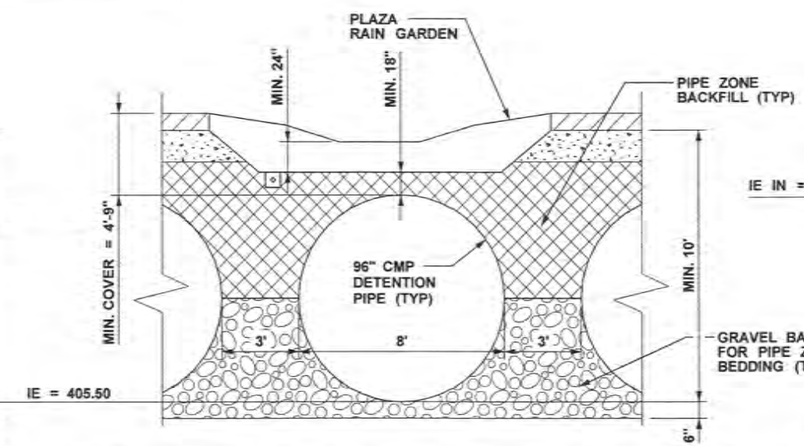
CMP DETENTION SYSTEM - PLAN VIEW (DR4-30)

N.T.S.



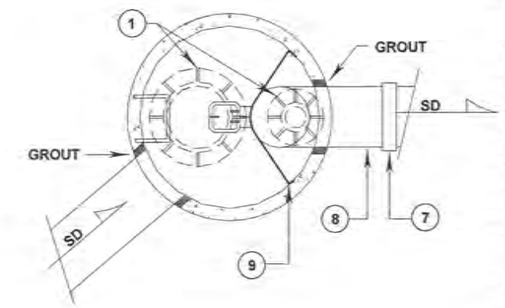
CMP DETENTION SYSTEM - TYPICAL SECTION VIEW

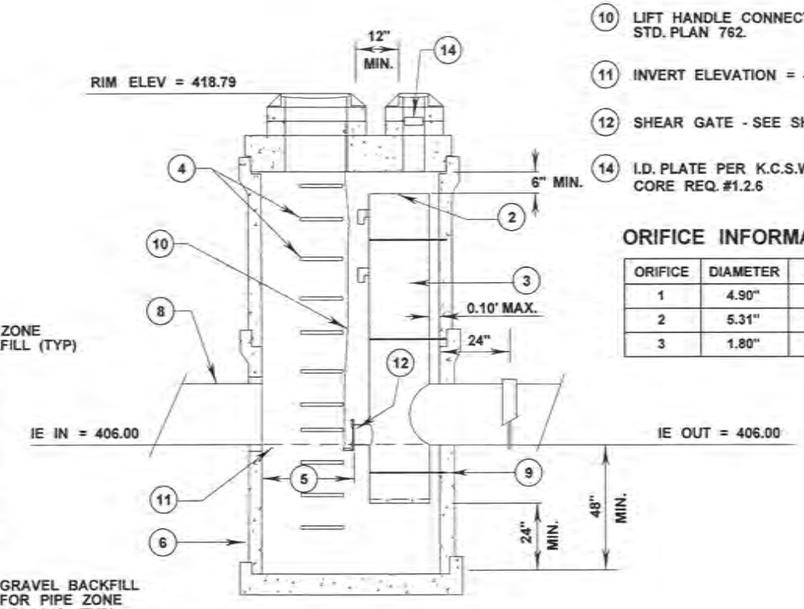
N.T.S.



CMP DETENTION SYSTEM - SECTION VIEW AT RAIN GARDEN

N.T.S.





ELEVATION

FLOW CONTROL STRUCTURE DETAILS (DR4-31)

N.T.S.

NOTES:

1. INSTALL 1-18" AND 1-24" DIA. MH. ACCESS PER STND DWG 716, ONE SO THAT THE LIFT GATE IS VISIBLE AND THE STEPS ARE CLEAR AND DIRECTLY ACCESSABLE. THE OTHER IS OVER THE RESTRICTOR UNIT.
2. OVERFLOW ELEVATION = 412.00
3. RESTRICTOR UNIT - SEE SHORELINE STD. PLAN 761.
4. POLYPROPYLENE PLASTIC STEP
5. MIN CLEARANCE = 36"
6. 72" TYPE 2 CB
7. BAND STRAP WITH GASKET
8. SEE PLAN AND SPECIFICATIONS FOR SIZE AND TYPE OF PIPE ENTERING AND EXITING CB.
9. SECURE RESTRICTOR TO CB WITH 8 GA ALUMINUM STRAPS BOLT TO CB WALL WITH STAINLESS STEEL ANCHOR BOLTS. ONE STRAP ABOVE AND BELOW OUTLET REQUIRED, INTERMEDIATE STRAPS REQUIRED FOR RESTRICTOR RISERS GREATER THAN 12' ABOVE OUTLET.
10. LIFT HANDLE CONNECTOR - SEE SHORELINE STD. PLAN 762.
11. INVERT ELEVATION = 406.00
12. SHEAR GATE - SEE SHORELINE STD. PLAN 762.
14. I.D. PLATE PER K.C.S.W.D.M. CORE REQ. #1.2.6

ORIFICE INFORMATION

ORIFICE	DIAMETER	HEIGHT	ELEVATION
1	4.90"	0.000 ft	404.00
2	5.31"	4.002 ft	408.00
3	1.80"	4.500 ft	408.50

FILE NAME	c:\pwworking\sea\d0379728\124463_DT5a_P3.dgn
TIME	4:52:04 PM
DATE	9/14/2010
PLOTTED BY	cwilcox
DESIGNED BY	BRG
ENTERED BY	BRG
CHECKED BY	LJL
PROJ. ENGR.	PAF
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WA | FED.AID PROJ.NO.

JOB NUMBER 124463

CONTRACT NO. CON0050153 | LOCATION NO.

P.E. STAMP BOX — DATE 9.15.10

CITY OF SHORELINE

HDR ENGINEERING INC.

AURORA CORRIDOR IMPROVEMENT PROJECT
N 185TH ST – N 192ND ST

DRAINAGE DETAILS

PLOT5 | DT5 | SHEET 108 OF 389 SHEETS

ProjectWise Vault: DR

This page intentionally left blank.

Appendix B:
Chain of Custody Sheets

Login: P64379 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

Delete -5, -7

Delete EPA PLB from -6, -8

CHAIN OF CUSTODY

Relinquished by	Date 12/8/15	Time 1608
Received by	Date 12/8/15	Time 1608
Sample Numbers 1, 2, 3, 4, 6, 8		[All]

Sample Number	P64379-1	P64379-2	P64379-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	12/8/2015 ~~10:48am~~ 1:43pm	12/8/2015 10:48am	12/8/2015 2:01pm
End Date/Time	12/8/2015 1:43pm	12/8/2015 1:43pm	12/8/2015 2:01pm
Time Span	Ø hr	3 hr	Ø hr
Sample Depth			
COND, FIELD	33.Ø →	**********	38.Ø →
DO, FIELD	10.29 mg/L →	**********	10.36 mg/L →
PH, FIELD	7.5 →	**********	7.28 →
SAMP TEMP	11.29°C →	**********	10.26°C →
TURB, FIELD	87.0 NTU →	**********	11.2 NTU →
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	~~7 LG WTPH-DX~~

Aliquot #1 2L, 10:48am

Aliquot #2 2L, 11:17am

Aliquot #3 2L, 1:17pm

Aliquot #4 2L, 1:43pm

move to -4

W6143803

Login: P64379 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P64379-4	P64379-5	P64379-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	12/8/2015 11:06am		12/8/2015 11:57am
End Date/Time	12/8/2015 2:01pm		12/8/2015 12:30pm
Time Span	3 hr		0.5 hr
Sample Depth			
COND, FIELD	**********		38.1 **********
DO, FIELD	**********		10.23 mg/L **********
PH, FIELD	**********		7.42 **********
SAMP TEMP	**********		12.62°C **********
TURB, FIELD	**********		45.7 NTU **********
Dept, Matrix, Prod	3 LG DOC Aliquot #1 3 LG NH3 2L, 11:06am 3 LG NO23 3 LG ORTHOP Aliquot #2 3 LG TOC 3 LG TOTN 2L, 11:27am 3 LG TOTP 3 LG TSS Aliquot #3 5 LG FC-MF 6 LG CA-ICPMS 2L, 1:31pm 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS Aliquot #4 6 LG CU-ICPMS 2L, 2:01 pm 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX Delete	3 LG DOC Aliquot #1 3 LG NH3 3 LG NO23 2L, 11:57am 3 LG ORTHOP 3 LG TOC Aliquot #2 3 LG TOTN 3 LG TOTP 2L, 12:30pm 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~ Delete

Login: P64379 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P64379-7	P64379-8	
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	
Short Loc Desc	BP2-Out	BP2-Out	
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	
Site	KING COUNTY	KING COUNTY	
Comments	Grab	Comp	
Start Date/Time		12/8/2015 12:21 pm	
End Date/Time		12/8/2015 12:43pm	
Time Span		0.5hr	
Sample Depth			
COND, FIELD		47.3 **********	
DO, FIELD		9.99 mg/L ******	
PH, FIELD		7.03 **********	
SAMP TEMP		9.953°C ******	
TURB, FIELD		5.92 NTU **********	
Dept, Matrix, Prod	7 LG WTPH-DX Delete	3 LG DOC Aliquot #1 3 LG NH3 3 LG NO23 2L, 12:21pm 3 LG ORTHOP 3 LG TOC 3 LG TOTN Aliquot #2 3 LG TOTP 3 LG TSS 2L, 12:43pm 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~ Delete	

Login: P64648 | Echo Lk SW Effectiveness | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date* 1/21/2016	*Time* 1:54 pm
Received by	*Date* 1/21/16	*Time* 13:54
Sample Numbers		*[All]*

Sample Number	P64648-1	P64648-2	P64648-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	5 aliquots of 2L		5 aliquots of 2L
Start Date/Time	01/21/16 08:45am	01/21/16 11:16am	01/21/16 9:11am
End Date/Time	01/21/16 11:10am	—	01/21/16 11:22am
Time Span	2.5	—	2.25
Sample Depth	—	—	—
COND, FIELD	15.8	**********	25.1
DO, FIELD	11.61	**********	11.19
PERSONNEL	CB + CG	**********	CB+CG
PH, FIELD	7.44	**********	7.35
SAMP FUNC	**********	**********	**********
SAMP TEMP	7.476	**********	7.150
TURB, FIELD	35.9	**********	12.3
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

WG-144380

Login: P64648 Echo Lk SW Effectiveness Personnel: _____

Project: 421879-250

Sample Number	P64648-4	P64648-5	P64648-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments		7 aliquots of 1 to 2L	
Start Date/Time	01/21/16 11:24am	01/21/16 09:27am	01/21/16 12:00pm
End Date/Time	—	01/21/16 12:30pm	—
Time Span	—	3.0	—
Sample Depth	—	—	—
COND, FIELD	**********	23.3	**********
DO, FIELD	**********	11.44	**********
PERSONNEL	**********	HF, SH	**********
PH, FIELD	**********	7.60	**********
SAMP FUNC	**********	**********	**********
SAMP TEMP	**********	7.989	**********
TURB, FIELD	**********	48.9	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P64648 Echo Lk SW Effectiveness Personnel: _____

Project: 421879-250

Sample Number	P64648-7	P64648-8	P64648-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP1-IN
Short Loc Desc	BP2-Out	BP2-Out	BP1-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #1 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	7 aliquots of 1 to 2L		FREP ; 5 aliquots of 2L
Start Date/Time	01/21/16 09:40am	01/21/16 12:05pm	01/21/16 9:08am
End Date/Time	01/21/16 12:35pm	—	01/21/16 11:15am
Time Span	3.0	—	2.0
Sample Depth	—	—	—
COND, FIELD	29.2	**********	
DO, FIELD	11.34	**********	
PERSONNEL	HF, SH	**********	
PH, FIELD	7.47	**********	
SAMP FUNC	**********	**********	FREP @ L64648-1
SAMP TEMP	7.380	**********	
TURB, FIELD	5.57	**********	
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS ~~6 LG CD-ICPMS, DISS~~ Delete Diss metals 6 LG CU-ICPMS ~~6 LG CU-ICPMS, DISS~~ 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS ~~6 LG PB-ICPMS, DISS~~ 6 LG ZN-ICPMS ~~6 LG ZN-ICPMS, DISS~~ 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P64648 Echo Lk SW Effectiveness Personnel: _____

Project: 421879-250

Sample Number	**P64648-10**		
QC Link			
Locator	**ECHO-BP1-IN**		
Short Loc Desc	BP1-In		
Locator Desc	RAIN GARDEN #1 - INLET		
Site	KING COUNTY		
Comments	FREP		
Start Date/Time	01/21/16 11:18am		
End Date/Time	———		
Time Span	———		
Sample Depth	———		
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL	**********		
PH, FIELD	**********		
SAMP FUNC	FREP @ L64648-2		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	7 LG WTPH-DX		

Login: P64921

Shoreline-Echo Lake Stormwater Monitoring

Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 3/1/16	Time 1547
Received by	Date 3/1/16	Time 1547
Sample Numbers 1, 3, 5, 7, 9, 11, 13, 15, 17		[All]

Sample Number	P64921-1	P64921-2	P64921-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	03/1/2016 10:25		3/1/2016 10:40
End Date/Time	3/1/2016 11:33	Delete	3/1/2016 11:45
Time Span	1.0 hr		1.0 hr
Sample Depth	—		—
COND, FIELD	38.8	**********	36.9
DO, FIELD	11.14	**********	10.81
PERSONNEL	CB, SH, CG, DH	**********	CB, SH, CG, DH
PH, FIELD	7.42	**********	6.86
SAMP TEMP	8.824	**********	8.471
TURB, FIELD	88.5	**********	21.6
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

WG144920

Login: P64921 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P64921-4	P64921-5	P64921-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab Delete
Start Date/Time		3/1/2016 11:20	3/1/2016 11:35
End Date/Time	Delete	3/1/2016 11:50	
Time Span		0.5 hr	
Sample Depth		—	
COND, FIELD	**********	41.6	**********
DO, FIELD	**********	11.19	**********
PERSONNEL	**********	CB, SH, CG, DH	**********
PH, FIELD	**********	7.38	**********
SAMP TEMP	**********	9.230	**********
TURB, FIELD	**********	37.4	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS ~~7 LG PAH-SIM~~ ~~10 LG EPA1668PCB~~	7 LG WTPH-DX

Login: P64921 **Shoreline-Echo Lake Stormwater Monitoring** Personnel: _____

Project: 421879-250

Sample Number	P64921-7	P64921-8	P64921-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	3/1/2016 11:35		3/1/2016 10:53
End Date/Time	3/1/2016 11:35	Delete	3/1/2016 11:54
Time Span	Ø hr		1.Ø hr
Sample Depth	—		—
COND, FIELD	67.9	**********	25.5
DO, FIELD	1Ø.96	**********	11.25
PERSONNEL	CB, SH, CG, DH	**********	CB, SH, CG, DH
PH, FIELD	6.74	**********	7.4Ø
SAMP TEMP	8.293	**********	9.191
TURB, FIELD	4.75	**********	75.2
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS ~~7 LG PAH-SIM~~ ~~10 LG EPA1668PCB~~	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P64921 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P64921-10	P64921-11	P64921-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time		3/1/2016 11:05	
End Date/Time		3/1/2016 12:05	
Time Span	Delete	1.0 hr	Delete
Sample Depth		—	
COND, FIELD	**********	43.3	**********
DO, FIELD	**********	9.94	**********
PERSONNEL	**********	CB, SH, CL, DH	**********
PH, FIELD	**********	6.18	**********
SAMP TEMP	**********	8.396	**********
TURB, FIELD	**********	6.11	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P64921 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P64921-13	P64921-14	P64921-15
QC Link			
Locator	ECHO-FLT1-IN	ECHO-FLT1-IN	ECHO-FLT1-OUT
Short Loc Desc	FLT1-In	FLT1-In	FLT1-Out
Locator Desc	FILTERRA #1 - INLET	FILTERRA #1 - INLET	FILTERRA #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	3/1/2016 11:38		3/1/2016 11:42
End Date/Time	3/1/2016 12:45	Delete	3/1/2016 12:50
Time Span	1.0hr		1.0hr
Sample Depth	—		—
COND, FIELD	~~38.8~~ CA	**********	57.7
DO, FIELD	~~11.14~~ CA	**********	10.32
PERSONNEL	CB, SM, CA, DH	**********	CB, SM, CA, DH
PH, FIELD	~~7.42~~ CA	**********	7.16
SAMP TEMP	~~8.824~~ CA	**********	9.833
TURB, FIELD	~~88.5~~ CA	**********	30.1
Dept, Matrix, Proc	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~

Did not take field measurements

Login: P64921 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	**P64921-16**		
QC Link			
Locator	**ECHO-FLT1-OUT**		
Short Loc Desc	FLT1-Out		
Locator Desc	FILTERRA #1 - OUTLET		
Site	KING COUNTY		
Comments	Grab		
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL	**********		
PH, FIELD	**********		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	7 LG WTPH-DX		

Delete

Sample: P64921-17 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Received by	*Date*	*Time*
Sample Numbers		*[All]*

Sample Number	**P64921-17**		
QC Link			
Locator	**ECHO-BP2-IN**		
Short Loc Desc	BP2-In		
Locator Desc	RAIN GARDEN #2 - INLET		
Site	KING COUNTY		
Comments	Comp FREP@L64921-5		
Start Date/Time	3/1/2016 11:20		
End Date/Time	3/1/2016 11:50		
Time Span	0.5hr		
Sample Depth	—		
~~COND, FIELD~~	—		
~~DO, FIELD~~	—		
PERSONNEL	CB,SH,CL,DM		
~~PH, FIELD~~	—		
~~SAMP TEMP~~	—		
~~TURB, FIELD~~	—		
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS ~~7 LG PAH-SIM~~ ~~10 LG EPA1668PCB~~		

Delete

Login: P64999 | Echo Lake 3/9/20415 | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 3/10/16	Time 0909
Received by Meghan Ellis	Date 3/10/16	Time 0909
Sample Numbers 1-18		(All)

Sample Number	P64999-1	P64999-2	P64999-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	3/9/16 / 1440	→ / 1643	→ / 1445
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	27.1	**********	46.0
DO, FIELD	11.03	**********	11.97
PERSONNEL	SH, JP, CB, CB	**********	→
PH, FIELD	7.02	**********	6.88
SAMP TEMP	9.245	**********	9.111
TURB, FIELD	64.2	**********	29.6
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 1510 3 LG ORTHOP 1540 3 LG TOTN 3 LG TOTP 1611 3 LG TSS 5 LG FC-MF 1642 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 1515 3 LG ORTHOP 3 LG TOTN 1545 3 LG TOTP 3 LG TSS 1615 5 LG FC-MF 6 LG CA-ICPMS 1648 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

- TOX

- TOX

WG144991

Login: P64999 Echo Lake 3/9/20415 Personnel: _____

Project: 421879-250

Sample Number	P64999-4	P64999-5	P64999-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	3/9/16 / 1649	→ / 1456	→ / 1656
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	30,6	**********
DO, FIELD	**********	11,20	**********
PERSONNEL	**********	SH, JP, CB, CG	**********
PH, FIELD	**********	7,39	**********
SAMP TEMP	**********	8,903	**********
TURB, FIELD	**********	45,3	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 1525 3 LG ORTHOP 3 LG TOTN 1555 3 LG TOTP 3 LG TSS 1625 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 1655 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P64999 Echo Lake 3/9/20415 Personnel: _____

Project: 421879-250

Sample Number	P64999-7	P64999-8	P64999-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	03/09/16/ 1510	→ / 1709	→ / 1400
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	56,4	**********	43,7
DO, FIELD	10,76	**********	10,82
PERSONNEL	SH, JP, LB, CG	**********	→
PH, FIELD	6,68	**********	7,34
SAMP TEMP	8,517	**********	9,499
TURB, FIELD	6,69	**********	92,1
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 1530 3 LG TOTN 1600 3 LG TOTP 3 LG TSS 1630 5 LG FC-MF 6 LG CA-ICPMS 1700 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 1430 3 LG ORTHOP 3 LG TOTN 1500 3 LG TOTP 3 LG TSS 1533 5 LG FC-MF 6 LG CA-ICPMS 1603 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P64999 Echo Lake 3/9/20415 Personnel: _____

Project: 421879-250

Sample Number	P64999-10	P64999-11	P64999-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	03/09/16/ 1604	→ / 1425	→ / 1625
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	56.6	**********
DO, FIELD	**********	10.68	**********
PERSONNEL	**********	SH, JP, CB, CG	**********
PH, FIELD	**********	6.32	**********
SAMP TEMP	**********	8.962	**********
TURB, FIELD	**********	9.23	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 1450 3 LG NO23 3 LG ORTHOP 1525 3 LG TOTN 3 LG TOTP 1555 3 LG TSS 5 LG FC-MF 1625 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P64999 Echo Lake 3/9/20415 Personnel: _____

Project: 421879-250

Sample Number	P64999-13	P64999-14	P64999-15
QC Link			
Locator	ECHO-FLT1-IN	ECHO-FLT1-IN	ECHO-FLT1-OUT
Short Loc Desc	FLT1-In	FLT1-In	FLT1-Out
Locator Desc	FILTERRA #1 - INLET	FILTERRA #1 - INLET	FILTERRA #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	03/09/16 / 1420	→ / 1626	→ / 1433
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	28.4	**********	31.4
DO, FIELD	11.13	**********	10.36
PERSONNEL	SH, JP, LB, CG	**********	→
PH, FIELD	7.76	**********	7.08
SAMP TEMP	9.613	**********	9.440
TURB, FIELD	43.8	**********	37.7
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 1455 3 LG ORTHOP 3 LG TOTN 1525 3 LG TOTP 3 LG TSS 1555 5 LG FC-MF 6 LG CA-ICPMS 1625 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 1503 3 LG ORTHOP 3 LG TOTN 1530 3 LG TOTP 3 LG TSS 1600 5 LG FC-MF 6 LG CA-ICPMS 1630 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P64999 Echo Lake 3/9/20415 Personnel: _____

Project: 421879-250

Sample Number	**P64999-16**		
QC Link			
Locator	**ECHO-FLT1-OUT**		
Short Loc Desc	FLT1-Out		
Locator Desc	FILTERRA #1 - OUTLET		
Site	KING COUNTY		
Comments	Grab		
Start Date/Time	03/09/16/1631		
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL	**********		
PH, FIELD	**********		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	7 LG WTPH-DX		

Sample: P64999-17 FREP Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Received by	*Date*	*Time*
Sample Numbers		*[All]*

Sample Number	**P64999-17**		
QC Link			
Locator	**ECHO-BP2-OUT**		
Short Loc Desc	BP2-Out		
Locator Desc	RAIN GARDEN #2 - OUTLET		
Site	KING COUNTY		
Comments	Comp		
Start Date/Time	03/09/10 / 1515		
End Date/Time			
Time Span			
Sample Depth			
~~COND, FIELD~~	—		
~~DO, FIELD~~	—		
PERSONNEL	CB, SH, JP, CL		
~~PH, FIELD~~	—		
~~SAMP TEMP~~	—		
~~TURB, FIELD~~	—		
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 1535 3 LG ORTHOP 3 LG TOTN 1605 3 LG TOTP 3 LG TSS 1635 5 LG FC-MF 6 LG CA-ICPMS 1705 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB		

Deleted

CB deleted

Sample: P64999-18 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Received by	*Date*	*Time*
Sample Numbers		*[All]*

Sample Number	**P64999-18**		
QC Link			
Locator	**ECHO-BP2-OUT**		
Short Loc Desc	BP2-Out		
Locator Desc	RAIN GARDEN #2 - OUTLET		
Site	KING COUNTY		
Comments	Grab		
Start Date/Time	03/09/16/ 1710		
End Date/Time			
Time Span	FREP		
Sample Depth			
Dept, Matrix, Prod	7 LG WTPH-DX		

Login: P66382 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by [signature]	Date 10-13-16	Time 1340
Received by [signature]	Date 10/13/16	Time 1340
Sample Numbers 17,18,19,20,25		[All]

Sample Number	P66382-1	P66382-2	P66382-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD		**********	
DO, FIELD		**********	
PERSONNEL		**********	
PH, FIELD		**********	
SAMP FUNC	**********	**********	**********
SAMP TEMP		**********	
TURB, FIELD		**********	
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

CHAIN OF CUSTODY

RELINQUISHED BY [signature]	Date 10/13/16	Time 1630
RECEIVED BY [signature]	Date 10/13/16	Time 1630
Sample Number(s) 9-12		(All)

WG-148600

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-4	P66382-5	P66382-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		**********
DO, FIELD	**********		**********
PERSONNEL	**********		**********
PH, FIELD	**********		**********
SAMP FUNC	**********	**********	**********
SAMP TEMP	**********		**********
TURB, FIELD	**********		**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-7	P66382-8	P66382-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time			~~0915~~ 10/13/16 09:15
End Date/Time			10/13/16 14:33
Time Span			5.3
Sample Depth			———
COND, FIELD		**********	26.6
DO, FIELD		**********	10.21
PERSONNEL		**********	SH, CB, LS, CG, RO
PH, FIELD		**********	7.57
SAMP FUNC	**********	**********	**********
SAMP TEMP		**********	12.518
TURB, FIELD		**********	27.8
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-10	P66382-11	P66382-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	10/13/16 14:33	10/13/16 09:15	10/13/16 14:40
End Date/Time	———	10/13/16 14:40	———
Time Span	———	5.4	———
Sample Depth	———	———	———
COND, FIELD	**********	34.2	**********
DO, FIELD	**********	7.46	**********
PERSONNEL	**********	SH, CB, LS, CA, RO	**********
PH, FIELD	**********	6.63	**********
SAMP FUNC	**********	**********	**********
SAMP TEMP	**********	12.982	**********
TURB, FIELD	**********	4.44	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-13	P66382-14	P66382-15
QC Link			
Locator	ECHO-BP4-IN	ECHO-BP4-IN	ECHO-BP4-OUT
Short Loc Desc	BP4-In	BP4-In	BP4-Out
Locator Desc	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD		**********	
DO, FIELD		**********	
PERSONNEL		**********	
PH, FIELD		**********	
SAMP FUNC	**********	**********	**********
SAMP TEMP		**********	
TURB, FIELD		**********	
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-16	P66382-17	P66382-18
QC Link			
Locator	ECHO-BP4-OUT	ECHO-FLT1-IN	ECHO-FLT1-IN
Short Loc Desc	BP4-Out	FLT1-In	FLT1-In
Locator Desc	RAIN GARDEN #4 - OUTLET	FILTERRA #1 - INLET	FILTERRA #1 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time		10/13/16 09:19	10/13/16 11:23
End Date/Time		10/13/16 11:23	—
Time Span		1.5	—
Sample Depth		—	—
COND, FIELD	**********	36.5	**********
DO, FIELD	**********	10.22	**********
PERSONNEL	**********	SH, CB, LS, LG, RO	**********
PH, FIELD	**********	7.44	**********
SAMP FUNC	**********	**********	**********
SAMP TEMP	**********	13.014	**********
TURB, FIELD	**********	24.4	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-19	P66382-20	P66382-21
QC Link			
Locator	ECHO-FLT1-OUT	ECHO-FLT1-OUT	ECHO-FLT2-IN
Short Loc Desc	FLT1-Out	FLT1-Out	FLT2-In
Locator Desc	FILTERRA #1 - OUTLET	FILTERRA #1 - OUTLET	FILTERRA #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/13/16 09:40	10/13/16 11:16	
End Date/Time	10/13/16 11:16	—	
Time Span	1.6	—	
Sample Depth	—	—	
COND, FIELD	30.0	**********	
DO, FIELD	9.22	**********	
PERSONNEL	CB, SH, LS, CG, RO	**********	
PH, FIELD	7.33	**********	
SAMP FUNC	**********	**********	**********
SAMP TEMP	12.903	**********	
TURB, FIELD	24.7	**********	
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66382-22	P66382-23	P66382-24
QC Link			
Locator	ECHO-FLT2-IN	ECHO-FLT2-OUT	ECHO-FLT2-OUT
Short Loc Desc	FLT2-In	FLT2-Out	FLT2-Out
Locator Desc	FILTERRA #2 - INLET	FILTERRA #2 - OUTLET	FILTERRA #2 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		**********
DO, FIELD	**********		**********
PERSONNEL	**********		**********
PH, FIELD	**********		**********
SAMP FUNC	**********	**********	**********
SAMP TEMP	**********		**********
TURB, FIELD	**********		**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66382 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	**P66382-25**		
QC Link			
Locator	**FFBLANK**		
Short Loc Desc	FFBLANK		
Locator Desc	FIELD FILTER BLANK		
Site	METRO		
Comments			
Start Date/Time	10/13/14 / ~~1600~~ 0800	US	
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL	**********		
PH, FIELD	**********		
SAMP FUNC	FFB		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	3 LN NH3 3 LN NO23 3 LN ORTHOP		

Login: P66498 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

Delete 14, -16

CHAIN OF CUSTODY

Relinquished by	Date 10/26/16	Time 1548
Received by	Date 10/26/16	Time 1548
Sample Numbers 1-13, 15, 17-23		[All]

Sample Number	P66498-1	P66498-2	P66498-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/26/16 0912	→ 1118	→ 0917
End Date/Time	1118		1123
Time Span	2.06		2.06
Sample Depth			
COND, FIELD	15.0	**********	25.1
DO, FIELD	10.65	**********	10.26
PERSONNEL	HF, SH, DH →	**********	→
PH, FIELD	7.61	**********	7.31
SAMP TEMP	11.245	**********	11.337
TURB, FIELD	21.1	**********	18.0
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~

WG-148805

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-4	P66498-5	P66498-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	10/26/16 1123	→ 0907	→ 1047
End Date/Time		1047	
Time Span		1:40	
Sample Depth			
COND, FIELD	**********	37.1	**********
DO, FIELD	**********	10.54	**********
PERSONNEL	**********	CB, CG →	**********
PH, FIELD	**********	7.49	**********
SAMP TEMP	**********	11.133	**********
TURB, FIELD	**********	43.5	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~	7 LG WTPH-DX

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-7	P66498-8	P66498-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/26/16 0911	→ 1055	→ 0829
End Date/Time	1055		1038
Time Span	1.44		2:09
Sample Depth			
COND, FIELD	64.9	**********	29.2
DO, FIELD	10.13	**********	10.48
PERSONNEL	CB, CG →	**********	SH, CG, CB, DH, HF
PH, FIELD	6.95	**********	7.52
SAMP TEMP	12.114	**********	11.173
TURB, FIELD	7.13	**********	31.7
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-10	P66498-11	P66498-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	10/26/16 1038	→ 0839	→ 1044
End Date/Time		1044	
Time Span		2.05	
Sample Depth			
COND, FIELD	**********	55.3	**********
DO, FIELD	**********	9.81	**********
PERSONNEL	**********	SH, CG, HF, DH, CB →	**********
PH, FIELD	**********	7.03	**********
SAMP TEMP	**********	12.735	**********
TURB, FIELD	**********	9.99	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-13	P66498-14	P66498-15
QC Link			
Locator	ECHO-BP4-IN	ECHO-BP4-IN	ECHO-BP4-OUT
Short Loc Desc	BP4-In	BP4-In	BP4-Out
Locator Desc	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/26/16 1014	→ ~~1024~~ SH	→ 1024
End Date/Time	1120		1106
Time Span	~~1.04~~ 1.06		0.42
Sample Depth			
COND, FIELD	15.1	**********	40.8
DO, FIELD	10.63	**********	10.04
PERSONNEL	CB, DH	**********	→
PH, FIELD	7.40	**********	7.22
SAMP TEMP	11.210	**********	11.392
TURB, FIELD	21.1	**********	46.2
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

delete
deleted 10/26/16 ME

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-16	P66498-17	P66498-18
QC Link			
Locator	ECHO-BP4-OUT	ECHO-FLT1-IN	ECHO-FLT1-IN
Short Loc Desc	BP4-Out	FLT1-In	FLT1-In
Locator Desc	RAIN GARDEN #4 - OUTLET	FILTERRA #1 - INLET	FILTERRA #1 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time		10/26/16 0807	→ 1030 ~~0814~~ SH
End Date/Time		1030	~~1035~~
Time Span		2.23	
Sample Depth			
COND, FIELD	**********	32.9	**********
DO, FIELD	**********	10.72	**********
PERSONNEL	**********	HF, SH →	**********
PH, FIELD	**********	7.58	**********
SAMP TEMP	**********	10.982	**********
TURB, FIELD	**********	35.4	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

delete

deleted 10/26/16 ME

Login: P66498 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66498-19	P66498-20	P66498-21
QC Link			
Locator	ECHO-FLT1-OUT	ECHO-FLT1-OUT	FFBLANK
Short Loc Desc	FLT1-Out	FLT1-Out	FFBLANK
Locator Desc	FILTERRA #1 - OUTLET	FILTERRA #1 - OUTLET	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	Comp	Grab	
Start Date/Time	10/26/16 0814	→ 1035	→ 1430
End Date/Time	1035		
Time Span	2.21		
Sample Depth			
COND, FIELD	45.0	**********	**********
DO, FIELD	9.89	**********	**********
PERSONNEL	HF, SH →	**********	CB **********
PH, FIELD	7.24	**********	**********
SAMP TEMP	11.933	**********	**********
TURB, FIELD	18.0	**********	**********
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP

Sample: P66498-22 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Received by	*Date*	*Time*
Sample Numbers		*[All]*

Sample Number	P66498-22	FREP -23	
QC Link			
Locator	ECHO-BP1-IN FREP		
Short Loc Desc	BP1-In		
Locator Desc	RAIN GARDEN #1 - INLET CL66498-1	CL66498-2	
Site	KING COUNTY		
Comments	Comp	Grab	
Start Date/Time	10/26/16 0935	→ 1120	
End Date/Time	1120		
Time Span	1.45		
Sample Depth			
COND, FIELD	13.3		
DO, FIELD	10.66		
PERSONNEL	~~SH, CH, CG, DH, HF~~	SH, CB, CG, HF, DH	
PH, FIELD	7.60		
SAMP TEMP	11.294		
TURB, FIELD	17.9		
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG FC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM		

Login: P66938

Shoreline-Echo Lake Stormwater Monitoring

Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 1/18/17	Time 1126
Received by	Date 1/18/17	Time 1126
Sample Numbers	1-23	[All]

Sample Number	P66938-1	P66938-2	P66938-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	1/17/17 1435	→ 1527	→ 1433
End Date/Time	1527		1530
Time Span	52 min (0.866)		57 min (0.95)
Sample Depth			
COND, FIELD	119.2	**********	272.7
DO, FIELD	12.03	**********	12.08
PERSONNEL	BK, CB, SH, DH	**********	→
PH, FIELD	7.28	**********	6.93
SAMP TEMP	5.301	**********	4.033
TURB, FIELD	184.0	**********	49.6
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM

WG149919

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-4	P66938-5	P66938-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp 1535	Grab 1610
Start Date/Time	1/17/17 1530	→ ~~1415~~ SH →	~~1505~~
End Date/Time		~~1505~~ 1610	
Time Span		35 min (0.583)	
Sample Depth			
COND, FIELD	**********	102.1	**********
DO, FIELD	**********	12.07	**********
PERSONNEL	**********	BK, DH, CB, SH	**********
PH, FIELD	**********	7.49	**********
SAMP TEMP	**********	5.589	**********
TURB, FIELD	**********	117.0	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Visible Sheen

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-7	P66938-8	P66938-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	1/17/17 1540	→ 1620	→ 1427
End Date/Time	1620		1512
Time Span	40 min (0.667)		45 min (0.75)
Sample Depth			
COND, FIELD	286.8	**********	169.9
DO, FIELD	12.81	**********	12.02
PERSONNEL	SH, CB, DH, BK	**********	→
PH, FIELD	6.86	**********	7.29
SAMP TEMP	3.800	**********	5.289
TURB, FIELD	11.7	**********	222.0
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-10	P66938-11	P66938-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	1/17/17 1512	→ 1430	→ 1522
End Date/Time		1522	
Time Span		52 min (0.866)	
Sample Depth			
COND, FIELD	**********	948.5	**********
DO, FIELD	**********	11.10	**********
PERSONNEL	**********	BK, DH, CB, SH	**********
PH, FIELD	**********	6.44	**********
SAMP TEMP	**********	4.801	**********
TURB, FIELD	**********	13.9	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-13	P66938-14	P66938-15
QC Link			
Locator	ECHO-BP4-IN	ECHO-BP4-IN	ECHO-BP4-OUT
Short Loc Desc	BP4-In	BP4-In	BP4-Out
Locator Desc	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	1/18/17 0800	→ 0840	→ 0840
End Date/Time	0840		1000
Time Span	40min (0.667)		1hr. 20 (1.333)
Sample Depth			
COND, FIELD	359.6	**********	354.7
DO, FIELD	11.47	**********	11.94
PERSONNEL	CB, SH	**********	→
PH, FIELD	5.95	**********	6.07
SAMP TEMP	6.539	**********	5.567
TURB, FIELD	71.8	**********	48.3
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

very low flow

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-16	P66938-17	P66938-18
QC Link			
Locator	ECHO-BP4-OUT	ECHO-FLT1-IN	ECHO-FLT1-IN
Short Loc Desc	BP4-Out	FLT1-In	FLT1-In
Locator Desc	RAIN GARDEN #4 - OUTLET	FILTERRA #1 - INLET	FILTERRA #1 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	1/18/17 1000	1/17/17 1333	→ 1421
End Date/Time		1421	
Time Span		48min (0.8)	
Sample Depth			
COND, FIELD	**********	122.0	**********
DO, FIELD	**********	12.25	**********
PERSONNEL	**********	CB, SH	**********
PH, FIELD	**********	7.73	**********
SAMP TEMP	**********	5.311	**********
TURB, FIELD	**********	144.0	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-19	P66938-20	P66938-21
QC Link			
Locator	ECHO-FLT1-OUT	ECHO-FLT1-OUT	FFBLANK
Short Loc Desc	FLT1-Out	FLT1-Out	FFBLANK
Locator Desc	FILTERRA #1 - OUTLET	FILTERRA #1 - OUTLET	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	Comp	Grab	
Start Date/Time	1/17/17 1348	→ 1433	1/18/17 10:00
End Date/Time	1433		
Time Span	45min (0.75)		
Sample Depth			
COND, FIELD	470.3	**********	**********
DO, FIELD	11.48	**********	**********
PERSONNEL	CB, SH	**********	**********
PH, FIELD	7.63	**********	**********
SAMP TEMP	5.215	**********	**********
TURB, FIELD	75.0	**********	**********
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP

Login: P66938 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66938-22	P66938-23	
QC Link			
Locator	ECHO-FLT1-IN	ECHO-FLT1-IN	
Short Loc Desc	FLT1-In	FLT1-In	
Locator Desc	FILTERRA #1 - INLET	FILTERRA #1 - INLET	
Site	KING COUNTY	KING COUNTY	
Comments	Comp, FREP	Grab, FREP	
Start Date/Time	1/17/17 1336	→ 1425	
End Date/Time	1/17/17 1425		
Time Span	49 min (0.817)		
Sample Depth			
~~COND, FIELD~~	Not measured	**********	
DO, FIELD		**********	
PERSONNEL	CB, SH	**********	
~~PH, FIELD~~	Not measured	**********	
~~SAMP TEMP~~		**********	
TURB, FIELD	140.0	**********	
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	

Login: P67070

Shoreline-Echo Lake Stormwater Monitoring

Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 2/9/17	Time 1214
Received by Meghan Elley	Date 2/9/17	Time 1214
Sample Numbers	1-12; 25-27	[All]

Sample Number	P67070-1	P67070-2	P67070-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	2/9/17 0808	→ 0938	→ 0810
End Date/Time	0938		0940
Time Span	~~90~~ 1.5		1.5
Sample Depth			
COND, FIELD	68.6	**********	109.4
DO, FIELD	11.27	**********	11.06
PERSONNEL	CB, DH, SH, JDD	**********	→
PH, FIELD	7.34	**********	7.15
SAMP TEMP	7.782	**********	6.342
TURB, FIELD	154.0	**********	23.5
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM

NG-150448

Login — please delete -13-24 Thanks :) deleted 2/9/17 ME

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-4	P67070-5	P67070-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP2-IN	ECHO-BP2-IN
Short Loc Desc	BP1-Out	BP2-In	BP2-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #2 - INLET	RAIN GARDEN #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	2/9/17 0940	→ ~~0850~~ 0850 (SH)	→ 0945
End Date/Time		0945	
Time Span	~~0~~	0.55	
Sample Depth			
COND, FIELD	**********	97.0 ~~90.3~~ (SH)	**********
DO, FIELD	**********	10.97	**********
PERSONNEL	**********	DH, JP, CB	**********
PH, FIELD	**********	7.46	**********
SAMP TEMP	**********	8.959	**********
TURB, FIELD	**********	125.0	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-7	P67070-8	P67070-9
QC Link			
Locator	ECHO-BP2-OUT	ECHO-BP2-OUT	ECHO-BP3-IN
Short Loc Desc	BP2-Out	BP2-Out	BP3-In
Locator Desc	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #2 - OUTLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	2/9/17 0855	→ ~~0855~~ 0955 SH	→ 0740
End Date/Time	0955		0905
Time Span	1.0		1.25
Sample Depth			
COND, FIELD	190.3	**********	81.1
DO, FIELD	10.70	**********	11.33
PERSONNEL	DH, JP, CB	**********	CB, DH, SH, JDD
PH, FIELD	6.56	**********	7.10
SAMP TEMP	7.178	**********	7.304
TURB, FIELD	8.80	**********	121.0
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM

Sample Number	P67070-10	P67070-11	P67070-12
QC Link			
Locator	ECHO-BP3-IN	ECHO-BP3-OUT	ECHO-BP3-OUT
Short Loc Desc	BP3-In	BP3-Out	BP3-Out
Locator Desc	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	2/9/17 0905	→ 0740	→ 0910
End Date/Time		0910	
Time Span		1.30	
Sample Depth			
COND, FIELD	**********	164.7	**********
DO, FIELD	**********	10.52	**********
PERSONNEL	**********	CB, SH, DH, JDD	**********
PH, FIELD	**********	6.37	**********
SAMP TEMP	**********	5.218	**********
TURB, FIELD	**********	10.4	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-13	P67070-14	P67070-15
QC Link			
Locator	ECHO-BP4-IN	ECHO-BP4-IN	ECHO-BP4-OUT
Short Loc Desc	BP4-In	BP4-In	BP4-Out
Locator Desc	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - INLET	RAIN GARDEN #4 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD		**********	
DO, FIELD		**********	
PERSONNEL		**********	
PH, FIELD		**********	
SAMP TEMP		**********	
TURB, FIELD		**********	
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX Delete	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-16	P67070-17	P67070-18
QC Link			
Locator	ECHO-BP4-OUT	ECHO-FLT1-IN	ECHO-FLT1-IN
Short Loc Desc	BP4-Out	FLT1-In	FLT1-In
Locator Desc	RAIN GARDEN #4 - OUTLET	FILTERRA #1 - INLET	FILTERRA #1 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		**********
DO, FIELD	**********		**********
PERSONNEL	**********		**********
PH, FIELD	**********		**********
SAMP TEMP	**********		**********
TURB, FIELD	**********		**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX

DECTE

Sample Number	P67070-19	P67070-20	P67070-21
QC Link			
Locator	ECHO-FLT1-OUT	ECHO-FLT1-OUT	ECHO-FLT2-IN
Short Loc Desc	FLT1-Out	FLT1-Out	FLT2-In
Locator Desc	FILTERRA #1 - OUTLET	FILTERRA #1 - OUTLET	FILTERRA #2 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD		**********	
DO, FIELD		**********	
PERSONNEL		**********	
PH, FIELD		**********	
SAMP TEMP		**********	
TURB, FIELD		**********	
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

DEUE

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-22	P67070-23	P67070-24
QC Link			
Locator	ECHO-FLT2-IN	ECHO-FLT2-OUT	ECHO-FLT2-OUT
Short Loc Desc	FLT2-In	FLT2-Out	FLT2-Out
Locator Desc	FILTERRA #2 - INLET	FILTERRA #2 - OUTLET	FILTERRA #2 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		**********
DO, FIELD	**********		**********
PERSONNEL	**********		**********
PH, FIELD	**********		**********
SAMP TEMP	**********		**********
TURB, FIELD	**********		**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

DELETE

Login: P67070 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67070-25	P67070-26	P67070-27
QC Link			
Locator	FFBLANK	TEMP	TEMP
Short Loc Desc	FFBLANK	TEMPLOC	TEMPLOC
Locator Desc	FIELD FILTER BLANK	TEMPORARY LOCATOR	TEMPORARY LOCATOR
Site	METRO	TEMP RG#3 out	TEMP RG#3 out
Comments	FFB Nutrients	Comp, FREP	Grab, FREP
Start Date/Time	2/9/17 1105	→ 0750	→ ~~0750~~ 0913
End Date/Time		0913	
Time Span		1.23	
Sample Depth			
COND, FIELD	**********	152.2	**********
DO, FIELD	**********	10.57	**********
PERSONNEL	**********	SH, CB, DH, JDD	**********
PH, FIELD	**********	6.41	**********
SAMP TEMP	**********	5.277	**********
TURB, FIELD	**********	7.07	**********
Dept, Matrix, Prod	3 LN NH3 3 LN NO23 3 LN ORTHOP	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	7 LG WTPH-DX

Login: P67140

Shoreline-Echo Lake Stormwater Monitoring

Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 2/15/17	Time 1630
Received by	Date 2/15/17	Time 1630
Sample Numbers		[All]

Sample Number	P67140-1	P67140-2	P67140-3
QC Link			
Locator	ECHO-BP1-IN	ECHO-BP1-IN	ECHO-BP1-OUT
Short Loc Desc	BP1-In	BP1-In	BP1-Out
Locator Desc	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - INLET	RAIN GARDEN #1 - OUTLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	2/15/17 1220	→ 1420	→ 1220
End Date/Time	1420		1420
Time Span	2		2
Sample Depth			
COND, FIELD	114.2	**********	105.7
DO, FIELD	10.04	**********	11.09
PERSONNEL	DH, SH	**********	→
PH, FIELD	7.33	**********	7.23
SAMP TEMP	9.582	**********	7.705
TURB, FIELD	225.0	**********	37.6
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM

WG150454

Login: P67140 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67140-4	P67140-5	P67140-6
QC Link			
Locator	ECHO-BP1-OUT	ECHO-BP3-IN	ECHO-BP3-IN
Short Loc Desc	BP1-Out	BP3-In	BP3-In
Locator Desc	RAIN GARDEN #1 - OUTLET	RAIN GARDEN #3 - INLET	RAIN GARDEN #3 - INLET
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Grab	Comp	Grab
Start Date/Time	2/15/17 1420	→ 1255	→ 1500
End Date/Time		1500	
Time Span		2.05	
Sample Depth			
COND, FIELD	**********	84.7	**********
DO, FIELD	**********	10.73	**********
PERSONNEL	**********	DH, SH	**********
PH, FIELD	**********	6.89	**********
SAMP TEMP	**********	7.699	**********
TURB, FIELD	**********	151.0	**********
Dept, Matrix, Prod	7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX

Login: P67140 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P67140-7	P67140-8	P67140-9
QC Link			
Locator	ECHO-BP3-OUT	ECHO-BP3-OUT	FFBLANK
Short Loc Desc	BP3-Out	BP3-Out	FFBLANK
Locator Desc	RAIN GARDEN #3 - OUTLET	RAIN GARDEN #3 - OUTLET	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	Comp	Grab	FFB Nutrients
Start Date/Time	2/15/17 1255	→ 1500	→ 1600
End Date/Time	1500		
Time Span	2.05		
Sample Depth			
COND, FIELD	119.5	**********	**********
DO, FIELD	10.36	**********	**********
PERSONNEL	DH, SH	**********	**********
PH, FIELD	6.78	**********	**********
SAMP TEMP	7.506	**********	**********
TURB, FIELD	12.7	**********	**********
Dept, Matrix, Prod	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 5 LG MODEC-MF 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM	7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP

Login: P65650 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by		*Date* 6/24/16	*Time* 1015
Received by		*Date* 6/24/16	*Time* 1015
Sample Numbers	1, 3, 5		*[All]*

Sample Number	P65650-1	P65650-2	P65650-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	6/23/16 / 2100		6/23/16 / 2100
End Date/Time	6/24/16 / 0200		6/24/16 / 0200
Time Span	5 hrs	Delete	5 hrs
Sample Depth	Every 15 min @ 420mL		Every 15 min @ 420mL
~~COND, FIELD~~ Delete	20 aliquots	**********	20 Aliq. 15
~~DO, FIELD~~ Delete	—	**********	—
PERSONNEL	CB		CB
~~PH, FIELD~~ Delete	—	**********	—
~~SAMP TEMP~~ Delete	—	**********	—
~~TURB, FIELD~~ Delete	—	**********	—
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS Delete ~~7 LG PAH-SIM~~ ~~10 LG EPA1668PCB~~	5 LG FC-MF 7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS Delete ~~7 LG PAH-SIM~~ ~~10 LG EPA1668PCB~~

WG 196594

Login: P65650 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Delete

Sample Number	**P65650-4**		
QC Link			
Locator	**ECHO-DTS-OUT**		
Short Loc Desc	DTS-Out		
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS		
Site	KING COUNTY		
Comments	Grab		
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL			
PH, FIELD	**********		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX		

Sample: P65650-5 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Received by	*Date*	*Time*
Sample Numbers		*[All]*

Sample Number	**P65650-5**		
QC Link			
Locator	**FFBLANK**		
Short Loc Desc	FFBLANK		
Locator Desc	FIELD FILTER BLANK		
Site	METRO		
Comments			
Start Date/Time	6/24/16 / 0930		
End Date/Time			
Time Span	FG		
Sample Depth			
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP		

Login: P66175 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinqdished by	Date 9/17/16	Time 1345
Received by Meghan	Date 9/19/16	Time 0730
Sample Numbers	* stored in walk-in cooler until receipt except micro - delivered to analyst, disp nuts per EC #32	[All]

Sample Number	P66175-1	P66175-2	P66175-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	09/17/16 / 0755	→ / 0715	→ 0805
End Date/Time			
Time Span	3 hrs		3 hrs
Sample Depth			
COND, FIELD	122.1	**********	131.5
DO, FIELD	8.86	**********	8.20
PERSONNEL	CB	→	→
PH, FIELD	7.20	**********	7.18
SAMP TEMP	17.131	**********	17.408
TURB, FIELD	30.8	**********	43.3
Dept, Matrix, Prod TC: 20 min 9 samples * Both inlet & outlet flowing at start.	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	5 LG FC-MF 7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

WG148099

Login: P66175 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

*Field parms only

Sample Number	P66175-4	-5	-6
QC Link			
Locator	ECHO-DTS-OUT		
Short Loc Desc	DTS-Out	Inlet	Outlet
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS	exo (post storm) →	
Site	KING COUNTY		
Comments	Grab		
Start Date/Time	09/17/16/ 0725	→ / 1142	→ 1132
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	79.0	126.9
DO, FIELD	**********	8.83	8.08
PERSONNEL	CB	→	→
PH, FIELD	**********	7.33	7.23
SAMP TEMP	**********	17.076	17.135
TURB, FIELD	**********	24.2	24.2
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX	not Running → Still running below AVM, Low flow	Still Running, but very little flow.

Login: P66175 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	**P66175-7**		
QC Link			
Locator	**FFBLANK**		
Short Loc Desc	FFBLANK		
Locator Desc	FIELD FILTER BLANK		
Site	METRO		
Comments			
Start Date/Time	9/17/16/1330		
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********		
DO, FIELD	**********		
PERSONNEL	CB		
PH, FIELD	**********		
SAMP TEMP	**********		
TURB, FIELD	**********		
Dept, Matrix, Prod	3 LN NH3 3 LN NO23 3 LN ORTHOP		

Login: P66285 | Shoreline-Echo Lake DTS | Personnel: CB

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by Friedrich Gottlupp	Date 10-7-16	Time 915
Received by J. Bailey	Date 10/7/16	Time 0915
Sample Numbers -1, -3, -5		

Sample Number	P66285-1	P66285-2	P66285-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/6/16 / 1800		10/6/16 1800
End Date/Time	10/7/16 / 0440		10/7/16 / 0440
Time Span			
Sample Depth	7.20 @ 33		7.20 @ 33
COND, FIELD	—	**********	—
DO, FIELD	—	**********	—
PERSONNEL	CB		CB
PH, FIELD	—	**********	—
SAMP FUNC	**********	**********	**********
SAMP TEMP	—	**********	—
TURB, FIELD	—	**********	—
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	5 LG FC-MF 7 LG WTPH-DX Delete	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

— No Grabs
↳ not flowing
— ~~Rock~~
— Picked up Samples @ 0600.

WG148599

Login: P66285 Shoreline-Echo Lake DTS Personnel: _____

Project: 421879-250

Delete

Sample Number	P66285-4	P66285-5	
QC Link			
Locator	ECHO-DTS-OUT	FFBLANK	
Short Loc Desc	DTS-Out	FFBLANK	
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	Grab		
Start Date/Time			10/7/16 9830
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	**********	
DO, FIELD	**********	**********	
PERSONNEL		**********	
PH, FIELD	**********	**********	
SAMP FUNC	**********		FFB
SAMP TEMP	**********	**********	
TURB, FIELD	**********	**********	
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP	

Login: P66384 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 10/13/16	Time 1005
Received by	Date 10/13/16	Time 1005
Sample Numbers 66384-2, 4 (All)		[All]

Sample Number	P66384-1	P66384-2	P66384-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/13/16/0825	→ 0815	→ 0820
End Date/Time	10/13/16 / 1405		10/13/16 / 1400
Time Span	5.4 hrs		5.4 hrs
Sample Depth			
COND, FIELD	33.3	**********	31.7
DO, FIELD	10.18	**********	10.18
PERSONNEL	CB, SH	→	→
PH, FIELD	7.16	**********	7.20
SAMP FUNC	**********	**********	**********
SAMP TEMP	12.774	**********	12.936
TURB, FIELD	16.2	**********	15.6
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	5 LG FC-MF 7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

18 aliquots 510 mL every 20 minutes

0.31 in ~~DTS~~ during event

CHAIN OF CUSTODY

RELINQUISHED BY	Date 10/13/16	Time 1700
RECEIVED BY	Date 10/13/16	Time 1700
Sample Number(s) 1, 3, 5		(All)

WO-148600

Login: P66384 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66384-4	P66384-5	
QC Link			
Locator	ECHO-DTS-OUT	FFBLANK	
Short Loc Desc	DTS-Out	FFBLANK	
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	Grab		
Start Date/Time	10/13/16 / 0800	→ / 1630	
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	**********	
DO, FIELD	**********	**********	
PERSONNEL	CB, SH	**********	
PH, FIELD	**********	**********	
SAMP FUNC	**********	FFB	
SAMP TEMP	**********	**********	
TURB, FIELD	**********	**********	
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP	

Login: P66435

Project: 421879-250

Shoreline-Echo Lake Stormwater Monitoring

Personnel: _____

CHAIN OF CUSTODY

Relinquished by		Date	10/20/16	Time	1325
Received by		Date	10/20/16	Time	1325
Sample Numbers	1-5				[XII]

Sample Number	P66435-1	P66435-2	P66435-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/19/16/2130	10/20/16/0808	10/19/16/2130
End Date/Time	10/20/16/0730		10/20/16/0730
Time Span	9hrs		9hrs
Sample Depth			
COND, FIELD	50.8	**********	55.5
DO, FIELD	10.62	**********	10.56
PERSONNEL	OB	→	→
PH, FIELD	7.24	**********	7.08
SAMP FUNC	**********	**********	**********
SAMP TEMP	11.749	**********	11.754
TURB, FIELD	12.7	**********	12.2
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB	5 LG FC-MF 7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM 10 LG EPA1668PCB

1.01 inches during sampling

WF148617

Login: P66435 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66435-4	P66435-5	
QC Link			
Locator	ECHO-DTS-OUT	FFBLANK	
Short Loc Desc	DTS-Out	FFBLANK	
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	Grab		
Start Date/Time	10/20/16 / 0820	→ / 1305	
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	**********	
DO, FIELD	**********	**********	
PERSONNEL	CB	**********	
PH, FIELD	**********	**********	
SAMP FUNC	**********	FFB	
SAMP TEMP	**********	**********	
TURB, FIELD	**********	**********	
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP	

Login: P66499 | Shoreline-Echo Lake Stormwater Monitoring | Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 10/26/16	Time 1446
Received by	Date 10/26/16	Time 1446
Sample Numbers		[All]

Sample Number	P66499-1	P66499-2	P66499-3
QC Link			
Locator	ECHO-DTS-IN	ECHO-DTS-IN	ECHO-DTS-OUT
Short Loc Desc	DTS-In	DTS-In	DTS-Out
Locator Desc	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - INLET OF DTS	ECHO LAKE STORMWATER - OUTLET OF DTS
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	Comp	Grab	Comp
Start Date/Time	10/26/16 0815	→ 1157	→ 0820
End Date/Time	1308		1310
Time Span	4.53		4.50
Sample Depth			
COND, FIELD	91.3	**********	62.2
DO, FIELD	10.40	**********	10.45
PERSONNEL	CB, SH	→	→
PH, FIELD	7.24	**********	7.29
SAMP FUNC	**********	**********	**********
SAMP TEMP	11.963	**********	11.743
TURB, FIELD	15.3	**********	21.0
Dept, Matrix, Prod	3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~	5 LG FC-MF 7 LG WTPH-DX	3 LG DOC 3 LG NH3 3 LG NO23 3 LG ORTHOP 3 LG TOC 3 LG TOTN 3 LG TOTP 3 LG TSS 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG ICPMS-HARDNESS 6 LG MG-ICPMS 6 LG PB-ICPMS 6 LG PB-ICPMS, DISS 6 LG ZN-ICPMS 6 LG ZN-ICPMS, DISS 7 LG PAH-SIM ~~10 LG EPA1668PCB~~

W6148805

Login: P66499 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	P66499-4	P66499-5	
QC Link			
Locator	ECHO-DTS-OUT	FFBLANK	
Short Loc Desc	DTS-Out	FFBLANK	
Locator Desc	ECHO LAKE STORMWATER - OUTLET OF DTS	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	Grab		
Start Date/Time	10/26/16 1203	→ 1400	
End Date/Time			
Time Span			
Sample Depth			
COND, FIELD	**********	**********	
DO, FIELD	**********	**********	
PERSONNEL	CB, SH	**********	
PH, FIELD	**********	**********	
SAMP FUNC	**********	FFB prior to split	
SAMP TEMP	**********	**********	
TURB, FIELD	**********	**********	
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX	3 LN NH3 3 LN NO23 3 LN ORTHOP	

Login: P67413

Shoreline-Echlo Lake Equipment Blanks

Personnel: _____

Project: 421879-250

CHAIN OF CUSTODY

Relinquished by	Date 3/29/17	Time 1615
Received by	Date 3/29/17	Time 1615
Sample Numbers		[All]

Sample Number	P67413-1	P67413-2	P67413-3
QC Link			
Locator	BLANK1	FFBLANK	BLANK2
Short Loc Desc	Blank1	FFBLANK	Blank2
Locator Desc	BLANK1	FIELD FILTER BLANK	BLANK2
Site	METRO	METRO	METRO
Comments	AS Comp	FFB	Peristaltic Pump and Tubing
Start Date/Time	03/29/17 / 1550	→ / 1545	→ / 1535
End Date/Time			
Time Span			
Sample Depth			
PERSONNEL	CB, SH	**********	→
SAMP FUNC	**********	FFB	Equipment Blank
SAMP INFO	GLS	**********	Non-Posh pole
Dept, Matrix, Prod	3 LN NH3 3 LN NO23 3 LN ORTHOP 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 7 LN PAH-SIM 10 LN EPA1668PCB	3 LN NH3 3 LN NO23 3 LN ORTHOP	10 LN EPA1668PCB

TOC
DOC

WG151081

Login: P67413 Shoreline-Echo Lake Stormwater Monitoring Personnel: _____

Project: 421879-250

Sample Number	**P67413-4**		
QC Link			
Locator	**BLANK2**		
Short Loc Desc	Blank2		
Locator Desc	BLANK2		
Site	METRO		
Comments	Peristaltic Pump and Tubing		
Start Date/Time	3/29/17/1605		
End Date/Time			
Time Span			
Sample Depth			
PERSONNEL	SH, CB		
SAMP FUNC	Equipment Blank		
SAMP INFO	w/ Posh pole		
Dept, Matrix, Prod	10 LN EPA1668PCB		

CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: King Co. Env. Lab, 322 W. Ewing St, Seattle, WA 98119

CONTACT: F. Grothkopp

PHONE: 206-477-7114

Date: 6-24-16

EMAIL: fritz.grothkopp@kingcounty.gov

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX	NUMBER OF CONTAINERS	DIOXIN/FURAN	PCB - dioxin-like (12)	PCB - 209 congener	PAH	NDMA	TBT	Nonylphenol		Date Requested	COMMENTS
L64379-2	PRL6 1861	12-8-15	WATER	2			X							
-4	1862	"		2										
L64648-1	1863	1-21-16		2										
-3	1864			2										
-5	1865			2										
-7	1866			2										
-9	1867			2										
L64921-1	1868	3-1-16		2										
-3	1869			2										
-9	1870			2										
-11	1871			2										
L64999-1	1872	3-9-16		2										
-3	1873			2										
-5	1874			2										
-7	1875			2										

Sampler's Signature	Relinquished by:	Company	Date	Time	Received by:	
	Bobby Wainright	KC Environmental Lab	6/24/2016	10:39	JWiebe	
Comments: Project: 421879-250 Shoreline/Echo Lake SW Eff Monitoring	Method of Shipment: P delivery	Waybill No.:	Rec'd for PRL:		Date: 24JUN16	Time: 10:39am
	Shipment Condition: good	Temp.:	Cooler Opened By: JW			

CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: King Co. Env. Lab
322 W. Ewing St
SEATTLE, WA 98119

CONTACT: F. Grothkopp

PHONE: 206-477-7114

Date: 6-24-16

EMAIL: fritz.grothkopp@kingcounty.gov

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX	NUMBER OF CONTAINERS	DIOXIN/FURAN		PCB - dioxin-like (12)	PCB - 209 congener	PAH	NDMA	TBT	Nonylphenol		Date Requested	COMMENTS
L64999-9	PR161876	3-9-16	WATER	2			X								
-11	1877	↓	↓	2			↓								
-13	1878			2											
-15	1879			2											
-17	1880			2											

Sampler's Signature	Relinquished by:	Company	Date	Time	Received by:	
	Bobby Wittingt	KC Environmental Lab.	6/24/2016	10:39	JWiebe	
Comments:	Method of Shipment	Waybill No.:	Rec'd for PRL:		Date	Time
	Personal delivery				24JUN16	10:39AM.
	Shipment Condition	Temp.:	Cooler Opened By:			
	GOOD		JW			

CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: King Co. Env. Lab
322 W. Ewing St
SEATTLE, WA 98119

CONTACT: F. Grothkopp

PHONE: 206-477-7114

Date: 12-20-16

EMAIL: fritz.grothkopp@kingcounty.gov

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX	NUMBER OF CONTAINERS	DIOXIN/FURAN	PCB - dioxin-like (12)	PCB - 209 congener	PAH	NDMA	TBT	Nonylphenol		Date Requested	COMMENTS
L66175-1	PR4565	9-17-16	WATER	2			X							
-3	4566	9-17-16		2										
L66285-1	4567	10-6-16		2										
-3	4568	10-6-16		2										
L66382-9	4569	10-13-16		2										
-11	4570			2										
-17	4571			2										
-19	4572			2										
L66384-1	4573	10-13-16		2										
-3	4574	"		2										
L66435-1	4575	10-19-16		2										
-3	4576	"	WATER	2			X							

Sampler's Signature	Relinquished by:	Company	Date	Time	Received by:	
Comments: Shoreline-Echo Lake Project: 421879-250	Method of Shipment	Waybill No.:	Rec'd for PRL:		Date: 21 dec 16	Time: 10:40 am.
	Shipment Condition	Temp.: 9.5C	Cooler Opened By: JW			

SAMPLE RECEIPT FORM / CHEMICAL ANALYSIS FORM

FILE #: PR164565

CLIENT: King County
322 W. Ewing St.
Seattle, WA 98119
USA

Phone: (206) 477-7114
Email: fritz.grothkopp@kingcounty.gov

RECEIVED BY: M.A. Wright/J. Wiebe **DATE/TIME:** December 21, 2016 (10:40 a.m.)
CONDITION: okay, 7.6°C

# of Containers	Sample Type	Sample (Client Codes)	Lab Codes	Test Requested
		Project ID: 421879-250 Shoreline-Echo Lake		
2	Water	L66175-1 Date Sampled: 09/17/16	PR164565	209PCB
2	Water	L66175-3 Date Sampled: 09/17/16	PR164566	209PCB
2	Water	L66289-1 Date Sampled: 10/06/16	PR164567	209PCB
2	Water	L66289-3 Date Sampled: 10/09/16	PR164568	209PCB
2	Water	L66382-9 Date Sampled: 10/13/16	PR164569	209PCB
2	Water	L66382-11 Date Sampled: 10/13/16	PR164570	209PCB
2	Water	L66832-17 Date Sampled: 10/13/16	PR164571	209PCB
2	Water	L66832-19 Date Sampled: 10/13/16	PR164572	209PCB
2	Water	L66384-1 Date Sampled: 10/13/16	PR164573	209PCB
2	Water	L66384-3 Date Sampled: 10/13/16	PR164574	209PCB
2	Water	L66435-1 Date Sampled: 10/19/16	PR164575	209PCB
2	Water	L66435-3 Date Sampled: 10/19/16	PR164576	209PCB
2	Water	L66498-9 Date Sampled: 10-26-16	PR164598	209PCB
2	Water	L66498-11 Date Sampled: 10-26-16	PR164599	209PCB
2	Water	L66498-13 Date Sampled: 10-26-16	PR164600	209PCB
1	Water	L66498-15 Date Sampled: 10-26-16	PR164601	209PCB
2	Water	L66498-17 Date Sampled: 10-26-16	PR164602	209PCB
2	Water	L66498-19 Date Sampled: 10-26-16	PR164603	209PCB

STORAGE: Stored at 4°C.

ANALYTES: HRGC/HRMS analysis for polychlorinated polychlorinated biphenyls (209 congeners).

SPECIAL INSTRUCTIONS: none

CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: King Co. Env. Lab.
322 West Ewing St.
Seattle, WA 98119

CONTACT: F. Grothkopp

PHONE: 206-477-7114

Date: 4-5-17

EMAIL: fritz.grothkopp@kingcounty.gov

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX	NUMBER OF CONTAINERS	DIOXIN/FURAN	PCB - dioxin-like (12)	PCB - 209 congener	PAH	NDMA	TBT	Nonylphenol		Date Requested	COMMENTS
L66938-5	PR171233	1-18-17	WATER	2			✓							
-7	1234	↓	↓	2			✓							
-13	1235			2			✓							
-15	1236			2			✓							
-17	1237			2			✓							
-19	1238			2			✓							
L67070-5	1239	2-9-17		2			✓							
-7	1240	↓		2			✓							
* -26			↓	2			✓							* did not receive
L67413-1	1241	3-29-17	WATER	2			✓							
-3	1242	↓	↓	2			✓							
-4	1243	↓	↓	2			✓							
~~L6707~~ JW														
* 66938-22	1244			2										* extra, not included on COC - 10APR17 do not analyse. JW

Sampler's Signature	Relinquished by:	Company	Date	Time	Received by:	
	Frederick Grothkopp	KCEL	4-5-17	1200		
Comments: 421879-250 Shoreline-Echo Lake Stormwater Monitoring	Method of Shipment: Fedex	Waybill No.:	Rec'd for PRL: ON		Date: 06APR17	Time: 11am.
	Shipment Condition: Good	Temp.: 9.0C	Cooler Opened By: JW			

SAMPLE RECEIPT FORM / CHEMICAL ANALYSIS FORM

FILE #: PR171233

CLIENT: King County
322 W. Ewing St.
Seattle, WA 98119
USA

Phone: (206) 477-7114
Email: fritz.grothkopp@kingcounty.gov

RECEIVED BY: J. Wiebe
CONDITION: okay, 7.6°C

DATE/TIME: April 6, 2017 (11:00 a.m.)

# of Containers	Sample Type	Sample (Client Codes)	Lab Codes	Test Requested
		Project ID: 421879-250 Shoreline Echo Lake Stormwater Monitoring		
2	Water	L66938-5 Date Sampled: 01-18-17	PR171233	209PCB
2	Water	L66938-7 Date Sampled: 01-18-17	PR171234	209PCB
2	Water	L66938-13 Date Sampled: 01-18-17	PR171235	209PCB
2	Water	L66938-15 Date Sampled: 01-18-17	PR171236	209PCB
2	Water	L66938-17 Date Sampled: 01-18-17	PR171237	209PCB
2	Water	L66938-19 Date Sampled: 01-18-17	PR171238	209PCB
2	Water	L67070-5 Date Sampled: 02-09-17	PR171239	209PCB
2	Water	L67070-7 Date Sampled: 02-09-17	PR171240	209PCB
2	Water	L67413-1 Date Sampled: 03-29-17	PR171241	209PCB
2	Water	L67413-3 Date Sampled: 03-29-17	PR171242	209PCB
2	Water	L67413-4 Date Sampled: 03-29-17	PR171243	209PCB
2	Water	L66938-22	PR171244	HOLD

STORAGE: Stored at 4°C.

ANALYTES: HRGC/HRMS analysis for polychlorinated polychlorinated biphenyls (209 congeners).

SPECIAL INSTRUCTIONS: none

METHODOLOGY

Reference Method: PCB: SOP LAB02; EPA Method 1668C

Data summarized in Data Report Attached

Report sent to: Fritz Grothkopp Date: May 17, 2017

Comments: Results relate only to items tested.

Appendix C:
Field Sampling Methods

This page intentionally left blank.

APPENDIX C - FIELD SAMPLING METHODS

This appendix provides an overview of the field sampling methods used in the study; greater detail is presented in the project QAPP (King County 2015). The sampling locations are described in Section C.1. Sections C.2 and C.3 summarize the sample collection and sample processing methods, respectively. Section C.4 describes the field sampling deviations from the QAPP. Photographs illustrating these sampling methods are included at the end of the appendix.

C.1 Sampling Locations

Stormwater samples were collected from the inlet and outlet of three BPB constructed in 2012, one BPB constructed in 2016, a Filterra constructed in 2012, and the DTS (Table C-1). These BPB and Filterra are located within the Echo Lake drainage basin and receive runoff from Aurora Ave N. (State Route 99) between N 185th St and N 200th St. Effluent from these treatment features is discharged back into the stormwater system. The DTS is located below ground at the Park and Ride on the corner of Aurora Ave N. and N 192nd St. This structure receives runoff from almost the entire drainage basin, including highway, residential, and commercial areas. Effluent from this structure discharges directly to Echo Lake. Figure A-1 identifies each sampled BPB, Filterra, and the inlet and outlet of the DTS. More detailed information about these structures is included in Appendix A and the project QAPP.

Table C-1. Echo Lake Stormwater Sampling Locations with Locator Names

Site Type	Locator Name*	Latitude	Longitude
Bioretention Planter Boxes (constructed in 2012)	ECHO-BP1-In	47.76749	-122.34573
	ECHO-BP1-Out	47.76760	-122.34573
	ECHO-BP2-In	47.76534	-122.34611
	ECHO-BP2-Out	47.76543	-122.34611
	ECHO-BP3-In	47.76685	-122.34572
	ECHO-BP3-Out	47.76695	-122.34572
Bioretention Planter Boxes (constructed in 2016)	ECHO-BP4-In	47.77263	-122.34580
	ECHO-BP4-Out	47.77271	-122.34580
Filterra (constructed in 2012)	ECHO-FLT1-In	47.76726	-122.34573
	ECHO-FLT1-Out	47.76727	-122.34572
Detention Tank System	ECHO-DTS-In	47.767697	-122.346477
	ECHO-DTS-Out	47.767634	-122.346277

*Locators are a unique name given to a sampling location and used in the KCEL database. Locators with the ending –In refer to the inlet of the treatment feature. Locators with the ending –Out refer to the outlet of the treatment feature.

C.2 Sample Collection

The QAPP provides a detailed description of sample collection procedures; however, there were several deviations from the QAPP, which are described in Section C.4. General procedures are summarized for the individual treatment features (BPB and Filterra) in Section C.2.1, and for the DTS in Section C.2.2.

C.2.1 General Procedures at the BPB and Filterra

As described in the QAPP, composite grab samples were collected at the inlet and outlet of each treatment feature using peristaltic pumps. Site-dedicated and pre-cleaned silicon tubing was used for each sampling event, and Teflon® tubing was pre-cleaned and site-dedicated. At each site, two-liter aliquots were generally collected every 20 to 30 minutes and composited in glass carboys. The QAPP specified up to 8.75 liters would be collected at each site over a period of at least two hours. In practice, up to 10 liters were collected at each site, usually over a period of 0.5 to 3 hours. These samples were not collected in relation to the hydrograph, but many composite sample collections spanned the entire effluent flow at the BPBs for a given storm event. Samples with less than the target volume were retained for analysis following the flow chart depicted in Figure 3 of the QAPP (King County 2015).

As specified in the QAPP, an additional 50 mL aliquot was filtered through a site-dedicated capsule filter (0.45µm) for each main sample aliquot collected. The QAPP specified that filtered aliquots would be composited at the KCEL, but in practice, field compositing was possible; therefore, filtered aliquots were composited into a 500 mL HDPE bottle as collected. Capsule filters were replaced when clogged, which occurred several times throughout a given sampling event. This filtered sample was collected for dissolved metals analysis, which requires filtering within 15 minutes of sample collection.

The QAPP specified that petroleum hydrocarbons samples would be collected directly into a dedicated container at the beginning of sampling. However, it was not possible to sample the effluent without the use of a peristaltic pump, due to the small opening of the clean out used to access the underdrain. Instead, grab samples were collected into a dedicated container using the peristaltic pump after the last aliquot was collected for the main composite sample. The project team anticipated that this procedure would prevent the loss of oils to equipment surfaces in two ways. One is by collecting this sample in a dedicated container, the splitting process is avoided, which would require the sample to pass through extra tubing while transferring containers. And second, by collecting the grab sample after all other sample aliquots have been collected, the tubing has already been coated with some oil, possibly preventing loss of oil from the final grab sample.

As described in the QAPP, field parameters were measured prior to each sampling event by collecting a volume of water in a pre-cleaned two-liter bucket using a peristaltic pump. Dissolved oxygen, temperature, pH and conductivity were measured using an EXO YSI Sonde, and turbidity will measured using a Hach 2100 Portable Turbidimeter.

C.2.2 Capturing Influent and Effluent at the BPB and Filterra

The QAPP specified general sample collection procedures; however, some details were honed during field visits after the QAPP was written. This section describes in detail how influent and effluent samples were collected at the BPB and Filterra over the course of this project.

Stormwater from the highway enters a catch basin system prior to reaching the BPBs (See Appendix A for layout). Influent samples were collected by holding the pump tubing at the surface of the water spilling from the catch basin into the BPB. While these samples likely contained a mixture of new stormwater and stormwater that had been sitting in the catch basin from previous storms, they were representative of the water entering the BPB.

There are no catch basins associated with the Filterra inlets. The QAPP directed that Filterra influent would be physically concentrated to sampling from the roadway; however, this was not necessary in practice. Instead, a small stainless-steel tray was placed on top of the mulch/media layer in the path of the sheet flow from the street. After several minutes of flushing, influent samples were collected from the surface of the water pooling in the stainless steel tray. Water continually overflowed from the tray into the media, so the Filterra continued functioning, but the walls of the tray prevented mulch debris from entering the sample line. This setup also allowed personnel to stay clear of the roadway.

Effluent samples for each BPB and the Filterra were collected from the underdrains, using overflows and/or clean outs for access (See Appendix B for details). The BPB underdrain was fairly deep, and so the pump tubing was secured within a PVC pole and lowered into the overflow or clean out until the tubing opening was submerged in the effluent flowing through the underdrain pipe. The Filterra underdrain was not visible, and so the pump tubing could not be placed using visual clues. Instead, with the pump running, the tubing was lowered into the clean out until effluent could be seen moving through the tubing. The tubing was held in place while the aliquot was collected.

C.2.3 General Procedures at the DTS

Flow meters were installed according to the procedures outlined in the QAPP, except for a number of deviations described in Section C.4. In the end, usable data were available for only a few months from the area velocity meter installed at the inlet.

Composite samples were collected using the GLS ISCO® autosamplers specified in the QAPP, but due to the flow monitoring issues, they could not be collected as flow-weighted samples. Instead time-weighted samples were collected using a visual level and start time to trigger sampling. Samples were collected over three to 11 hour timespans, depending on storm duration, with 250mL aliquots collected every 15 minutes. Otherwise, the procedures followed those described in the QAPP.

C.3 Sample Processing

Sample processing followed the procedures described in the QAPP. The samples were kept on ice and transported to KCEL where they were split into the appropriate sample containers, logged into the chain of custody, and stored at the appropriate storage temperatures until analysis. Samples for polychlorinated biphenyl (PCB) analysis were shipped to Pacific Rim Laboratories as described in the QAPP.

C.4 Additional deviations from the QAPP

- The QAPP specified that storms would qualify for sampling with at least 0.15 inches of rainfall during the storm event with an antecedent dry period of at least six hours with less than 0.04 inches of rainfall. In reality, these conditions did not sufficiently predict conditions that would generate effluent flow from the BPBs. Instead, the project team had to monitor the forecast for predicted rainfall greater than 0.03 inches per 15 minutes over at least two hours in order to target storms with the necessary intensity to produce effluent flow for sampling. This deviation was necessary to obtain samples for the study, but it resulted in sampling only high intensity storm conditions; however, this is still representative of treatment conditions at this site, because these are the only conditions under which effluent flow was observed at the BPBs.
- The QAPP specified that a second Filterra would be included in the study from the northern portion of the retrofit (completed in 2016). The design of this Filterra differed from the one sampled in the southern portion of the retrofit (completed in 2012) and the underdrain was much less accessible. The field crew could not access the effluent flow for sampling and so this site was dropped from the study.
- The QAPP specified that six to eight storms would be sampled at each BPB and Filterra. This sample goal was achieved at BPB1, BPB2, and BPB3. The Filterra developed drainage issues, and was not sampleable for the last two storms, meaning only five storms were sampled at this site. Only two storms were sampled at BPB4 due to insufficient effluent flow and delays in construction. The Filterra results were retained for analysis despite the small sample size, but only limited observations could be made with the BPB4 results.
- While the sample aliquots were generally collected at the BPBs between 20 and 30 minutes apart, as specified in the QAPP, there was one event where aliquots were collected a couple hours apart. This was because effluent from the BPB had stopped flowing during a period of lower intensity rain, and the project team had to wait until storm intensity increased and flow restarted. This event also had a timespan over 5 hours, because of this break midway through sampling. This deviation is not expected to affect data quality.
- One effluent sample at BPB2 (L64921-7) consisted of only one aliquot (i.e., single grab). This was because rainfall intensity diminished unexpectedly and effluent flows ceased before additional aliquots could be collected. Results for this sample were comparable to other effluent sample results, and retained for all data analysis.

- The filtered aliquots collected for dissolved metals were composited in the field instead of in the laboratory as specified in the QAPP. This did not affect the data quality.
- Sometimes sediment was present in the underdrains of BPB1 and BPB3. This sediment had likely built up during previous storms, and would not be representative of current conditions if captured in the sample. To prevent this, the underdrains were flushed with either reverse osmosis (RO) water from the laboratory or from rainwater collected in the field at least 30 minutes before samples were collected if sediment was present. This procedure was chosen to collect the most representative samples for each storm, but it does not provide information about the contaminants present in the sediment. While the water used to clear the sediment could potentially introduce contaminants into the outlet samples, the field crew minimized this risk by allowing the underdrains to flush with effluent for at least 10 minutes before sampling.
- The QAPP specified that flow would be monitored throughout the project with ISCO® 4230 air bubblers (level sensor-type flow meters) at both the inlet and outlet of the DTS. However, soon after the flow meters were installed, it became clear there were issues at both locations.
    - At the inlet, the pipe would often fill with water during storms, which is not a condition under which the air bubbler can correctly measure flow. The air bubble at the inlet was replaced with an ISCO 4250 area velocity meter on November 10, 2015, which can accurately measure flow in a full pipe.
    - At the outlet, an additional flow control structure intercepts the water before it proceeds to the outlet pipe where the flow meter was installed (Appendix A, page A-9). After recording questionable flow data during a couple storms, the field lead visited the site during a storm to assess the situation. The field lead observed water surging from the flow control structure into the outlet pipe. This non-uniform flow was causing the flow meter to record erroneous measurements. This issue was not resolved, and flow monitoring was discontinued at the DTS outlet site. This also necessitated modifying Study Objective #2 to exclude the evaluation of flow control effectiveness of the DTS. Additionally, since flow data was not recorded at the outlet, all samples collected at the DTS were time-weighted instead of flow-weighted as specified in the QAPP. Finally, due to technical errors, inlet flow data was not recorded during several months of the project. The collected flow data are available upon request.
- As mentioned in Section C.2.3, DTS samples timespans were shorter than those specified in the QAPP and they were time-weighted. Additionally, it is unclear what portion of the hydrograph was sampled, because the flow data was not reliable. Despite these deviations, the samples were successfully collected only during storm conditions and were retained for analysis unless additional data quality issues were expected (See Appendix G).

APPENDIX C REFERENCES

King County. 2015. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

SAMPLING METHOD PHOTOGRAPHS

Figure C-1. Filterra with closed grate and Filterra with open grate, clean-out uncapped (June 2, 2015).

Figure C-2. Filterra inlet sampling, stainless steel tray collecting water from curb cut (October 26, 2016).

Figure C-3. BPB1 inlet sampling, peristaltic pump (December 8, 2015).

Figure C-4. BPB1 outlet sampling, PVC pole holds tubing along the bottom of underdrain (December 8, 2015).

Figure C-5. DTS inlet sampling, ISCO autosampler retrieval (October 13, 2015).

Figure C-6. DTS outlet sampling, ISCO autosampler retrieval, demonstrating weighted tubing (October 13, 2015).

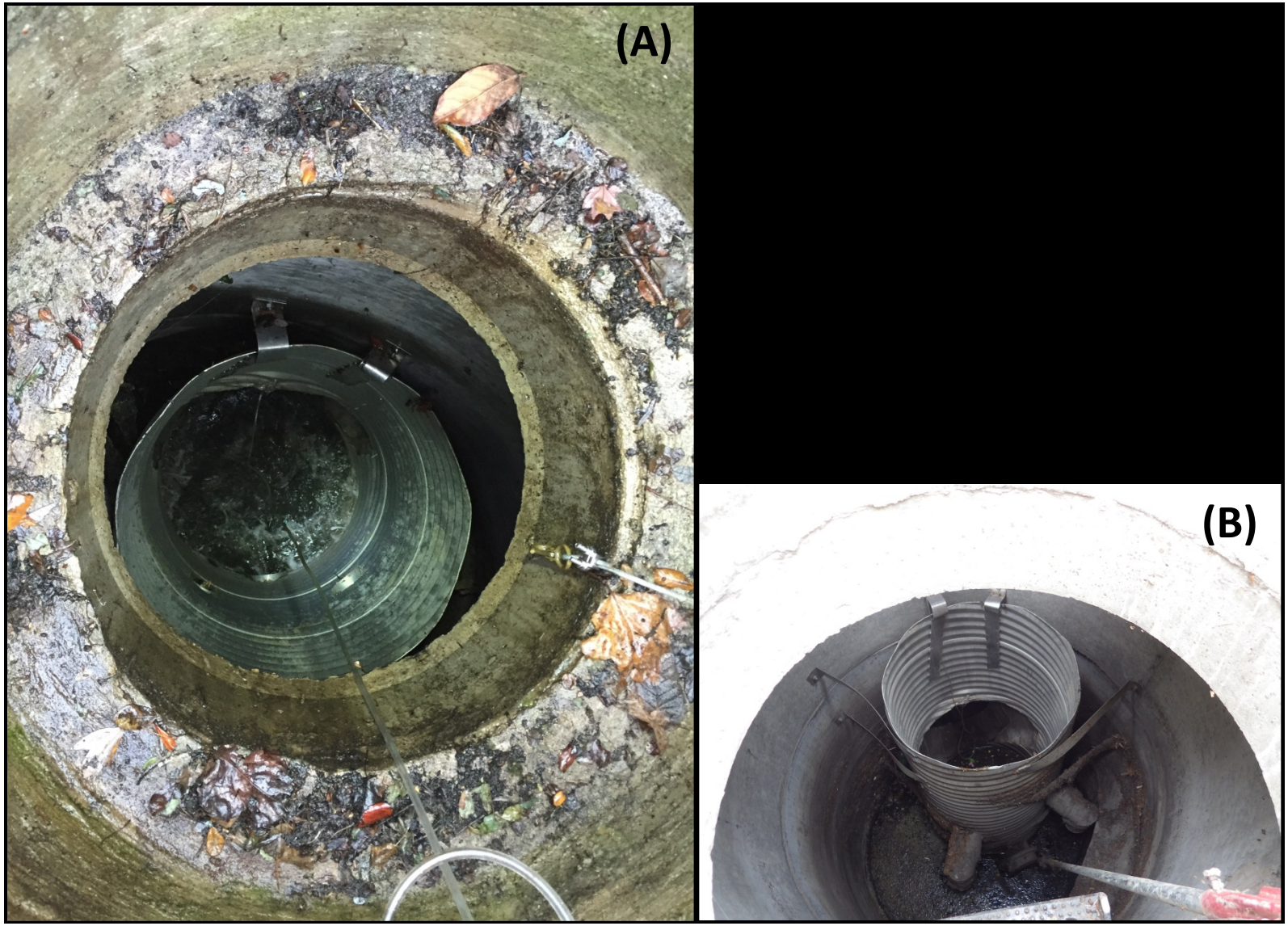


Figure C-7. View inside DTS outlet sampling location, flow control structure: (A) October 13, 2015, (B) June 2, 2015 (no storm).

Appendix D:
Analytical Methods

This page intentionally left blank.

APPENDIX D - LABORATORY METHODS

A summary of analytical methods are presented in this section. The King County Environmental Laboratory (KCEL) reports both the reporting detection limit (RDL) and the method detection limit (MDL) for each sample and parameter, where applicable. PCB congeners were analyzed using high resolution isotopic dilution based methods, therefore MDL and RDL terms are less applicable because limits of quantitation are derived from calibration capabilities and ubiquitous, but typically low level equipment and laboratory blank contamination. As a result, PCB and dioxin/furan congener data are reported to lowest method calibration limits (LMCLs) and flagged as estimated down to the sample specific detection limit (SDL). In most cases the SDL is below the LMCL. The following sections provide a summary of the laboratory methods; greater detail can be found in the project QAPP (King County 2015).

D.1 KCEL Analysis

KCEL analyzed all parameters except PCBs. Standard Method SM5310B was used for TOC and DOC analysis, while Standard Method SM2540D was used for TSS analysis. Nutrients were analyzed using SM4500-P-F (orthophosphate phosphorus), SM4500-P-B, F (total phosphorus), SM4500-N-C (total nitrogen), SM4500-NO3-F (nitrate-nitrite nitrogen), and Kerouel & Aminot (1997; ammonia nitrogen).

Total and dissolved metals were analyzed and reported by EPA Method 200.8 (Inductively Coupled Plasma-Mass Spectrometry [ICP-MS]), KCEL SOP 624. The specific metals analyzed included: cadmium, copper, lead, and zinc. PAHs samples were prepared by liquid-liquid extraction in general agreement with EPA method 3520C. Samples were analyzed by a modified EPA Method 8270 Gas Chromatography/Mass Spectrometry – Selected Ion Monitoring method (GC/MS-SIM; KCEL SOP 731v5). The specific PAHs included: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(g,h,i)perylene, benzo(a)pyrene, benzo(b,j,k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno (1,2,3-cd)perylene, naphthalene, phenanthrene, and pyrene.

The QAPP specified bacteria would be analyzed as fecal coliforms using Standard Method SM9222D; however, there was interference in the cultures. After the first set of samples with interference, the laboratory began side-by-side analysis with *Escherichia coli* (*E. coli*) to test comparability. Starting in October 2016, fecal coliform analysis was dropped in favor of *E. coli* analysis for all remaining samples. *E. coli* was analyzed using Standard Method SM9213D/3B.

Toxicity tests were conducted for four sets of samples collected at one of the bioretention planter boxes (BPB1). For each event two toxicity tests were conducted: (1) a 48-hour acute test with *Daphnia pulex* following KCEL SOP #412v2 and EPA Test Method 2021.0 (acute *Daphnia pulex*), and (2) a 7-day chronic test with *Ceriodaphnia dubia* following KCEL SOP #408v3 and EPA Method 1002.0 (chronic *Ceriodaphnia dubia*).

D.2 PCB Analysis

PCBs are found in up to 209 different chemical forms, called congeners, and were measured using high resolution PCB congener analysis. Analysis followed EPA Method 1668 Revision C (EPA 2010), which is a high-resolution gas chromatography/high-resolution mass spectroscopy (HRGC/HRMS) method using an isotope dilution internal standard quantification. This method provides reliable analyte identification and very low detection limits. An extensive suite of labeled surrogate standards are added before samples are extracted. Data are "recovery-corrected" for losses in extraction and cleanup, and analytes are quantified against their most similar labeled analogues. The analysis included all 209 PCB congeners. Pacific Rim Laboratories (PRL) performed the PCB congener analysis according to their SOP LAB02. The samples were extracted followed by standard method clean-up, which includes an acid wash followed by Acid Silica, Carbon, and Alumina column chromatography. Analysis is performed with an SGE HT-8 column.

D.3 Deviations from the QAPP

- The QAPP specified that DOC and TOC would only be analyzed for effluent samples at the DTS; however, the project manager requested that DOC analysis be added to the BPB and Filterra samples starting in 2017, because of surprisingly low dissolved copper concentrations observed in the BPB effluent during an initial review of the data. The BPB samples collected on 12/8/2015 also included TOC and DOC analysis, although this was an unplanned deviation. This does not affect data quality, but provides additional information to the project.

Appendix D References

EPA. 2010. Method 1668C, Chlorinated biphenyl congeners in water, soil, sediment, biosolids, and tissue by HRGC/HRMS. U.S. Environmental Protection Agency, Office of Water, Office Science and Technology, Washington, D.C. EPA-820-R-10-005.

King County. 2015. Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

Appendix E:
Data Analysis Methods

This page intentionally left blank.

APPENDIX E – DATA ANALYSIS METHODS

This section presents the methods used to prepare data for analysis, including the rules for: use of replicate data, significant figures, non-detect results, and determining sums for chemical groups (e.g., petroleum hydrocarbons [TPH-Dx], polycyclic aromatic hydrocarbons [PAHs] and polychlorinated biphenyls [PCBs]). Data analysis methods are also described, which include calculating percent reduction and statistical tests. Statistical test results are also presented.

E.1 Laboratory and Field Replicates

Laboratory and field replicates were considered quality control samples and were not used in data analysis, but rather as part of the data validation and quality control assessments.

E.2 Significant Figures

Chemical data generated by the King County Environmental Laboratory (KCEL) are reported to three significant figures, unless the value is below the reporting detection limit (RDL). In these cases, the value has higher uncertainty and is reported to only two significant figures. Pacific Rim Laboratories reports PCB congener results to three significant figures. PCB congener sums were also rounded to three significant figures. Appendix F presents the concentration data with appropriate significant figures.

E.3 Summation for TPH-Dx, PAH, and PCB Totals

Diesel-range and lube oil-range petroleum hydrocarbon results were summed for TPH-Dx. Total PAHs are the sum of 16 PAH compounds (Table E-1). Total PCBs are the sum of all detected concentrations of the 209 congeners. Results deemed non-detect by the laboratory or through data validation were not included in these sums. Some samples did not have any detected petroleum hydrocarbons or PAHs. In these cases, the highest MDL of the summed compounds was used as the level of detection.

Table E-1. PAH compounds included in total PAH sums.

PAH Compounds			
2-Methylnaphthalene	Benzo(a)anthracene	Chrysene	Indeno(1,2,3-Cd)Pyrene
Acenaphthene	Benzo(a)pyrene	Dibenzo(a,h)anthracene	Naphthalene
Acenaphthylene	Benzo(b,j,k)fluoranthene	Fluoranthene	Phenanthrene
Anthracene	Benzo(g,h,i)perylene	Fluorene	Pyrene

E.4 Use of Non-detect Result Values

Non-detect results were included in summary statistics, report figures, percent reduction calculations, and statistical tests using the MDL as the sample value. This method results in a high bias for data summaries with non-detects and increases uncertainty in other calculations and statistical tests. In most cases, parameters were detected in the influent, but not the effluent. This suggests that high bias may be introduced to the effluent results,

but not the influent results. Therefore, percent reductions and statistically significant decreases calculated from this dataset provide a conservative estimate of stormwater treatment. However, to help mitigate this uncertainty, parameters were included in statistical analyses only if frequency of detection was greater than 75%.

E.5 Statistical Analysis

This section describes the methods used for statistical analysis presented in the main report and appendices.

Differences between Influent and Effluent Chemical Concentrations – Data Preparation

All representative sample results for samples collected from the bioretention planter boxes (BPBs), the Filterra®, and the detention tank system (DTS) were included in the following analyses. However, one influent sample at the DTS (L65650-1) was deemed "not representative" as described in Section G1.6 of Appendix G. Data for the influent and effluent sample pair (L65650-1 and -3, sampled 6/23/2016) are not included in the sample summary table (Table 1 in the main report) and were not retained for any data analyses associated with this report. However, these sample results were included in the data validation (Appendix G) and full list of validated results (Appendix F).

Differences between Influent and Effluent – Paired Permutation Tests

Statistically significant reductions in concentration between influent and effluent were determined for individual BPBs (BPB1, BPB2, and BPB3), the Filterra, and the DTS using a one-sided paired permutation test (Sections 2.1 and 2.2 in the main report). This test was conducted in R (version 3.2.1; R Core Team 2017). The code is included on page E-5. The test determines whether decreases in concentration (between influent and effluent) are greater than would be expected by chance. This is accomplished by calculating signed differences between influent and effluent pairs, then generating many permutations of this dataset by randomly assigning a positive or negative difference (i.e., multiplying by 1 or -1). The mean difference in concentration is then recalculated for each permutation. The mean difference calculated with the original dataset is then compared to those generated by the permutations. If the observed mean difference is within the top 5% of the permutation results, then the decrease is greater than would be expected by chance – the mean reduction in concentration is statistically significant with p-value <0.05 (Figure E-1).

This test is similar to a paired t-test, except it is does not require the assumption of normal distribution. Instead, it uses the sampled distribution by resampling from the actual dataset. This test is also favorable because it tests on means, unlike the one-tailed Wilcoxon signed-rank test, which is used to determine if population mean ranks differ (recommended in Technology Assessment Protocol – Ecology [TAPE]; Ecology 2011). Permutation test results are presented in Table E-2.

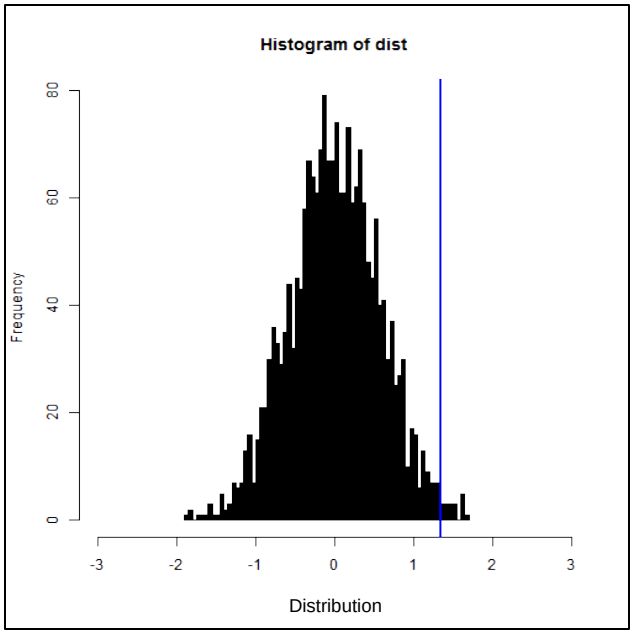


Figure E-1. Example of permutation results. Black bars indicate frequency of permutated difference and blue line signifies the observed difference.

Mean Percent Reductions with 95% Confidence Intervals - Bootstrapping

The 95% confidence intervals around mean percent reductions were calculated using R for individual BPBs (BPB1, BPB2, and BPB3), all BPBs combined (including BPB4), the Filterra, and the DTS using bootstrapping as described in TAPE (Ecology 2011). The "boot" function in the "boot" package for R was used (Canty and Ripley 2017). This test was first performed for the complete dataset for each parameter and then again for parameters included in TAPE using only the sample pairs for which influent concentrations were within the TAPE-specified influent range (Table 2 in Ecology 2011). Results for these analyses are presented in Table E-3 and Table E-4, respectively. Table 2 in the main report summarizes the mean percent reductions based on the lowest 95% confidence interval for each parameter and site (Table E-3).

Toxicity Test Results – CETIS Statistical Analysis

Toxicity tests were conducted to address Objective 1 described in the main report (Section 2.1). Appendix H2 includes a brief summary of the results with full reports included in Appendix F3).

The KCEL Aquatic Toxicology Unit uses the Comprehensive Environmental Toxicity Information System (CETIS) statistical package to assess toxicity (CETIS V1.8.7.16). This program compares the toxicity endpoints[1] between environmental samples and negative control samples for each toxicity test. When available, the low hardness negative control was used for this comparison. To meet the project objectives, these statistical comparisons were repeated between the influent and effluent sample pairs for each sample event.

[1] Percent survival is the endpoint used for the acute toxicity test (*Daphnia pulex*), while both percent survival and mean reproduction are used as the endpoints for the chronic toxicity tests (*Ceriodaphnia dubia*).

The specific statistical tests used for these data were based on dataset characteristics such as normal-distribution, equal variance, and equal number of replicates. The United States Environmental Protection Agency (EPA) methods for interpreting toxicity data provide flow charts to determine which statistical test to use (acute test: Figure 12 in EPA 2002a, and chronic test: Figure 2 in EPA 2002b). Appendix A of the CETIS User's Guide describes the statistical tests used by the program (Tidepool Scientific 2011). The statistical results are presented in the reports for each toxicity test (Appendix F3).

Relationships between Parameters – Linear Regression

Appendix H3 describes the use of linear regressions to describe how certain parameters may be related. Linear regressions were conducted using Microsoft Excel 2010, which uses least-squares fit. The R^2 values are presented on the scatter plots included in Appendix H3.

Echo Lake Water Quality Monitoring Summary – Data Preparation

Appendix H6 describes the data analysis conducted on the Echo Lake water quality monitoring data. For most analyses the data were grouped by year and were not differentiated between months. Data collection included samples for nutrient data collected in April during some years, but for most years, nutrient data were collected only from May through October. To maintain data comparability across years, the April results were not included in the data analysis. Additionally, in 2014 fecal coliform was analyzed only in samples collected in May and June; therefore, 2014 data were not included in the analyses. Fecal coliform results for three samples were less than the method detection limit; the MDL of 1 was used for these results. Finally, the bacteria dataset used for this analysis included only the samples collected as part of the weekly monitoring effort.

Echo Lake Water Quality Monitoring Summary – Wilcoxon Rank-Sum Test

Wilcoxon Rank-Sum Tests (or Mann-Whitney U tests) were conducted using Sigma Plot v12.5 to compare median nutrient concentrations and bacteria counts between pre- and post-retrofit years. This is a non-parametric test that estimates whether the difference in medians between two groups is greater than would be expected by chance. Two-sided p-values less than 0.05 were used to indicate statistically significant differences. Table E-5 lists these results.

R Code for Paired Permutations

```
#permutation Test, paired -
#datafile format:
#Site2 = monitoring stations (e.g., Filterra, bioswale)
#Type = influent to or effluent from facility
#Date = date of sampling (both influent and effluent sampled)
#Cu = Copper concentration
#.....

results<-data.frame(Site2=unique(data$Site2),Alt_Reduce=NA,Alt_Increase=NA,Alt_Diff=NA)
#setting up a blank data frame to fill with permutation test results

for (j in unique(data$Site2)){ #loop through each site
  sides<-merge(subset(data,Site2==j&Type=='Influent'),subset(data,Site2==j&Type=='Effluent'),by='Date',
            suffixes = c(".Influent",".Effluent")) #create data frame where influent and effluent are side-by-side

 sample<-sides$CuD.Influent-sides$CuD.Effluent #determine difference between influent and effluent level ###change parameter name for each
  length_sample<-length(sample) #n
  possibilities <-unique(t(combn(c(-1,1)*(rep(1,length_sample*2)),length_sample))) #determine number of possible combinations for permutation
  out<-rep(NA,nrow(possibilities)) #permutation test output vector

  for(i in 1:nrow(possibilities)){
    out[i]<-mean(sample*possibilities[i,]) #calculate mean for each possible permutation
  }
  plot(density(out)) #plot distribution of permutated means
  abline(v=mean(sample)) #what was the observed mean difference
  #calculate p-values based on permutated output
  results$Alt_Reduce[results$Site2==j]<-length(which(out>mean(sample)))/length(out) #alternative hypothesis: Influent > Effluent
  results$Alt_Increase[results$Site2==j]<-length(which(out<mean(sample)))/length(out) #alternative hypothesis: Influent < Effluent
  results$Alt_Diff[results$Site2==j]<-length(which(abs(out)>abs(mean(sample))))/length(out) #alternative hypothesis: Influent =/= Effluent
}
```

Code written by Tim Clark, King County Water and Land Resources, April 2017.

Appendix E References

Angelo Canty and Brian Ripley (2017). Boot: Bootstrap R (S-Plus) Functions. R package version 1.3-20.

Ecology. 2011. Guidance for Evaluating Emerging Stormwater Treatment Technologies. Technology Assessment Protocol – Ecology. Publication No. 11-10-061.

EPA. 2002a. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. United States Environmental Protection Agency, Office of Water, Washington D.C. EPA-821-R-02-012.

EPA. 2002b. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition. United States Environmental Protection Agency, Office of Water, Washington D.C. EPA-821-R-02-013.

King County. 2015. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

R Core Team. (2017). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL http://www.R-project.org/.

Tidepool Scientific, LLC. 2011. CETIS-Comprehensive Environmental Toxicity Information System: User's Guide.

Table E-2. Paired permutation test results for influent and effluent concentrations.

Parameter	Site	one-sided p-value*
Ammonia Nitrogen	BPB1	0.000
Ammonia Nitrogen	BPB2	0.000
Ammonia Nitrogen	BPB3	0.000
Ammonia Nitrogen	Filterra	0.000
Ammonia Nitrogen	DTS	0.813
Conductivity	BPB1	0.973
Conductivity	BPB2	0.992
Conductivity	BPB3	0.992
Conductivity	Filterra	0.813
Conductivity	DTS	0.375
Dissolved Copper	BPB1	0.004
Dissolved Copper	BPB2	0.320
Dissolved Copper	BPB3	0.516
Dissolved Copper	Filterra	0.781
Dissolved Copper	DTS	0.375
Dissolved Oxygen	BPB1	0.723
Dissolved Oxygen	BPB2	0.219
Dissolved Oxygen	BPB3	0.000
Dissolved Oxygen	Filterra	0.000
Dissolved Oxygen	DTS	0.250
Dissolved Zinc	BPB1	0.000
Dissolved Zinc	BPB2	0.000
Dissolved Zinc	BPB3	0.000
Dissolved Zinc	Filterra	0.906
Dissolved Zinc	DTS	0.531
Hardness	BPB1	0.176
Hardness	BPB2	0.508
Hardness	BPB3	0.617
Hardness	Filterra	0.000
Hardness	DTS	0.375
Petroleum Hydrocarbons	BPB1	0.000
Petroleum Hydrocarbons	BPB2	0.000
Petroleum Hydrocarbons	BPB3	0.000
Petroleum Hydrocarbons	Filterra	0.000
Petroleum Hydrocarbons	DTS	0.875
Nitrate/nitrite Nitrogen	BPB1	0.996
Nitrate/nitrite Nitrogen	BPB2	0.992
Nitrate/nitrite Nitrogen	BPB3	0.992
Nitrate/nitrite Nitrogen	Filterra	0.594
Nitrate/nitrite Nitrogen	DTS	0.250
Othrophosphate Phosphorus	BPB1	0.996
Othrophosphate Phosphorus	BPB2	0.992
Othrophosphate Phosphorus	BPB3	0.992
Othrophosphate Phosphorus	Filterra	0.406
Othrophosphate Phosphorus	DTS	0.625
pH	BPB1	0.000
pH	BPB2	0.000
pH	BPB3	0.000
pH	Filterra	0.000
pH	DTS	0.375
Temperature	BPB1	0.008
Temperature	BPB2	0.031
Temperature	BPB3	0.250
Temperature	Filterra	0.500
Temperature	DTS	0.625
Total Cadmium	BPB1	0.000
Total Cadmium	BPB2	0.000

Table E-2. Paired permutation test results for influent and effluent concentrations.

Parameter	Site	one-sided p-value*
Total Cadmium	Filterra	0.000
Total Cadmium	DTS	0.469
Total Copper	BPB1	0.000
Total Copper	BPB2	0.000
Total Copper	BPB3	0.000
Total Copper	Filterra	0.000
Total Copper	DTS	0.250
Total Lead	BPB1	0.000
Total Lead	BPB2	0.000
Total Lead	BPB3	0.000
Total Lead	Filterra	0.000
Total Lead	DTS	0.250
Total Nitrogen	BPB1	0.008
Total Nitrogen	BPB2	0.195
Total Nitrogen	BPB3	0.828
Total Nitrogen	Filterra	0.000
Total Nitrogen	DTS	0.188
Total PAHs	BPB1	0.000
Total PAHs	BPB2	0.000
Total PAHs	BPB3	0.000
Total PAHs	Filterra	0.000
Total PAHs	DTS	0.125
Total Phosphorus	BPB1	0.992
Total Phosphorus	BPB2	0.992
Total Phosphorus	BPB3	0.977
Total Phosphorus	Filterra	0.000
Total Phosphorus	DTS	0.188
Total Suspended Solids	BPB1	0.000
Total Suspended Solids	BPB2	0.000
Total Suspended Solids	BPB3	0.000
Total Suspended Solids	Filterra	0.000
Total Suspended Solids	DTS	0.031
Total Zinc	BPB1	0.000
Total Zinc	BPB2	0.000
Total Zinc	BPB3	0.000
Total Zinc	Filterra	0.000
Total Zinc	DTS	0.031
Turbidity	BPB1	0.000
Turbidity	BPB2	0.000
Turbidity	BPB3	0.000
Turbidity	Filterra	0.063
Turbidity	DTS	0.750

* Shaded cells indicate statistically significant decrease in mean concentration from influent to effluent ($p<0.05$).

Table E-3. 95% confidence intervals for percent reduction in concentration by site.

Parameter	Site	95% Lower Confidence Interval	95% Upper Confidence Interval
Ammonia Nitrogen	All BPB	89%	95%
Ammonia Nitrogen	BPB1	80%	94%
Ammonia Nitrogen	BPB2	97%	99%
Ammonia Nitrogen	BPB3	93%	96%
Ammonia Nitrogen	FLT1	86%	92%
Ammonia Nitrogen	DTS	-27%	14%
Dissolved Copper	All BPB	-43%	16%
Dissolved Copper	BPB1	13%	40%
Dissolved Copper	BPB2	-22%	24%
Dissolved Copper	BPB3	-114%	32%
Dissolved Copper	FLT1	-65%	19%
Dissolved Copper	DTS	-8%	5%
Dissolved Lead	All BPB	NDs	NDs
Dissolved Lead	BPB1	NDs	NDs
Dissolved Lead	BPB2	NDs	NDs
Dissolved Lead	BPB3	NDs	NDs
Dissolved Lead	FLT1	NDs	NDs
Dissolved Lead	DTS	-57%	12%
Dissolved Zinc	All BPB	60%	75%
Dissolved Zinc	BPB1	63%	69%
Dissolved Zinc	BPB2	76%	83%
Dissolved Zinc	BPB3	65%	78%
Dissolved Zinc	FLT1	-100%	3%
Dissolved Zinc	DTS	-2%	2%
Petroleum Hydrocarbons	All BPB	81%	89%
Petroleum Hydrocarbons	BPB1	75%	90%
Petroleum Hydrocarbons	BPB2	78%	91%
Petroleum Hydrocarbons	BPB3	79%	94%
Petroleum Hydrocarbons	FLT1	68%	85%
Petroleum Hydrocarbons	DTS	-23%	-5%
Nitrate/nitrite Nitrogen	All BPB	-534%	-217%
Nitrate/nitrite Nitrogen	BPB1	-346%	-106%
Nitrate/nitrite Nitrogen	BPB2	-596%	-216%
Nitrate/nitrite Nitrogen	BPB3	-1021%	-209%
Nitrate/nitrite Nitrogen	FLT1	-107%	31%
Nitrate/nitrite Nitrogen	DTS	-7%	20%
Othrophosphate Phosphorus	All BPB	-8045%	-2891%
Othrophosphate Phosphorus	BPB1	-3212%	-1490%
Othrophosphate Phosphorus	BPB2	-9822%	-3968%
Othrophosphate Phosphorus	BPB3	-16323%	-1286%
Othrophosphate Phosphorus	FLT1	-130%	43%
Othrophosphate Phosphorus	DTS	-5%	5%
Total Cadmium	All BPB	24%	44%
Total Cadmium	BPB1	13%	47%
Total Cadmium	BPB2	18%	50%
Total Cadmium	BPB3	NDs	NDs
Total Cadmium	FLT1	16%	62%
Total Cadmium	DTS	-15%	14%
Total Copper	All BPB	74%	84%
Total Copper	BPB1	78%	85%
Total Copper	BPB2	77%	87%
Total Copper	BPB3	76%	86%
Total Copper	FLT1	56%	67%
Total Copper	DTS	-9%	10%
Total Lead	All BPB	66%	88%
Total Lead	BPB1	49%	75%

Table E-3. 95% confidence intervals for percent reduction in concentration by site.

Parameter	Site	95% Lower Confidence Interval	95% Upper Confidence Interval
Total Lead	BPB2	93%	95%
Total Lead	BPB3	87%	95%
Total Lead	FLT1	67%	83%
Total Lead	DTS	-8%	20%
Total Nitrogen	All BPB	-1%	21%
Total Nitrogen	BPB1	10%	34%
Total Nitrogen	BPB2	-8%	36%
Total Nitrogen	BPB3	-29%	8%
Total Nitrogen	FLT1	44%	54%
Total Nitrogen	DTS	-4%	9%
Total PAHs	All BPB	71%	95%
Total PAHs	BPB1	97%	98%
Total PAHs	BPB2	98%	99%
Total PAHs	BPB3	98%	99%
Total PAHs	FLT1	86%	98%
Total PAHs	DTS	0%	21%
Total PCBs	All BPB	82%	95%
Total PCBs	BPB1	83%	92%
Total PCBs	BPB2	98%	99%
Total PCBs	BPB3	65%	100%
Total PCBs	FLT1	82%	95%
Total PCBs	DTS	-52%	35%
Total Phosphorus	All BPB	-249%	-122%
Total Phosphorus	BPB1	-121%	-42%
Total Phosphorus	BPB2	-453%	-249%
Total Phosphorus	BPB3	-252%	-90%
Total Phosphorus	FLT1	37%	63%
Total Phosphorus	DTS	-4%	8%
Total Suspended Solids	All BPB	83%	95%
Total Suspended Solids	BPB1	75%	89%
Total Suspended Solids	BPB2	97%	99%
Total Suspended Solids	BPB3	96%	98%
Total Suspended Solids	FLT1	58%	87%
Total Suspended Solids	DTS	4%	22%
Total Zinc	All BPB	86%	92%
Total Zinc	BPB1	83%	89%
Total Zinc	BPB2	92%	96%
Total Zinc	BPB3	90%	95%
Total Zinc	FLT1	64%	78%
Total Zinc	DTS	0%	11%

Table E-4. 95% confidence intervals to compare to TAPE criteria.

Parameter	Influent Range	Criteria	Site	N	Lower 95% CI	Upper 95% CI	Units	Meets Criteria?*
Total Suspended Solids	20 to 100 mg/L	≤ 20 mg/L effluent	All BPB	16	3.49	10.7	mg/L effluent	**Yes**
			BPB1	5	8.78	16.8		**Yes**
			BPB2	5	0.69	1.55		**Yes**
			BPB3	4	1.01	2.13		**Yes**
			FLT1	4	6.39	30.4		No
	100 to 200 mg/L	≥ 80% removal	All BPB	8	92%	98%	% reduction in concentration	**Yes**
			BPB1	3	89%	92%		**Yes**
			BPB2	2	NA	NA		NA
			BPB3	3	97%	99%		**Yes**
			FLT1	1	NA	NA		NA
Dissolved Copper	5 to 20 µg/L	> 30 % removal	All BPB	6	24%	46%	% reduction in concentration	No
			BPB1	2	NA	NA		NA
			BPB2	1	NA	NA		NA
			BPB3	3	30%	51%		**Yes**
			FLT1	2	NA	NA		NA
Dissolved Zinc	20 to 300 µg/L	> 60% removal	All BPB	1	NA	NA	% reduction in concentration	NA
			BPB1	0	NA	NA		NA
			BPB2	0	NA	NA		NA
			BPB3	1	NA	NA		NA
			FLT1	1	NA	NA		NA
Total Phosphorus	0.1 to 0.5 mg/L	≥ 50% removal	FLT1	3	36%	72%	% reduction in concentration	No

* This analysis is based on an extremely limited number of samples (N). Additionally, these are based on concentration reduction, not mass reduction, even though volume reductions were likely, particularly at the BPB. There is high uncertainty in these estimates.

NA - not analyzed due to sample size (N) less than 3.

Table E-5. Wilcoxon Rank-Sum Test (Mann-Whitney U test) results for Echo Lake monitoring data 2001-2011 (pre-retrofit) versus 2012 to 2016.

Parameter	Mann-Whitney U Statistic	two-sided p-value
Total Phosphorus 1-m depth (May through October)	2124	<0.001
Total Nitrogen 1-m depth (May through October)	2468	<0.001
Fecal coliform (May through September)	3746	0.002

Appendix F:
Raw Validated Data and PCB Congener Sums

APPENDIX F

Contents:

Section F1 –Validated KCEL Analytical Data *(Excel spreadsheet)*

Table F1-1. Echo Lake Drainage Basin Stormwater BMP Sampling KCEL Analytical Results

Table F1-2. Echo Lake Main Stormwater Outfall KCEL

Section F2 – Validated PCB Data and Sums *(Excel spreadsheet)*

Table F2-1. Echo Lake Drainage Basin Stormwater BMP Sampling PCB Congener Results and Sums

Table F2-2. PCB Quality Control Sample Results

Section F3 – Toxicity Reports

Echo Lake water quality monitoring data are available online at:
http://green2.kingcounty.gov/smalllakes/WQData.aspx

Echo Lake bacteria monitoring data are available online at:
http://green2.kingcounty.gov/swimbeach/BeachData.aspx?locator=A764SB&CurrentYear=false

Sections F1 and F2 available separately as Excel spreadsheets.

These are available upon request or on the project website:
http://www.kingcounty.gov/depts/dnrp/wlr/sections-programs/science-section/doing-science/echo-lake-study.aspx

Section F3 – Toxicity Reports

November 29, 2017

Carly Greyell
King County Department of Natural Resources & Parks
Water and Land Resources Division
Science and Technical Support Section
King Street Center, KSC-NR-0600
201 S. Jackson St., Suite 600
Seattle, WA 98104

Dear Carly:

The summary of a 7-day (*Ceriodaphnia*) test and a 48-hour (*Daphnia*) test conducted on storm water samples collected from an Echo Lake rain garden site on January 21, 2016 is shown in the table below. Tests were initiated January 26 and 27, 2016. Detailed findings and method descriptions are in the "RESULTS" and "METHODS" sections of the attached report. Statistical data analysis was performed in CETIS V1.8.7.16.

Event # 1 Collect 1/21/16		***Ceriodaphnia* Survival & Reproduction Test Date 1/27/16**			***D. pulex* Acute Mortality Test Date 1/26/16**	
Locator	**Sample Information**	**Test #**	**% Survival**	**3rd brood reproduction**	**Test #**	**% Survival**
LABCON	Standard Control Water	7873	90	34.2	7871	100
ECHO-BP1-IN	L64648-1	7873	50*	23.8**	7871	95
ECHO-BP1-OUT	L64648-3	7873	80	30.6	7871	95
	Retest with dilutions 2/4/16 (100 % sample data)					
LABCON	Standard Control Water	7883	100	33.4		
ECHO-BP1-IN	L64648-1	7883	100	27.7**		
ECHO-BP1-OUT	L64648-3	7883	100	33.4		
*Statistically significant reduction in survival compared to control response ($p<0.05$; Fisher Exact Test).						
**Statistically significant reduction in reproduction compared to control response ($p<0.05$; 1-tailed, t-Test).						

If you would like additional information, please contact me at 477-7117.

Sincerely,

Fran Sweeney
King County Dept. of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing St.
Seattle, WA 98119

November 29, 2017

Carly Greyell
King County Department of Natural Resources & Parks
Water and Land Resources Division
Science and Technical Support Section
King Street Center, KSC-NR-0600
201 S. Jackson St., Suite 600
Seattle, WA 98104

Dear Carly:

The summary of a 7-day (*Ceriodaphnia*) test and a 48-hour (*Daphnia*) test conducted on storm water samples collected from an Echo Lake rain garden site on March 10, 2016 is shown in the table below. Tests were initiated March 11, 2016. Detailed findings and method descriptions are in the "RESULTS" and "METHODS" sections of the attached report. Statistical data analysis was performed in CETIS V1.8.7.16.

Event # 2 Collect 3/10/16		***Ceriodaphnia* Survival & Reproduction Test Date 3/11/16**			***D. pulex* Acute Mortality Test Date 3/11/16**	
Locator	**Sample Information**	**Test #**	**% Survival**	**3rd brood reproduction**	**Test #**	**% Survival**
LABCON	Standard Control Water	7897	100	17.4	7898	100
ECHO-BP1-IN	L64999-1	7897	100	19.2	7898	85
ECHO-BP1-OUT	L64999-3	7897	90	21.4	7898	100
No statistically significant reduction in survival or reproduction between control and samples, or inlet compared to outlet.						

If you would like additional information, please contact me at 477-7117.

Sincerely,

Fran Sweeney
King County Dept. of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing St.
Seattle, WA 98119

BIOLOGICAL MONITORING REPORT FOR THE

Echo Lake Rain Garden Storm Water Tests
Events 1 and 2 (January-March, 2016)

Program #421879-250

KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS
WATER AND LAND RESOURCES DIVISION
ENVIRONMENTAL LABORATORY SECTION
322 WEST EWING STREET
SEATTLE, WASHINGTON 98119

Test #/Date:	**7871 *Daphnia* Acute**	**1/26/2016**
	7873 *Ceriodaphnia* Chronic	**1/27/2016**
	7883 *Ceriodaphnia* Chronic	**2/4/2016**
	7897 *Ceriodaphnia* Chronic	**3/11/2016**
	7898 *Daphnia* acute	**3/11/2016**

Report Date: **July 20, 2016**

METHODS

SAMPLES

Two storm water samples were collected at Echo Lake Rain Garden #1 Inlet and Outlet sites on January 21 (Event 1) and March 9 (Event 2), 2016. Approximately 3 to 7L of each sample was delivered to the King County Environmental Laboratory (KCEL) in 2.5 gallon glass screw-cap jars with minimal headspace and tested as received. The samples were stored in the dark at 4 ± 2°C and used to initiate the *Daphnia pulex* acute and the *Ceriodaphnia dubia* chronic toxicity tests, as well as for *C. dubia* test renewals.

Collection information and chemical characteristics of the test samples are listed in the table below.

	EVENT 1		EVENT 2	
Site:	Echo Lake Rain Garden #1, INLET	Echo Lake Rain Garden #1, OUTLET	Echo Lake Rain Garden #1, INLET	Echo Lake Rain Garden #1, OUTLET
Station:	ECHO-BP1-IN	ECHO-BP1-OUT	ECHO-BP1-IN	ECHO-BP1-OUT
KCEL Sample #:	L64648-1	L64648-3	L64999-1	L64999-3
Collect Date/Time	1-21-16/ 0845-1110h	1-21-16/ 0911-1122h	3-9-16/ 1440h	3-9-16/ 1445h
Rec'd Date/Time	1-21-16/ 1400h	1-21-16/ 1400h	3-10-16/ 0800h	3-10-16/ 0800h
Volume (L)	6.8	3.4	4.5	4.5
Temp (°C)	7.6/ 6.2	6.5	5.5	5.6
pH	7.22/ 7.18	7.14	7.26	7.10
D.O. (mg/L)	11.6/ 12.0	11.8	10.6	11.4
Tot. Alk (mg/L as $CaCO_3$)	7.93	10.3	10.8	15.3
Tot. Hard (mg/L as $CaCO_3$)	11.2	10.1	13.6	15.3
Cond (µmhos/cm)	21.2	27.0	28	41
Turbidity (NTU)				
Tot. Susp. Solids (mg/L)	45.4	10.2	56.4	16.8
Ortho-P (mg/L)	0.0125	0.136	0.00218	0.097
NO_2 + NO_3 (mg/L)	0.031 (<RDL)	0.0885	0.0717	0.202
Tot N (mg/L)	0.324	0.302	0.609	0.503
Tot P (mg/L)	0.07	0.192	0.0736	0.155
Tot NH_3 (mg/L)	0.0651	0.0054 (< RDL)	0.100	0.0064 (< RDL)

CONTROL WATER

The control water for tests with *Daphnia pulex* is fresh water obtained from a 95 ft. deep well located at the KCEL and filtered to 60 µm with Nitex screen before use. *D. pulex* are routinely maintained in static-renewal cultures of well water (WW) at 20 ± 1°C.

Water used for testing and culturing with *Ceriodaphnia* is fresh water obtained monthly from Lake Washington at a site midway between the I-90 and 520 bridges and filtered through 60 µm Nitex screen before use.

Metals by ICP are measured monthly (last analysis: 5-2016); metals by ICP/MS or CVAA and organic compounds are measured annually (last analyses: 02 & 03-2016). Hardness, alkalinity, conductivity and pH are measured at the beginning of each test.

Physical-chemical characteristics of the WW and LWW are listed in the following table:

Parameter	WW Values		LWW Values		Units
	10-16-15	1-18-16	1-21-16	2-29-16	
Temperature	NA	16.9	NA	NA	°C, adjusted as necessary
Conductivity	265	160	98.5	98.2	µmhos/cm
pH	7.96	7.90	7.70	7.71	
Total Hardness (calc.)	109	62	38	39	mg/L as $CaCO_3$
Total Alkalinity	80	54	36	37	mg/L as $CaCO_3$
Total Cd	< 2		< 2		µg/L
Total Cr	< 3		< 3		µg/L
Total Cu	< 4		< 4		µg/L
Total Ni	< 5		< 5		µg/L
Total Pb	< 20		< 20		µg/L
Total Zn	< 5		< 5		µg/L
Total Mercury	< 0.05		< 0.05		µg/L
Volatile Organics	*		+		
Organic Analysis (BNA'S): Bis(2-Ethylhexyl)Phthalate Di-N-Butyl Phthalate	** 7.1 < MDL		++ 0.56 < RDL < MDL		 µg/L µg/L
Pesticides & PCB's:	***		+++		

* 45 cmpds not detectable
** 68 cmpds not detectable
*** 28 cmpds not detected
\+ 45 cmpds not detectable
++ 68 cmpds not detectable
+++ 28 cmpds not detected

ACUTE TOXICITY TESTS

Water Flea - *Daphnia pulex* – 48-Hour Static Acute Test

Events 1 and 2

The *Daphnia* acute toxicity tests followed the methods of US EPA (2002a). Test animals were neonates (< 24-hours old) taken from an overnight brood board; parent animals were adults isolated from in-house mass cultures. Samples were tested as received at one undiluted (100%) concentration along with a WW-only control. Test chambers were 30-mL beakers containing 25 mL of test solution. Individual broods were blocked across treatments such that each replicate contained representatives of five separate broods, with four replicates per treatment. Test chambers were randomized at the start of the test. The test was incubated at 20.0 ± 1.0°C for 48 hours on a 16:8 hour light:dark cycle. Survival and water quality measurements were recorded every 24 hours. Temperature was measured daily by digital thermometer in replicate blanks at six positions of the test tray (4 outer corner + 2 center). In addition, incubator temperature was measured at 15-minute intervals using an Onset Tidbit data logger. Temperature, pH and dissolved oxygen (D.O.) values can be found on the attached photocopied pages from the laboratory notebook in the "Storm Water Tests" section of this report.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
7871 (Event 1)	L64648	1-26-16/ 1400h	1-28-16/ 1455h	0 (WW control), 100%	< 24 hr	4	5
7898 (Event 2)	L64999	3-11-16/ 1255h	3-13-16/ 1300h	0 (WW control), 100%	< 24 hr	4	5

CHRONIC TOXICITY TESTS

Water Flea - *Ceriodaphnia dubia* - 7-Day Chronic Static Renewal Test

Event 1 (No Dilutions)

The *Ceriodaphnia dubia* 7-day static renewal chronic toxicity tests were conducted as outlined in US EPA (2002b). Samples were tested as received at one undiluted (100%) concentration. Ten replicates containing one animal each were tested at each treatment, including the control. Test organisms were 3rd or 4th-brood neonates (< 24 hours old) taken from an in-house individual brood board of adults started from mass culture. Individual broods were blocked across treatments, and each replicate represented a different brood. The test was incubated at 25 ± 1.0°C for 7 days on a 16:8 h light:dark cycle. All test solutions were renewed daily. Reproduction, survival, temperature and water quality measurements were recorded every 24 hours. Temperature was measured daily in six test board temperature blanks (4 outer corner + 2 center) and at 15-minute intervals using an Onset "Tidbit" data logger placed in a beaker of water in the incubator. The pH and D.O. values measured during testing can be found on the attached photocopied pages from the laboratory notebook in the "Storm Water Tests" section of this report.

Test #	**LIMS Sample #**	**Start Date/ Time**	**End Date/ Time**	**Sample Concentrations (%)**	**Daphnid Age**	**# Reps/ Trtmt**	**# Orgs/ Rep**
7873	L64648-1, -3	1-27-16/ 1330h	2-3-16/ 1300h	0 (LWW control), 100%	< 24 hr	10	1

Event 1 (With Dilutions)

Due to toxicity observed in the Inlet sample in the first set of tests, a second chronic *C. dubia* test was initiated using the original samples diluted with LWW in a dilution series. Five concentrations of each sample were tested: 100, 50, 25, 12.5 and 6.25%, along with a 0% sample (LWW-only) control. Because an insufficient volume of the Outlet sample L64648-3 remained for conducting renewals, the test was run using 5 replicates of the this sample. The test was otherwise run as described above for the Event 1 test.

Test #	**LIMS Sample #**	**Start Date/ Time**	**End Date/ Time**	**Sample Concentrations (%)**	**Daphnid Age**	**# Reps/ Trtmt**	**# Orgs/ Rep**
7883	L64648-1	2-4-16/ 1450h	2-11-16/ 1443h	0 (LWW control), 6.25, 12.5, 25, 50, 100%	< 24 hr	10	1
"	L64648-3	"	"	"	"	5	"

Event 2 (No Dilutions)

The *C. dubia* chronic test with Event 2 storm water samples was conducted as described above for the Event 1 test, with no sample dilutions.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
7898	L64999-1, -3	3-11-16/ 1255h	3-13-16/ 1300h	0 (LWW control), 100%	< 24 hr	10	1

QUALITY CONTROL

Reference toxicant control results are summarized in the following table.

Test Organism:	*Daphnia*		*Ceriodaphnia*	
Test #:	7869	7905	7881	7904
Control Survival (%)	100	100	80	100
Criteria	≥ 90	≥ 90	≥ 80	≥ 80
Acceptable?	**Yes**	**Yes**	**Yes**	**Yes**
Survival LC50 (g/L)	2.79	3.17		
Lab Control Limits	2.44 - 4.36	2.43 – 4.36		
Acceptable?	**Yes**	**Yes**		
Control Reprod (# neos/adult)			33.8	36.8
Criteria			≥ 15	≥ 15
Acceptable?			**Yes**	**Yes**
PMSD for Reproduction (%)*			32.04	24.4
Criteria			13 – 47	13 - 47
Acceptable?			**Yes**	**Yes**
Reproduction IC25 (µg/L)			3.09	6.71
Lab Control Limits			0 – 5.29	0 – 6.07
Acceptable?			**Yes**	**No**

*Percent Minimum Significant Difference; determined by Dunnett's Multiple Comparison test (Steels Many-One Rank Test for unequal variance); ($\alpha = 0.05$)

NaCl was used as a reference toxicant in acute tests with *Daphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant tests for *Daphnia* (#7869 & #7905) (US EPA 2002a). Acute positive control tests met acceptability criteria regarding control survival, and the survival LC50 endpoints were within the control limits of the mean ± 2SD (US EPA, 2002a).

Cadmium nitrate was used as a reference toxicant in chronic toxicity tests with *Ceriodaphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant tests for *Ceriodaphnia* (#7881 & #7904) (US EPA 2002b). In addition, chronic tests met acceptability criteria regarding control survival and mean control reproduction. For test #7881, the reproduction IC25 fell within the control limits of mean ± 2SD (US EPA 2002b), whereas for #7904 it slightly exceeded the upper control limit. Because it met all other QC criteria, the test was retained. Reference toxicant tests with *Ceriodaphnia* were re-started in 2015 following a three-year hiatus. It is possible that a change in diet or culture health may have affected the response to the toxicant.

The precision tables located at the end of this report are constructed to monitor the sensitivity of the organisms to the reference toxicant and thereby provide an indication of their overall sensitivity to other compounds.

WATER QUALITY MONITORING

Methods and method numbers for water quality tests are listed in the following table:

Parameter	**Method**
Water Quality Tests	APHA (1992); US EPA (1991).
Temperature	Standard Mercury Thermometer (calibrated with a certified thermometer traceable to NBS records) and Onset, Tidbit (v2) UTBI-001 Temperature Logger (KCEL #436v1).
Dissolved Oxygen	YSI membrane electrode method (Method #4500-0 G; KCEL #434).
pH	Beckman 690 meter with automatic temperature compensation and Ross combination electrode (Method #4500-H; APHA 1992; KCEL #433).
Total Alkalinity	Potentiometric Method (Method #2320 B; KCEL #319v4).
Total Hardness	By calculation (Method #2340 B; KCEL #612v4).
Conductivity	Orion Model #122 Meter with 012210 conductivity cell (Method 2510B; KCEL #435).
Total Ammonia	Phenate Method (Standard Methods SM 4500 - NH_3-G; KCEL #330v4).
Unionized Ammonia	Calculated from total ammonia, pH and ionization constants (APHA Method #417 G).
Pesticides and PCB's	Continuous liquid extraction method (EPA Method #608; KCEL #733).
Organic Analysis	Continuous liquid extraction method for BNA's (EPA Method #625; KCEL #731).
Volatile Organics	Purge and trap method (EPA Method #624; KCEL #732).
Total Metals	ICP for Cd, Cr, Cu, Ni, Pb and Zn (EPA Method #200.7; KCEL #612v4); for Hg analysis (KCEL #604v5, 601v4, 605v0).

RESULTS

ACUTE TOXICITY TESTS

Water Flea - *Daphnia pulex* – 48-Hour Static Acute Test

Event 1 (No Dilutions): KCEL Test #7871

Survival results for the 48-hour *Daphnia* acute test with Event 1 storm water samples are listed in the table below.

Sample #	Station/ Site	% Sample	Percent Survival at 48 Hours: % Survival in each rep. (n=5 *Daphnia*/rep) Rep 1	Rep 2	Rep 3	Rep 4	Mean	# *Daphnia* Tested
----	Well Water Control	0	100	100	100	100	**100**	20
L64648-1	ECHO-BP1-IN Rain Garden #1 (Inlet)	100	80	100	100	100	**95**	20
L64648-3	ECHO-BP1-OUT Rain Garden #1 (Outlet)	100	100	80	100	100	**95**	20

Survival was 100 % in the well water-only control and 95% in both the Inlet and Outlet storm water samples. Survival in both the Inlet and Outlet samples was not significantly reduced from the control ($p > 0.05$; Wilcoxon Rank Sum Test).

The unionized ammonia level in 100% Inlet and Outlet sample reached a maximum of 0.007 and 0.005 mg N/L, respectively, during the 48-hour test.

Event 2 (KCEL Test #7898)

Results are listed in the table below of the 48-hour acute test with *Daphnia* using Event 2 storm water samples.

Sample #	Station/ Site	% Sample	% Survival at 48 Hours: % Survival in each rep. (n=5 *Daphnia*/rep) Rep 1	Rep 2	Rep 3	Rep 4	Mean	# *Daphnia* Tested
----	Well Water Control	0	100	100	100	100	**100**	20
L64999-1	ECHO-BP1-IN Rain Garden #1 (Inlet)	100	80	100	80	80	**85**[+]	20
L64999-3	ECHO-BP1-OUT Rain Garden #1 (Outlet)	100	100	100	100	100	**100**	20

[+]Different from control at ANOVA, but not significantly ($p > 0.05$; Wilcoxon Rank-Sum test)

Survival was 100% in the well water-only control and Outlet storm sample and 85% in the Inlet storm sample. Survival in the Inlet sample was decreased from the control and Outlet sample (at ANOVA) but not significantly ($p > 0.05$; Wilcoxon Rank-Sum test), whereas survival in the Outlet samples was not reduced from the control.

The unionized ammonia level in both the 100% Inlet and Outlet samples reached a maximum of 0.009 mg NH_3-N/L during the 48-hour test.

Water Flea - *Ceriodaphnia dubia* - 7-Day Chronic Static Renewal Test

Event 1 (KCEL Test #7873)

Reproduction and survival results over the 7-day chronic *Ceriodaphnia* test with Event 1 storm water samples are shown in the table below.

Sample #	Station	% Sample	Reproduction (Mean #Neonates/Adult in 7 Days) 1	2	3	4	5	6	7	8	9	10	Mean Reprod	Mean % Surv
---	LWW Control	0	28	12	49	48	51	30	16	5+	39	35	**34.2 (n = 9)**	90
L64648-1	ECHO-BP1-IN	100	23	34	21	14	38	8	34	19	24	23	**23.8***	50**
L64648-2	ECHO-BP1-OUT	100	5	45	46	42	24	41	4	41	28	30	**30.6**	80

+ Outlier; omitted from analysis
*Significantly different from control ($p < 0.05$; 1-tailed t-Test) **Significantly different from control ($p < 0.05$; Fisher's Exact Test)

As shown in the table above, survival was 90% in the LWW-only control, 50% in the Inlet storm sample and 80% in the Outlet storm sample. In the Inlet sample, survival was significantly reduced from the control ($p < 0.05$; Fishers Exact Test), but not significantly ($p > 0.05$; Fishers Exact Test) in the Outlet sample.

Similarly, reproduction in the Inlet storm sample was significantly ($p < 0.05$; homoscedastic 1-tailed t-Test) less than the control but not significantly reduced from the control in the Outlet sample ($p > 0.05$; homoscedastic 1-tailed t-Test). Reproduction in the Inlet and Outlet sample did not differ significantly ($p > 0.05$; Tukey-Kramer and homoscedastic 1-tailed t-Test).

The unionized ammonia level in 100% Inlet and Outlet samples reached a maximum of 0.009 and 0.007 mg NH_3-N/L, respectively, during the 7-day test.

Event 1, with Dilutions (KCEL Test #7883)

Results of the 7-day Ceriodaphnia chronic renewal test run using a dilution series of Event 1 storm water samples are listed in the table below.

Sample #	Station	% Sample	Reproduction (Mean #Neonates/Adult in 7 Days) 1	2	3	4	5	6	7	8	9	10	Mean Reprod	Mean % Surv
---	LWW Control	0	36	34	34	34	32	33	28	32	36	35	**33.4**	100
L64648-1	ECHO-BP1-IN	6.25	38	25	32	9	32	35	29	30	36	36	**30.2**	100
		12.5	39	37	32	36	35	32	32	34	32	34	**34.3**	100
		25	32	36	33	37	32	37	32	35	52	27	**35.3**	100
		50	37	31	29	32	31	33	25	29	31	33	**31.1**	100
		100	29	23	27	28	27	32	23	32	24	32	**27.7***	100
L64648-3	ECHO-BP1-OUT	6.25	31	39	28	35	31						**32.8**	100
		12.5	37	35	34	36	31						**34.6**	100
		25	33	34	31	35	36						**33.8**	100
		50	32	31	31	38	35						**33.4**	100
		100	33	33	33	34	34						**33.4**	100

*Significantly different from control ($p < 0.05$; 1-tailed t-Test)

Survival was 100% in the LWW-only control and all concentrations of both the Inlet and Outlet storm samples.

For the Inlet sample, reproduction was significantly reduced from the control at the 100% sample ($p < 0.05$; Steel Many-One Rank Test); it was also less than the control at 6.25% and the 50% sample concentrations but not significantly ($p > 0.05$; Steel

Many-One Rank Test). The NOEC was calculated to be 50% sample. Because reproduction was not reduced by more than 25% at any concentration, an IC25 could not be calculated.

For the Outlet sample, reproduction was not reduced from the control at any sample concentration; therefore, an IC25 could not be calculated.

Reproduction in the Outlet sample did not differ significantly from the Inlet sample ($p > 0.05$; heterogeneous 1-tailed t-Test).

The unionized ammonia level in 100% Inlet and Outlet samples reached a maximum of 0.010 and 0.006 mg NH_3-N/L, respectively, during the 7-day test.

Event 2 No Dilutions (KCEL Test #7897)

Average reproduction and survival results at the end of the 7-day *Ceriodaphnia* chronic renewal test with Event 2 storm water samples are listed in the table below.

Sample #	Station	% Sample	Reproduction (Mean #Neonates/Adult in 7 Days) 1	2	3	4	5	6	7	8	9	10	Mean Reprod	Mean % Surv
---	LWW Control	0	19	16	20	17	20	18	18	9	19	18	**17.4**	100
L64999-1	ECHO-BP1-IN	100	8	18	18	20	22	23	19	24	21	19	**19.2**	100
L64999-3	ECHO-BP1-OUT	100	24	21	18	21	20	22	22	23	22	21	**21.4**	90

Survival was 100% in the LWW-only control and the Inlet sample and 90% in the Outlet sample. Survival in the Outlet sample was not significantly reduced from the control ($p > 0.05$; Fisher Exact/ Bonferroni t-Test).

Reproduction in both the Inlet and Outlet samples was not reduced from the control.

The unionized ammonia level in 100% Inlet and Outlet sample reached a maximum of 0.016 and 0.013 mg NH_3-N/L, respectively, during the 7-day test.

QUALITY CONTROL

Storm water sample and control performance results are summarized in the following table:

Test Organism:	*Ceriodaphnia*			*Daphnia*	
Test #:	7873	7883	7897	7871	7898
Control Survival (%)	90	100	100	100	100
Criteria	≥ 80	≥ 80	≥ 80	≥ 90	≥ 90
Acceptable?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Control Reproduction (# neos/adult)	34.2	33.4	17.4		
Criteria	≥ 15	≥ 15	≥ 15		
Acceptable?	**Yes**	**Yes**	**Yes**		
PMSD for Reproduction (%)*	27.7 (IN) 34.9 (OUT)	15.3 (IN)	17.3 (IN)		
Criteria	13-47	13-47	13-47		
Acceptable?	**Yes**	**Yes**	**Yes**		

*Percent Minimum Significant Difference; determined by Dunnett's Multiple Comparison test ($\alpha = 0.05$)

As shown in the table above, both the acute and chronic effluent tests met acceptability criteria regarding control performance and test variability, including survival, reproduction and PMSD (US EPA, 2002a & 2002b).

Dissolved oxygen, pH, temperature and/or salinity remained within acceptable limits throughout both the acute and chronic tests (US EPA, 2002a & 2002b). Water quality data recorded during testing is shown on the photocopied pages from the laboratory notebook in the "Effluent Tests" section of this report.

Tested By:

King County Department of Natural Resources & Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing Street
Seattle WA 98119
(206) 477-7123

Julie Alaimo, Gary Yoshida, Robin Revelle, Gabriela Hannach, Elizabeth Frame, Lyndsey Swanson, Fran Sweeney

REFERENCES

APHA. 1992. Standard Methods for the Examination of Water and Wastewater, 18th Edition. American Public Health Association, American Waterworks Association, Water Pollution Control Association, Washington D.C.

US EPA. 2002a. Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms. 5th edition. EPA-821-02-012, October, 2002. US Environmental Protection Agency, Office of Water (4303T), Washington, DC.

US EPA. 2002b. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. 4th Edition (EPA-821-R-02-013).

US EPA. 1991. Code of Federal Regulations, 40CFR, Appendix A, July 1991. U.S. Environmental Protection Agency, Office of Federal Registry, Washington, D.C.

October 25, 2017

Carly Greyell
King County Department of Natural Resources & Parks
Water and Land Resources Division
Science and Technical Support Section
King Street Center, KSC-NR-0600
201 S. Jackson St., Suite 600
Seattle, WA 98104

Dear Carly:

The summary of a 7-day (*Ceriodaphnia*) test and a 48-hour (*Daphnia*) test conducted on storm water samples collected from an Echo Lake rain garden site on October 26, 2016 is shown in the table below. The tests were initiated on October 28, 2016 and October 31, 2016 respectively. Detailed findings and method descriptions are in the "RESULTS" and "METHODS" sections of the attached report. Statistical data analysis was performed in CETIS V1.8.7.16.

Event # 3 Collect 10/26/17		***Ceriodaphnia* Survival & Reproduction Test Date 10/28/16**			***D. pulex* Acute Mortality Test Date 10/31/16**	
Locator	**Sample Information**	**Test #**	**% Survival**	**3rd brood reproduction**	**Test #**	**% Survival**
LABCON	Standard Control Water	8174	100	32.8	8175	100
LABCON - LH	Low Hardness Control Water	8174	100	33.9	8175	100
ECHO-BP1-IN	L66498-1	8174	60*†	19.5 **††	8175	100
ECHO-BP1-OUT	L66498-3	8174	100	33.2	8175	100
	Retest with dilutions 11/11/16 (100% sample data)					
LABCON	Standard Control Water	8217 8218	NA	NA		
LABCON - LH	Low Hardness Control Water	8217 8218	100	19		
ECHO-BP1-IN	L66498-1	8217	90	22.6		
ECHO-BP1-OUT	L66498-3	8218	90	22.6		

*Statistically significant reduction in survival compared to (low-hardness) control response ($p<0.05$; Fisher Exact Test).

** Statistically significant reduction in reproduction compared to (low-hardness) control response ($p<0.05$; Wilcoxon Rank Sum 2-Sample Test).

†Statistically significant reduction in survival in Inlet response compared to Outlet response ($p<0.05$; Fisher Exact Test).

††Statistically significant reduction in reproduction in the Inlet response compared to Outlet response ($p<0.05$; Wilcoxon Rank Sum 2-Sample Test).

If you would like additional information, please contact me at 477-7117.

Sincerely,

Fran Sweeney
King County Dept. of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing St.
Seattle, WA 98119

BIOLOGICAL MONITORING REPORT FOR THE

Echo Lake Rain Garden Storm Water Test
October 26, 2016

Program #421879-250

KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS
WATER AND LAND RESOURCES DIVISION
ENVIRONMENTAL LABORATORY SECTION
322 WEST EWING STREET
SEATTLE, WASHINGTON 98119

Test #/Date:	**8174 *Ceriodaphnia* Chronic**	**10/28/16**
	8175 *Daphnia* Acute	**10/31/16**

Report Date: **March 28, 2017**

METHODS

SAMPLES

Storm water samples were collected at Echo Lake Rain Garden #1 Inlet and Outlet sites on October 26, 2016. Approximately 3 to 7L of each sample was delivered to the King County Environmental Laboratory (KCEL)in 9 Liter glass screw-cap jars with minimal headspace and tested as received The samples were stored in the dark at 4 ± 2°C and used to initiate the *Daphnia pulex* acute and the *Ceriodaphnia dubia* chronic toxicity tests, as well as for *C. dubia* test renewals.

Collection information and chemical characteristics of the test samples are listed in the table below.

Site:	Echo Lake Rain Garden #1, INLET	Echo Lake Rain Garden #1, OUTLET
Station:	ECHO-BP1-IN	ECHO-BP1-OUT
KCEL Sample #:	L66498-1	L66498-3
Collect Date/Time	10/26/16 09:12	10/26/16 09:17
Rec'd Date/Time	10/26/16 14:40	10/26/16 14:40
Volume (L)	~ 1.5 gal (~ 6L)*	~ 1.5 gal (~ 6L)*
Temp (°C)	5.9	5.4
pH	7.404	7.030
D.O. (mg/L)	10.9	11.0
Total Alkalinity (mg/L as $CaCO_3$)	NA	NA
Total. Hardness (mg/L as $CaCO_3$)	8.99	12
Cond (µmhos/cm)	15	25.1
Turbidity (NTU)	21.1	18
Tot. Susp. Solids (mg/L)	39.6	14.6
Ortho-P (mg/L)	0.0165	0.134
$NO_2 + NO_3$ (mg/L)	0.0424	0.145
Tot N (mg/L)	0.457	0.487
Tot P (mg/L)	0.0714	0.177
Tot NH_3 (mg/L)	0.118	0.0194

*Split from 9L glass jars in-house

CONTROL WATER

The control water for tests with *Daphnia pulex* is fresh water obtained from a 95 ft. deep well located at the KCEL and filtered to 60 µm with Nitex screen before use. *D. pulex* are routinely maintained in static-renewal cultures of well water (WW) at 20 ± 1°C.

Water used for testing and culturing with *Ceriodaphnia* is fresh water obtained monthly from Lake Washington at a site midway between the I-90 and 520 bridges and filtered through 60 µm Nitex screen before use.

Metals by ICP are measured monthly (last analysis: October 2016); metals by ICP/MS or CVAA and organic compounds are measured annually (last analyses: February and March 2016). Hardness, alkalinity, conductivity and pH are measured at the beginning of each test.

Physical-chemical characteristics of the WW and LWW are listed in the following table:

Parameter	LWW	Low Hardness LWW	WW	Low Hardness WW	Units
Sample Number:	L66510-1	L66510-2	L66510-3	L66510-4	
Temperature:	*	*	*	*	°C, adjusted as necessary
Conductivity:	102.1	27.8	30.1	25.9	µmhos/cm
pH:	7.805	7.536	8.159	7.598	
Total Hardness (calc.):	41.9	10.8	105	10.4	mg/L as $CaCO_3$
Total Alkalinity:	37.9	9.87	68.9	7.19	mg/L as $CaCO_3$

*Water held at 0-5°C cooler until needed.

Metals and Organics:

Parameter	LWW	WW	Units
Total Cd:	< 2	< 2	µg/L
Total Cr:	< 3	< 3	µg/L
Total Cu:	< 4	< 4	µg/L
Total Ni:	< 5	< 5	µg/L
Total Pb:	< 20	< 20	µg/L
Total Zn:	< 5	< 5	µg/L
Total Mercury:	< 0.05	< 0.05	µg/L
Volatile Organics:	*	+	µg/L
Organic Analysis (BNA'S):	**	++	µg/L
Bis(2-Ethylhexyl)Phthalate:	0.56#	7.1	µg/L
Di-N-Butyl Phthalate:	< 0.47	< 0.47	µg/L
Pesticides & PCB's:	***	+++	µg/L

* 45 cmpds not detectable
** 68 cmpds not detectable
*** 28 cmpds not detectable
# < RDL; RDL = 1.89

+ 45 cmpds not detectable
++ 68 cmpds not detectable
+++ 28 cmpds not detectable

CHRONIC TOXICITY TEST

Water Flea - *Ceriodaphnia dubia* - 7-Day Chronic Static Renewal Test (#8174)

The *Ceriodaphnia dubia* 7-day static renewal chronic toxicity tests were conducted as outlined in US EPA (2002b). Samples were tested as received at one undiluted (100%) concentration. Ten replicates containing one animal each were tested at each treatment, including the control. Test organisms were 3rd or 4th-brood neonates (< 24 hours old) taken from an in-house individual brood board of adults started from mass culture. Individual broods were blocked across treatments, and each replicate represented a different brood. The test was incubated at 25 ± 1.0°C for 7 days on a 16:8 h light:dark cycle. All test solutions were renewed daily. Reproduction, survival, temperature and water quality measurements were recorded every 24 hours. Temperature was measured daily in six test board temperature blanks (4 outer corner + 2 center) and at 15-minute intervals using an Onset "Tidbit" data logger placed in a beaker of water in the incubator. The pH and D.O. values measured during testing can be found on the attached photocopied pages from the laboratory notebook in the 'Storm Water Tests" section of this report.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
8174	L66498	10/28/17 0940	11/04/16 1010	0 (WW control), 0 (Low Hardness control), 100%	< 24 hr	10	1

RESULTS

Reproduction and survival results over the 7-day chronic *Ceriodaphnia* test # 8174 are shown in the table below:

Sample #	Station	% Sample	Reproduction (#Neonates/Adult in 7 Days)										Mean Reprod*	Mean % Surv
			1	2	3	4	5	6	7	8	9	10		
----	LWW Control	0	32	35	33	37	18	36	35	28	40	34	**32.8**	100
----	Low Hardness Control	0	36	30	31	37	36	31	33	35	35	35	**33.9**	100
L66498-1	ECHO-BP1-IN	100	17	31	5	25	30	27	25	11	0	24	**19.5**	60
L66498-2	ECHO-BP1-OUT	100	31	35	34	36	31	40	34	36	33	22	**33.2**	100

*Numbers based off of 3rd brood

As shown in the table above, survival was 100% in all samples except for the Inlet, where survival was 60%.

The Wilcoxon Rank Sum Two-Sample Test (Nonparametric-Two Sample) and an Equal Variance Two-Sample t-test (Parametric) were used to compare the inlet and outlet for both survival and reproduction. A significant reproduction effect was found between pairings for both survival and reproduction.

The unionized ammonia level in 100% Inlet and Outlet samples reached a maximum of**0.003** and **<0.001** mg NH_3-N/L, respectively, during the 7-day test.

ACUTE TOXICITY TEST

Water Flea - *Daphnia pulex* – 48-Hour Static Acute Test (#8175)

The *Daphnia* acute toxicity test followed the methods of US EPA (2002a). Test animals were neonates (< 24-hours old) taken from an overnight brood board; parent animals were adults isolatedfrom in-house mass cultures. Samples were tested as received at one undiluted (100%) concentration along with a WW-only control. Test chambers were 30-mL beakers containing 25 mL of test solution. Individual broods were blocked across treatments such that each replicate contained representatives of five separate broods, with four replicates per treatment. Test chambers were randomized at the start of the test. The test was incubated at 20.0 ± 1.0°C for 48 hours on a 16:8 hour light:dark cycle. Survival and water quality measurements were recorded every 24 hours. Temperature was measured daily by digitalthermometer in replicate blanks at six positions of the test tray (4 outer corner + 2 center). In addition, incubator temperature was measured at 15-minute intervals using an Onset Tidbit data logger. Temperature, pH and dissolved oxygen (D.O.) values can be found on the attached photocopied pages from the laboratory notebook in the "Storm Water Tests" section of this report.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
8175	L66498	10/31/16 1040	11/02/16 1050	0 (WW control), 0 (Low Hardness control), 100%	< 24 hr	4	5

RESULTS

Survival results for the 48-hour *Daphnia* acute test # 8175 are listed in the table below:

Sample #	Station/ Site	% Sample	Percent Survival at 48 Hours					# *Daphnia* Tested
			% Survival in each rep. (n=5 *Daphnia*/rep)				Mean % Survival	
			Rep 1	Rep 2	Rep 3	Rep 4		
----	Well Water Control	0	100	100	100	100	**100**	20
----	Low Harness Control	0	100	100	100	100	**100**	20
L66498-1	ECHO-BP1-IN Rain Garden #1 (Inlet)	100	100	100	100	100	**100**	20
L66498-3	ECHO-BP1-OUT Rain Garden #1 (Outlet)	100	100	100	100	100	**100**	20

Mean % Survival was 100 % in all samples.

The Wilcoxon Rank Sum Two-Sample Test (Nonparametric-Two Sample) and an Equal Variance Two-Sample t-test (Parametric) were used to compare the inlet and outlet. A non-significant effect was found.

The unionized ammonia level in 100% Inlet and Outlet sample reached a maximum of **0.002** and **<0.001** mg N/L, respectively, during the 48-hour test.

QUALITY CONTROL

Storm water sample and control performance results are summarized in the following table:

Test Organism:	*Ceriodaphnia*	*Daphnia*
Test #:	8174	8175
Control Survival (%)	100	100
Criteria	≥ 80	≥ 90
Acceptable?	**Yes**	**Yes**
Control Reproduction (# neos/adult)	32.8#	
Criteria	≥ 15	
Acceptable?	**Yes**	
PMSD* for Reproduction (%)	**NA**	
Criteria	**NA**	
Acceptable?	**NA**	

Based on 3rd brood.
*Percent Minimum Significant Difference

As shown in the table above, both the acute and chronic effluent tests met acceptability criteria regarding control, performance and test variability; including survival, and reproduction(US EPA, 2002a & 2002b).

Dissolved oxygen, pH, temperature and/or salinity remained within acceptable limits throughout both the acute and chronic tests (US EPA, 2002a & 2002b). Water quality data recorded during testing is shown on the photocopied pages from the laboratory notebook in the "Effluent Tests" section of this report.

Reference toxicant control results are summarized in the following table.

Test #:	*Daphnia* 8199	*Ceriodaphnia* 8178
Control Survival (%)	100	100
Criteria	≥ 90	≥ 80
Acceptable?	**Yes**	**Yes**
Survival LC50 (g/L)	3.8	
Lab Control Limits	3.4 – 4.2	
Acceptable?	**Yes**	
Control Reprod (# neos/adult)		37.8
Criteria		≥ 15
Acceptable?		**Yes**
PMSD for Reproduction (%)*		8.58
Criteria		13 - 47
Acceptable?		**Yes***
Reproduction IC25 (µg/L)		2.76
Lab Control Limits		0-7.29
Acceptable?		**Yes**

*Percent Minimum Significant Difference; PMSD slightly low, however all other QC is acceptable.

NaCl was used as a reference toxicant in the acute test with *Daphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant test for *Daphnia* (#8199) (US EPA 2002a). The acute positive control test met acceptability criteria regarding control survival, and the survival LC50 endpoint was within the control limits of the mean ± 2SD (US EPA, 2002a).

Cadmium nitrate was used as a reference toxicant in chronic toxicity tests with *Ceriodaphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant tests for *Ceriodaphnia* (#8178) (US EPA 2002b). In addition, chronic tests met acceptability criteria regarding control survival and mean control reproduction.

The precision tables located at the end of this report are constructed to monitor the sensitivity of the organisms to the reference toxicant and thereby provide an indication of their overall sensitivity to other compounds

WATER QUALITY MONITORING

Methods and method numbers for water quality tests are listed in the following table:

Parameter	Method
Water Quality Tests	APHA (1992); US EPA (1991).
Temperature	Standard Mercury Thermometer (calibrated with a certified thermometer traceable to NBS records) and Onset, Tidbit (v2) UTBI-001 Temperature Logger (KCEL #436v1).
Dissolved Oxygen	YSI membrane electrode method (Method #4500-0 G; KCEL #434).
pH	Beckman 690 meter with automatic temperature compensation and Ross combination electrode (Method #4500-H; APHA 1992; KCEL #433).
Total Alkalinity	Potentiometric Method (Method #2320 B; KCEL #319v4).
Total Hardness	By calculation (Method #2340 B; KCEL #612v4).
Conductivity	Orion Model #122 Meter with 012210 conductivity cell (Method 2510B; KCEL #435).
Total Ammonia	Phenate Method (Standard Methods SM 4500 - NH_3-G; KCEL #330v4).
Unionized Ammonia	Calculated from total ammonia, pH and ionization constants (APHA Method #417 G).
Pesticides and PCB's	Continuous liquid extraction method (EPA Method #608; KCEL #733).
Organic Analysis	Continuous liquid extraction method for BNA's (EPA Method #625; KCEL #731).
Volatile Organics	Purge and trap method (EPA Method #624; KCEL #732).
Total Metals	ICP for Cd, Cr, Cu, Ni, Pb and Zn (EPA Method #200.7; KCEL #612v4); for Hg analysis (KCEL #604v5, 601v4, 605v0).

Tested By:

King County Department of Natural Resources & Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing Street
Seattle WA 98119
(206) 477-7123

Julie Alaimo, Gary Yoshida, Robin Revelle, Gabriela Hannach, Elizabeth Frame, Lyndsey Swanson, Fran Sweeney

REFERENCES

APHA. 1992. Standard Methods for the Examination of Water and Wastewater, 18th Edition. American Public Health Association, American Waterworks Association, Water Pollution Control Association, Washington D.C.

US EPA. 2002a. Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms. 5th edition. EPA-821-02-012, October, 2002. US Environmental Protection Agency, Office of Water (4303T), Washington, DC.

US EPA. 2002b. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. 4th Edition (EPA-821-R-02-013).

US EPA. 1991. Code of Federal Regulations, 40CFR, Appendix A, July 1991. U.S. Environmental Protection Agency, Office of Federal Registry, Washington, D.C.

October 25, 2017

Carly Greyell
King County Department of Natural Resources & Parks
Water and Land Resources Division/ Scientific and Technical Support
Watershed and Ecological Assessment Team
King Street Center
201 S. Jackson Street, Room 600
MS KSC-NR-0600
Seattle, WA 98104-3855

Dear Carly:

A summary of 48-hour acute (*Daphnia*) and 7-day chronic (*Ceriodaphnia*) tests conducted with storm water samples collected from Echo Lake Rain Garden #1 Inlet and Outlet sites on January 17-18, 2017 is listed in the following table. The tests were initiated on January 24 and 19, respectively. Detailed findings and method descriptions are in the "RESULTS" and "METHODS" sections of the attached report. Statistical data analysis was performed in CETIS V1.8.7.16.

Event # 4 Collect 1/18/2017		***Ceriodaphnia* Survival & Reproduction Test Date 1/19/17**			***D. pulex* Acute Mortality Test Date 1/24/17**	
Locator	**Sample Information**	**Test #**	**% Survival**	**3rd brood reproduction**	**Test #**	**% Survival**
LABCON	Standard Control Water	8245	100	35.4	8248	95
LABCON - LH	Low Hardness Control Water	8245	100	31	8248	NA
ECHO-BP1-IN	L66938-1	8245	0*†	0 **††	8248	100
ECHO-BP1-OUT	L66938-3	8245	90	37.9	8248	100
*Statistically significant reduction in survival compared to (low-hardness) control response ($p<0.05$; Fisher Exact Test).						
** Statistically significant reduction in reproduction compared to (low-hardness) control response ($p<0.05$; Wilcoxon Rank Sum 2-Sample Test).						
†Statistically significant reduction in survival in Inlet response compared to Outlet response ($p<0.05$; Fisher Exact Test).						
††Statistically significant reduction in reproduction in the Inlet response compared to Outlet response ($p<0.05$; Wilcoxon Rank Sum 2-Sample Test).						

If you would like additional information, please contact me at 477-7117.

Sincerely,

Fran Sweeney
King County Dept. of Natural Resources and Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing St.
Seattle, WA 98119

BIOLOGICAL MONITORING REPORT FOR

Echo Lake Rain Garden #1 Storm Water Tests
January 2017

Program #421879-250

KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS
WATER AND LAND RESOURCES DIVISION
ENVIRONMENTAL LABORATORY SECTION
322 WEST EWING STREET
SEATTLE, WASHINGTON 98119

Test #/Date:	**8248 *Daphnia* Acute**	**1/24/2017**
	8245 *Ceriodaphnia* Chronic	**1/19/2017**

Report Date: **March 30, 2017**

METHODS

SAMPLES

Two storm water samples were collected by time-paced composite at Echo Lake Rain Garden #1 Inlet and Outlet sites on January 17, 2017. Approximately 2.5-3 L of each sample was split from a larger container and delivered to the King County Environmental Laboratory (KCEL) in 9-L glass jars with Teflon-lined screw-cap lids and tested as-received. The samples were stored in the dark at 4 ± 2°C and used to initiate the *Daphnia pulex* acute and the *Ceriodaphnia dubia* chronic toxicity tests, as well as for *C. dubia* test renewals.

Collection information and chemical characteristics of the test samples are listed in the table below.

Site:	Echo Lake Rain Garden #1-Inlet	Echo Lake Rain Garden #1-Outlet
Station:	ECHO-BP1-IN	ECHO-BP1-OUT
KCEL Sample #:	L66938-1	L66938-3
Coll Date/ Time From:	1-17-17/ 1435h	1-17-17/ 1433h
to:	1-17-17/ 1527h	1-17-17/ 1530h
Rec'd Date/Time	1-18-17/ 1126h	1-18-17/ 1126h
pH*	7.28	6.93
Tot. Alk (mg/L as $CaCO_3$)	---	---
Tot. Hard (mg/L as $CaCO_3$)	26	31
Cond (µmhos/cm)	140	235
Turbidity (NTU)	184	49.6
Tot. Susp. Solids (mg/L)	223	23.4
Ortho-P (mg/L)	0.0121	0.203
$NO_2 + NO_3$ (mg/L)	0.0665	0.508
Tot N (mg/L)	1.31	1.20
Tot P (mg/L)	0.242	0.287
Tot NH_3 (mg/L)	0.324	0.116

*Measured in field

CONTROL WATER

The control water for tests with *Daphnia pulex* is fresh water obtained from a 95 ft. deep well located at the KCEL and filtered to 60 µm with Nitex screen before use. *D. pulex* are routinely maintained in static-renewal cultures of well water (WW) at 20 ± 1°C. The well water is diluted by approximately a third with MilliQ SuperQ de-ionized water to bring the total hardness to usual levels.

Water used for testing and culturing with *Ceriodaphnia* is fresh water obtained monthly from Lake Washington (LWW) at a site midway between the I-90 and 520 bridges and filtered through 60 µm Nitex screen before use.

For LWW, low-hardness controls were prepared by diluting 1:10 with MilliQ water to approximate the hardness of the storm samples and receiving water.

Metals by ICP are measured monthly (last analysis: 1-2017); metals by ICP/MS or CVAA and organic compounds are measured annually (last analyses: 2-2017). Hardness, alkalinity, conductivity and pH are measured at the beginning of each test.

Physical-chemical characteristics of the WW and LWW are listed in the following table:

Parameter	WW 1-18-17	WW (adjusted TH)	LWW 1-9-17	Units
Temperature	13.8	----	NA	°C, adjusted as necessary
Conductivity	328	242	98.6	µmhos/cm
pH	8.05	8.08	7.72	
Total Hardness (calc.)	131	94.6	36	mg/L as $CaCO_3$
Total Alkalinity	72	45	100	mg/L as $CaCO_3$
Total Cd	< 2		< 2	µg/L
Total Cr	< 3		< 3	µg/L
Total Cu	< 4		< 4	µg/L
Total Ni	< 5		< 5	µg/L
Total Pb	< 20		< 20	µg/L
Total Se	< 0.05		< 0.05	µg/L
Total Zn	< 5		< 5	µg/L
Total Mercury	< 0.05		< 0.05	µg/L
Volatile Organics	*		+	
Organic Analysis (BNA'S):	**		++	
Bis(2-Ethylhexyl)Phthalate	7.1		0.56 < 1.89 (RDL)	µg/L
Di-N-Butyl Phthalate	< 0.47		< 0.47	µg/L
Pesticides & PCB's:	***		+++	

* 45 cmpds not detectable
** 68 cmpds not detectable
*** 28 cmpds not detected

\+ 45 cmpds not detectable
++ 68 cmpds not detectable
+++ 28 cmpds not detected

ACUTE TOXICITY TEST

Daphnia pulex – 48-Hour Static Acute Test #8248

The water flea *Daphnia* acute toxicity test #8248 followed the methods of US EPA (2002a). Test animals were neonates (< 24-hours old) taken from an overnight brood board; parent animals were adults isolated from in-house mass cultures. Because neonates from broods released on 1/21/17 were used in another test, the current test was started the following work day in order to have sufficient numbers of neonates. Samples were diluted with WW to the concentrations listed below, along with a WW-only control. Test chambers were 30-mL beakers containing 25 mL of test solution. Individual broods were blocked across treatments such that each replicate contained representatives of five separate broods, with four replicates per treatment. Test chambers were randomized at the start of the test. The test was incubated at 20.0 ± 1.0°C for 48 hours on a 16:8 hour light:dark cycle. Survival and water quality measurements were recorded every 24 hours. Temperature was measured daily by digital thermometer in replicate blanks at six positions of the test tray (4 outer corner + 2 center). In addition, incubator temperature was measured at 15-minute intervals using an Onset Tidbit data logger. Temperature, pH and dissolved oxygen (D.O.) values can be found on the attached photocopied pages from the laboratory notebook in the "Storm Water Tests" section of this report.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
8248	L66938-1, -3	1-24-17/ 1435h	1-26-17/ 1405h	0 (WW controls), 6.25, 12.5, 25, 50, 100	< 24 hr	4	5

CHRONIC TOXICITY TEST

Ceriodaphnia dubia - 7-Day Chronic Static Renewal Test #8245

The water flea *Ceriodaphnia dubia* 7-day static renewal chronic toxicity test #8245 was conducted as outlined in US EPA (2002b). Samples were tested as received at one undiluted (100%) concentration. Ten replicates containing one animal each were tested at each treatment, including a LWW-only control and a low-hardness LWW control. Test organisms were 3rd or 4th-brood neonates (< 24 hours old) taken from an in-house individual brood board of adults started from mass culture. Individual broods were blocked across treatments, and each replicate represented a different brood. The test was incubated at 25 ± 1.0°C for 7 days on a 16:8 h light:dark cycle. All test solutions were renewed daily. Reproduction, survival, temperature and water quality measurements were recorded every 24 hours. Temperature was measured daily in six test board temperature blanks (4 outer corner + 2 center) and at 15-minute intervals using an Onset "Tidbit" data logger placed in a beaker of water in the incubator. The pH and D.O. values measured during testing can be found on the attached photocopied pages from the laboratory notebook in the "Storm Water Tests" section of this report.

Test #	LIMS Sample #	Start Date/ Time	End Date/ Time	Sample Concentrations (%)	Daphnid Age	# Reps/ Trtmt	# Orgs/ Rep
8245	L66938-1, -3	1-19-17/ 1435h	1-26-17/ 1510h	0 (LWW controls), 100%	< 24 hr	10	1

QUALITY CONTROL

Reference toxicant control results are summarized in the following table.

	Daphnia	*Ceriodaphnia*
Test #:	8249	8250
Test Date:	2-1-17	2-3-17
Control Survival (%)	100	90
Criteria	≥ 90	≥ 80
Acceptable?	**Yes**	**Yes**
Survival LC50 (g/L)	3.42	
Lab Control Limits	2.39 – 4.65	
Acceptable?	**Yes**	
Control Reprod (# neos/adult)		39.8
Criteria		≥ 15
Acceptable?		**Yes**
PMSD for Reproduction (%)*		18.1
Criteria		13 - 47
Acceptable?		**Yes**
Reproduction IC25 (µg/L)		1.97
Lab Control Limits		0 – 7.25
Acceptable?		**Yes**

*Percent Minimum Significant Difference; determined by Dunnett's Multiple Comparison test (Steels Many-One Rank Test for unequal variance); ($\alpha = 0.05$)

NaCl was used as a reference toxicant in the acute test with *Daphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant test for *Daphnia* (#8249) (US EPA 2002a). The acute positive control test met acceptability criteria regarding control survival, and the survival LC50 endpoint was within the control limits of the mean ± 2SD (US EPA, 2002a).

Cadmium nitrate was used as a reference toxicant in the chronic toxicity test with *Ceriodaphnia*. Temperature, pH and dissolved oxygen measurements remained within acceptable limits throughout the reference toxicant test for *Ceriodaphnia*

(#8250) (US EPA 2002b). In addition, the chronic test met acceptability criteria regarding control survival and mean control reproduction (US EPA 2002b).

The precision tables located at the end of this report are constructed to monitor the sensitivity of the organisms to the reference toxicant and thereby provide an indication of their overall sensitivity to other compounds.

WATER QUALITY MONITORING

Methods and method numbers for water quality tests are listed in the following table:

Parameter	Method
Water Quality Tests	APHA (1992); US EPA (1991).
Temperature	Standard Mercury Thermometer (calibrated with a certified thermometer traceable to NBS records) and Onset, Tidbit (v2) UTBI-001 Temperature Logger (KCEL #436v1).
Dissolved Oxygen	YSI membrane electrode method (Method #4500-0 G; KCEL #434).
pH	Beckman 690 meter with automatic temperature compensation and Ross combination electrode (Method #4500-H; APHA 1992; KCEL #433).
Total Alkalinity	Potentiometric Method (Method #2320 B; KCEL #319v4).
Total Hardness	By calculation (Method #2340 B; KCEL #612v4).
Conductivity	Orion Model #122 Meter with 012210 conductivity cell (Method 2510B; KCEL #435).
Total Ammonia	Phenate Method (Standard Methods SM 4500 - NH_3-G; KCEL #330v4).
Unionized Ammonia	Calculated from total ammonia, pH and ionization constants (APHA Method #417 G).
Pesticides and PCB's	Continuous liquid extraction method (EPA Method #608; KCEL #733).
Organic Analysis	Continuous liquid extraction method for BNA's (EPA Method #625; KCEL #731).
Volatile Organics	Purge and trap method (EPA Method #624; KCEL #732).
Total Metals	ICP for Cd, Cr, Cu, Ni, Pb and Zn (EPA Method #200.7; KCEL #612v4); for Hg analysis (KCEL #604v5, 601v4, 605v0).

RESULTS

ACUTE TOXICITY TESTS

Daphnia pulex – 48-Hour Static Acute Test #8248

Survival results for the 48-hour *Daphnia* acute test #8248 with Echo Lake storm water samples are listed in the table below.

Sample #	Station	% Sample	Percent Survival at 48 Hours: % Survival in each rep. (n=5 *Daphnia*/rep) Rep 1	Rep 2	Rep 3	Rep 4	Mean	# *Daphnia* Tested
----	Well Water Control	0	100	100	100	80	**95**	20
L66938-1	ECHO-BP1-IN	6.25	100	100	100	100	**100**	20
		12.5	100	100	100	100	**100**	20
		25	100	100	100	100	**100**	20
		50	100	100	100	100	**100**	20
		100	100	100	100	100	**100**	20
L66938-3	ECHO-BP1-OUT	6.25	100	100	100	100	**100**	20
		12.5	100	100	100	100	**100**	20
		25	100	100	100	100	**100**	20
		50	100	100	100	100	**100**	20
		100	100	100	100	100	**100**	20

Survival was 95% in the WW-only control and 100% in all concentrations of both Inlet and Outlet samples. Survival in both the 100% Inlet and Outlet samples did not differ significantly from the WW-only control ($p > 0.05$; Wilcoxon Rank Sum 2-Sample Test). The NOEC for survival was 100% for both samples ($p > 0.05$; Steels Many-One Rank Sum Test). An LC50 could not be calculated for either the Inlet or Outlet sample due to insufficient mortality.

The maximum un-ionized ammonia levels in the 100% storm samples during the 48-hour test are listed in the table below.

Station:	ECHO-BP1-IN	ECHO-BP1-OUT
KCEL Sample #:	L66938-1	L66938-3
NH_3-N (mg/L)	0.006	0.002

***Ceriodaphnia dubia* - 7-Day Chronic Static Renewal Test #8245**

Reproduction and survival results over the 7-day chronic *Ceriodaphnia* test #8245 with 100% Echo Lake storm water samples are shown in the table below. Reproduction was calculated using the 6-day data after 60% or greater of control organisms produced 3 or more broods (US EPA 2002b; WA DOE 2016).

Sample #	Station	% Sample	Reproduction (#Neonates/Adult in 6 Days)										Mean Reprod	Mean 7d % Surv
			1	2	3	4	5	6	7	8	9	10		
---	LWW Control (Low-Hardness)	0	30	30	31	30	30	33	33	34	29	30	**31.0**	100
---	LWW (unadjusted)	0	37	36	37	38	31	31	37	35	36	36	**35.4**	100
L66938-1	ECHO-BP1-IN	100	0	0	0	0	0	0	0	0	0	0	**0**	0
-3	ECHO-BP1-OUT	100	39	14[x]	40	42	43	33	40	37	45	46	**37.9***	90**

*Significantly greater than in Inlet sample ($p < 0.05$; Wilcoxon Rank Sum 2-Sample Test)
**Significantly greater than in Inlet sample ($p < 0.05$; Fisher Exact Test)
[x]Mortality on Day 6

As shown in the table above, survival was 90% in the Outlet sample and 100% in both the hardness-adjusted and non-adjusted LWW-only controls. Survival was 0% in the Inlet sample.

Reproduction in the Outlet sample was significantly greater than in the Inlet sample ($p < 0.05$; Wilcoxon Rank Sum 2-Sample Test).

The maximum un-ionized ammonia levels reached in the 100% storm samples during the 7-day chronic test are listed in the table below.

Station:	ECHO-BP1-IN	ECHO-BP1-OUT
KCEL Sample #:	L66938-1	L66938-3
NH_3-N (mg/L)	0.005	0.003

QUALITY CONTROL

Storm water sample and control performance results are summarized in the following table:

Test Organism:	*Ceriodaphnia*	*Daphnia*
Test #:	8245	8248
Control Survival (%)	100	95
Criteria	≥ 80	≥ 90
Acceptable?	**Yes**	**Yes**
Control Reproduction (# neos/adult)	31.0	
Criteria	≥ 15	
Acceptable?	**Yes**	

As shown in the table above, both the acute and chronic effluent tests met acceptability criteria regarding control performance, including survival and reproduction (US EPA, 2002a & 2002b).

Dissolved oxygen, pH, temperature and/or salinity remained within acceptable limits throughout both the acute and chronic tests (US EPA, 2002a & 2002b). Water quality data recorded during testing is shown on the photocopied pages from the laboratory notebook in the "Effluent Tests" section of this report.

Tested By:

King County Department of Natural Resources & Parks
Water and Land Resources Division
Environmental Laboratory Section
322 West Ewing Street
Seattle WA 98119
(206) 477-7123

Julie Alaimo, Gary Yoshida, Robin Revelle, Gabriela Hannach, Elizabeth Frame, Lyndsey Swanson, Fran Sweeney

REFERENCES

APHA. 1992. Standard Methods for the Examination of Water and Wastewater, 18th Edition. American Public Health Association, American Waterworks Association, Water Pollution Control Association, Washington D.C.

US EPA. 2002a. Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms. 5th edition. EPA-821-02-012, October, 2002. US Environmental Protection Agency, Office of Water (4303T), Washington, DC.

US EPA. 2002b. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. 4th Edition (EPA-821-R-02-013).

US EPA. 1991. Code of Federal Regulations, 40CFR, Appendix A, July 1991. U.S. Environmental Protection Agency, Office of Federal Registry, Washington, D.C.

WA DOE. 2016. Whole Effluent Toxicity Testing Guidance and Test Review Criteria. DOE Pub. #WQ-R-95-80, revised June 2016. Washington State Department of Ecology, Water Quality Program, Olympia, WA.

Appendix G:
Data Quality Assessment

Contents:

Section G1 – Data Quality Summary

Section G2 – KCEL Data Validation

Section G3 – PCB Data Validation

Appendix G1:
Data Quality Summary

APPENDIX G1 – DATA QUALITY SUMMARY

This section summarizes the findings of the data quality assessment, which followed the steps outlined in Section 10.0 of the project Quality Assurance Project Plan (QAPP; King County 2015a). The data collected for this project were reviewed partway through data collection and again when the full dataset was available. This summary describes how well the data met the general project objectives and the specific data quality objectives, as well as any implications this may have on data usage. Finally, the section includes a brief summary of system-wide data quality for data that were obtained from other sources, but used for comparisons (i.e., 2010-11 outfall samples and lake monitoring data).

G1.1 General Project Objectives

Project objectives were achieved with a few exceptions, which are listed below (see Section 1.1 of the main report for a list of project objectives):

- The effectiveness of the retrofit for bacteria treatment could not be confidently determined due to data quality issues and impacted Objectives 1, 2, and 4. These data quality issues are described in the data validation memo included as Appendix G2. Some estimates of bacteria treatment effectiveness are presented in Appendix H.
- There were significant issues with the ability to collect flow data at the detention tank system (DTS) as described in Appendix I. These data were required to address the flow control portion of project objective #2. No estimates of flow control effectiveness are included in this report.
- To address Objective 1, the QAPP specified that six to eight storms would be sampled for each individual BMP; however only five storms were sampled for the Filterra® (i.e., FLT1) and only two storms were sampled at the bioretention planter box (BPB) installed in 2016 (i.e., BPB4). This data limitation resulted in lower statistical power to evaluate the Filterra treatment effectiveness. However, statistical differences were detected for many parameters, indicating sufficient statistical power to detect treatment effectiveness for most parameters. Representativeness may have been limited, however (See Section G1.6). Statistical tests could not be conducted for the limited BPB4 results without combining these data with other BPB results. Therefore, comparisons between new BPBs and older BPBs (i.e., BPB1, BPB2, and BPB3 – installed in 2012) could not be done for this study. While the QAPP specified a second Filterra would be evaluated by the study, this was not possible (See Appendix C).

G1.2 Precision

Precision is the agreement of a set of results among themselves and is a measure of the ability to reproduce a result. Precision was evaluated through analysis of field replicates, laboratory replicates and matrix spike duplicates according to the control limits specified in the QAPP.

- Section G2 describes a few instances where King County Environmental Laboratory (KCEL) quality control (QC) results were outside precision control limits specified in the QAPP. The associated sample results were qualified as estimates, but none of these results were rejected. Precision control limits were met for polychlorinated biphenyl (PCB) analysis.
- Table G1-1 lists the field replicate samples collected for the project. The total number of field replicates exceeded the number specified in the QAPP, but more replicates were collected from the influent than effluent, due to limited effluent flow during the sampling period. The relative percent differences (RPDs) between primary and replicate sample results were within the control limits used for laboratory replicates for all but a handful of results (Table G1-2).

Table G1-1. Collection and analysis of field replicate samples.

Site/ Flow	Collect Date	Sample IDs*	Field Meas.	TSS	Total Nutrients & Metals	Dis. Nutr.	Dis. Metals	PAH	TPH-Dx	PCB
BPB1 Influent	01/21/16	L64648-1 (-2) **L64648-9 (-10)**		✓	✓	✓		✓	✓	✓
BPB1 Influent	10/26/16	L66498-1 (-2) **L66498-22 (-23)**	✓	X	X	✓	✓	✓	✓	
BPB2 Influent	03/01/16	L64921-5 **L64921-17**		✓	✓	✓	✓			
BPB2 Effluent	03/09/16	L64999-7 (-8) **L64999-17 (-18)**		✓	✓	✓	✓	✓	✓	X
BPB3 Effluent	02/09/17	L67070-11 **L67070-26**	X	X	✓	✓	✓	✓	✓	
Filterra Influent	01/17/17	L66938-17 **L66938-22**	Only turbidity	✓	X	✓	✓	✓	✓	
DTS Influent	09/17/16	L66175-1 **L66175-5**	X							
DTS Effluent	09/17/16	L66175-3 **L66175-6**	✓							

*Replicate sample IDs in bold. Grab sample IDs in parentheses.
✓ - all results were within laboratory replicate control limits
X – some results were outside laboratory replicate control limits (Table G1-2).
TSS – total suspended solids; Dis. Nutr. – dissolved nutrients; PAH – polycyclic aromatic hydrocarbons; TPH-Dx – total lube oil-/diesel-range hydrocarbons, PCB – polychlorinated biphenyls

Table G1-2. Results for field replicate samples that exceeded control limits.

Parameter	Control Limits	Field Replicate Results Outside Control Limits (RPD)
Turbidity	20%	L67070-26 (38%) L66175-5 (57%)
Conductivity	10%	L66175-5 (43%)
TSS	25%	L66498-22 (28%) L67070-26 (28%)
Total Phosphorus	20%	L66938-22 (21%)
Lead	20%	L66498-22 (24%) L66938-22 (29%)
Total PCBs	50%	L64999-17 (180%)

Comparison of field replicate results to laboratory replicate control limits is a conservative measure of precision, and these slight variations do not indicate severe precision issues; however, the relatively greater difference between PCB results was investigated further.

Total PCBs are calculated as the sum of all detected congeners, and individual congener concentrations were compared to further explore differences in this sample pair. Only one congener (PCB-118, 5.9 pg/L) was detected in the primary sample (L64999-7). Detection of such a low concentration is extremely unusual for an environmental sample. Nineteen congeners (114 pg/L total PCBs) were detected in the field replicate (L64999-17) which represents a more typical pattern. PCB-118 was detected at very similar concentrations (5.9 and 5.4 pg/L) and was the only congener in common between the samples. There was no indication that the other 18 congeners were present in the primary sample (e.g., no blank corrected or qualified results). However, almost all detections in these samples were below the estimated quantitation limit (EQL) and were flagged as estimates by the laboratory.

Coincidentally, a laboratory duplicate analysis was performed on this field replicate. Total PCBs in the laboratory duplicate were very similar to the field replicate at 112 pg/L, and the congener profiles were virtually identical. This indicates acceptable laboratory precision, suggesting that the difference between the primary sample and field replicate is due to variability introduced during field collection. Overall, these total PCB concentrations are quite low and as a result, a slight difference in collected material can result in seemingly high variability. The project objectives were still addressed, because differences between influent and effluent PCB concentrations at the BPBs and Filterra were generally much greater than this low level variability.

G1.3 Bias

Bias is a measure of the difference, due to a systematic factor, between an analytical result and the true value of an analyte. This was evaluated through analysis of equipment blanks, method blanks, spike blanks, matrix spikes, certified reference materials, laboratory control samples and/or surrogates, along with laboratory recovery sample control charts.

- No systematic bias was observed in the KCEL analysis based on method blanks and spiked QC samples, but there were a few isolated instances of bias. These instances are described in the data validation memo, and some sample results were qualified as estimates with high or low bias. The severity of bias was low and did not indicate results should be rejected.
- Method blank contamination is an expected issue for PCB congener analysis due to the ubiquitous nature of PCBs and the low detection limits required for the analysis. Total PCB concentrations in all method blanks were less than 200 pg/L, and all congeners detected within five times the concentration in the associated blank were qualified as non-detects during the data validation process. Congener PCB-11 was the most common and influential contaminant in the method blanks.
- As detailed in Section G3, one laboratory control sample for PCB analysis indicated high bias for two congeners. This resulted in the need to flag some sample results as estimates in the data validation process, but no results were rejected.
- One equipment blank for the DTS sampling set-up (i.e., autosampler) was analyzed for nutrients, conventional parameters, metals, and PAHs. Concentrations of all parameters were below detection limits, except TOC at 0.71 mg/L. All TOC results at the DTS were at least 8 mg/L, so this slight high bias suggested by the equipment blank is not expected to negatively impact the results.
- Three equipment blanks were analyzed for PCB congeners. These represented the set-up for DTS sampling, the BPB/Filterra influent sampling, and BPB effluent sampling. Total PCB concentrations were less than 50 pg/L in each sample. About 20% of the total concentration in each was contributed by PCB-68, and between 33% and 49% by PCB-75. With similar results in each equipment blank, this slight high bias is not likely to impact the project objectives of comparing between influent and effluent concentrations.

G1.4 Sensitivity

Sensitivity is a measure of the capability of analytical methods to meet the study goal. Detection limits were appropriate to assess differences between influent and effluent concentrations for almost all parameters. There was excellent frequency of detection (FOD) for TSS, nutrients, metals (except cadmium and dissolved lead), total PCBs, and influent PAHs and lube oil-range hydrocarbons. For parameters with less than 100% FOD, the FOD was generally much lower in effluent samples, indicating decreasing concentrations through treatment, despite the non-detects. The exceptions were dissolved cadmium and diesel-range hydrocarbons for which there were only a handful of detections, and dissolved

lead where detections were all below the reporting detection limit (RDL). Overall, sensitivity was sufficient to address the project objectives with these few exceptions.

G1.5 Accuracy

Accuracy is an estimate of the difference between the true value and the measured value. The accuracy of a result is affected by both systematic and random errors. Accuracy of the analytical results was evaluated using matrix spikes, certified reference materials and/or laboratory control samples, and ongoing recovery sample control charts. Equipment blanks, method blanks, spiked QC samples, and laboratory control samples can also impact accuracy, but these are discussed under bias (Section G1.3). Accuracy of the field measurements were assessed by check standards and end checks, which were all within control limits. Flow data were not used for any analysis, and so accuracy was not rigorously assessed.

G1.6 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at the sampling point, or an environmental condition. Sample collection followed the established sample handling and holding times required for each analytical test, with a few exceptions (orthophosphate phosphorus, bacteria, and, at the DTS, dissolved metals; Section G2). The equipment blank results demonstrate that equipment decontamination methods were successful.

Representativeness may have been limited by the number of sample pairs available to assess effectiveness at each BMP ($n \leq 8$). A greater number of samples collected over more diverse conditions would allow for greater certainty that the sample results were representative of average effectiveness; however, the project was constrained by the planned scope and budget. Additionally, storm samples often did not capture the first pulse of a given storm event (Appendix H4).

The DTS inlet sampling location does not represent all of the stormwater entering the DTS; one small subbasin enters from a different inlet. This was not expected to significantly impact comparisons between influent and effluent water quality, as described in the QAPP (King County 2015a). Additionally, the DTS outlet sampling location does not represent all stormwater discharged to Echo Lake through the main outfall; one small subbasin enters the stormwater line downstream of the DTS outlet sampling location.

One sample (L65650-1) from the DTS inlet was collected during a relatively small storm on 6/23/2016 and considered non- representative of influent conditions. The autosampler recorded collection of sample aliquots at this location prior to the beginning of the rain event. This suggests that some sample aliquots were collected from water that remained in the catch basin from a previous storm event. The field lead agreed that it was possible the sample line had been placed too low, so that the line may have been submerged in this

water. The project team decided to exclude this sample pair from the data analysis, because it was not likely representative of the influent to the DTS during that storm event.

G1.7 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. Standard collection and analysis methods were followed throughout the project to assure comparability of project data. The QAPP describes how the stormwater treatment evaluated for this project can be compared to stormwater treatment throughout the region (King County 2015a); the DTS was designed according to recommendations in the 2005 SWMMWW (Ecology 2005).

The QAPP also describes comparability issues between pre-retrofit outfall sample results and post-retrofit DTS sample results due to stormwater system configurations, development, and sample collection during slightly different times of year. Statistical comparisons are not presented in this report due to the high uncertainty in comparability. These issues are described further in Section 2.2 (Objective 3) of the main report and Appendix A.

G1.8 Completeness

Completeness is defined as the total number of samples analyzed for which acceptable analytical data are generated, compared to the total number of samples submitted for analysis. The QAPP specified a goal of six samples per sampling location and 90% acceptable analytical data. These data quality goals were met, with the exception of the Filterra and BPB4 where less than six samples were collected. Project objectives were still met for the Filterra, but treatment effectiveness could not be statistically assessed at BPB4 due to limited sample numbers (Section G1.1). Flow monitoring was not completed for this project, as described in Appendix I.

G1.9 Quality of System-wide Data Collected Outside this Project

Data collected outside this project were not validated, but basic data quality was reviewed, as described below. No data were rejected based on this review.

Outfall Samples (2010-2011)
Results from the pre-retrofit samples collected at the outfall to Echo Lake were reviewed for any data quality issues following the same data quality guidelines required for project data (see QAPP; King County 2015a). No formal data validation memo was produced, but the batch and QC reports were reviewed and are available upon request.

Dissolved metals and dissolved nutrients samples were not filtered within the prescribed 15-minute holding time, and two total suspended solids samples were not analyzed within the prescribed seven-day holding time. These data quality issues cast some uncertainty on

these pre-retrofit results, but the data were not rejected. All other data quality objectives were met.

Echo Lake Monitoring Data

A technical memorandum describes the data quality assessment for Echo Lake monitoring data collected from 2001 through 2011 (King County 2015b). The nutrient data collected from 2012 to 2016 were reviewed through the King County Small Lakes Monitoring Program. This process includes a screen for outliers based on historical data and a consult with the KCEL to identify any quality control issues. The data review process also identified three samples that were analyzed for phosphorus outside the 7-day holding time. These results were flagged as estimates. Additionally, one fecal coliform sample result was not reported due to a power outage at the laboratory. No other quality control issues were reported for the data used in the analyses presented in Appendix H.

Appendix G References

Ecology. 2005. Stormwater Management Manual for Western Washington (SWMMWW). Publication No. 05-10-33.

King County. 2015a. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

King County. 2015b. Echo Lake Historical Data Technical Memorandum: 2001-2011 Water Quality Monitoring Results. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

Appendix G2:
KCEL Data Validation

King County

Water and Land Resources Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
206-477-4800 Fax 206-296-0192
TTY Relay: 711

TECHNICAL MEMORANDUM

September 19, 2017

TO: Deb Lester, Science and Technical Support Section, Water and Land Resources Division, Department of Natural Resources and Parks

FM: Carly Greyell, Science and Technical Support Section, Water and Land Resources Division, Department of Natural Resources and Parks

RE: Data Validation Memo: Echo Lake Stormwater Monitoring – SAM Effectiveness Study

This technical memorandum summarizes the data validation review performed on 137 stormwater samples collected within the Echo Lake drainage basin in Shoreline, WA between December 8,2015 and February 15, 2017. Also included are results from equipment blanks: one autosampler blank sample and 12 filter blank samples from processing for dissolved nutrient analysis. The equipment blank samples were collected between June 24, 2016 and March 29, 2017. The sample collection and analysis methods are specified in the project Quality Assurance Project Plan (QAPP; King County 2015). Samples were analyzed for one or more of the following: field measurements (i.e., conductivity, dissolved oxygen, pH, temperature, and turbidity), total suspended solids (TSS), total and dissolved nutrients, total and dissolved organic carbon (TOC/DOC), bacteria, total and dissolved trace metals, petroleum hydrocarbons (Dx), and polycyclic aromatic hydrocarbons (PAHs). A few samples were also analyzed for total alkalinity, as a requirement of the EPA toxicity methods. The alkalinity results are not included in this data validation effort. Table 1-1 provides an inventory of the samples included in this data validation review. All samples were collected and analyzed by the King County Environmental Laboratory (KCEL).

Table 1-1. Sample Inventory

Sample Type	Locator	Collect Date	Sample ID	Field Meas.	DOC	TOC	TSS	Total Nutrients	Dissolved Nutrients	Total Metals	Dissolved Metals	PAHs	Dx	Bacteria
EGS	ECHO-BP1-IN	12/8/2015	L64379-1										X	
ECS	ECHO-BP1-IN	12/8/2015	L64379-2	X	X	X	X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	12/8/2015	L64379-3										X	
ECS	ECHO-BP1-OUT	12/8/2015	L64379-4	X	X	X	X	X	X	X	X	X		X
ECS	ECHO-BP2-IN	12/8/2015	L64379-6	X	X	X	X	X	X	X	X	X		X
ECS	ECHO-BP2-OUT	12/8/2015	L64379-8	X	X	X	X	X	X	X	X	X		X
ECS	ECHO-BP1-IN	1/21/2016	L64648-1	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	1/21/2016	L64648-2										X	
ECS	ECHO-BP1-OUT	1/21/2016	L64648-3	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	1/21/2016	L64648-4										X	
ECS	ECHO-BP2-IN	1/21/2016	L64648-5	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-IN	1/21/2016	L64648-6										X	
ECS	ECHO-BP2-OUT	1/21/2016	L64648-7	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-OUT	1/21/2016	L64648-8										X	
ECS-FREP	ECHO-BP1-IN	1/21/2016	L64648-9				X	X	X	X		X		X
EGS-FREP	ECHO-BP1-IN	1/21/2016	L64648-10										X	
ECS	ECHO-BP1-IN	3/1/2016	L64921-1	X			X	X	X	X	X	X		X
ECS	ECHO-BP1-OUT	3/1/2016	L64921-3	X			X	X	X	X	X	X		X
ECS	ECHO-BP2-IN	3/1/2016	L64921-5	X			X	X	X	X	X			X
ECS	ECHO-BP2-OUT	3/1/2016	L64921-7	X			X	X	X	X	X			X
ECS	ECHO-BP3-IN	3/1/2016	L64921-9	X			X	X	X	X	X	X		X
ECS	ECHO-BP3-OUT	3/1/2016	L64921-11	X			X	X	X	X	X	X		X
ECS	ECHO-FLT1-IN	3/1/2016	L64921-13				X	X	X	X	X	X		X
ECS	ECHO-FLT1-OUT	3/1/2016	L64921-15	X			X	X	X	X	X	X		X
ECS-FREP	ECHO-BP2-IN	3/1/2016	L64921-17				X	X	X	X	X			X
ECS	ECHO-BP1-IN	3/9/2016	L64999-1	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	3/9/2016	L64999-2										X	
ECS	ECHO-BP1-OUT	3/9/2016	L64999-3	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	3/9/2016	L64999-4										X	
ECS	ECHO-BP2-IN	3/9/2016	L64999-5	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-IN	3/9/2016	L64999-6										X	

Sample Type	Locator	Collect Date	Sample ID	Field Meas.	DOC	TOC	TSS	Total Nutrients	Dissolved Nutrients	Total Metals	Dissolved Metals	PAHs	Dx	Bacteria
ECS	ECHO-BP2-OUT	3/9/2016	L64999-7	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-OUT	3/9/2016	L64999-8										X	
ECS	ECHO-BP3-IN	3/9/2016	L64999-9	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	3/9/2016	L64999-10										X	
ECS	ECHO-BP3-OUT	3/9/2016	L64999-11	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	3/9/2016	L64999-12										X	
ECS	ECHO-FLT1-IN	3/9/2016	L64999-13	X			X	X	X	X	X	X		X
EGS	ECHO-FLT1-IN	3/9/2016	L64999-14										X	
ECS	ECHO-FLT1-OUT	3/9/2016	L64999-15	X			X	X	X	X	X	X		X
EGS	ECHO-FLT1-OUT	3/9/2016	L64999-16										X	
ECS-FREP	ECHO-BP2-OUT	3/9/2016	L64999-17				X	X	X	X	X	X		X
EGS-FREP	ECHO-BP2-OUT	3/9/2016	L64999-18										X	
EAS	ECHO-DTS-IN	6/23/2016	L65650-1				X	X	X	X	X			
EAS	ECHO-DTS-OUT	6/23/2016	L65650-3		X	X	X	X	X	X	X			
FFB	FFBLANK	6/24/2016	L65650-5						X					
EAS	ECHO-DTS-IN	9/17/2016	L66175-1	X			X	X	X	X	X	X		
EGS	ECHO-DTS-IN	9/17/2016	L66175-2										X	X
EAS	ECHO-DTS-OUT	9/17/2016	L66175-3	X	X	X	X	X	X	X	X	X		
EGS	ECHO-DTS-OUT	9/17/2016	L66175-4										X	X
EAS	ECHO-DTS-IN	9/17/2016	L66175-5	X										
EAS	ECHO-DTS-OUT	9/17/2016	L66175-6	X										
FFB	FFBLANK	9/17/2016	L66175-7						X					
EAS	ECHO-DTS-IN	10/6/2016	L66285-1				X	X	X	X	X	X		
EAS	ECHO-DTS-OUT	10/6/2016	L66285-3		X	X	X	X	X	X	X	X		
FFB	FFBLANK	10/7/2016	L66285-5						X					
ECS	ECHO-BP3-IN	10/13/2016	L66382-9	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	10/13/2016	L66382-10										X	
ECS	ECHO-BP3-OUT	10/13/2016	L66382-11	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	10/13/2016	L66382-12										X	
ECS	ECHO-FLT1-IN	10/13/2016	L66382-17	X			X	X	X	X	X	X		X
EGS	ECHO-FLT1-IN	10/13/2016	L66382-18										X	
ECS	ECHO-FLT1-OUT	10/13/2016	L66382-19	X			X	X	X	X	X	X		X

Sample Type	Locator	Collect Date	Sample ID	Field Meas.	DOC	TOC	TSS	Total Nutrients	Dissolved Nutrients	Total Metals	Dissolved Metals	PAHs	Dx	Bacteria
EGS	ECHO-FLT1-OUT	10/13/2016	L66382-20										X	
FFB	FFBLANK	10/13/2016	L66382-25						X					
EAS	ECHO-DTS-IN	10/13/2016	L66384-1	X			X	X	X	X	X	X		
EGS	ECHO-DTS-IN	10/13/2016	L66384-2										X	X
EAS	ECHO-DTS-OUT	10/13/2016	L66384-3	X	X	X	X	X	X	X	X	X		
EGS	ECHO-DTS-OUT	10/13/2016	L66384-4										X	X
FFB	FFBLANK	10/13/2016	L66384-5						X					
EAS	ECHO-DTS-IN	10/19/2016	L66435-1	X			X	X	X	X	X	X		
EGS	ECHO-DTS-IN	10/20/2016	L66435-2										X	X
EAS	ECHO-DTS-OUT	10/19/2016	L66435-3	X	X	X	X	X	X	X	X	X		
EGS	ECHO-DTS-OUT	10/20/2016	L66435-4										X	X
FFB	FFBLANK	10/20/2016	L66435-5						X					
ECS	ECHO-BP1-IN	10/26/2016	L66498-1	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	10/26/2016	L66498-2										X	
ECS	ECHO-BP1-OUT	10/26/2016	L66498-3	X			X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	10/26/2016	L66498-4										X	
ECS	ECHO-BP2-IN	10/26/2016	L66498-5	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-IN	10/26/2016	L66498-6										X	
ECS	ECHO-BP2-OUT	10/26/2016	L66498-7	X			X	X	X	X	X	X		X
EGS	ECHO-BP2-OUT	10/26/2016	L66498-8										X	
ECS	ECHO-BP3-IN	10/26/2016	L66498-9	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	10/26/2016	L66498-10										X	
ECS	ECHO-BP3-OUT	10/26/2016	L66498-11	X			X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	10/26/2016	L66498-12										X	
ECS	ECHO-BP4-IN	10/26/2016	L66498-13	X			X	X	X	X	X	X		X
ECS	ECHO-BP4-OUT	10/26/2016	L66498-15	X			X	X	X	X	X	X		X
ECS	ECHO-FLT1-IN	10/26/2016	L66498-17	X			X	X	X	X	X	X		X
EGS	ECHO-FLT1-IN	10/26/2016	L66498-18										X	
ECS	ECHO-FLT1-OUT	10/26/2016	L66498-19	X			X	X	X	X	X	X		X
EGS	ECHO-FLT1-OUT	10/26/2016	L66498-20										X	
ECS-FREP	ECHO-BP1-IN	10/26/2016	L66498-22	X			X	X	X	X	X	X		X
EGS-FREP	ECHO-BP1-IN	10/26/2016	L66498-23										X	

Sample Type	Locator	Collect Date	Sample ID	Field Meas.	DOC	TOC	TSS	Total Nutrients	Dissolved Nutrients	Total Metals	Dissolved Metals	PAHs	Dx	Bacteria
EAS	ECHO-DTS-IN	10/26/2016	L66499-1	X			X	X	X	X	X	X		
EGS	ECHO-DTS-IN	10/26/2016	L66499-2										X	X
EAS	ECHO-DTS-OUT	10/26/2016	L66499-3	X	X	X	X	X	X	X	X	X		
EGS	ECHO-DTS-OUT	10/26/2016	L66499-4										X	X
FFB	FFBLANK	10/26/2016	L66499-5						X					
ECS	ECHO-BP1-IN	1/17/2017	L66938-1	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	1/17/2017	L66938-2										X	
ECS	ECHO-BP1-OUT	1/17/2017	L66938-3	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	1/17/2017	L66938-4										X	
ECS	ECHO-BP2-IN	1/17/2017	L66938-5	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP2-IN	1/17/2017	L66938-6										X	
ECS	ECHO-BP2-OUT	1/17/2017	L66938-7	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP2-OUT	1/17/2017	L66938-8										X	
ECS	ECHO-BP3-IN	1/17/2017	L66938-9	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	1/17/2017	L66938-10										X	
ECS	ECHO-BP3-OUT	1/17/2017	L66938-11	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	1/17/2017	L66938-12										X	
ECS	ECHO-BP4-IN	1/18/2017	L66938-13	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP4-IN	1/18/2017	L66938-14										X	
ECS	ECHO-BP4-OUT	1/18/2017	L66938-15	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP4-OUT	1/18/2017	L66938-16										X	
ECS	ECHO-FLT1-IN	1/17/2017	L66938-17	X	X		X	X	X	X	X	X		X
EGS	ECHO-FLT1-IN	1/17/2017	L66938-18										X	
ECS	ECHO-FLT1-OUT	1/17/2017	L66938-19	X	X		X	X	X	X	X	X		X
EGS	ECHO-FLT1-OUT	1/17/2017	L66938-20										X	
FFB	FFBLANK	1/17/2017	L66938-21		X				X					
ECS-FREP	ECHO-FLT1-IN	1/17/2017	L66938-22		X		X	X	X	X	X	X		X
EGS-FREP	ECHO-FLT1-IN	1/17/2017	L66938-23										X	
ECS	ECHO-BP1-IN	2/9/2017	L67070-1	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	2/9/2017	L67070-2										X	
ECS	ECHO-BP1-OUT	2/9/2017	L67070-3	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	2/9/2017	L67070-4										X	

Sample Type	Locator	Collect Date	Sample ID	Field Meas.	DOC	TOC	TSS	Total Nutrients	Dissolved Nutrients	Total Metals	Dissolved Metals	PAHs	Dx	Bacteria
ECS	ECHO-BP2-IN	2/9/2017	L67070-5	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP2-IN	2/9/2017	L67070-6										X	
ECS	ECHO-BP2-OUT	2/9/2017	L67070-7	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP2-OUT	2/9/2017	L67070-8										X	
ECS	ECHO-BP3-IN	2/9/2017	L67070-9	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	2/9/2017	L67070-10										X	
ECS	ECHO-BP3-OUT	2/9/2017	L67070-11	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	2/9/2017	L67070-12										X	
FFB	FFBLANK	2/9/2017	L67070-25						X					
ECS-FREP	ECHO-BP3-OUT	2/9/2017	L67070-26	X	X		X	X	X	X	X	X		X
EGS-FREP	ECHO-BP3-OUT	2/9/2017	L67070-27										X	
ECS	ECHO-BP1-IN	2/15/2017	L67140-1	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-IN	2/15/2017	L67140-2										X	
ECS	ECHO-BP1-OUT	2/15/2017	L67140-3	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP1-OUT	2/15/2017	L67140-4										X	
ECS	ECHO-BP3-IN	2/15/2017	L67140-5	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-IN	2/15/2017	L67140-6										X	
ECS	ECHO-BP3-OUT	2/15/2017	L67140-7	X	X		X	X	X	X	X	X		X
EGS	ECHO-BP3-OUT	2/15/2017	L67140-8										X	
FFB	FFBLANK	2/15/2017	L67140-9						X					
EB	BLANK1	3/29/2017	L67413-1		X	X	X	X	X	X	X	X		
FFB	FFBLANK	3/29/2017	L67413-2						X					
			Total	**69**	**34**	**11**	**77**	**77**	**88**	**77**	**76**	**72**	**59**	**72**

ECS – environmental composite grab sample; EGS – environmental grab sample; EAS – environmental autosampler sample; EB – equipment blanks; FFB – field filter blanks; -FREP – field replicate; X – parameter group analyzed

1.0 INTRODUCTION

This data validation review was based, in part, on guidance in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2016a) and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (EPA 2016b), as well as the project QAPP (King County 2015). Materials reviewed included Batch Reports and Analytical Quality Control (QC) Reports downloaded from the King County Laboratory Information Management System (LIMS) database and are included in this memorandum as Attachment A. Also reviewed were data anomaly forms (DAF), which are available upon request. The QC parameters reviewed during this data validation include: holding time, method blanks, spike blanks, laboratory control samples, matrix spikes, matrix spike duplicates, laboratory duplicates, and surrogates, all of which are described below. Field measurements and microbiology analyses include unique QC measurements and QC samples, which are described in Sections 1.10 and 1.11.

1.1. Holding Time (HT)

The analytical HT is a method-specific timeframe, during which sample preparation and analysis should occur to provide valid data. All samples should be analyzed within this prescribed HT. For composite samples, the end of the composite period is considered the start of the HT period.

1.2. Method Blank (MB)

A MB is an aliquot of clean reference matrix that is typically processed through the entire analytical procedure. The MB is used to evaluate the levels of contamination that might be associated with the processing and analysis of samples. All MB results should be less than method detection limits (MDLs).

1.3. Spike Blank (SB)

A SB is an aliquot of the clean reference matrix used for the MB, to which a known concentration of target analyte(s) has been added. The SB is processed through the entire analytical procedure, and used as an indicator of method accuracy. SBs are not addressed in the *National Functional Guidelines*; however, King County has empirically-derived control limits for SB analytes, which are shown on the attached QC reports. SB results should be within these control limits.

1.4. Spike Blank Duplicate (SBD)

A SBD is a second aliquot of the clean reference matrix used for the MB, to which a known concentration of target analyte(s) has been added. The SBD is used as an additional indicator of method accuracy as well as an indicator of method precision. The relative percent difference (RPD) between SB and SBD results should be within QAPP-specified control limits.

1.5. Matrix Spike (MS)

A MS is a sample aliquot fortified with a known concentration of a target analyte(s). The MS is processed through the entire analytical procedure. The MS is used as an indicator of sample

matrix effect on the recovery of target analyte(s). The *National Functional Guidelines* specifies control limits of 75% to 125% MS recoveries for trace metals (EPA 2016b). For all other analytes, King County has empirically-derived control limits, which are shown on the attached QC reports. MS recoveries should be within these control limits.

1.6. Matrix Spike Duplicate (MSD)

A MSD is a second sample aliquot fortified with a known concentration of a target analyte(s). The MSD is used as an additional indicator of sample matrix effect on the recovery of target analyte(s) as well as an indicator of method precision. The relative percent difference (RPD) between MS and MSD results should be within QAPP-specified control limits.

1.7. Laboratory Control Sample (LCS)

A LCS is a sample of known analyte concentration(s) that is prepared in the lab from a separate source of analyte(s) relative to the calibration standards. The LCS analysis follows the entire analytical process and is stored and prepared following the same procedures as a field sample. The LCS is used as an indicator of method accuracy and long-term analytical precision. King County uses QAPP-specified percent recovery control limits, which are shown on the attached QC reports. Percent recoveries for LCS results should be within these control limits.

1.8. Laboratory Duplicate (LD)

A LD is a second aliquot of a sample, processed concurrently and in an identical manner with the original sample. The LD is used as an indicator of method precision and laboratory subsampling procedures. The LD can also be used to provide information regarding the homogeneity of the sample matrix. QC results are reported as an RPD between the sample and LD results. The RPD between all trace metal LD results should be within 20% (EPA 2016b). QAPP-specified control limits are used for all other analytes. LD RPD results will not be qualified for samples in which the concentration is less than the reporting detection limit (RDL), because of the inherent analytical variability at concentrations less than the RDL, which is the limit of practical quantitation.

1.9. Surrogates

A surrogate is a known concentration of non-target analyte which is added to each sample (both analytical and QC samples) prior to extraction and analysis for all trace organic analyses. Surrogate recovery is used as a sample-specific indication of method or matrix bias for target analytes. The surrogate is selected to behave in a similar manner to the target analytes. All surrogates and their control limits are listed in the QC report in Appendix A.

1.10. Field Measurement-Specific QC Measurements

A check standard (CS) is a solution of known concentration that is prepared independently from calibration standard solutions. It is analyzed after initial calibration, but prior to field measurements and also following the last measurement (i.e., end check [EC]) to check accuracy and stability of the detector.

A field measurement replicate (FREP) is defined as a separate in-situ measurement made following all procedures typically done between individual measurements. The probe would typically be maintained at the same depth and position used in the original measurement. FREPs are generally performed at a minimum frequency of 5% of measurements or once per day.

Field measurement duplicates are defined as two sequential measurements made on a portion of the sample collected in a bucket or other container. The intent of taking measurements from water collected in a separate container is to eliminate or minimize any variability in the measured water due to current or other changing conditions.

1.11. Microbiology-Specific QC Samples

A negative control sample is media streaked with a non-target organism and analyzed through the complete procedure. The negative control is expected to show no detectable target organisms thereby evaluating the specificity of the method.

A positive control is a QC sample prepared or obtained by the lab which is known or expected to yield a positive response. A positive control can be either a sample of contaminated water or media streaked with the target organism, which is analyzed through the complete procedure.

A “before membrane filtration blank” is an aliquot of sterile diluent added to challenge the testing apparatus and conditions prior to membrane filtration of samples. The before filtration blank is analyzed to evaluate the sterility of the materials, equipment and work area at the beginning of sample analysis.

An “after membrane filtration blank” is an aliquot of sterile diluent added to challenge the testing apparatus and conditions after membrane filtration of samples. The after filtration blank is analyzed to evaluate cross-contamination during sample analysis.

1.12. Validation Reporting

The following sections describe the data validation actions for each analyte group. This includes a table listing the HT and QC samples reviewed during the validation in each workgroup, a description of each result outside control limits, and the recommended actions for data validation. Any additional data quality issues are also discussed. Table A at the end of this memorandum lists all recommended validation qualifiers based on this review.

2.0 FIELD MEASUREMENTS

Field measurements included conductivity, dissolved oxygen, pH, temperature, and turbidity. An aliquot of sample was used to measure these parameters in the field. An EXO YSI Sonde was used for all measurements except turbidity, for which a Hach 2100 Portable Turbidimeter was generally used.

The following sections summarize the QC measurements for each parameter. Please note some workgroup numbers are repeated across parameters, because they are measured concurrently with the equipment.

2.1. Conductivity

Conductivity was measured using KCEL Standard Operating Procedure (SOP) #206v2 for 69 samples batched as 11 workgroups. CS and EC were included for each workgroup. The QAPP specified that field measurement duplicates and FREPs would be measured once per sampling event, but this was not done. The KCEL discontinued the practice of measuring duplicates, and FREPs were only measured when environmental sample FREPs were collected. Workgroups without FREPs do not include an evaluation of precision and the associated sample results should be qualified with "J" flags and considered estimates with unknown bias. QC results are summarized in Table 2-1 and Section 2.1.1. Table A lists all recommended data qualifications.

Table 2-1. Conductivity Workgroups and QC Measurements

Workgroup	Samples	FREP	CS/EC
WG143803	L64379-2, -4, -6, and -8	NA	✓
WG144380	L64648-1, -3, -5, and -7	NA	✓
WG144920	L64921-1, -3, -5, -7, -9, -11, and -15	NA	✓
WG144991	L64999-1, -3, -5, -7, -9, -11, -13, and -15	NA	✓
WG148099	L66175-1, -3, -5, and -6	NA	✓
WG148600	L66382-9, -11, -17, and -19; L66384-1 and -3	NA	✓
WG148617	L66435-1 and -3	NA	✓
WG148805	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	X	✓
WG149919	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, and -19	NA	✓
WG150448	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓
WG150454	L67140-1, -3, -5, and -7	NA	✓
	Control Limits:	10% RPD	90-110% Recovery

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

2.1.1. Results Outside Control Limits

Workgroup WG148805 included an FREP, but the RPD between results was 12.01%, exceeding the 10% RPD specified in the QAPP. This indicates unacceptable precision in conductivity measurements for this workgroup. Associated sample results should be qualified with "J" flags and considered estimates with unknown bias.

2.2. Dissolved Oxygen

Dissolved oxygen was measured using KCEL SOP #201v3 for 69 samples batched as 11 workgroups. EC were included for each workgroup. The QAPP specified that field measurement duplicates and FREPs would be measured once per sampling event, but this was not done. The KCEL discontinued the practice of measuring duplicates, and FREPs were only measured when environmental sample FREPs were collected. Workgroups without FREPs do not include any

evaluation of precision and the associated sample results should be qualified with "J" flags and considered estimates with unknown bias. All QC measurement results were within control limits, indicating acceptable data quality, except as described above (Table 2-2). Table A lists all recommended data qualifications.

Table 2-2. Dissolved Oxygen Workgroups and QC Measurements

Workgroup	Samples	FREP	EC
WG143803	L64379-2, -4, -6, and -8	NA	✓
WG144380	L64648-1, -3, -5, and -7	NA	✓
WG144920	L64921-1, -3, -5, -7, -9, -11, and -15	NA	✓
WG144991	L64999-1, -3, -5, -7, -9, -11, -13, and -15	NA	✓
WG148099	L66175-1, -3, -5, and -6	NA	✓
WG148600	L66382-9, -11, -17, and -19; L66384-1 and -3	NA	✓
WG148617	L66435-1 and -3	NA	✓
WG148805	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓
WG149919	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, and -19	NA	✓
WG150448	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓
WG150454	L67140-1, -3, -5, and -7	NA	✓
	Control Limits:	20% RPD	96-104% Saturation

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

2.3. pH

pH was measured using KCEL SOP #202v3 for 69 samples batched as 11 workgroups. CS and EC were included for each workgroup. The QAPP specified that field measurement duplicates and FREPs would be measured once per sampling event, but this was not done. The KCEL discontinued the practice of measuring duplicates, and FREPs were only measured when environmental sample FREPs were collected. Workgroups without FREPs do not include any evaluation of precision and the associated sample results should be qualified with "J" flags and considered estimates with unknown bias. All QC measurement results were within control limits, indicating acceptable data quality, except as described above (Table 2-3). Table A lists all recommended data qualifications.

Table 2-3. pH Workgroups and QC Measurements

Workgroup	Samples	FREP	CS/EC
WG143803	L64379-2, -4, -6, and -8	NA	✓
WG144380	L64648-1, -3, -5, and -7	NA	✓
WG144920	L64921-1, -3, -5, -7, -9, -11, and -15	NA	✓
WG144991	L64999-1, -3, -5, -7, -9, -11, -13, and -15	NA	✓
WG148099	L66175-1, -3, -5, and -6	NA	✓
WG148600	L66382-9, -11, -17, and -19; L66384-1 and -3	NA	✓
WG148617	L66435-1 and -3	NA	✓
WG148805	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓

Workgroup	Samples	FREP	CS/EC
WG149919	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, and -19	NA	✓
WG150448	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓
WG150454	L67140-1, -3, -5, and -7	NA	✓
	Control Limits:	±0.2 Difference	±0.2 Difference

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

2.4. Temperature

Temperature was measured using KCEL SOP #203v3 for 69 samples batched as 11 workgroups. The QAPP specified that field measurement duplicates and FREPs would be measured once per sampling event, but this was not done. The KCEL discontinued the practice of measuring duplicates, and FREPs were only measured when environmental sample FREPs were collected. Workgroups without FREPs do not include any evaluation of precision and the associated sample results should be qualified with "J" flags and considered estimates with unknown bias. All QC measurement results were within control limits, indicating acceptable data quality, except as described above (Table 2-4). Table A lists all recommended data qualifications.

Table 2-4. Temperature Workgroups and QC Measurements

Workgroup	Samples	FREP
WG143803	L64379-2, -4, -6, and -8	NA
WG144380	L64648-1, -3, -5, and -7	NA
WG144920	L64921-1, -3, -5, -7, -9, -11, and -15	NA
WG144991	L64999-1, -3, -5, -7, -9, -11, -13, and -15	NA
WG148099	L66175-1, -3, -5, and -6	NA
WG148600	L66382-9, -11, -17, and -19; L66384-1 and -3	NA
WG148617	L66435-1 and -3	NA
WG148805	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓
WG149919	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, and -19	NA
WG150448	L67070-1, -3, -5, -7, -9, -11, and -26	✓
WG150454	L67140-1, -3, -5, and -7	NA
	Control Limits:	±0.3°C Difference

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

2.5. Turbidity

Turbidity was measured using KCEL SOP #207v1 for 70 samples batched as 11 workgroups. CS and EC were included for each workgroup. The QAPP specified that field measurement duplicates and FREPs would be measured once per sampling event, but this was not done. The KCEL discontinued the practice of measuring duplicates, and FREPs were only measured when environmental sample FREPs were collected. Workgroups without FREPs do not include any evaluation of precision and the associated sample results should be qualified with "J" flags and considered estimates with unknown bias. QC results are summarized in Table 2-5 and Section 2.5.1. Table A lists all recommended data qualifications.

Table 2-5. Turbidity Workgroups and QC Measurements

Workgroup	Samples	FREP	CS/EC
WG143803	L64379-2, -4, -6, and -8	NA	✓
WG144380	L64648-1, -3, -5, and -7	NA	✓
WG144920	L64921-1, -3, -5, -7, -9, -11, and -15	NA	✓
WG144991	L64999-1, -3, -5, -7, -9, -11, -13, and -15	NA	✓
WG148099	L66175-1, -3, -5, and -6	NA	✓
WG148600	L66382-9, -11, -17, and -19; L66384-1 and -3	NA	✓
WG148617	L66435-1 and -3	NA	✓
WG148805	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓
WG149919	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	NA	✓
WG150448	L67070-1, -3, -5, -7, -9, -11, and -26	X	✓
WG150454	L67140-1, -3, -5, and -7	NA	✓
	Control Limits:	20% RPD	±20% of true value

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

2.5.1. Results Outside Control Limits

Workgroup WG150448 included an FREP, but the RPD between results was 38% exceeding the QAPP specified 20% RPD. This indicates unacceptable precision in turbidity for this workgroup. Associated sample results should be qualified with "J" flags and considered estimates with unknown bias.

3.0 CONVENTIONAL PARAMETERS AND NUTRIENTS

Conventional parameters included TSS, and, for some samples, TOC/DOC. Nutrients included total and dissolved nitrogen and phosphorus.

3.1. TSS

TSS was analyzed following Standard Method SM2540-D (APHA 1998) for 76 samples batched as 13 workgroups (Table 3-1). The QAPP specified each workgroup should include analysis of three QC sample-types: MB, LCS, and LD. Results indicate acceptable data quality for all project samples (Table 3-1 and Section 3.1.1).

Table 3-1. TSS Workgroups and QC Assessment

Workgroup	Samples	HT	MB	LCS	LD
WG143430	L64379-2, -4, -6, and -8	✓	✓	✓	✓
WG144194	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓
WG144698	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓
WG144865	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓
WG146466	L65650-1 and -3	✓	✓	✓	X
WG148004	L66175-1 and -3	✓	✓	✓	✓
WG148269	L66285-1 and -3	✓	✓	✓	✓
WG148385	L66382-9, -11, -17, and -19;	✓	✓	✓	✓

Workgroup	Samples	HT	MB	LCS	LD
	L66384-1 and -3				
WG148582	L66435-1 and -3	✓	✓	✓	✓
WG148748	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓	✓	✓
WG149840	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	✓	✓	✓	✓
WG150226	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓	✓	✓
WG150295	L67140-1, -3, -5, and -7	✓	✓	✓	✓
	Control Limits:	7 days	<MDL	80-120% Recovery	25% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

3.1.1. Results Outside Control Limits

Workgroup WG146466 included two LDs. One was performed on a leachate matrix sample, and had an RPD of 54%, which exceeded control limits. However, the other LD had an RPD of 0% and was performed on a sample matrix similar to the project samples (i.e., stormwater) indicating acceptable precision for project sample results.

3.2. Total and Dissolved Organic Carbon

TOC and DOC were analyzed following Standard Method SM5310-B (APHA 1998), which is a high-temperature combustion/infrared detection method. Samples were batched as 15 workgroups (34 samples for DOC and 11 samples for TOC; Table 3-2). Each workgroup included analysis of five QC sample-types: MB, SB, LCS, MS, and LD. Results indicate acceptable data quality for all project samples (Table 3-2).

Table 3-2. TOC/DOC Workgroups and QC Samples

Workgroup	Samples	HT	MB	SB	LCS	MS	LD
WG143627	L64379-2, -4, -6, and -8 (TOC)	✓	✓	✓	✓	✓	✓
WG143741	L64379-2 and -4 (DOC)	✓	✓	✓	✓	✓	✓
WG143826	L64379-6 and -8 (DOC)	✓	✓	✓	✓	✓	✓
WG146688	L65650-3 (TOC/DOC)	✓	✓	✓	✓	✓	✓
WG148128	L66175-3 (TOC/DOC)	✓	✓	✓	✓	✓	✓
WG148326	L66285-3 (TOC/DOC)	✓	✓	✓	✓	✓	✓
WG148546	L66384-3 (DOC)	✓	✓	✓	✓	✓	✓
WG148655	L66384-3 (TOC); L66435-3 (TOC/DOC)	✓	✓	✓	✓	✓	✓
WG148873	L66499-3 (TOC)	✓	✓	✓	✓	✓	✓
WG149032	L66499-3 (DOC)	✓	✓	✓	✓	✓	✓
WG150134	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, -21, and -22 (DOC)	✓	✓	✓	✓	✓	✓
WG150290	L67070-1, -3, -5, -7, -9, -11, and -26 (DOC)	✓	✓	✓	✓	✓	✓
WG150461	L67140-1, -3, -5, and -7 (DOC)	✓	✓	✓	✓	✓	✓
WG151031	L67413-1 (TOC)	✓	✓	✓	✓	✓	✓
WG151181	L67413-1 (DOC)	✓	✓	✓	✓	✓	✓
	Control Limits:	28 days	<MDL	80-120% Recovery	85-115% Recovery	75-125% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

3.3. Total Nitrogen and Phosphorus

Total nitrogen and total phosphorus were analyzed following Standard Methods SM4500-N-C and SM4500-P-B,F (APHA 1998), respectively, for 76 samples batched as 12 workgroups (Table 3-3). The QAPP specified each workgroup should include analysis of five QC sample-types for each analyte: MB, SB, MS, LCS, and LD. Results indicate acceptable data quality for all project samples (Table 3-3 and Section 3.3.1).

Table 3-3. Total Nitrogen and Total Phosphorus Workgroups and QC Assessment

Workgroup	Samples	HT	MB	SB	MS	LCS	LD
WG143546	L64379-2, -4, -6, and -8	✓	✓	✓	✓	✓	✓
WG144142	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	✓
WG144755	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG144930	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG146500	L65650-1 and -3	✓	✓	✓	✓	✓	✓
WG147783	L66175-1 and -3	✓	✓	✓	✓	✓	X
WG148244	L66285-1 and -3	✓	✓	✓	✓	✓	✓
WG148580	L66382-9, -11, -17, and -19; L66384-1 and -3; L66435-1 and -3	✓	✓	✓	✓	✓	✓
WG148823	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓	✓	✓	✓	✓
WG149845	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	✓	✓	✓	✓	✓	✓
WG150174	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓	✓	✓	✓	✓
WG150306	L67140-1, -3, -5, and -7	✓	✓	✓	✓	✓	✓
	Control Limits:	28 days	<MDL	80-120% Recovery	75-125% Recovery	85-115% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

3.3.1. Results Outside Control Limits

Workgroup WG147783 included five LDs for total phosphorus. One LD was performed on a freshwater matrix sample and had a 22% RPD, exceeding control limits. All other LDs had RPDs within control limits, including one performed on a project sample, indicating acceptable precision for project sample results.

3.4. Ammonia Nitrogen

Nitrogen was analyzed as ammonia following Kerouel & Aminot (1997) for 89 samples batched as 15 workgroups (Table 3-4). The QAPP specified each workgroup should include analysis of five QC sample-types for each analyte: MB, SB, MS, LCS, and LD. Results indicate acceptable data quality for all project samples (Table 3-4).

Table 3-4. Ammonia Nitrogen Workgroups and QC Assessment

Workgroup	Samples	HT	MB	SB	MS	LCS	LD
WG143407	L64379-2, -4, -6, and -8	✓	✓	✓	✓	✓	✓
WG144182	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	✓

Workgroup	Samples	HT	MB	SB	MS	LCS	LD
WG144716	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG144938	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG146495	L65650-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148181	L66175-1, -3, and -7	✓	✓	✓	✓	✓	✓
WG148333	L66285-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148362	L66382 -17, -19, and -25	✓	✓	✓	✓	✓	✓
WG148527	L66382 -9 and -11; L66384-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148650	L66435-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148713	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, -21, and -22; L66499-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG149912	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, -21, and -22	✓	✓	✓	✓	✓	✓
WG150188	L67070-1, -3, -5, -7, -9, -11, -25, and -26	✓	✓	✓	✓	✓	✓
WG150292	L67140-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	✓
WG150997	L67413-1 and -2	✓	✓	✓	✓	✓	✓
	Control Limits:	14 days	<MDL	80-120% Recovery	75-125% Recovery	85-115% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

3.5. Nitrite/nitrate and Orthophosphate

Nitrogen was analyzed as nitrite/nitrate and phosphorus as orthophosphate following Standard Methods SM4500-NO3-F and SM4500-P-F (APHA 1998), respectively, for 89 samples batched as 15 workgroups (Table 3-5). The QAPP specified each workgroup should include analysis of five QC sample-types for each analyte: MB, SB, MS, LCS, and LD. Results for HT and QC samples were within control limits (Table 3-5); however, sample handling issues impacted orthophosphate phosphorus results (Section 3.5.1). Table A lists all recommended data qualifications.

Table 3-5. Nitrate/nitrite and Orthophosphate Workgroups and QC Assessment

Workgroup	Samples	HT	MB	SB	MS	LCS	LD
WG143407	L64379-2, -4, -6, and -8	✓	✓	✓	✓	✓	✓
WG144141	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	✓
WG144716	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG144938	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓	✓
WG146495	L65650-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148025	L66175-1, -3, and -7	✓	✓	✓	✓	✓	✓
WG148333	L66285-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148362	L66382 -17, -19, and -25	✓	✓	✓	✓	✓	✓
WG148527	L66382 -9 and -11; L66384-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG148650	L66435-1, -3, and -5	✓	✓	✓	✓	✓	✓

Workgroup	Samples	HT	MB	SB	MS	LCS	LD
WG148713	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, -21, and -22; L66499-1, -3, and -5	✓	✓	✓	✓	✓	✓
WG149912	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, -21, and -22	✓	✓	✓	✓	✓	✓
WG150188	L67070-1, -3, -5, -7, -9, -11, -25, and -26	✓	✓	✓	✓	✓	✓
WG150292	L67140-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	✓
WG150997	L67413-1 and -2	✓	✓	✓	✓	✓	✓
	Control Limits:	14 days	<MDL	80-120% Recovery	75-125% Recovery	85-115% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

3.5.1. Sampling Handling Issue

All orthophosphate phosphorus samples were filtered outside of the method-specified 15-minute HT. All detected results should be qualified with "J" flags and considered estimates with unknown bias. All non-detect results should be qualified with "UJ" flags and considered estimated non-detects with unknown bias.

4.0 TRACE METALS

Trace metals analysis included total and dissolved cadmium, copper, lead, zinc, total magnesium and calcium, and hardness as $CaCO_3$.

4.1. Total ICP-MS Metals and Hardness

Total metals were analyzed by inductively coupled plasma mass spectroscopy (ICP-MS) following EPA Method 200.8 (EPA 1995) for 77 samples batched as 11 workgroups (Table 4-1). The QAPP specified that each workgroup include four QC sample-types: MB, SB, MS, and LD. Results indicate acceptable data quality for all project samples (Table 4-1).

Table 4-1. Total ICP-MS and Hardness Workgroups and QC Samples

Workgroup	Samples	HT	MB	SB	MS	LD
WG143599	L64379-2, -4, -6, and -8	✓	✓	✓	✓	✓
WG144318	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓*	✓
WG145188	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓
WG145236	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓
WG146738	L65650-1 and -3	✓	✓	✓	✓*	✓
WG148337	L66175-1 and -3; L66285-1 and -3	✓	✓	✓	✓*	✓
WG148782	L66382-9, -11, -17, and -19; L66384-1 and -3; L66435-1 and -3	✓	✓	✓	✓*	✓
WG148827	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓	✓	✓	✓
WG150180	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	✓	✓	✓	✓	✓
WG150452	L67070-1, -3, -5, -7, -9, -11, and -26; L67140-1, -3, -5, and -7	✓	✓	✓	✓	✓

Workgroup	Samples	HT	MB	SB	MS	LD
WG151216	L67413-1	✓	✓	✓	✓	✓
	Control Limits:	180 days	<MDL	85-115% Recovery	75-125% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup
* At least one project parameter measured in the MS in these workgroups had a spiked concentration that was less than four times the concentration detected in the sample on which the MS was performed. This violates the "4x rule" and accuracy cannot be assessed due to the low spike to sample concentration ratio. However, recoveries for these MS results were still within control limits and SBs can also be used to assess method accuracy. No qualifications are recommended based on MS results.

4.2. Dissolved ICP-MS Metals

Dissolved metals were analyzed by inductively coupled plasma mass spectroscopy (ICP-MS) following EPA Method 200.8 (EPA 1995) for 76 samples batched as 16 workgroups (Table 4-2). The QAPP specified that each workgroup include four QC sample-types: MB, SB, MS, and LD. The results indicate acceptable data quality for all project samples (Table 4-2), with the exception of a few sample handling issues (Section 4.2.1). Table A lists all recommended data qualifications.

Table 4-2. Dissolved ICP-MS Workgroups and QC Samples

Workgroup	Samples	HT	MB	SB	MS	LD
WG143810	L64379-2, -4, -6, and -8	✓	✓	✓	✓	✓
WG144381	L64648-1, -3, -5, and -7	✓	✓	✓	✓	✓
WG145215	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓
WG145266	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	✓	✓	✓	✓
WG146905	L65650-1 and -3	✓	✓	✓	✓*	✓
WG147984	L66175-1 and -3	✓	✓	✓	✓	✓
WG148332	L66285-1 and -3	✓	✓	✓	✓	✓
WG148522	L66382-9, -11, -17, and -19; L66384-1 and -3	✓	✓	✓	✓	✓
WG148826	L66498-1 and -3	✓	✓	✓	✓	✓
WG148971	L66435-1 and -3	✓	✓	✓	✓	✓
WG149168	L66498-5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499 -3	✓	✓	✓	✓	✓
WG149178	L66499 -1	✓	✓	✓	✓	✓
WG150217	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	✓	✓	✓	✓	✓
WG150558	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓	✓	✓	✓
WG150726	L67140-1, -3, -5, and -7	✓	✓	✓	✓	✓
WG151091	L67413-1	✓	✓	✓	✓	✓
	Control Limits:	180 days	<MDL	85-115% Recovery	75-125% Recovery	20% RPD

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup
* The spiked concentration of dissolved zinc in the MS in this workgroup was less than four times the concentration detected in the sample on which the MS was performed. This violates the "4x rule" and accuracy cannot be assessed due to the low spike to sample concentration ratio. However, recoveries for these MS results were still within control limits and SBs can also be used to assess method accuracy. No qualifications are recommended based on MS results.

4.2.1. Sampling Handling Issue

Composite samples collected with the autosampler (L65650-1 and -3; L66175-1 and -3; L66285-1 and -3; L66384-1 and -3; L66435-1 and -3; L66499-1 and -3) were filtered for dissolved metals analysis outside the 15-minute hold time. Detected dissolved metals results for these samples should be qualified with "J" flags and considered estimates with unknown bias and non-detect results should be qualified with "UJ" flags and considered estimated non-detects with unknown bias.

5.0 TRACE ORGANICS

The QAPP specified trace organics would include analysis of PAHs and petroleum hydrocarbons.

5.1. PAHs

PAHs were analyzed by SW846-8270D-SIM for 72 samples batched as 13 workgroups (Table 5-1). Ideally, the QC samples for each workgroup would include MB, SB, MS, and MSD; however, the QAPP specified that SBDs could be substituted for MSDs when sample volume was limited. MSDs were not analyzed in four workgroups, but SB/SBD results can be used to assess method precision. Surrogates are also used in each QC and environmental sample. Results are summarized in Table 5-1 and indicate acceptable data quality for all project samples, with the exceptions described below (Section 5.1.1). Table A lists all recommended data qualifications.

Table 5-1. PAH Workgroups and QC Samples

Workgroup	Samples	HT	MB	SB	SBD	MS	MSD	Surrogates
WG143498	L64379-2, -4, -6 and -8	✓	✓	✓	NA	✓	✓	✓
WG144149	L64648-1, -3, -5, -7, and -9	✓	✓	✓	✓	✓	NA	✓
WG144726	L64921-1, -3, -9, -11, -13, and -15	✓	✓	✓	✓	✓	NA	✓
WG144921	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	✓	X	✓	NA	✓	✓	✓
WG147966	L66175-1 and -3	✓	✓	✓	NA	✓	✓	✓
WG148302	L66285-1 and -3	✓	✓	X	X	X	NA	✓
WG148458	L66382-9, -11, -17, and -19 L66384-1 and -3	✓	✓	✓	NA	✓	✓	✓
WG148652	L66435-1 and -3	✓	✓	X	NA	X	x	✓
WG148678	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22; L66499-1 and -3	✓	✓	X	NA	x	✓	✓
WG149895	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	✓	✓	✓	NA	✓	✓	✓
WG150221	L67070-1, -3, -5, -7, -9, -11, and -26	✓	✓	✓	✓	✓	NA	✓
WG150370	L67140-1, -3, -5, and -7	✓	✓	✓	NA	✓	✓	✓
WG151046	L67413-1	✓	✓	✓	NA	X	X	X
	Control Limits:	7/40 days*	<MDL	Variable†	40% RPD	Variable†	40% RPD	Variable†

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup; * – extracted within 7 days, analyzed within subsequent 40 days; † - Control limits vary by compound; see attached QC report.

5.1.1. Results Outside Control Limits

In the MB for workgroup WG144921, naphthalene was detected at a concentration within five times of all naphthalene detections in samples associated with this workgroup. The detected results were all less than RDL and should be qualified with "U" flags and considered nondetects with the RDL value as the level of detection.

In the SB and SBD associated with workgroup WG148302, fluorene recoveries (53% and 51%) were just below the lower control limit (54%), suggesting potentially low bias for associated sample results. No other accuracy issues were identified for fluorene in this workgroup, and the MS was conducted on a project sample. Fluorene was not detected in the samples associated with this workgroup or in any other samples collected at these sampling locations (ECHO-DTS-IN and ECHO-DTS-OUT). This suggests the sample results are consistent with results in other workgroups. No qualifications are recommended for fluorene in this workgroup based on this analysis.

In the MS associated with workgroup WG148302, indeno(1,2,3-Cd)pyrene recovery (139%) exceeded the upper control limit (130%), suggesting potentially high bias for associated sample results. Results for indeno(1,2,3-Cd)pyrene in the SB and SBD associated with this workgroup were within control limits, suggesting there was no systematic bias. Indeno(1,2,3-Cd)pyrene was not detected in the sample on which the MS was performed and so the result can be used without qualifications.

In the SB, MS and MSD associated with workgroup WG148652, recoveries for chrysene and benzo(b,j,k)fluoranthene exceeded the upper control limits, suggesting systematic high bias. Chrysene and benzo(b,j,k)fluoranthene were detected in both samples associated with this workgroup (L66435-1 and -3), and results should be qualified with "J" flags and considered estimates with high bias.

In the SB and MS associated with workgroup WG148678, recoveries for chrysene exceeded the upper control limits, suggesting systematic high bias in this workgroup. All detected chrysene results in this workgroup should be qualified with "J" flags and considered estimates with high bias.

In the MS associated with workgroup WG148678, recovery for indeno(1,2,3-Cd)pyrene (139%) exceeded the upper control limit (130%). Indeno(1,2,3-Cd)pyrene recovery in the MSD was within control limits (126%), and the RPD was within the 40% control limit. The SB recovery for indeno(1,2,3-Cd)pyrene was also within control limits suggesting there was no systematic bias for this workgroup, but there could be matrix interference that caused the high bias in the MS. The indeno(1,2,3-Cd)pyrene MS sample result (L66499-3) should be qualified with a "J" flag and considered an estimate with high bias.

Recoveries for the MS and MSD for acenaphthylene (both 45%) in workgroup WG151046 were below the lower control limit (51%). The MS and MSDs for this workgroup were performed on a sample with a very different matrix (stormwater) than

the project sample associated with this workgroup (L67413-1, an equipment blank). However, recoveries of surrogate, 2-fluorobiphenyl, were also below the lower control limit in six environmental samples, including the sample on which the MS was performed and the project sample (L67413-1). This surrogate represents lower molecular weight PAHs, like acenaphthylene. These QC results indicate potential low bias for acenaphthylene in these samples. Acenaphthylene was not detected in the project sample (L67413-1), and so this result should be qualified with a "UJ" flag and considered an estimated non-detect with low bias.

5.2. Petroleum Hydrocarbons

Petroleum hydrocarbons were analyzed by NWTPH-Dx (GC/FID) (Ecology 1997) for 59 samples batched as 10 workgroups (Table 5-2). Ideally, the QC samples for each workgroup would include MB, SB, and LD; however, the QAPP specified that SBDs could be substituted for LDs when sample volume was limited. LDs were not analyzed in two workgroups, but SBD results can be used to assess method precision. Surrogates are also used in each QC and environmental sample. Results indicate acceptable data quality for all project samples (Table 5-2 and Section 5.2.1).

Table 5-2. Petroleum Hydrocarbon Workgroups and QC Samples

Workgroup	Samples	HT	MB	SB	SBD	LD	Surrogates
WG143425	L64379-1 and -3	✓	✓	✓	NA	✓	X
WG144205	L64648-2, -4, -6, -8, and -10	✓	✓	✓	NA	✓	✓
WG144946	L64999-2, -4, -6, -8, -10, -12, -14, -16, and -18	✓	✓	✓	NA	✓	✓
WG147964	L66175-2 and -4	✓	✓	✓	NA	✓	✓
WG148456	L66382-10, -12, -18, and -20; L66384-2 and -4	✓	✓	✓	NA	✓	✓
WG148595	L66435-2 and -4	✓	✓	✓	NA	✓	✓
WG148679	L66498-2, -4, -6, -8, -10, -12, -18, -20, and -23; L66499-2 and -4	✓	✓	✓	NA	✓	✓
WG149842	L66938-2, -4, -6, -8, -10, -12, -14, -16, -18, -20, and -23	✓	✓	✓	NA	✓	✓
WG150220	L67070-2, -4, -6, -8, -10, -12, and -27	✓	✓	✓	✓	NA	✓
WG150368	L67140-2, -4, -6, and -8	✓	✓	✓	✓	NA	✓
	Control Limits:	7/40 days*	<MDL	50-150% Recovery	40% RPD	40% RPD	50-150% Recovery

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup
* – extracted within 7 days, analyzed within subsequent 40 days

5.2.1. Results Outside Control Limits

The recovery for surrogate, 2-fluorobiphenyl in workgroup WG143425, was below the lower control limit in the MB. It is not uncommon for MB surrogates to have somewhat depressed recoveries, due to the lack of matrix. Additionally, this surrogate is associated more with lower molecular weight hydrocarbons, like those included in the diesel-range hydrocarbon results. Even if the MB result was biased low, diesel range hydrocarbons

were not detected in the project samples associated with this workgroup, so there is no concern with laboratory contamination influencing the sample results. The sample results can be used without qualification.

6.0 MICROBIOLOGY

The QAPP specified samples would be analyzed for fecal coliform following Standard Method SM9222D; however, interferences were observed for all project samples, obscuring clear colony counts (Section 6.1). To address this issue, samples were analyzed for *Escherichia coli* (*E. coli*) instead of fecal coliform starting October 13, 2016. Table 6-1 lists the workgroups for the 72 samples that were analyzed for bacteria. The QAPP-specified the microbiology QC samples should include a negative and positive control sample (NC/PC) and before and after filtration blanks (BF/AF). Five workgroups also included a LD, which was not specified in the QAPP. QC samples are run for each workgroup or for all samples received over a four-hour period. Therefore, QC samples can be used to evaluate more than one workgroup if received within a four-hour period. Results are summarized in Table 6-1. Due to interferences (Section 6.1) and sample handling issues (Section 6.2), microbiology results for most project samples should be qualified with "J" flags and considered estimates with unknown bias. Table A lists all recommended data qualifications.

Table 6-1. Microbiology Workgroups and QC Samples

Workgroup	Samples	Analysis	HT	PC	NC	BF	AF	LD
WG143380	L64379-2, -4, -6, and -8	Fecals	✓	✓	✓	✓	✓	NA
WG144109	L64648-1, -3, -5, -7, and -9	Fecals	✓	✓	✓	✓	✓	✓*
WG144681	L64921-1, -3, -5, -7, -9, -11, -13, -15, and -17	Fecals	✓	✓	✓	✓	✓	NA
WG144816	L64999-1, -3, -5, -7, -9, -11, -13, -15, and -17	Fecals	✓	✓	✓	✓	✓	NA
WG147869	L66175-2 and -4	Fecals	✓	✓	✓	✓	✓	✓*
WG148369	L66382-9, -11, -17, and -19	Fecals	✓	✓	✓	✓	✓	NA
WG148370	L66384-2 and -4	Fecals	✓	✓	✓	✓	✓	✓*
WG148783	L66435-2 and -4	*E. coli*	✓	✓	✓	✓	✓	✓*
WG148784	L66498-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	*E. coli*	✓	✓	✓	✓	✓	NA
WG148785	L66499-2 and -4	*E. coli*	✓	✓	✓	✓	✓	NA
WG149830	L66938-1, -3, -5, -7, -9, -11, -13, -15, -17, -19, and -22	*E. coli*	✓	✓	✓	✓	✓	✓*
WG150142	L67070-1, -3, -5, -7, -9, -11, and -26	*E. coli*	✓	✓	✓	✓	✓	NA
WG150278	L67140-1, -3, -5, and -7	*E. coli*	✓	✓	✓	✓	✓	NA
WG154875	L66382-9, 11, 17, and 19	*E. coli*	✓	✓	✓	✓	✓	NA
Control Limits:			24 hours	Pass	Pass	<MDL, Pass	<MDL, Pass	*

✓ – meets control limits; X – outside control limits; NA – not analyzed in the workgroup

* The LD assessment is based on precision calculations with at least 15 LDs in a project. Only five LDs were included in this project, so precision could not be confidently assessed using LDs. However, LD results were comparable to previous stormwater projects, suggesting acceptable precision.

6.1. Interferences

As discussed above, the QAPP specified fecal coliform would be analyzed for each sample. However, an unknown matrix interference consistently caused abnormal colony growths in the media that were difficult to interpret. Following the first three sampling events, KCEL initiated analysis of *E. coli* plates in parallel with fecal coliform. The *E. coli* plates did not show interference and provided comparable results to the fecal coliform plates; therefore, only *E. coli* was analyzed for the remainder of the project. All fecal coliform results should be qualified with "J" flags and considered estimates with unknown bias. The results should not be rejected since the *E. coli* results confirmed the fecal coliform analysis provided reasonable estimates.

6.2. Sample Handling Issues

Due to the nature of the sampling locations and project, most microbiology samples were collected as composites. These methods introduce uncertainty through potential contamination from non-sterile equipment or from longer timespans allowing predation, die-off, or growth to occur. The microbiology results are not defensible for regulation and do not meet EPA standards due to these uncertainties. However, the timespans were relatively short (around two hours), minimizing these uncertainties. All composite sample microbiology results should be qualified with "J" flags and considered estimates with unknown bias.

7.0 DATA USABILITY

As a general data reporting format, sample results reported as "<MDL" should be assigned "U" flags and results reported as "<RDL" should be qualified with "J" flags and considered estimates with unknown bias. All other analytical results included in this dataset may be used as reported, without qualification, with the exceptions summarized in the previous sections and Table A below. LIMS Batch and QC reports are provided as Attachment A.

8.0 REFERENCES

APHA 1998. *Standard Methods for the Examination of Water and Wastewater, 20th Edition.* American Public Health Association. Washington, D.C.

Ecology. 1997. Analytical Methods for Petroleum Hydrocarbons. Publication No. ECY 97-602.

EPA 1995. *Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma – Mass Spectrometry*. *Method 200.8, Revision 5.4*. United States Environmental Protection Agency, Office of Research and Development. Cincinnati, Ohio.

EPA. 2016a. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. OLEM 9355.0-133, USEPA-540-R-2016-001. United States Environmental Protection Agency. Washington, D.C. September 2016.

EPA. 2016b. *National Functional Guidelines for Superfund Organic Methods Data Review*. OLEM 9355.0-134, USEPA-540-R-2016-002. United States Environmental Protection Agency. Washington, D.C. September 2016.

Kérouel, R., and Aminot, A. 1997. Fluorometric determination of ammonia in sea and estuarine waters by direct segmented flow analysis. Journal of Marine Chemistry 57: 265–275.

King County. 2015. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

• • •

Should you have questions regarding any of the information contained in this data validation memorandum, please don't hesitate to contact me.

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG143407	ECHO-BP1-IN	12/8/2015	L64379-2	Orthophosphate Phosphorus	0.00456	mg/L	H	0.0005	0.002	0.00456	J	unknown
WG143407	ECHO-BP1-OUT	12/8/2015	L64379-4	Orthophosphate Phosphorus	0.107	mg/L	H	0.0005	0.002	0.107	J	unknown
WG143407	ECHO-BP2-IN	12/8/2015	L64379-6	Orthophosphate Phosphorus	0.0057	mg/L	<RDL,H	0.005	0.02	0.0057	J	unknown
WG143407	ECHO-BP2-OUT	12/8/2015	L64379-8	Orthophosphate Phosphorus	0.316	mg/L	H	0.0025	0.01	0.316	J	unknown
WG144141	ECHO-BP1-IN	1/21/2016	L64648-1	Orthophosphate Phosphorus	0.0125	mg/L	H	0.0005	0.002	0.0125	J	unknown
WG144141	ECHO-BP1-OUT	1/21/2016	L64648-3	Orthophosphate Phosphorus	0.136	mg/L	H	0.0025	0.01	0.136	J	unknown
WG144141	ECHO-BP2-IN	1/21/2016	L64648-5	Orthophosphate Phosphorus	0.002	mg/L	<RDL,H	0.0005	0.002	0.002	J	unknown
WG144141	ECHO-BP2-OUT	1/21/2016	L64648-7	Orthophosphate Phosphorus	0.298	mg/L	H	0.005	0.02	0.298	J	unknown
WG144141	ECHO-BP1-IN	1/21/2016	L64648-9	Orthophosphate Phosphorus	0.0137	mg/L	H	0.0005	0.002	0.0137	J	unknown
WG144716	ECHO-BP1-IN	3/1/2016	L64921-1	Orthophosphate Phosphorus	0.00567	mg/L	H	0.0005	0.002	0.00567	J	unknown
WG144716	ECHO-BP3-OUT	3/1/2016	L64921-11	Orthophosphate Phosphorus	0.311	mg/L	H	0.01	0.04	0.311	J	unknown
WG144716	ECHO-FLT1-IN	3/1/2016	L64921-13	Orthophosphate Phosphorus	0.00583	mg/L	H	0.0005	0.002	0.00583	J	unknown
WG144716	ECHO-FLT1-OUT	3/1/2016	L64921-15	Orthophosphate Phosphorus	0.0088	mg/L	H	0.0005	0.002	0.0088	J	unknown
WG144716	ECHO-BP2-IN	3/1/2016	L64921-17	Orthophosphate Phosphorus	0.00835	mg/L	H	0.0005	0.002	0.00835	J	unknown
WG144716	ECHO-BP1-OUT	3/1/2016	L64921-3	Orthophosphate Phosphorus	0.168	mg/L	H	0.0025	0.01	0.168	J	unknown
WG144716	ECHO-BP2-IN	3/1/2016	L64921-5	Orthophosphate Phosphorus	0.00973	mg/L	H	0.0005	0.002	0.00973	J	unknown
WG144716	ECHO-BP2-OUT	3/1/2016	L64921-7	Orthophosphate Phosphorus	0.362	mg/L	H	0.01	0.04	0.362	J	unknown
WG144716	ECHO-BP3-IN	3/1/2016	L64921-9	Orthophosphate Phosphorus	0.00363	mg/L	H	0.0005	0.002	0.00363	J	unknown
WG144938	ECHO-BP1-IN	3/9/2016	L64999-1	Orthophosphate Phosphorus	0.00218	mg/L	H	0.0005	0.002	0.00218	J	unknown
WG144938	ECHO-BP3-OUT	3/9/2016	L64999-11	Orthophosphate Phosphorus	0.137	mg/L	H	0.01	0.04	0.137	J	unknown
WG144938	ECHO-FLT1-IN	3/9/2016	L64999-13	Orthophosphate Phosphorus	0.00324	mg/L	H	0.0005	0.002	0.00324	J	unknown
WG144938	ECHO-FLT1-OUT	3/9/2016	L64999-15	Orthophosphate Phosphorus	0.0107	mg/L	H	0.0005	0.002	0.0107	J	unknown
WG144938	ECHO-BP2-OUT	3/9/2016	L64999-17	Orthophosphate Phosphorus	0.337	mg/L	H	0.005	0.02	0.337	J	unknown
WG144938	ECHO-BP1-OUT	3/9/2016	L64999-3	Orthophosphate Phosphorus	0.097	mg/L	H	0.0025	0.01	0.097	J	unknown
WG144938	ECHO-BP2-IN	3/9/2016	L64999-5	Orthophosphate Phosphorus	0.00403	mg/L	H	0.0005	0.002	0.00403	J	unknown
WG144938	ECHO-BP2-OUT	3/9/2016	L64999-7	Orthophosphate Phosphorus	0.343	mg/L	H	0.01	0.04	0.343	J	unknown
WG144938	ECHO-BP3-IN	3/9/2016	L64999-9	Orthophosphate Phosphorus	0.00312	mg/L	H	0.0005	0.002	0.00312	J	unknown
WG146495	ECHO-DTS-IN	6/23/2016	L65650-1	Orthophosphate Phosphorus	0.132	mg/L	H	0.0005	0.002	0.132	J	unknown
WG146495	ECHO-DTS-OUT	6/23/2016	L65650-3	Orthophosphate Phosphorus	0.103	mg/L	H	0.0005	0.002	0.103	J	unknown
WG148025	ECHO-DTS-IN	9/17/2016	L66175-1	Orthophosphate Phosphorus	0.109	mg/L	H	0.0005	0.002	0.109	J	unknown
WG148025	ECHO-DTS-OUT	9/17/2016	L66175-3	Orthophosphate Phosphorus	0.114	mg/L	H	0.0005	0.002	0.114	J	unknown
WG148333	ECHO-DTS-IN	10/6/2016	L66285-1	Orthophosphate Phosphorus	0.077	mg/L	H	0.0005	0.002	0.077	J	unknown
WG148333	ECHO-DTS-OUT	10/6/2016	L66285-3	Orthophosphate Phosphorus	0.0813	mg/L	H	0.0005	0.002	0.0813	J	unknown
WG148362	ECHO-FLT1-IN	10/13/2016	L66382-17	Orthophosphate Phosphorus	0.0224	mg/L	H	0.0005	0.002	0.0224	J	unknown
WG148362	ECHO-FLT1-OUT	10/13/2016	L66382-19	Orthophosphate Phosphorus	0.015	mg/L	H	0.0005	0.002	0.015	J	unknown
WG148527	ECHO-BP3-OUT	10/13/2016	L66382-11	Orthophosphate Phosphorus	0.0961	mg/L	H	0.0005	0.002	0.0961	J	unknown
WG148527	ECHO-BP3-IN	10/13/2016	L66382-9	Orthophosphate Phosphorus	0.00808	mg/L	H	0.0005	0.002	0.00808	J	unknown
WG148527	ECHO-DTS-IN	10/13/2016	L66384-1	Orthophosphate Phosphorus	0.0527	mg/L	H	0.0005	0.002	0.0527	J	unknown
WG148527	ECHO-DTS-OUT	10/13/2016	L66384-3	Orthophosphate Phosphorus	0.0496	mg/L	H	0.0005	0.002	0.0496	J	unknown
WG148650	ECHO-DTS-IN	10/19/2016	L66435-1	Orthophosphate Phosphorus	0.0656	mg/L	H	0.0005	0.002	0.0656	J	unknown
WG148650	ECHO-DTS-OUT	10/19/2016	L66435-3	Orthophosphate Phosphorus	0.0611	mg/L	H	0.0005	0.002	0.0611	J	unknown
WG148713	ECHO-BP1-IN	10/26/2016	L66498-1	Orthophosphate Phosphorus	0.0165	mg/L	H	0.0005	0.002	0.0165	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG148713	ECHO-BP3-OUT	10/26/2016	L66498-11	Orthophosphate Phosphorus	0.175	mg/L	H	0.0005	0.002	0.175	J	unknown
WG148713	ECHO-BP4-IN	10/26/2016	L66498-13	Orthophosphate Phosphorus	0.00473	mg/L	H	0.0005	0.002	0.00473	J	unknown
WG148713	ECHO-BP4-OUT	10/26/2016	L66498-15	Orthophosphate Phosphorus	0.0431	mg/L	H	0.0005	0.002	0.0431	J	unknown
WG148713	ECHO-FLT1-IN	10/26/2016	L66498-17	Orthophosphate Phosphorus	0.0279	mg/L	H	0.0005	0.002	0.0279	J	unknown
WG148713	ECHO-FLT1-OUT	10/26/2016	L66498-19	Orthophosphate Phosphorus	0.0175	mg/L	H	0.0005	0.002	0.0175	J	unknown
WG148713	ECHO-BP1-IN	10/26/2016	L66498-22	Orthophosphate Phosphorus	0.0155	mg/L	H	0.0005	0.002	0.0155	J	unknown
WG148713	ECHO-BP1-OUT	10/26/2016	L66498-3	Orthophosphate Phosphorus	0.134	mg/L	H	0.0005	0.002	0.134	J	unknown
WG148713	ECHO-BP2-IN	10/26/2016	L66498-5	Orthophosphate Phosphorus	0.0106	mg/L	H	0.0005	0.002	0.0106	J	unknown
WG148713	ECHO-BP2-OUT	10/26/2016	L66498-7	Orthophosphate Phosphorus	0.363	mg/L	H	0.005	0.02	0.363	J	unknown
WG148713	ECHO-BP3-IN	10/26/2016	L66498-9	Orthophosphate Phosphorus	0.00734	mg/L	H	0.0005	0.002	0.00734	J	unknown
WG148713	ECHO-DTS-IN	10/26/2016	L66499-1	Orthophosphate Phosphorus	0.0664	mg/L	H	0.0005	0.002	0.0664	J	unknown
WG148713	ECHO-DTS-OUT	10/26/2016	L66499-3	Orthophosphate Phosphorus	0.0675	mg/L	H	0.0005	0.002	0.0675	J	unknown
WG149912	ECHO-BP1-IN	1/17/2017	L66938-1	Orthophosphate Phosphorus	0.0121	mg/L	H	0.0005	0.002	0.0121	J	unknown
WG149912	ECHO-BP3-OUT	1/17/2017	L66938-11	Orthophosphate Phosphorus	0.136	mg/L	H	0.002	0.008	0.136	J	unknown
WG149912	ECHO-BP4-IN	1/18/2017	L66938-13	Orthophosphate Phosphorus	0.00502	mg/L	H	0.0005	0.002	0.00502	J	unknown
WG149912	ECHO-BP4-OUT	1/18/2017	L66938-15	Orthophosphate Phosphorus	0.0831	mg/L	H	0.0005	0.002	0.0831	J	unknown
WG149912	ECHO-FLT1-IN	1/17/2017	L66938-17	Orthophosphate Phosphorus	0.027	mg/L	H	0.0005	0.002	0.027	J	unknown
WG149912	ECHO-FLT1-OUT	1/17/2017	L66938-19	Orthophosphate Phosphorus	0.0279	mg/L	H	0.0005	0.002	0.0279	J	unknown
WG149912	ECHO-FLT1-IN	1/17/2017	L66938-22	Orthophosphate Phosphorus	0.0266	mg/L	H	0.0005	0.002	0.0266	J	unknown
WG149912	ECHO-BP1-OUT	1/17/2017	L66938-3	Orthophosphate Phosphorus	0.203	mg/L	H	0.002	0.008	0.203	J	unknown
WG149912	ECHO-BP2-IN	1/17/2017	L66938-5	Orthophosphate Phosphorus	0.0102	mg/L	H	0.0005	0.002	0.0102	J	unknown
WG149912	ECHO-BP2-OUT	1/17/2017	L66938-7	Orthophosphate Phosphorus	0.415	mg/L	H	0.01	0.04	0.415	J	unknown
WG149912	ECHO-BP3-IN	1/17/2017	L66938-9	Orthophosphate Phosphorus	0.0142	mg/L	H	0.002	0.008	0.0142	J	unknown
WG150188	ECHO-BP1-IN	2/9/2017	L67070-1	Orthophosphate Phosphorus	0.00541	mg/L	H	0.0005	0.002	0.00541	J	unknown
WG150188	ECHO-BP3-OUT	2/9/2017	L67070-11	Orthophosphate Phosphorus	0.639	mg/L	H	0.01	0.04	0.639	J	unknown
WG150188	ECHO-BP3-OUT	2/9/2017	L67070-26	Orthophosphate Phosphorus	0.642	mg/L	H	0.01	0.04	0.642	J	unknown
WG150188	ECHO-BP1-OUT	2/9/2017	L67070-3	Orthophosphate Phosphorus	0.218	mg/L	H	0.0025	0.01	0.218	J	unknown
WG150188	ECHO-BP2-IN	2/9/2017	L67070-5	Orthophosphate Phosphorus	0.00354	mg/L	H	0.0005	0.002	0.00354	J	unknown
WG150188	ECHO-BP2-OUT	2/9/2017	L67070-7	Orthophosphate Phosphorus	0.319	mg/L	H	0.005	0.02	0.319	J	unknown
WG150188	ECHO-BP3-IN	2/9/2017	L67070-9	Orthophosphate Phosphorus	0.002	mg/L	<RDL,H	0.0005	0.002	0.002	J	unknown
WG150292	ECHO-BP1-IN	2/15/2017	L67140-1	Orthophosphate Phosphorus	0.00522	mg/L	H	0.0005	0.002	0.00522	J	unknown
WG150292	ECHO-BP1-OUT	2/15/2017	L67140-3	Orthophosphate Phosphorus	0.123	mg/L	H	0.0025	0.01	0.123	J	unknown
WG150292	ECHO-BP3-IN	2/15/2017	L67140-5	Orthophosphate Phosphorus	0.00358	mg/L	H	0.0005	0.002	0.00358	J	unknown
WG150292	ECHO-BP3-OUT	2/15/2017	L67140-7	Orthophosphate Phosphorus	0.475	mg/L	H	0.01	0.04	0.475	J	unknown
WG143803	ECHO-BP1-IN	12/8/2015	L64379-2	Turbidity, Field	87	NTU		0.5	2	87	J	unknown
WG143803	ECHO-BP1-OUT	12/8/2015	L64379-4	Turbidity, Field	11.2	NTU		0.5	2	11.2	J	unknown
WG143803	ECHO-BP2-IN	12/8/2015	L64379-6	Turbidity, Field	45.7	NTU		0.5	2	45.7	J	unknown
WG143803	ECHO-BP2-OUT	12/8/2015	L64379-8	Turbidity, Field	5.9	NTU		0.5	2	5.9	J	unknown
WG144380	ECHO-BP1-IN	1/21/2016	L64648-1	Turbidity, Field	35.9	NTU		0.5	2	35.9	J	unknown
WG144380	ECHO-BP1-OUT	1/21/2016	L64648-3	Turbidity, Field	12.3	NTU		0.5	2	12.3	J	unknown
WG144380	ECHO-BP2-IN	1/21/2016	L64648-5	Turbidity, Field	48.9	NTU		0.5	2	48.9	J	unknown
WG144380	ECHO-BP2-OUT	1/21/2016	L64648-7	Turbidity, Field	5.6	NTU		0.5	2	5.6	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG144920	ECHO-BP1-IN	3/1/2016	L64921-1	Turbidity, Field	88.5	NTU		0.5	2	88.5	J	unknown
WG144920	ECHO-BP3-OUT	3/1/2016	L64921-11	Turbidity, Field	6.1	NTU		0.5	2	6.1	J	unknown
WG144920	ECHO-FLT1-OUT	3/1/2016	L64921-15	Turbidity, Field	30.1	NTU		0.5	2	30.1	J	unknown
WG144920	ECHO-BP1-OUT	3/1/2016	L64921-3	Turbidity, Field	21.6	NTU		0.5	2	21.6	J	unknown
WG144920	ECHO-BP2-IN	3/1/2016	L64921-5	Turbidity, Field	37.4	NTU		0.5	2	37.4	J	unknown
WG144920	ECHO-BP2-OUT	3/1/2016	L64921-7	Turbidity, Field	4.8	NTU		0.5	2	4.8	J	unknown
WG144920	ECHO-BP3-IN	3/1/2016	L64921-9	Turbidity, Field	75.2	NTU		0.5	2	75.2	J	unknown
WG144991	ECHO-BP1-IN	3/9/2016	L64999-1	Turbidity, Field	64.2	NTU		0.5	2	64.2	J	unknown
WG144991	ECHO-BP3-OUT	3/9/2016	L64999-11	Turbidity, Field	9.2	NTU		0.5	2	9.2	J	unknown
WG144991	ECHO-FLT1-IN	3/9/2016	L64999-13	Turbidity, Field	43.8	NTU		0.5	2	43.8	J	unknown
WG144991	ECHO-FLT1-OUT	3/9/2016	L64999-15	Turbidity, Field	37.7	NTU		0.5	2	37.7	J	unknown
WG144991	ECHO-BP1-OUT	3/9/2016	L64999-3	Turbidity, Field	29.6	NTU		0.5	2	29.6	J	unknown
WG144991	ECHO-BP2-IN	3/9/2016	L64999-5	Turbidity, Field	45.3	NTU		0.5	2	45.3	J	unknown
WG144991	ECHO-BP2-OUT	3/9/2016	L64999-7	Turbidity, Field	6.7	NTU		0.5	2	6.7	J	unknown
WG144991	ECHO-BP3-IN	3/9/2016	L64999-9	Turbidity, Field	92.1	NTU		0.5	2	92.1	J	unknown
WG148600	ECHO-BP3-OUT	10/13/2016	L66382-11	Turbidity, Field	4.4	NTU		0.5	2	4.4	J	unknown
WG148600	ECHO-FLT1-IN	10/13/2016	L66382-17	Turbidity, Field	24.4	NTU		0.5	2	24.4	J	unknown
WG148600	ECHO-FLT1-OUT	10/13/2016	L66382-19	Turbidity, Field	24.7	NTU		0.5	2	24.7	J	unknown
WG148600	ECHO-BP3-IN	10/13/2016	L66382-9	Turbidity, Field	27.8	NTU		0.5	2	27.8	J	unknown
WG148600	ECHO-DTS-IN	10/13/2016	L66384-1	Turbidity, Field	16.2	NTU		0.5	2	16.2	J	unknown
WG148600	ECHO-DTS-OUT	10/13/2016	L66384-3	Turbidity, Field	15.6	NTU		0.5	2	15.6	J	unknown
WG148617	ECHO-DTS-IN	10/19/2016	L66435-1	Turbidity, Field	12.7	NTU		0.5	2	12.7	J	unknown
WG148617	ECHO-DTS-OUT	10/19/2016	L66435-3	Turbidity, Field	12.2	NTU		0.5	2	12.2	J	unknown
WG149919	ECHO-BP1-IN	1/17/2017	L66938-1	Turbidity, Field	184	NTU		0.5	2	184	J	unknown
WG149919	ECHO-BP3-OUT	1/17/2017	L66938-11	Turbidity, Field	13.9	NTU		0.5	2	13.9	J	unknown
WG149919	ECHO-BP4-IN	1/18/2017	L66938-13	Turbidity, Field	71.8	NTU		0.5	2	71.8	J	unknown
WG149919	ECHO-BP4-OUT	1/18/2017	L66938-15	Turbidity, Field	48.3	NTU		0.5	2	48.3	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-17	Turbidity, Field	144	NTU		0.5	2	144	J	unknown
WG149919	ECHO-FLT1-OUT	1/17/2017	L66938-19	Turbidity, Field	75	NTU		0.5	2	75	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-22	Turbidity, Field	140	NTU		0.5	2	140	J	unknown
WG149919	ECHO-BP1-OUT	1/17/2017	L66938-3	Turbidity, Field	49.6	NTU		0.5	2	49.6	J	unknown
WG149919	ECHO-BP2-IN	1/17/2017	L66938-5	Turbidity, Field	117	NTU		0.5	2	117	J	unknown
WG149919	ECHO-BP2-OUT	1/17/2017	L66938-7	Turbidity, Field	11.7	NTU		0.5	2	11.7	J	unknown
WG149919	ECHO-BP3-IN	1/17/2017	L66938-9	Turbidity, Field	222	NTU		0.5	2	222	J	unknown
WG150448	ECHO-BP1-IN	2/9/2017	L67070-1	Turbidity, Field	154	NTU		0.5	2	154	J	unknown
WG150448	ECHO-BP3-OUT	2/9/2017	L67070-11	Turbidity, Field	10.4	NTU		0.5	2	10.4	J	unknown
WG150448	ECHO-BP3-OUT	2/9/2017	L67070-26	Turbidity, Field	7.1	NTU		0.5	2	7.1	J	unknown
WG150448	ECHO-BP1-OUT	2/9/2017	L67070-3	Turbidity, Field	23.5	NTU		0.5	2	23.5	J	unknown
WG150448	ECHO-BP2-IN	2/9/2017	L67070-5	Turbidity, Field	125	NTU		0.5	2	125	J	unknown
WG150448	ECHO-BP2-OUT	2/9/2017	L67070-7	Turbidity, Field	8.8	NTU		0.5	2	8.8	J	unknown
WG150448	ECHO-BP3-IN	2/9/2017	L67070-9	Turbidity, Field	121	NTU		0.5	2	121	J	unknown
WG150454	ECHO-BP1-IN	2/15/2017	L67140-1	Turbidity, Field	225	NTU		0.5	2	225	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG150454	ECHO-BP1-OUT	2/15/2017	L67140-3	Turbidity, Field	37.6	NTU		0.5	2	37.6	J	unknown
WG150454	ECHO-BP3-IN	2/15/2017	L67140-5	Turbidity, Field	151	NTU		0.5	2	151	J	unknown
WG150454	ECHO-BP3-OUT	2/15/2017	L67140-7	Turbidity, Field	12.7	NTU		0.5	2	12.7	J	unknown
WG143803	ECHO-BP1-IN	12/8/2015	L64379-2	Conductivity, Field	33	umhos/cm		0.5	10	33	J	unknown
WG143803	ECHO-BP1-OUT	12/8/2015	L64379-4	Conductivity, Field	38	umhos/cm		0.5	10	38	J	unknown
WG143803	ECHO-BP2-IN	12/8/2015	L64379-6	Conductivity, Field	38.1	umhos/cm		0.5	10	38.1	J	unknown
WG143803	ECHO-BP2-OUT	12/8/2015	L64379-8	Conductivity, Field	47.3	umhos/cm		0.5	10	47.3	J	unknown
WG143803	ECHO-BP1-IN	12/8/2015	L64379-2	Dissolved Oxygen, Field	10.3	mg/L		0.5	1	10.3	J	unknown
WG143803	ECHO-BP1-OUT	12/8/2015	L64379-4	Dissolved Oxygen, Field	10.4	mg/L		0.5	1	10.4	J	unknown
WG143803	ECHO-BP2-IN	12/8/2015	L64379-6	Dissolved Oxygen, Field	10.2	mg/L		0.5	1	10.2	J	unknown
WG143803	ECHO-BP2-OUT	12/8/2015	L64379-8	Dissolved Oxygen, Field	10	mg/L		0.5	1	10	J	unknown
WG143803	ECHO-BP1-IN	12/8/2015	L64379-2	pH, Field	7.5	pH				7.5	J	unknown
WG143803	ECHO-BP1-OUT	12/8/2015	L64379-4	pH, Field	7.28	pH				7.28	J	unknown
WG143803	ECHO-BP2-IN	12/8/2015	L64379-6	pH, Field	7.42	pH				7.42	J	unknown
WG143803	ECHO-BP2-OUT	12/8/2015	L64379-8	pH, Field	7.03	pH				7.03	J	unknown
WG143803	ECHO-BP1-IN	12/8/2015	L64379-2	Sample Temperature, Field	11.3	deg C				11.3	J	unknown
WG143803	ECHO-BP1-OUT	12/8/2015	L64379-4	Sample Temperature, Field	10.3	deg C				10.3	J	unknown
WG143803	ECHO-BP2-IN	12/8/2015	L64379-6	Sample Temperature, Field	12.6	deg C				12.6	J	unknown
WG143803	ECHO-BP2-OUT	12/8/2015	L64379-8	Sample Temperature, Field	10	deg C				10	J	unknown
WG144380	ECHO-BP1-IN	1/21/2016	L64648-1	Conductivity, Field	15.8	umhos/cm		0.5	10	15.8	J	unknown
WG144380	ECHO-BP1-OUT	1/21/2016	L64648-3	Conductivity, Field	25.1	umhos/cm		0.5	10	25.1	J	unknown
WG144380	ECHO-BP2-IN	1/21/2016	L64648-5	Conductivity, Field	23.3	umhos/cm		0.5	10	23.3	J	unknown
WG144380	ECHO-BP2-OUT	1/21/2016	L64648-7	Conductivity, Field	29.2	umhos/cm		0.5	10	29.2	J	unknown
WG144380	ECHO-BP1-IN	1/21/2016	L64648-1	Dissolved Oxygen, Field	11.6	mg/L		0.5	1	11.6	J	unknown
WG144380	ECHO-BP1-OUT	1/21/2016	L64648-3	Dissolved Oxygen, Field	11.2	mg/L		0.5	1	11.2	J	unknown
WG144380	ECHO-BP2-IN	1/21/2016	L64648-5	Dissolved Oxygen, Field	11.4	mg/L		0.5	1	11.4	J	unknown
WG144380	ECHO-BP2-OUT	1/21/2016	L64648-7	Dissolved Oxygen, Field	11.3	mg/L		0.5	1	11.3	J	unknown
WG144380	ECHO-BP1-IN	1/21/2016	L64648-1	pH, Field	7.44	pH				7.44	J	unknown
WG144380	ECHO-BP1-OUT	1/21/2016	L64648-3	pH, Field	7.35	pH				7.35	J	unknown
WG144380	ECHO-BP2-IN	1/21/2016	L64648-5	pH, Field	7.6	pH				7.6	J	unknown
WG144380	ECHO-BP2-OUT	1/21/2016	L64648-7	pH, Field	7.47	pH				7.47	J	unknown
WG144380	ECHO-BP1-IN	1/21/2016	L64648-1	Sample Temperature, Field	7.5	deg C				7.5	J	unknown
WG144380	ECHO-BP1-OUT	1/21/2016	L64648-3	Sample Temperature, Field	7.2	deg C				7.2	J	unknown
WG144380	ECHO-BP2-IN	1/21/2016	L64648-5	Sample Temperature, Field	8	deg C				8	J	unknown
WG144380	ECHO-BP2-OUT	1/21/2016	L64648-7	Sample Temperature, Field	7.4	deg C				7.4	J	unknown
WG144920	ECHO-BP1-IN	3/1/2016	L64921-1	Conductivity, Field	38.8	umhos/cm		0.5	10	38.8	J	unknown
WG144920	ECHO-BP3-OUT	3/1/2016	L64921-11	Conductivity, Field	43.3	umhos/cm		0.5	10	43.3	J	unknown
WG144920	ECHO-FLT1-OUT	3/1/2016	L64921-15	Conductivity, Field	57.7	umhos/cm		0.5	10	57.7	J	unknown
WG144920	ECHO-BP1-OUT	3/1/2016	L64921-3	Conductivity, Field	36.9	umhos/cm		0.5	10	36.9	J	unknown
WG144920	ECHO-BP2-IN	3/1/2016	L64921-5	Conductivity, Field	41.6	umhos/cm		0.5	10	41.6	J	unknown
WG144920	ECHO-BP2-OUT	3/1/2016	L64921-7	Conductivity, Field	67.9	umhos/cm		0.5	10	67.9	J	unknown
WG144920	ECHO-BP3-IN	3/1/2016	L64921-9	Conductivity, Field	25.5	umhos/cm		0.5	10	25.5	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG144920	ECHO-BP1-IN	3/1/2016	L64921-1	Dissolved Oxygen, Field	11.1	mg/L		0.5	1	11.1	J	unknown
WG144920	ECHO-BP3-OUT	3/1/2016	L64921-11	Dissolved Oxygen, Field	9.9	mg/L		0.5	1	9.9	J	unknown
WG144920	ECHO-FLT1-OUT	3/1/2016	L64921-15	Dissolved Oxygen, Field	10.3	mg/L		0.5	1	10.3	J	unknown
WG144920	ECHO-BP1-OUT	3/1/2016	L64921-3	Dissolved Oxygen, Field	10.8	mg/L		0.5	1	10.8	J	unknown
WG144920	ECHO-BP2-IN	3/1/2016	L64921-5	Dissolved Oxygen, Field	11.2	mg/L		0.5	1	11.2	J	unknown
WG144920	ECHO-BP2-OUT	3/1/2016	L64921-7	Dissolved Oxygen, Field	11	mg/L		0.5	1	11	J	unknown
WG144920	ECHO-BP3-IN	3/1/2016	L64921-9	Dissolved Oxygen, Field	11.3	mg/L		0.5	1	11.3	J	unknown
WG144920	ECHO-BP1-IN	3/1/2016	L64921-1	pH, Field	7.42	pH				7.42	J	unknown
WG144920	ECHO-BP3-OUT	3/1/2016	L64921-11	pH, Field	6.18	pH				6.18	J	unknown
WG144920	ECHO-FLT1-OUT	3/1/2016	L64921-15	pH, Field	7.16	pH				7.16	J	unknown
WG144920	ECHO-BP1-OUT	3/1/2016	L64921-3	pH, Field	6.86	pH				6.86	J	unknown
WG144920	ECHO-BP2-IN	3/1/2016	L64921-5	pH, Field	7.38	pH				7.38	J	unknown
WG144920	ECHO-BP2-OUT	3/1/2016	L64921-7	pH, Field	6.74	pH				6.74	J	unknown
WG144920	ECHO-BP3-IN	3/1/2016	L64921-9	pH, Field	7.4	pH				7.4	J	unknown
WG144920	ECHO-BP1-IN	3/1/2016	L64921-1	Sample Temperature, Field	8.8	deg C				8.8	J	unknown
WG144920	ECHO-BP3-OUT	3/1/2016	L64921-11	Sample Temperature, Field	8.4	deg C				8.4	J	unknown
WG144920	ECHO-FLT1-OUT	3/1/2016	L64921-15	Sample Temperature, Field	9.8	deg C				9.8	J	unknown
WG144920	ECHO-BP1-OUT	3/1/2016	L64921-3	Sample Temperature, Field	8.5	deg C				8.5	J	unknown
WG144920	ECHO-BP2-IN	3/1/2016	L64921-5	Sample Temperature, Field	9.2	deg C				9.2	J	unknown
WG144920	ECHO-BP2-OUT	3/1/2016	L64921-7	Sample Temperature, Field	8.3	deg C				8.3	J	unknown
WG144920	ECHO-BP3-IN	3/1/2016	L64921-9	Sample Temperature, Field	9.2	deg C				9.2	J	unknown
WG144991	ECHO-BP1-IN	3/9/2016	L64999-1	Conductivity, Field	27.1	umhos/cm		0.5	10	27.1	J	unknown
WG144991	ECHO-BP3-OUT	3/9/2016	L64999-11	Conductivity, Field	56.6	umhos/cm		0.5	10	56.6	J	unknown
WG144991	ECHO-FLT1-IN	3/9/2016	L64999-13	Conductivity, Field	28.4	umhos/cm		0.5	10	28.4	J	unknown
WG144991	ECHO-FLT1-OUT	3/9/2016	L64999-15	Conductivity, Field	31.4	umhos/cm		0.5	10	31.4	J	unknown
WG144991	ECHO-BP1-OUT	3/9/2016	L64999-3	Conductivity, Field	46	umhos/cm		0.5	10	46	J	unknown
WG144991	ECHO-BP2-IN	3/9/2016	L64999-5	Conductivity, Field	30.6	umhos/cm		0.5	10	30.6	J	unknown
WG144991	ECHO-BP2-OUT	3/9/2016	L64999-7	Conductivity, Field	56.4	umhos/cm		0.5	10	56.4	J	unknown
WG144991	ECHO-BP3-IN	3/9/2016	L64999-9	Conductivity, Field	43.7	umhos/cm		0.5	10	43.7	J	unknown
WG144991	ECHO-BP1-IN	3/9/2016	L64999-1	Dissolved Oxygen, Field	11	mg/L		0.5	1	11	J	unknown
WG144991	ECHO-BP3-OUT	3/9/2016	L64999-11	Dissolved Oxygen, Field	10.7	mg/L		0.5	1	10.7	J	unknown
WG144991	ECHO-FLT1-IN	3/9/2016	L64999-13	Dissolved Oxygen, Field	11.1	mg/L		0.5	1	11.1	J	unknown
WG144991	ECHO-FLT1-OUT	3/9/2016	L64999-15	Dissolved Oxygen, Field	10.4	mg/L		0.5	1	10.4	J	unknown
WG144991	ECHO-BP1-OUT	3/9/2016	L64999-3	Dissolved Oxygen, Field	12	mg/L		0.5	1	12	J	unknown
WG144991	ECHO-BP2-IN	3/9/2016	L64999-5	Dissolved Oxygen, Field	11.2	mg/L		0.5	1	11.2	J	unknown
WG144991	ECHO-BP2-OUT	3/9/2016	L64999-7	Dissolved Oxygen, Field	10.8	mg/L		0.5	1	10.8	J	unknown
WG144991	ECHO-BP3-IN	3/9/2016	L64999-9	Dissolved Oxygen, Field	10.8	mg/L		0.5	1	10.8	J	unknown
WG144991	ECHO-BP1-IN	3/9/2016	L64999-1	pH, Field	7.02	pH				7.02	J	unknown
WG144991	ECHO-BP3-OUT	3/9/2016	L64999-11	pH, Field	6.32	pH				6.32	J	unknown
WG144991	ECHO-FLT1-IN	3/9/2016	L64999-13	pH, Field	7.76	pH				7.76	J	unknown
WG144991	ECHO-FLT1-OUT	3/9/2016	L64999-15	pH, Field	7.08	pH				7.08	J	unknown
WG144991	ECHO-BP1-OUT	3/9/2016	L64999-3	pH, Field	6.88	pH				6.88	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG144991	ECHO-BP2-IN	3/9/2016	L64999-5	pH, Field	7.39	pH				7.39	J	unknown
WG144991	ECHO-BP2-OUT	3/9/2016	L64999-7	pH, Field	6.68	pH				6.68	J	unknown
WG144991	ECHO-BP3-IN	3/9/2016	L64999-9	pH, Field	7.34	pH				7.34	J	unknown
WG144991	ECHO-BP1-IN	3/9/2016	L64999-1	Sample Temperature, Field	9.2	deg C				9.2	J	unknown
WG144991	ECHO-BP3-OUT	3/9/2016	L64999-11	Sample Temperature, Field	9	deg C				9	J	unknown
WG144991	ECHO-FLT1-IN	3/9/2016	L64999-13	Sample Temperature, Field	9.6	deg C				9.6	J	unknown
WG144991	ECHO-FLT1-OUT	3/9/2016	L64999-15	Sample Temperature, Field	9.4	deg C				9.4	J	unknown
WG144991	ECHO-BP1-OUT	3/9/2016	L64999-3	Sample Temperature, Field	9.1	deg C				9.1	J	unknown
WG144991	ECHO-BP2-IN	3/9/2016	L64999-5	Sample Temperature, Field	8.9	deg C				8.9	J	unknown
WG144991	ECHO-BP2-OUT	3/9/2016	L64999-7	Sample Temperature, Field	8.5	deg C				8.5	J	unknown
WG144991	ECHO-BP3-IN	3/9/2016	L64999-9	Sample Temperature, Field	9.5	deg C				9.5	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-1	Conductivity, Field	122	umhos/cm		0.5	10	122	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-3	Conductivity, Field	132	umhos/cm		0.5	10	132	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-5	Conductivity, Field	79	umhos/cm		0.5	10	79	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-6	Conductivity, Field	127	umhos/cm		0.5	10	127	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-1	Dissolved Oxygen, Field	8.9	mg/L		0.5	1	8.9	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-3	Dissolved Oxygen, Field	8.2	mg/L		0.5	1	8.2	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-5	Dissolved Oxygen, Field	8.8	mg/L		0.5	1	8.8	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-6	Dissolved Oxygen, Field	8.1	mg/L		0.5	1	8.1	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-1	pH, Field	7.2	pH				7.2	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-3	pH, Field	7.18	pH				7.18	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-5	pH, Field	7.33	pH				7.33	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-6	pH, Field	7.23	pH				7.23	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-1	Sample Temperature, Field	17.1	deg C				17.1	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-3	Sample Temperature, Field	17.4	deg C				17.4	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-5	Sample Temperature, Field	17.1	deg C				17.1	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-6	Sample Temperature, Field	17.1	deg C				17.1	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-1	Turbidity, Field	30.8	NTU		0.5	2	30.8	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-3	Turbidity, Field	43.3	NTU		0.5	2	43.3	J	unknown
WG148099	ECHO-DTS-IN	9/17/2016	L66175-5	Turbidity, Field	24.2	NTU		0.5	2	24.2	J	unknown
WG148099	ECHO-DTS-OUT	9/17/2016	L66175-6	Turbidity, Field	24.2	NTU		0.5	2	24.2	J	unknown
WG148600	ECHO-BP3-OUT	10/13/2016	L66382-11	Conductivity, Field	34.2	umhos/cm		0.5	10	34.2	J	unknown
WG148600	ECHO-FLT1-IN	10/13/2016	L66382-17	Conductivity, Field	36.5	umhos/cm		0.5	10	36.5	J	unknown
WG148600	ECHO-FLT1-OUT	10/13/2016	L66382-19	Conductivity, Field	30	umhos/cm		0.5	10	30	J	unknown
WG148600	ECHO-BP3-IN	10/13/2016	L66382-9	Conductivity, Field	26.6	umhos/cm		0.5	10	26.6	J	unknown
WG148600	ECHO-DTS-IN	10/13/2016	L66384-1	Conductivity, Field	33.3	umhos/cm		0.5	10	33.3	J	unknown
WG148600	ECHO-DTS-OUT	10/13/2016	L66384-3	Conductivity, Field	31.7	umhos/cm		0.5	10	31.7	J	unknown
WG148600	ECHO-BP3-OUT	10/13/2016	L66382-11	Dissolved Oxygen, Field	7.5	mg/L		0.5	1	7.5	J	unknown
WG148600	ECHO-FLT1-IN	10/13/2016	L66382-17	Dissolved Oxygen, Field	10.2	mg/L		0.5	1	10.2	J	unknown
WG148600	ECHO-FLT1-OUT	10/13/2016	L66382-19	Dissolved Oxygen, Field	9.2	mg/L		0.5	1	9.2	J	unknown
WG148600	ECHO-BP3-IN	10/13/2016	L66382-9	Dissolved Oxygen, Field	10.2	mg/L		0.5	1	10.2	J	unknown
WG148600	ECHO-DTS-IN	10/13/2016	L66384-1	Dissolved Oxygen, Field	10.2	mg/L		0.5	1	10.2	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG148600	ECHO-DTS-OUT	10/13/2016	L66384-3	Dissolved Oxygen, Field	10.2	mg/L		0.5	1	10.2	J	unknown
WG148600	ECHO-BP3-OUT	10/13/2016	L66382-11	pH, Field	6.63	pH				6.63	J	unknown
WG148600	ECHO-FLT1-IN	10/13/2016	L66382-17	pH, Field	7.44	pH				7.44	J	unknown
WG148600	ECHO-FLT1-OUT	10/13/2016	L66382-19	pH, Field	7.33	pH				7.33	J	unknown
WG148600	ECHO-BP3-IN	10/13/2016	L66382-9	pH, Field	7.57	pH				7.57	J	unknown
WG148600	ECHO-DTS-IN	10/13/2016	L66384-1	pH, Field	7.16	pH				7.16	J	unknown
WG148600	ECHO-DTS-OUT	10/13/2016	L66384-3	pH, Field	7.2	pH				7.2	J	unknown
WG148600	ECHO-BP3-OUT	10/13/2016	L66382-11	Sample Temperature, Field	13	deg C				13	J	unknown
WG148600	ECHO-FLT1-IN	10/13/2016	L66382-17	Sample Temperature, Field	13	deg C				13	J	unknown
WG148600	ECHO-FLT1-OUT	10/13/2016	L66382-19	Sample Temperature, Field	12.9	deg C				12.9	J	unknown
WG148600	ECHO-BP3-IN	10/13/2016	L66382-9	Sample Temperature, Field	12.5	deg C				12.5	J	unknown
WG148600	ECHO-DTS-IN	10/13/2016	L66384-1	Sample Temperature, Field	12.8	deg C				12.8	J	unknown
WG148600	ECHO-DTS-OUT	10/13/2016	L66384-3	Sample Temperature, Field	12.9	deg C				12.9	J	unknown
WG148617	ECHO-DTS-IN	10/19/2016	L66435-1	Conductivity, Field	50.8	umhos/cm		0.5	10	50.8	J	unknown
WG148617	ECHO-DTS-OUT	10/19/2016	L66435-3	Conductivity, Field	55.5	umhos/cm		0.5	10	55.5	J	unknown
WG148617	ECHO-DTS-IN	10/19/2016	L66435-1	Dissolved Oxygen, Field	10.6	mg/L		0.5	1	10.6	J	unknown
WG148617	ECHO-DTS-OUT	10/19/2016	L66435-3	Dissolved Oxygen, Field	10.6	mg/L		0.5	1	10.6	J	unknown
WG148617	ECHO-DTS-IN	10/19/2016	L66435-1	pH, Field	7.24	pH				7.24	J	unknown
WG148617	ECHO-DTS-OUT	10/19/2016	L66435-3	pH, Field	7.08	pH				7.08	J	unknown
WG148617	ECHO-DTS-IN	10/19/2016	L66435-1	Sample Temperature, Field	11.7	deg C				11.7	J	unknown
WG148617	ECHO-DTS-OUT	10/19/2016	L66435-3	Sample Temperature, Field	11.8	deg C				11.8	J	unknown
WG148805	ECHO-BP1-IN	10/26/2016	L66498-1	Conductivity, Field	15	umhos/cm		0.5	10	15	J	unknown
WG148805	ECHO-BP3-OUT	10/26/2016	L66498-11	Conductivity, Field	55.3	umhos/cm		0.5	10	55.3	J	unknown
WG148805	ECHO-BP4-IN	10/26/2016	L66498-13	Conductivity, Field	15.1	umhos/cm		0.5	10	15.1	J	unknown
WG148805	ECHO-BP4-OUT	10/26/2016	L66498-15	Conductivity, Field	40.8	umhos/cm		0.5	10	40.8	J	unknown
WG148805	ECHO-FLT1-IN	10/26/2016	L66498-17	Conductivity, Field	32.9	umhos/cm		0.5	10	32.9	J	unknown
WG148805	ECHO-FLT1-OUT	10/26/2016	L66498-19	Conductivity, Field	45	umhos/cm		0.5	10	45	J	unknown
WG148805	ECHO-BP1-IN	10/26/2016	L66498-22	Conductivity, Field	13.3	umhos/cm		0.5	10	13.3	J	unknown
WG148805	ECHO-BP1-OUT	10/26/2016	L66498-3	Conductivity, Field	25.1	umhos/cm		0.5	10	25.1	J	unknown
WG148805	ECHO-BP2-IN	10/26/2016	L66498-5	Conductivity, Field	37.1	umhos/cm		0.5	10	37.1	J	unknown
WG148805	ECHO-BP2-OUT	10/26/2016	L66498-7	Conductivity, Field	64.9	umhos/cm		0.5	10	64.9	J	unknown
WG148805	ECHO-BP3-IN	10/26/2016	L66498-9	Conductivity, Field	29.2	umhos/cm		0.5	10	29.2	J	unknown
WG148805	ECHO-DTS-IN	10/26/2016	L66499-1	Conductivity, Field	91.3	umhos/cm		0.5	10	91.3	J	unknown
WG148805	ECHO-DTS-OUT	10/26/2016	L66499-3	Conductivity, Field	62.2	umhos/cm		0.5	10	62.2	J	unknown
WG149919	ECHO-BP1-IN	1/17/2017	L66938-1	Conductivity, Field	119	umhos/cm		0.5	10	119	J	unknown
WG149919	ECHO-BP3-OUT	1/17/2017	L66938-11	Conductivity, Field	949	umhos/cm		0.5	10	949	J	unknown
WG149919	ECHO-BP4-IN	1/18/2017	L66938-13	Conductivity, Field	360	umhos/cm		0.5	10	360	J	unknown
WG149919	ECHO-BP4-OUT	1/18/2017	L66938-15	Conductivity, Field	355	umhos/cm		0.5	10	355	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-17	Conductivity, Field	122	umhos/cm		0.5	10	122	J	unknown
WG149919	ECHO-FLT1-OUT	1/17/2017	L66938-19	Conductivity, Field	470	umhos/cm		0.5	10	470	J	unknown
WG149919	ECHO-BP1-OUT	1/17/2017	L66938-3	Conductivity, Field	273	umhos/cm		0.5	10	273	J	unknown
WG149919	ECHO-BP2-IN	1/17/2017	L66938-5	Conductivity, Field	102	umhos/cm		0.5	10	102	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG149919	ECHO-BP2-OUT	1/17/2017	L66938-7	Conductivity, Field	287	umhos/cm		0.5	10	287	J	unknown
WG149919	ECHO-BP3-IN	1/17/2017	L66938-9	Conductivity, Field	170	umhos/cm		0.5	10	170	J	unknown
WG149919	ECHO-BP1-IN	1/17/2017	L66938-1	Dissolved Oxygen, Field	12	mg/L		0.5	1	12	J	unknown
WG149919	ECHO-BP3-OUT	1/17/2017	L66938-11	Dissolved Oxygen, Field	11.1	mg/L		0.5	1	11.1	J	unknown
WG149919	ECHO-BP4-IN	1/18/2017	L66938-13	Dissolved Oxygen, Field	11.5	mg/L		0.5	1	11.5	J	unknown
WG149919	ECHO-BP4-OUT	1/18/2017	L66938-15	Dissolved Oxygen, Field	11.9	mg/L		0.5	1	11.9	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-17	Dissolved Oxygen, Field	12.3	mg/L		0.5	1	12.3	J	unknown
WG149919	ECHO-FLT1-OUT	1/17/2017	L66938-19	Dissolved Oxygen, Field	11.5	mg/L		0.5	1	11.5	J	unknown
WG149919	ECHO-BP1-OUT	1/17/2017	L66938-3	Dissolved Oxygen, Field	12.1	mg/L		0.5	1	12.1	J	unknown
WG149919	ECHO-BP2-IN	1/17/2017	L66938-5	Dissolved Oxygen, Field	12.1	mg/L		0.5	1	12.1	J	unknown
WG149919	ECHO-BP2-OUT	1/17/2017	L66938-7	Dissolved Oxygen, Field	12.8	mg/L		0.5	1	12.8	J	unknown
WG149919	ECHO-BP3-IN	1/17/2017	L66938-9	Dissolved Oxygen, Field	12	mg/L		0.5	1	12	J	unknown
WG149919	ECHO-BP1-IN	1/17/2017	L66938-1	pH, Field	7.28	pH				7.28	J	unknown
WG149919	ECHO-BP3-OUT	1/17/2017	L66938-11	pH, Field	6.44	pH				6.44	J	unknown
WG149919	ECHO-BP4-IN	1/18/2017	L66938-13	pH, Field	5.95	pH				5.95	J	unknown
WG149919	ECHO-BP4-OUT	1/18/2017	L66938-15	pH, Field	6.07	pH				6.07	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-17	pH, Field	7.73	pH				7.73	J	unknown
WG149919	ECHO-FLT1-OUT	1/17/2017	L66938-19	pH, Field	7.63	pH				7.63	J	unknown
WG149919	ECHO-BP1-OUT	1/17/2017	L66938-3	pH, Field	6.93	pH				6.93	J	unknown
WG149919	ECHO-BP2-IN	1/17/2017	L66938-5	pH, Field	7.49	pH				7.49	J	unknown
WG149919	ECHO-BP2-OUT	1/17/2017	L66938-7	pH, Field	6.86	pH				6.86	J	unknown
WG149919	ECHO-BP3-IN	1/17/2017	L66938-9	pH, Field	7.29	pH				7.29	J	unknown
WG149919	ECHO-BP1-IN	1/17/2017	L66938-1	Sample Temperature, Field	5.3	deg C				5.3	J	unknown
WG149919	ECHO-BP3-OUT	1/17/2017	L66938-11	Sample Temperature, Field	4.8	deg C				4.8	J	unknown
WG149919	ECHO-BP4-IN	1/18/2017	L66938-13	Sample Temperature, Field	6.5	deg C				6.5	J	unknown
WG149919	ECHO-BP4-OUT	1/18/2017	L66938-15	Sample Temperature, Field	5.6	deg C				5.6	J	unknown
WG149919	ECHO-FLT1-IN	1/17/2017	L66938-17	Sample Temperature, Field	5.3	deg C				5.3	J	unknown
WG149919	ECHO-FLT1-OUT	1/17/2017	L66938-19	Sample Temperature, Field	5.2	deg C				5.2	J	unknown
WG149919	ECHO-BP1-OUT	1/17/2017	L66938-3	Sample Temperature, Field	4	deg C				4	J	unknown
WG149919	ECHO-BP2-IN	1/17/2017	L66938-5	Sample Temperature, Field	5.6	deg C				5.6	J	unknown
WG149919	ECHO-BP2-OUT	1/17/2017	L66938-7	Sample Temperature, Field	3.8	deg C				3.8	J	unknown
WG149919	ECHO-BP3-IN	1/17/2017	L66938-9	Sample Temperature, Field	5.3	deg C				5.3	J	unknown
WG150454	ECHO-BP1-IN	2/15/2017	L67140-1	Conductivity, Field	114	umhos/cm		0.5	10	114	J	unknown
WG150454	ECHO-BP1-OUT	2/15/2017	L67140-3	Conductivity, Field	106	umhos/cm		0.5	10	106	J	unknown
WG150454	ECHO-BP3-IN	2/15/2017	L67140-5	Conductivity, Field	84.7	umhos/cm		0.5	10	84.7	J	unknown
WG150454	ECHO-BP3-OUT	2/15/2017	L67140-7	Conductivity, Field	120	umhos/cm		0.5	10	120	J	unknown
WG150454	ECHO-BP1-IN	2/15/2017	L67140-1	Dissolved Oxygen, Field	10	mg/L		0.5	1	10	J	unknown
WG150454	ECHO-BP1-OUT	2/15/2017	L67140-3	Dissolved Oxygen, Field	11.1	mg/L		0.5	1	11.1	J	unknown
WG150454	ECHO-BP3-IN	2/15/2017	L67140-5	Dissolved Oxygen, Field	10.7	mg/L		0.5	1	10.7	J	unknown
WG150454	ECHO-BP3-OUT	2/15/2017	L67140-7	Dissolved Oxygen, Field	10.4	mg/L		0.5	1	10.4	J	unknown
WG150454	ECHO-BP1-IN	2/15/2017	L67140-1	pH, Field	7.33	pH				7.33	J	unknown
WG150454	ECHO-BP1-OUT	2/15/2017	L67140-3	pH, Field	7.23	pH				7.23	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG150454	ECHO-BP3-IN	2/15/2017	L67140-5	pH, Field	6.89	pH				6.89	J	unknown
WG150454	ECHO-BP3-OUT	2/15/2017	L67140-7	pH, Field	6.78	pH				6.78	J	unknown
WG150454	ECHO-BP1-IN	2/15/2017	L67140-1	Sample Temperature, Field	9.6	deg C				9.6	J	unknown
WG150454	ECHO-BP1-OUT	2/15/2017	L67140-3	Sample Temperature, Field	7.7	deg C				7.7	J	unknown
WG150454	ECHO-BP3-IN	2/15/2017	L67140-5	Sample Temperature, Field	7.7	deg C				7.7	J	unknown
WG150454	ECHO-BP3-OUT	2/15/2017	L67140-7	Sample Temperature, Field	7.5	deg C				7.5	J	unknown
WG143380	ECHO-BP1-IN	12/8/2015	L64379-2	Fecal Coliform	80	CFU/100ml	C,SH,TA			80	J	unknown
WG143380	ECHO-BP1-OUT	12/8/2015	L64379-4	Fecal Coliform	27	CFU/100ml	C,SH,TA			27	J	unknown
WG143380	ECHO-BP2-IN	12/8/2015	L64379-6	Fecal Coliform	110	CFU/100ml	C,SH,TA			110	J	unknown
WG143380	ECHO-BP2-OUT	12/8/2015	L64379-8	Fecal Coliform	43	CFU/100ml	C,SH,TA			43	J	unknown
WG144109	ECHO-BP1-IN	1/21/2016	L64648-1	Fecal Coliform	14	CFU/100ml	C,SH,TA			14	J	unknown
WG144109	ECHO-BP1-OUT	1/21/2016	L64648-3	Fecal Coliform	4	CFU/100ml	SH,TA,C			4	J	unknown
WG144109	ECHO-BP2-IN	1/21/2016	L64648-5	Fecal Coliform	17	CFU/100ml	C,SH,TA			17	J	unknown
WG144109	ECHO-BP2-OUT	1/21/2016	L64648-7	Fecal Coliform	290	CFU/100ml	C,SH,TA			290	J	unknown
WG144109	ECHO-BP1-IN	1/21/2016	L64648-9	Fecal Coliform	21	CFU/100ml	C,SH,TA			21	J	unknown
WG144681	ECHO-BP1-IN	3/1/2016	L64921-1	Fecal Coliform	160	CFU/100ml	C,SH,TA			160	J	unknown
WG144681	ECHO-BP3-OUT	3/1/2016	L64921-11	Fecal Coliform	180	CFU/100ml	SH,TA,C			180	J	unknown
WG144681	ECHO-FLT1-IN	3/1/2016	L64921-13	Fecal Coliform	210	CFU/100ml	C,SH,TA			210	J	unknown
WG144681	ECHO-FLT1-OUT	3/1/2016	L64921-15	Fecal Coliform	5	CFU/100ml	C,SH,TA			5	J	unknown
WG144681	ECHO-BP2-IN	3/1/2016	L64921-17	Fecal Coliform	99	CFU/100ml	C,SH,TA			99	J	unknown
WG144681	ECHO-BP1-OUT	3/1/2016	L64921-3	Fecal Coliform	80	CFU/100ml	C,SH,TA			80	J	unknown
WG144681	ECHO-BP2-IN	3/1/2016	L64921-5	Fecal Coliform	150	CFU/100ml	C,SH,TA			150	J	unknown
WG144681	ECHO-BP2-OUT	3/1/2016	L64921-7	Fecal Coliform	160	CFU/100ml	C,SH,TA			160	J	unknown
WG144681	ECHO-BP3-IN	3/1/2016	L64921-9	Fecal Coliform	250	CFU/100ml	C,SH,TA			250	J	unknown
WG144816	ECHO-BP1-IN	3/9/2016	L64999-1	Fecal Coliform	290	CFU/100ml	C,SH,TA			290	J	unknown
WG144816	ECHO-BP3-OUT	3/9/2016	L64999-11	Fecal Coliform	44	CFU/100ml	C,SH,TA			44	J	unknown
WG144816	ECHO-FLT1-IN	3/9/2016	L64999-13	Fecal Coliform	150	CFU/100ml	C,SH,TA			150	J	unknown
WG144816	ECHO-FLT1-OUT	3/9/2016	L64999-15	Fecal Coliform	120	CFU/100ml	C,SH,TA			120	J	unknown
WG144816	ECHO-BP2-OUT	3/9/2016	L64999-17	Fecal Coliform	38	CFU/100ml	C,SH,TA			38	J	unknown
WG144816	ECHO-BP1-OUT	3/9/2016	L64999-3	Fecal Coliform	50	CFU/100ml	C,SH,TA			50	J	unknown
WG144816	ECHO-BP2-IN	3/9/2016	L64999-5	Fecal Coliform	130	CFU/100ml	C,SH,TA			130	J	unknown
WG144816	ECHO-BP2-OUT	3/9/2016	L64999-7	Fecal Coliform	40	CFU/100ml	C,SH,TA			40	J	unknown
WG144816	ECHO-BP3-IN	3/9/2016	L64999-9	Fecal Coliform	170	CFU/100ml	C,SH,TA			170	J	unknown
WG147869	ECHO-DTS-IN	9/17/2016	L66175-2	Fecal Coliform	490	CFU/100ml	C			490	J	unknown
WG147869	ECHO-DTS-OUT	9/17/2016	L66175-4	Fecal Coliform	610	CFU/100ml	C			610	J	unknown
WG148369	ECHO-BP3-OUT	10/13/2016	L66382-11	Fecal Coliform	120	CFU/100ml	C,SH,TA			120	J	unknown
WG148369	ECHO-FLT1-IN	10/13/2016	L66382-17	Fecal Coliform	490	CFU/100ml	C,SH,TA			490	J	unknown
WG148369	ECHO-FLT1-OUT	10/13/2016	L66382-19	Fecal Coliform	290	CFU/100ml	C,SH,TA			290	J	unknown
WG148369	ECHO-BP3-IN	10/13/2016	L66382-9	Fecal Coliform	550	CFU/100ml	C,SH,TA			550	J	unknown
WG148370	ECHO-DTS-IN	10/13/2016	L66384-2	Fecal Coliform	90	CFU/100ml	C			90	J	unknown
WG148370	ECHO-DTS-OUT	10/13/2016	L66384-4	Fecal Coliform	200	CFU/100ml	C			200	J	unknown
WG148784	ECHO-BP1-IN	10/26/2016	L66498-1	Escherichia coli	200	CFU/100ml	SH,TA			200	J	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG148784	ECHO-BP3-OUT	10/26/2016	L66498-11	Escherichia coli	97	CFU/100ml	SH,TA			97	J	unknown
WG148784	ECHO-BP4-IN	10/26/2016	L66498-13	Escherichia coli	180	CFU/100ml	SH,TA			180	J	unknown
WG148784	ECHO-BP4-OUT	10/26/2016	L66498-15	Escherichia coli	160	CFU/100ml	SH,TA			160	J	unknown
WG148784	ECHO-FLT1-IN	10/26/2016	L66498-17	Escherichia coli	44	CFU/100ml	SH,TA			44	J	unknown
WG148784	ECHO-FLT1-OUT	10/26/2016	L66498-19	Escherichia coli	34	CFU/100ml	SH,TA			34	J	unknown
WG148784	ECHO-BP1-IN	10/26/2016	L66498-22	Escherichia coli	200	CFU/100ml	SH,TA			200	J	unknown
WG148784	ECHO-BP1-OUT	10/26/2016	L66498-3	Escherichia coli	150	CFU/100ml	SH,TA			150	J	unknown
WG148784	ECHO-BP2-IN	10/26/2016	L66498-5	Escherichia coli	120	CFU/100ml	SH,TA			120	J	unknown
WG148784	ECHO-BP2-OUT	10/26/2016	L66498-7	Escherichia coli	100	CFU/100ml	SH,TA			100	J	unknown
WG148784	ECHO-BP3-IN	10/26/2016	L66498-9	Escherichia coli	120	CFU/100ml	SH,TA			120	J	unknown
WG149830	ECHO-BP1-IN	1/17/2017	L66938-1	Escherichia coli	85	CFU/100ml	SH,TA			85	J	unknown
WG149830	ECHO-BP3-OUT	1/17/2017	L66938-11	Escherichia coli	180	CFU/100ml	SH,TA			180	J	unknown
WG149830	ECHO-BP4-IN	1/18/2017	L66938-13	Escherichia coli	16	CFU/100ml	SH,TA			16	J	unknown
WG149830	ECHO-BP4-OUT	1/18/2017	L66938-15	Escherichia coli	30	CFU/100ml	SH,TA			30	J	unknown
WG149830	ECHO-FLT1-IN	1/17/2017	L66938-17	Escherichia coli	120	CFU/100ml	SH,TA			120	J	unknown
WG149830	ECHO-FLT1-OUT	1/17/2017	L66938-19	Escherichia coli	73	CFU/100ml	SH,TA			73	J	unknown
WG149830	ECHO-FLT1-IN	1/17/2017	L66938-22	Escherichia coli	76	CFU/100ml	SH,TA			76	J	unknown
WG149830	ECHO-BP1-OUT	1/17/2017	L66938-3	Escherichia coli	150	CFU/100ml	SH,TA			150	J	unknown
WG149830	ECHO-BP2-IN	1/17/2017	L66938-5	Escherichia coli	10	CFU/100ml	SH,TA			10	J	unknown
WG149830	ECHO-BP2-OUT	1/17/2017	L66938-7	Escherichia coli	13	CFU/100ml	SH,TA			13	J	unknown
WG149830	ECHO-BP3-IN	1/17/2017	L66938-9	Escherichia coli	150	CFU/100ml	SH,TA			150	J	unknown
WG150142	ECHO-BP1-IN	2/9/2017	L67070-1	Escherichia coli	35	CFU/100ml	SH,TA			35	J	unknown
WG150142	ECHO-BP3-OUT	2/9/2017	L67070-11	Escherichia coli	16	CFU/100ml	SH,TA			16	J	unknown
WG150142	ECHO-BP3-OUT	2/9/2017	L67070-26	Escherichia coli	23	CFU/100ml	SH,TA			23	J	unknown
WG150142	ECHO-BP1-OUT	2/9/2017	L67070-3	Escherichia coli	14	CFU/100ml	SH,TA			14	J	unknown
WG150142	ECHO-BP2-IN	2/9/2017	L67070-5	Escherichia coli	45	CFU/100ml	SH,TA			45	J	unknown
WG150142	ECHO-BP2-OUT	2/9/2017	L67070-7	Escherichia coli	26	CFU/100ml	SH,TA			26	J	unknown
WG150142	ECHO-BP3-IN	2/9/2017	L67070-9	Escherichia coli	19	CFU/100ml	SH,TA			19	J	unknown
WG150278	ECHO-BP1-IN	2/15/2017	L67140-1	Escherichia coli	220	CFU/100ml	SH,TA			220	J	unknown
WG150278	ECHO-BP1-OUT	2/15/2017	L67140-3	Escherichia coli	78	CFU/100ml	SH,TA			78	J	unknown
WG150278	ECHO-BP3-IN	2/15/2017	L67140-5	Escherichia coli	98	CFU/100ml	SH,TA			98	J	unknown
WG150278	ECHO-BP3-OUT	2/15/2017	L67140-7	Escherichia coli	61	CFU/100ml	SH,TA			61	J	unknown
WG146905	ECHO-DTS-IN	6/23/2016	L65650-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG146905	ECHO-DTS-OUT	6/23/2016	L65650-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG146905	ECHO-DTS-IN	6/23/2016	L65650-1	Copper, Dissolved, ICP-MS	12.6	ug/L	H	0.2	2	12.6	J	unknown
WG146905	ECHO-DTS-OUT	6/23/2016	L65650-3	Copper, Dissolved, ICP-MS	12.1	ug/L	H	0.2	2	12.1	J	unknown
WG146905	ECHO-DTS-IN	6/23/2016	L65650-1	Lead, Dissolved, ICP-MS	0.38	ug/L	<RDL,H	0.1	0.5	0.38	J	unknown
WG146905	ECHO-DTS-OUT	6/23/2016	L65650-3	Lead, Dissolved, ICP-MS	0.48	ug/L	<RDL,H	0.1	0.5	0.48	J	unknown
WG146905	ECHO-DTS-IN	6/23/2016	L65650-1	Zinc, Dissolved, ICP-MS	87.8	ug/L	H	0.5	2.5	87.8	J	unknown
WG146905	ECHO-DTS-OUT	6/23/2016	L65650-3	Zinc, Dissolved, ICP-MS	73.6	ug/L	H	0.5	2.5	73.6	J	unknown
WG147984	ECHO-DTS-IN	9/17/2016	L66175-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG147984	ECHO-DTS-OUT	9/17/2016	L66175-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG147984	ECHO-DTS-IN	9/17/2016	L66175-1	Copper, Dissolved, ICP-MS	14.9	ug/L	H	0.2	2	14.9	J	unknown
WG147984	ECHO-DTS-OUT	9/17/2016	L66175-3	Copper, Dissolved, ICP-MS	13.6	ug/L	H	0.2	2	13.6	J	unknown
WG147984	ECHO-DTS-IN	9/17/2016	L66175-1	Lead, Dissolved, ICP-MS	0.25	ug/L	<RDL,H	0.1	0.5	0.25	J	unknown
WG147984	ECHO-DTS-OUT	9/17/2016	L66175-3	Lead, Dissolved, ICP-MS	0.26	ug/L	<RDL,H	0.1	0.5	0.26	J	unknown
WG147984	ECHO-DTS-IN	9/17/2016	L66175-1	Zinc, Dissolved, ICP-MS	68	ug/L	H	0.5	2.5	68	J	unknown
WG147984	ECHO-DTS-OUT	9/17/2016	L66175-3	Zinc, Dissolved, ICP-MS	67.6	ug/L	H	0.5	2.5	67.6	J	unknown
WG148332	ECHO-DTS-IN	10/6/2016	L66285-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148332	ECHO-DTS-OUT	10/6/2016	L66285-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148332	ECHO-DTS-IN	10/6/2016	L66285-1	Copper, Dissolved, ICP-MS	5.84	ug/L	H	0.2	2	5.84	J	unknown
WG148332	ECHO-DTS-OUT	10/6/2016	L66285-3	Copper, Dissolved, ICP-MS	5.82	ug/L	H	0.2	2	5.82	J	unknown
WG148332	ECHO-DTS-IN	10/6/2016	L66285-1	Lead, Dissolved, ICP-MS	0.27	ug/L	<RDL,H	0.1	0.5	0.27	J	unknown
WG148332	ECHO-DTS-OUT	10/6/2016	L66285-3	Lead, Dissolved, ICP-MS	0.28	ug/L	<RDL,H	0.1	0.5	0.28	J	unknown
WG148332	ECHO-DTS-IN	10/6/2016	L66285-1	Zinc, Dissolved, ICP-MS	40.9	ug/L	H	0.5	2.5	40.9	J	unknown
WG148332	ECHO-DTS-OUT	10/6/2016	L66285-3	Zinc, Dissolved, ICP-MS	42.6	ug/L	H	0.5	2.5	42.6	J	unknown
WG148522	ECHO-DTS-IN	10/13/2016	L66384-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148522	ECHO-DTS-OUT	10/13/2016	L66384-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148522	ECHO-DTS-IN	10/13/2016	L66384-1	Copper, Dissolved, ICP-MS	7.44	ug/L	H	0.2	2	7.44	J	unknown
WG148522	ECHO-DTS-OUT	10/13/2016	L66384-3	Copper, Dissolved, ICP-MS	7.33	ug/L	H	0.2	2	7.33	J	unknown
WG148522	ECHO-DTS-IN	10/13/2016	L66384-1	Lead, Dissolved, ICP-MS	0.31	ug/L	<RDL,H	0.1	0.5	0.31	J	unknown
WG148522	ECHO-DTS-OUT	10/13/2016	L66384-3	Lead, Dissolved, ICP-MS	0.3	ug/L	<RDL,H	0.1	0.5	0.3	J	unknown
WG148522	ECHO-DTS-IN	10/13/2016	L66384-1	Zinc, Dissolved, ICP-MS	64.1	ug/L	H	0.5	2.5	64.1	J	unknown
WG148522	ECHO-DTS-OUT	10/13/2016	L66384-3	Zinc, Dissolved, ICP-MS	63.8	ug/L	H	0.5	2.5	63.8	J	unknown
WG148971	ECHO-DTS-IN	10/19/2016	L66435-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148971	ECHO-DTS-OUT	10/19/2016	L66435-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG148971	ECHO-DTS-IN	10/19/2016	L66435-1	Copper, Dissolved, ICP-MS	4	ug/L	H	0.2	2	4	J	unknown
WG148971	ECHO-DTS-OUT	10/19/2016	L66435-3	Copper, Dissolved, ICP-MS	4.5	ug/L	H	0.2	2	4.5	J	unknown
WG148971	ECHO-DTS-IN	10/19/2016	L66435-1	Lead, Dissolved, ICP-MS	0.2	ug/L	<RDL,H	0.1	0.5	0.2	J	unknown
WG148971	ECHO-DTS-OUT	10/19/2016	L66435-3	Lead, Dissolved, ICP-MS	0.22	ug/L	<RDL,H	0.1	0.5	0.22	J	unknown
WG148971	ECHO-DTS-IN	10/19/2016	L66435-1	Zinc, Dissolved, ICP-MS	36.5	ug/L	H	0.5	2.5	36.5	J	unknown
WG148971	ECHO-DTS-OUT	10/19/2016	L66435-3	Zinc, Dissolved, ICP-MS	36.6	ug/L	H	0.5	2.5	36.6	J	unknown
WG149168	ECHO-DTS-OUT	10/26/2016	L66499-3	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG149168	ECHO-DTS-OUT	10/26/2016	L66499-3	Copper, Dissolved, ICP-MS	4.23	ug/L	H	0.2	2	4.23	J	unknown
WG149168	ECHO-DTS-OUT	10/26/2016	L66499-3	Lead, Dissolved, ICP-MS	0.34	ug/L	<RDL,H	0.1	0.5	0.34	J	unknown
WG149168	ECHO-DTS-OUT	10/26/2016	L66499-3	Zinc, Dissolved, ICP-MS	24.9	ug/L	H	0.5	2.5	24.9	J	unknown
WG149178	ECHO-DTS-IN	10/26/2016	L66499-1	Cadmium, Dissolved, ICP-MS		ug/L	<MDL,H	0.05	0.25	0.05	UJ	unknown
WG149178	ECHO-DTS-IN	10/26/2016	L66499-1	Copper, Dissolved, ICP-MS	4.03	ug/L	H	0.2	2	4.03	J	unknown
WG149178	ECHO-DTS-IN	10/26/2016	L66499-1	Lead, Dissolved, ICP-MS	0.17	ug/L	<RDL,H	0.1	0.5	0.17	J	unknown
WG149178	ECHO-DTS-IN	10/26/2016	L66499-1	Zinc, Dissolved, ICP-MS	25.8	ug/L	H	0.5	2.5	25.8	J	unknown
WG144921	ECHO-BP1-IN	3/9/2016	L64999-1	Naphthalene	0.017	ug/L	<RDL,B	0.0047	0.0236	0.0236	U	
WG144921	ECHO-FLT1-IN	3/9/2016	L64999-13	Naphthalene	0.016	ug/L	<RDL,B	0.0047	0.0236	0.0236	U	
WG144921	ECHO-BP2-IN	3/9/2016	L64999-5	Naphthalene	0.019	ug/L	<RDL,B	0.0047	0.0236	0.0236	U	
WG144921	ECHO-BP3-IN	3/9/2016	L64999-9	Naphthalene	0.02	ug/L	<RDL,B	0.0047	0.0236	0.0236	U	

Table A. Echo Lake Stormwater Monitoring - SAM Effectiveness Study- Data Validation Flags and Bias Notation

WORKNUM	LOCATOR	COLLECTDATE	Sample ID	Parameter	NUMVALUE	UNITS	Lab Qual	MDL	RDL	DV Value	DV Qual	DV Bias
WG148652	ECHO-DTS-IN	10/19/2016	L66435-1	Benzo(b,j,k)fluoranthene	0.033	ug/L	<RDL,JL	0.0095	0.0476	0.033	J	high
WG148652	ECHO-DTS-OUT	10/19/2016	L66435-3	Benzo(b,j,k)fluoranthene	0.033	ug/L	<RDL,JL	0.0095	0.0476	0.033	J	high
WG148652	ECHO-DTS-IN	10/19/2016	L66435-1	Chrysene	0.026	ug/L	<RDL,JL	0.0095	0.0476	0.026	J	high
WG148652	ECHO-DTS-OUT	10/19/2016	L66435-3	Chrysene	0.026	ug/L	<RDL,JL	0.0095	0.0476	0.026	J	high
WG148678	ECHO-BP1-IN	10/26/2016	L66498-1	Chrysene	0.0708	ug/L	JL	0.0094	0.0472	0.0708	J	high
WG148678	ECHO-BP4-IN	10/26/2016	L66498-13	Chrysene	0.04	ug/L	<RDL,JL	0.0094	0.0472	0.04	J	high
WG148678	ECHO-FLT1-IN	10/26/2016	L66498-17	Chrysene	0.146	ug/L	JL	0.0094	0.0472	0.146	J	high
WG148678	ECHO-BP1-IN	10/26/2016	L66498-22	Chrysene	0.0572	ug/L	JL	0.0094	0.0472	0.0572	J	high
WG148678	ECHO-BP2-IN	10/26/2016	L66498-5	Chrysene	0.0764	ug/L	JL	0.0094	0.0472	0.0764	J	high
WG148678	ECHO-BP3-IN	10/26/2016	L66498-9	Chrysene	0.0594	ug/L	JL	0.0094	0.0472	0.0594	J	high
WG148678	ECHO-DTS-IN	10/26/2016	L66499-1	Chrysene	0.031	ug/L	<RDL,JL	0.0094	0.0472	0.031	J	high
WG148678	ECHO-DTS-OUT	10/26/2016	L66499-3	Chrysene	0.035	ug/L	<RDL,JL	0.0094	0.0472	0.035	J	high
WG148678	ECHO-DTS-OUT	10/26/2016	L66499-3	Indeno(1,2,3-Cd)Pyrene	0.011	ug/L	<RDL	0.0094	0.0472	0.011	J	high
WG151046	BLANK1	3/29/2017	L67413-1	Acenaphthylene		ug/L	<MDL,JG	0.0047	0.0236	0.0047	UJ	low
WG154875	ECHO-BP3-OUT	10/13/2016	L66382-11	Escherichia coli	190	CFU/100ml	SH,TA			190	J	unknown
WG154875	ECHO-FLT1-IN	10/13/2016	L66382-17	Escherichia coli	540	CFU/100ml	SH,TA			540	J	unknown
WG154875	ECHO-FLT1-OUT	10/13/2016	L66382-19	Escherichia coli	420	CFU/100ml	SH,TA			420	J	unknown
WG154875	ECHO-BP3-IN	10/13/2016	L66382-9	Escherichia coli	690	CFU/100ml	SH,TA			690	J	unknown

ATTACHMENT A

LIMS BATCH AND QC REPORTS

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

WG143407 (DISSNUT) Department: 3 - Conventionals Move Date: 29-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64296-1	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-1	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-1	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-2	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-2	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-2	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-3	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-3	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-3	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-4	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-4	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-4	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-5	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-5	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-5	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-6	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-6	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-6	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-7	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-7	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-7	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-8	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-8	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-8	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-9	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-9	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-9	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-10	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-10	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-10	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-11	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-11	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-11	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-12	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-12	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-12	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-13	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	
L64296-13	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	

L64296-13	422019	WRIA 7 Streams Ambient Monitoring	CVORTHOP	BLANK WTR	12/7/2015	12/9/2015	12/9/2015
L64310-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-2	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-3	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-3	421195-150	Beaver Lake	CVNO23	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-3	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-4	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-4	421195-150	Beaver Lake	CVNO23	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64310-4	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	12/8/2015	12/9/2015	12/9/2015
L64311-1	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-1	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-1	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-1	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-2	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-2	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-2	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-2	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-3	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-3	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-3	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-3	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-4	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-4	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-4	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-4	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-5	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-5	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-5	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-6	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-6	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-6	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-8	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-8	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-8	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-8	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-9	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-9	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-9	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-9	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-10	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-10	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015

L64311-10	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-10	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-11	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-11	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-11	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-11	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-12	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-12	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-12	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-12	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-13	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-13	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-13	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-14	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-14	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-14	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-15	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-15	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-15	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-16	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-16	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-16	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-17	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-17	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-17	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-19	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-19	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-19	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-19	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-20	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-20	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-20	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-20	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-21	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-21	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-21	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-22	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-22	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-22	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-23	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015
L64311-23	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015

L64311-23	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-25	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-25	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-25	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-26	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-26	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-26	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-27	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-27	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-27	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-29	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-29	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-29	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-29	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-30	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-30	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-30	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-30	421235	MAJOR LAKES (wtr col)	CVSI	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-31	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-31	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-31	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-32	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-32	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-32	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-33	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-33	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-33	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	12/7/2015	12/9/2015	12/9/2015	
L64311-35	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-35	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-35	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-35	421235	MAJOR LAKES (wtr col)	CVSI	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-36	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-36	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-36	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64311-36	421235	MAJOR LAKES (wtr col)	CVSI	BLANK WTR	12/7/2015	12/9/2015	12/9/2015	FFB
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	12/8/2015	12/9/2015	12/9/2015	

L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	12/8/2015	12/9/2015	12/9/2015	
WG143407-1	MB		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	MB1 12/9/15
WG143407-1	MB		CVNO23	BLANK WTR		12/9/2015	12/9/2015	MB1 12/9/15
WG143407-1	MB		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	MB1 12/9/15
WG143407-1	MB		CVSI	BLANK WTR		12/9/2015	12/9/2015	MB1 12/9/15
WG143407-2	SB		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	WG143407-1
WG143407-2	SB		CVNO23	BLANK WTR		12/9/2015	12/9/2015	WG143407-1
WG143407-2	SB		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	WG143407-1
WG143407-2	SB		CVSI	BLANK WTR		12/9/2015	12/9/2015	WG143407-1
WG143407-3	LCS		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-3	LCS		CVNO23	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-3	LCS		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-3	LCS		CVSI	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-4	LD		CVNH3-FL	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-4	LD		CVNO23	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-4	LD		CVORTHOP	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-4	LD		CVSI	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-5	MS		CVNH3-FL	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-5	MS		CVNO23	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-5	MS		CVORTHOP	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-5	MS		CVSI	FRESH WTR		12/9/2015	12/9/2015	L64311-19
WG143407-6	MB		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	MB2 12/9/15
WG143407-6	MB		CVNO23	BLANK WTR		12/9/2015	12/9/2015	MB2 12/9/15
WG143407-6	MB		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	MB2 12/9/15
WG143407-7	SB		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	WG143407-6
WG143407-7	SB		CVNO23	BLANK WTR		12/9/2015	12/9/2015	WG143407-6
WG143407-7	SB		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	WG143407-6
WG143407-8	LCS		CVNH3-FL	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-8	LCS		CVNO23	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-8	LCS		CVORTHOP	BLANK WTR		12/9/2015	12/9/2015	LEVEL1
WG143407-9	LD		CVNH3-FL	FRESH WTR		12/9/2015	12/9/2015	L64311-23
WG143407-9	LD		CVNO23	FRESH WTR		12/9/2015	12/9/2015	L64311-23
WG143407-9	LD		CVORTHOP	FRESH WTR		12/9/2015	12/9/2015	L64311-23
WG143407-10	MS		CVNH3-FL	FRESH WTR		12/9/2015	12/9/2015	L64311-23
WG143407-10	MS		CVNO23	FRESH WTR		12/9/2015	12/9/2015	L64311-23
WG143407-10	MS		CVORTHOP	FRESH WTR		12/9/2015	12/9/2015	L64311-23

WG143407-11	LD	CVNH3-FL	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-11	LD	CVNO23	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-11	LD	CVORTHOP	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-12	MS	CVNH3-FL	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-12	MS	CVNO23	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-12	MS	CVORTHOP	FRESH WTR	12/9/2015	12/9/2015	L64310-4
WG143407-13	LD	CVNH3-FL	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-13	LD	CVNO23	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-13	LD	CVORTHOP	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-14	MS	CVNH3-FL	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-14	MS	CVNO23	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-14	MS	CVORTHOP	STORM WTR	12/9/2015	12/9/2015	L64379-6
WG143407-15	MB	CVNH3-FL	BLANK WTR	12/9/2015	12/9/2015	MB3 12/9/15
WG143407-15	MB	CVNO23	BLANK WTR	12/9/2015	12/9/2015	MB3 12/9/15
WG143407-15	MB	CVORTHOP	BLANK WTR	12/9/2015	12/9/2015	MB3 12/9/15
WG143407-16	SB	CVNH3-FL	BLANK WTR	12/9/2015	12/9/2015	WG143407-15
WG143407-16	SB	CVNO23	BLANK WTR	12/9/2015	12/9/2015	WG143407-15
WG143407-16	SB	CVORTHOP	BLANK WTR	12/9/2015	12/9/2015	WG143407-15
WG143407-17	LCS	CVNH3-FL	BLANK WTR	12/9/2015	12/9/2015	LEVEL1
WG143407-17	LCS	CVNO23	BLANK WTR	12/9/2015	12/9/2015	LEVEL1
WG143407-17	LCS	CVORTHOP	BLANK WTR	12/9/2015	12/9/2015	LEVEL1
WG143407-18	LD	CVNH3-FL	FRESH WTR	12/9/2015	12/9/2015	L64296-3
WG143407-18	LD	CVNO23	FRESH WTR	12/9/2015	12/9/2015	L64296-3
WG143407-18	LD	CVORTHOP	FRESH WTR	12/9/2015	12/9/2015	L64296-3
WG143407-19	MS	CVNH3-FL	FRESH WTR	12/9/2015	12/9/2015	L64296-3
WG143407-19	MS	CVNO23	FRESH WTR	12/9/2015	12/9/2015	L64296-3
WG143407-19	MS	CVORTHOP	FRESH WTR	12/9/2015	12/9/2015	L64296-3

WG143430 (tss-2-12/10) Department: 3 - Conventionals Move Date: 18-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64136-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	SAMP
L64136-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	SAMP
L64196-1	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	
L64196-2	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	
L64196-3	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	
L64196-4	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	
L64196-5	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015	
L64296-1	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015	
L64296-2	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015	

L64296-3	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-4	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-5	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-6	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-7	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-8	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-9	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-10	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-11	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64296-12	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-1	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-2	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-3	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-4	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-5	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-6	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-8	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-9	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-10	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-11	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-12	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-13	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-14	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-15	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-16	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-17	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-19	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-20	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-21	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-22	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-23	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-25	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-26	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-27	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-29	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-30	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-31	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-32	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64311-33	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	12/7/2015	12/11/2015	12/14/2015
L64369-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	12/6/2015	12/11/2015	12/14/2015
L64374-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	12/7/2015	12/11/2015	12/14/2015

L64374-2	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	12/8/2015	12/11/2015	12/14/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	12/8/2015	12/11/2015	12/14/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	12/8/2015	12/11/2015	12/14/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	12/8/2015	12/11/2015	12/14/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	12/8/2015	12/11/2015	12/14/2015	
WG143430-1	MB		CVTSS	BLANK WTR		12/11/2015	12/14/2015	
WG143430-2	LCS		CVTSS	BLANK WTR		12/11/2015	12/14/2015	LEVEL1
WG143430-3	LD		CVTSS	STORM WTR		12/11/2015	12/14/2015	L64379-6
WG143430-4	LD		CVTSS	FRESH WTR		12/11/2015	12/14/2015	L64296-2
WG143430-5	MB		CVTSS	BLANK WTR		12/11/2015	12/14/2015	
WG143430-6	LCS		CVTSS	BLANK WTR		12/11/2015	12/14/2015	LEVEL1
WG143430-7	LD		CVTSS	FRESH WTR		12/11/2015	12/14/2015	L64311-4
WG143430-8	MB		CVTSS	BLANK WTR		12/11/2015	12/14/2015	
WG143430-9	LCS		CVTSS	BLANK WTR		12/11/2015	12/14/2015	LEVEL1
WG143430-10	LD		CVTSS	FRESH WTR		12/11/2015	12/14/2015	L64311-30

WG143546 (NUTS-12/15) Department: 3 - Conventionals Move Date: 29-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64196-1	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-1	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-2	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-2	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-3	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-3	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-4	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-4	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-5	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64196-5	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64221-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	12/7/2015	12/15/2015	12/22/2015	
L64221-2	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	12/7/2015	12/15/2015	12/22/2015	
L64221-3	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	12/7/2015	12/15/2015	12/22/2015	
L64310-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	12/8/2015	12/15/2015	12/22/2015	
L64310-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	12/8/2015	12/15/2015	12/22/2015	
L64310-3	421195-150	Beaver Lake	CVTOTP	FRESH WTR	12/8/2015	12/15/2015	12/22/2015	
L64310-4	421195-150	Beaver Lake	CVTOTP	FRESH WTR	12/8/2015	12/15/2015	12/22/2015	
L64311-37	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-37	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-38	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-38	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	

L64311-39	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-39	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-40	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-40	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-41	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-41	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-42	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-42	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-44	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-44	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-45	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-45	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-46	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-46	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-47	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-47	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-48	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-48	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-49	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64311-49	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-1	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-2	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-3	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-4	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-7	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-8	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-10	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-11	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64336-12	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOTP	FRESH WTR	12/14/2015	12/15/2015	12/22/2015	
L64370-1	421195-150	Beaver Lake	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64370-2	421195-150	Beaver Lake	CVTOTP	STORM WTR	12/7/2015	12/15/2015	12/22/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	12/8/2015	12/15/2015	12/22/2015	
WG143546-1	MB		CVTOTN	BLANK WTR		12/15/2015	12/22/2015	MB1 12/15
WG143546-1	MB		CVTOTP	BLANK WTR		12/15/2015	12/22/2015	MB1 12/15

WG143546-2	SB	CVTOTN	BLANK WTR	12/15/2015	12/22/2015	WG143546-1
WG143546-2	SB	CVTOTP	BLANK WTR	12/15/2015	12/22/2015	WG143546-1
WG143546-3	LCS	CVTOTN	BLANK WTR	12/15/2015	12/22/2015	LEVEL1
WG143546-3	LCS	CVTOTP	BLANK WTR	12/15/2015	12/22/2015	LEVEL1
WG143546-4	LD	CVTOTN	STORM WTR	12/15/2015	12/22/2015	L64196-5
WG143546-4	LD	CVTOTP	STORM WTR	12/15/2015	12/22/2015	L64196-5
WG143546-5	MS	CVTOTN	STORM WTR	12/15/2015	12/22/2015	L64196-5
WG143546-5	MS	CVTOTP	STORM WTR	12/15/2015	12/22/2015	L64196-5
WG143546-6	MB	CVTOTN	BLANK WTR	12/15/2015	12/22/2015	MB2 12/15
WG143546-6	MB	CVTOTP	BLANK WTR	12/15/2015	12/22/2015	MB2 12/15
WG143546-7	LCS	CVTOTN	BLANK WTR	12/15/2015	12/22/2015	LEVEL1
WG143546-7	LCS	CVTOTP	BLANK WTR	12/15/2015	12/22/2015	LEVEL1
WG143546-8	LD	CVTOTP	FRESH WTR	12/15/2015	12/22/2015	L64336-7
WG143546-9	MS	CVTOTP	FRESH WTR	12/15/2015	12/22/2015	L64336-7
WG143546-10	LD	CVTOTP	FRESH WTR	12/15/2015	12/22/2015	L64310-3
WG143546-11	MS	CVTOTP	FRESH WTR	12/15/2015	12/22/2015	L64310-3
WG143546-12	LD	CVTOTN	STORM WTR	12/15/2015	12/22/2015	L64379-8
WG143546-12	LD	CVTOTP	STORM WTR	12/15/2015	12/22/2015	L64379-8
WG143546-13	MS	CVTOTN	STORM WTR	12/15/2015	12/22/2015	L64379-8
WG143546-13	MS	CVTOTP	STORM WTR	12/15/2015	12/22/2015	L64379-8

WG143627 (TOC/421422) Department: 3 - Conventionals Move Date: 23-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64066-1	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-2	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-3	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-4	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-5	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-6	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64066-7	421240-210	Wet Weather Survey(Strmwtr)	CVTOC	STORM WTR	12/2/2015	12/18/2015	12/18/2015	
L64082-6	421422-CHSV	SWD-CHSW Q Cedar Hills Surface Water Qua	CVTOC	FRESH WTR	12/15/2015	12/17/2015	12/17/2015	
L64083-5	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	11/30/2015	12/16/2015	12/16/2015	
L64083-6	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	11/30/2015	12/16/2015	12/16/2015	
L64109-5	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	12/8/2015	12/21/2015	12/21/2015	
L64117-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	12/8/2015	12/16/2015	12/16/2015	
L64136-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/7/2015	12/18/2015	12/18/2015	SAMP
L64136-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/7/2015	12/18/2015	12/18/2015	SAMP
L64221-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOC	FRESH WTR	12/7/2015	12/16/2015	12/16/2015	
L64221-2	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOC	FRESH WTR	12/7/2015	12/16/2015	12/16/2015	

L64221-3	421422-DUSV	SWD-DUSW	Duvall Surface Water Quarterly	CVTOC	FRESH WTR	12/7/2015	12/16/2015	12/16/2015
L64253-1	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/8/2015	12/21/2015	12/21/2015
L64253-2	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/8/2015	12/21/2015	12/21/2015
L64253-4	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/21/2015	12/21/2015
L64253-5	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/10/2015	12/16/2015	12/16/2015
L64253-7	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/11/2015	12/21/2015	12/21/2015
L64253-8	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64253-9	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	LEACHATE	12/11/2015	12/16/2015	12/16/2015
L64253-10	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/21/2015	12/21/2015
L64253-11	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/16/2015	12/16/2015
L64253-12	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/16/2015	12/16/2015
L64253-13	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/21/2015	12/21/2015
L64253-15	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-16	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-20	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-21	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-22	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-23	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/9/2015	12/16/2015	12/16/2015
L64253-24	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/10/2015	12/21/2015	12/21/2015
L64253-25	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/10/2015	12/16/2015	12/16/2015
L64253-26	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64253-27	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64253-28	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64254-1	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	FRESH WTR	12/17/2015	12/17/2015	12/17/2015
L64254-2	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/17/2015	12/17/2015	12/17/2015
L64254-4	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	LEACHATE	12/17/2015	12/18/2015	12/18/2015
L64254-5	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/17/2015	12/17/2015	12/17/2015
L64254-7	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/17/2015	12/17/2015
L64254-8	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-9	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-10	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-11	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/11/2015	12/16/2015	12/16/2015
L64254-12	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/11/2015	12/21/2015	12/21/2015
L64254-13	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/10/2015	12/21/2015	12/21/2015
L64254-14	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/16/2015	12/16/2015
L64254-15	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-16	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-17	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-18	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64254-19	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64254-20	421422-CHGV	SWD-CHGW	Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015

L64254-21	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/16/2015	12/16/2015
L64254-22	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	12/14/2015	12/16/2015	12/16/2015
L64328-1	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	12/10/2015	12/16/2015	12/16/2015
L64328-3	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	12/10/2015	12/16/2015	12/16/2015
L64328-4	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	12/10/2015	12/18/2015	12/18/2015
L64331-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	12/10/2015	12/16/2015	12/16/2015
L64331-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	12/9/2015	12/18/2015	12/18/2015
L64331-4	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	12/9/2015	12/16/2015	12/16/2015
L64331-5	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	12/8/2015	12/16/2015	12/16/2015
L64333-1	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	12/11/2015	12/16/2015	12/16/2015
L64333-3	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	12/11/2015	12/16/2015	12/16/2015
L64336-1	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-2	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-3	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-4	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-5	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/15/2015	12/17/2015	12/17/2015
L64336-6	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/15/2015	12/17/2015	12/17/2015
L64336-7	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-8	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-9	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/15/2015	12/17/2015	12/17/2015
L64336-10	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-11	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-12	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/14/2015	12/17/2015	12/17/2015
L64336-13	421422-CHSW	SWD-CHSW M Cedar Hills Surface Water Mor	CVTOC	FRESH WTR	12/15/2015	12/17/2015	12/17/2015
L64355-1	421422-CHGV	SWD-CHGW-NP Cedar Hills Groundwater Nor	CVTOC	GRND WTR	12/15/2015	12/17/2015	12/17/2015
L64356-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64356-3	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64356-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/18/2015	12/18/2015	12/18/2015
L64356-5	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64356-6	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64356-7	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/16/2015	12/17/2015	12/17/2015
L64358-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/17/2015	12/18/2015	12/18/2015
L64358-3	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTOC	GRND WTR	12/17/2015	12/18/2015	12/18/2015
L64359-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/17/2015	12/17/2015	12/17/2015
L64359-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/17/2015	12/18/2015	12/18/2015
L64362-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/21/2015	12/21/2015	12/21/2015
L64362-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/21/2015	12/21/2015	12/21/2015
L64362-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/21/2015	12/21/2015	12/21/2015
L64362-5	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/21/2015	12/21/2015	12/21/2015
L64378-1	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVTOC	STORM WTR	12/8/2015	12/18/2015	12/18/2015
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	12/8/2015	12/18/2015	12/18/2015

L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	12/8/2015	12/18/2015	12/18/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	12/8/2015	12/18/2015	12/18/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	12/8/2015	12/18/2015	12/18/2015	
WG143627-1	MB		CVTOC	BLANK WTR		12/16/2015	12/16/2015	MB1 12/16/15
WG143627-2	SB		CVTOC	BLANK WTR		12/16/2015	12/16/2015	WG143627-1
WG143627-3	LCS		CVTOC	BLANK WTR		12/16/2015	12/16/2015	LEVEL1
WG143627-4	MB		CVTOC	BLANK WTR		12/16/2015	12/16/2015	MB2 12/16/15
WG143627-5	LCS		CVTOC	BLANK WTR		12/16/2015	12/16/2015	LEVEL1
WG143627-6	LD		CVTOC	LEACHATE		12/16/2015	12/16/2015	L64331-1
WG143627-7	MS		CVTOC	LEACHATE		12/16/2015	12/16/2015	L64331-1
WG143627-8	LD		CVTOC	FRESH WTR		12/16/2015	12/16/2015	L64083-5
WG143627-9	MS		CVTOC	FRESH WTR		12/16/2015	12/16/2015	L64083-5
WG143627-10	LD		CVTOC	GRND WTR		12/16/2015	12/16/2015	L64254-22
WG143627-11	MS		CVTOC	GRND WTR		12/16/2015	12/16/2015	L64254-22
WG143627-12	MB		CVTOC	BLANK WTR		12/17/2015	12/17/2015	MB1 12/17/15
WG143627-13	SB		CVTOC	BLANK WTR		12/17/2015	12/17/2015	WG143627-12
WG143627-14	LCS		CVTOC	BLANK WTR		12/17/2015	12/17/2015	LEVEL1
WG143627-15	MB		CVTOC	BLANK WTR		12/17/2015	12/17/2015	MB2 12/17/15
WG143627-16	LCS		CVTOC	BLANK WTR		12/17/2015	12/17/2015	LEVEL1
WG143627-17	LD		CVTOC	FRESH WTR		12/17/2015	12/17/2015	L64254-1
WG143627-18	MS		CVTOC	FRESH WTR		12/17/2015	12/17/2015	L64254-1
WG143627-19	MB		CVTOC	BLANK WTR		12/17/2015	12/17/2015	MB3 12/17/15
WG143627-20	LCS		CVTOC	BLANK WTR		12/17/2015	12/17/2015	LEVEL1
WG143627-21	MB		CVTOC	BLANK WTR		12/18/2015	12/18/2015	MB1 12/18/15
WG143627-22	SB		CVTOC	BLANK WTR		12/18/2015	12/18/2015	WG143627-21
WG143627-23	LCS		CVTOC	BLANK WTR		12/18/2015	12/18/2015	LEVEL1
WG143627-24	LD		CVTOC	GRND WTR		12/18/2015	12/18/2015	L64356-4
WG143627-25	MS		CVTOC	GRND WTR		12/18/2015	12/18/2015	L64356-4
WG143627-26	LD		CVTOC	STORM WTR		12/18/2015	12/18/2015	L64066-7
WG143627-27	MS		CVTOC	STORM WTR		12/18/2015	12/18/2015	L64066-7
WG143627-28	MB		CVTOC	BLANK WTR		12/21/2015	12/21/2015	MB1 12/21/15
WG143627-29	SB		CVTOC	BLANK WTR		12/21/2015	12/21/2015	WG143627-28
WG143627-30	LCS		CVTOC	BLANK WTR		12/21/2015	12/21/2015	LEVEL1
WG143627-31	LD		CVTOC	GRND WTR		12/21/2015	12/21/2015	L64253-1
WG143627-32	MS		CVTOC	GRND WTR		12/21/2015	12/21/2015	L64253-1
WG143627-33	LD		CVTOC	GRND WTR		12/21/2015	12/21/2015	L64362-1
WG143627-34	MS		CVTOC	GRND WTR		12/21/2015	12/21/2015	L64362-1

WG143741 (DOC/421240, 323589, 42187) Department: 3 - Conventionals Move Date: 30-DEC-15

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64066-1	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-2	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-3	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-4	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-5	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-6	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64066-7	421240-210	Wet Weather Survey(Strmwtr)	CVDOC	STORM WTR	12/2/2015	12/2/2015	12/23/2015	
L64136-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/7/2015	12/8/2015	12/23/2015	SAMP
L64136-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/7/2015	12/8/2015	12/23/2015	SAMP
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	12/8/2015	12/9/2015	12/23/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	12/8/2015	12/9/2015	12/23/2015	
WG143741-1	MB		CVDOC	BLANK WTR		12/2/2015	12/23/2015	MB1 12/02/15 15:00
WG143741-2	SB		CVDOC	BLANK WTR		12/2/2015	12/23/2015	WG143741-1
WG143741-3	LCS		CVDOC	BLANK WTR		12/23/2015	12/23/2015	LEVEL1
WG143741-4	LD		CVDOC	STORM WTR		12/2/2015	12/23/2015	L64066-3
WG143741-5	MS		CVDOC	STORM WTR		12/2/2015	12/23/2015	L64066-3
WG143741-6	MB		CVDOC	BLANK WTR		12/8/2015	12/23/2015	MB1 12/08/15 11:00
WG143741-7	MB		CVDOC	BLANK WTR		12/9/2015	12/23/2015	MB1 12/09/15 15:00

WG143826 (TOC, DOC/421422, 421250 &) Department: 3 - Conventionals Move Date: 07-JAN-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64112-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	12/28/2015	12/30/2015	12/30/2015	
L64112-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	12/28/2015	12/30/2015	12/30/2015	
L64112-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	12/28/2015	12/30/2015	12/30/2015	
L64192-1	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	12/14/2015	12/15/2015	12/31/2015	
L64192-1	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	12/14/2015	12/30/2015	12/30/2015	
L64192-2	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	12/14/2015	12/15/2015	12/31/2015	
L64192-2	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	12/14/2015	12/30/2015	12/30/2015	
L64192-3	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	12/14/2015	12/15/2015	12/31/2015	
L64192-3	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	12/14/2015	12/30/2015	12/30/2015	
L64193-1	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	12/14/2015	12/15/2015	12/31/2015	
L64193-1	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	12/14/2015	12/30/2015	12/30/2015	
L64193-2	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	12/14/2015	12/15/2015	12/31/2015	
L64193-2	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	12/14/2015	12/30/2015	12/30/2015	
L64193-3	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	12/14/2015	12/15/2015	12/31/2015	
L64193-3	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	12/14/2015	12/30/2015	12/30/2015	
L64378-1	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVDOC	STORM WTR	12/8/2015	12/9/2015	12/30/2015	
L64378-2	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVDOC	SALT WTR	12/8/2015	12/9/2015	12/30/2015	

L64378-2	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVTOC	SALT WTR	12/8/2015	12/30/2015	12/30/2015	
L64378-3	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVDOC	SALT WTR	12/8/2015	12/9/2015	12/30/2015	
L64378-3	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVTOC	SALT WTR	12/8/2015	12/30/2015	12/30/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	12/8/2015	12/9/2015	12/30/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	12/8/2015	12/9/2015	12/30/2015	
L64421-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/29/2015	12/30/2015	12/30/2015	
L64421-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/22/2015	12/30/2015	12/30/2015	
L64421-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/22/2015	12/30/2015	12/30/2015	
L64421-6	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/22/2015	12/30/2015	12/30/2015	
L64425-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/29/2015	12/30/2015	12/30/2015	
L64425-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	12/30/2015	12/30/2015	12/30/2015	
L64454-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/21/2015	12/22/2015	12/31/2015	AREP
L64454-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/21/2015	12/30/2015	12/30/2015	AREP
L64454-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/21/2015	12/22/2015	12/31/2015	AREP
L64454-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/21/2015	12/30/2015	12/30/2015	AREP
L64454-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/21/2015	12/22/2015	12/31/2015	FREP@L64454-1
L64454-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/21/2015	12/30/2015	12/30/2015	FREP@L64454-1
L64454-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/21/2015	12/22/2015	12/31/2015	FREP@L64454-2
L64454-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/21/2015	12/30/2015	12/30/2015	FREP@L64454-2
L64457-1	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	
L64457-2	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	
L64457-3	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	
L64457-4	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	
L64457-5	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	
L64457-6	421520-500	RSMP Status and Trends - Streams	CVDOC	FRESH WTR	12/28/2015	12/30/2015	12/31/2015	FREP @ L64457-3
L64468-1	423530-100	GTS Translator Study	CVDOC	STORM WTR	12/19/2015	12/19/2015	12/31/2015	
L64468-1	423530-100	GTS Translator Study	CVTOC	STORM WTR	12/19/2015	12/30/2015	12/30/2015	
L64468-2	423530-100	GTS Translator Study	CVDOC	FRESH WTR	12/19/2015	12/19/2015	12/31/2015	
L64468-2	423530-100	GTS Translator Study	CVTOC	FRESH WTR	12/19/2015	12/30/2015	12/30/2015	
L64468-3	423530-100	GTS Translator Study	CVDOC	SALT WTR	12/19/2015	12/19/2015	12/31/2015	
L64468-3	423530-100	GTS Translator Study	CVTOC	SALT WTR	12/19/2015	12/30/2015	12/30/2015	
WG143826-1	MB		CVTOC	BLANK WTR		12/30/2015	12/30/2015	MB1 12/30/15
WG143826-2	SB		CVTOC	BLANK WTR		12/30/2015	12/30/2015	WG143826-1
WG143826-3	LCS		CVTOC	BLANK WTR		12/30/2015	12/30/2015	LEVEL1
WG143826-4	LD		CVTOC	GRND WTR		12/30/2015	12/30/2015	L64421-4
WG143826-5	MS		CVTOC	GRND WTR		12/30/2015	12/30/2015	L64421-4
WG143826-6	LD		CVTOC	FRESH WTR		12/30/2015	12/30/2015	L64112-4
WG143826-7	MS		CVTOC	FRESH WTR		12/30/2015	12/30/2015	L64112-4
WG143826-8	LD		CVDOC	SALT WTR		12/9/2015	12/30/2015	L64378-2
WG143826-8	LD		CVTOC	SALT WTR		12/30/2015	12/30/2015	L64378-2
WG143826-9	MS		CVDOC	SALT WTR		12/9/2015	12/31/2015	L64378-3

WG143826-9	MS	CVTOC	SALT WTR	12/30/2015	12/30/2015	L64378-3
WG143826-10	MB	CVTOC	BLANK WTR	12/30/2015	12/30/2015	MB2 12/30/15
WG143826-11	LCS	CVTOC	BLANK WTR	12/30/2015	12/30/2015	LEVEL1
WG143826-12	LD	CVTOC	STORM WTR	12/30/2015	12/30/2015	L64454-4
WG143826-13	MS	CVDOC	STORM WTR	12/22/2015	12/31/2015	L64454-4
WG143826-13	MS	CVTOC	STORM WTR	12/30/2015	12/30/2015	L64454-4
WG143826-14	MB	CVDOC	BLANK WTR	12/9/2015	12/30/2015	MB1 12/09/15 15:00 DOC
WG143826-15	SB	CVDOC	BLANK WTR	12/9/2015	12/30/2015	WG143826-14
WG143826-16	LCS	CVDOC	BLANK WTR	12/30/2015	12/30/2015	LEVEL1
WG143826-17	MB	CVDOC	BLANK WTR	12/15/2015	12/31/2015	MB2 12/15/15 11:30 DOC
WG143826-18	LD	CVDOC	FRESH WTR	12/15/2015	12/31/2015	L64192-1
WG143826-19	MS	CVDOC	FRESH WTR	12/15/2015	12/31/2015	L64192-2
WG143826-20	MB	CVDOC	BLANK WTR	12/22/2015	12/31/2015	MB1 12/22/15 10:45 DOC
WG143826-21	LD	CVDOC	STORM WTR	12/22/2015	12/31/2015	L64454-3
WG143826-22	MB	CVDOC	BLANK WTR	12/30/2015	12/31/2015	MB3 12/30/15 16:30 DOC
WG143826-23	LCS	CVDOC	BLANK WTR	12/31/2015	12/31/2015	LEVEL1

WG144141 (nutrients) Department: 3 - Conventionals Move Date: 04-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64503-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/22/2016	1/22/2016	1/22/2016	
L64524-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNH3-FL	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64524-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNO23	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64524-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVORTHOP	LEACHATE	1/13/2016	1/22/2016	1/22/2016	
L64524-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNH3-FL	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64524-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNO23	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64524-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVORTHOP	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64525-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNH3-FL	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64525-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/13/2016	1/22/2016	1/22/2016	
L64525-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/13/2016	1/22/2016	1/22/2016	
L64525-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNH3-FL	LEACHATE	1/13/2016	1/21/2016	1/21/2016	
L64525-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/13/2016	1/22/2016	1/22/2016	
L64525-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/13/2016	1/22/2016	1/22/2016	
L64525-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNH3-FL	LEACHATE	1/14/2016	1/21/2016	1/21/2016	
L64525-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/14/2016	1/22/2016	1/22/2016	
L64525-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/14/2016	1/22/2016	1/22/2016	
L64525-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNH3-FL	LEACHATE	1/12/2016	1/21/2016	1/21/2016	
L64525-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/12/2016	1/22/2016	1/22/2016	
L64525-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/12/2016	1/22/2016	1/22/2016	
L64527-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/19/2016	1/20/2016	1/21/2016	

L64527-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/19/2016	1/20/2016	1/21/2016
L64529-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/19/2016	1/20/2016	1/21/2016
L64529-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/19/2016	1/20/2016	1/21/2016
L64568-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/20/2016	1/21/2016	1/21/2016
L64568-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/20/2016	1/21/2016	1/21/2016
L64568-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/20/2016	1/20/2016	1/21/2016
L64568-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/20/2016	1/20/2016	1/21/2016
L64568-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/20/2016	1/20/2016	1/21/2016
L64568-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/20/2016	1/20/2016	1/21/2016
L64568-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/20/2016	1/21/2016	1/21/2016
L64568-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNO3	GRND WTR	1/20/2016	1/21/2016	1/21/2016
L64605-1	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-1	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-2	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-2	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-3	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-3	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-4	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-4	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-4	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-5	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-5	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-5	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-6	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-6	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-6	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-8	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-8	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-8	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-9	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-9	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-10	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-10	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-11	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-11	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-11	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-12	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-12	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-12	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016
L64605-13	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	1/20/2016	1/21/2016	1/21/2016

L64605-13	421195-150	Beaver Lake	CVNO23	FRESH WTR	1/20/2016	1/21/2016	1/21/2016	
L64605-13	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016	
L64606-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016	
L64606-2	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	1/20/2016	1/21/2016	1/21/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/21/2016	1/22/2016	1/22/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/21/2016	1/22/2016	1/22/2016	FREP @ L64648-1
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/21/2016	1/22/2016	1/22/2016	FREP @ L64648-1
WG144141-1	MB		CVNH3-FL	BLANK WTR		1/20/2016	1/21/2016	CONNUTS1
WG144141-1	MB		CVNO23	BLANK WTR		1/20/2016	1/21/2016	CONNUTS1
WG144141-1	MB		CVNO3	BLANK WTR		1/20/2016	1/21/2016	CONNUTS1
WG144141-1	MB		CVORTHOP	BLANK WTR		1/20/2016	1/21/2016	CONNUTS1
WG144141-2	SB		CVNO23	BLANK WTR		1/20/2016	1/21/2016	WG144141-1
WG144141-2	SB		CVNO3	BLANK WTR		1/20/2016	1/21/2016	WG144141-1
WG144141-3	LCS		CVNH3-FL	BLANK WTR		1/21/2016	1/21/2016	LEVEL1
WG144141-3	LCS		CVNO23	BLANK WTR		1/21/2016	1/21/2016	LEVEL1
WG144141-3	LCS		CVNO3	BLANK WTR		1/21/2016	1/21/2016	LEVEL1
WG144141-3	LCS		CVORTHOP	BLANK WTR		1/21/2016	1/21/2016	LEVEL1
WG144141-4	LD		CVNH3-FL	GRND WTR		1/20/2016	1/21/2016	L64529-2
WG144141-4	LD		CVNO3	GRND WTR		1/20/2016	1/21/2016	L64529-2
WG144141-5	MS		CVNH3-FL	GRND WTR		1/20/2016	1/21/2016	L64529-2
WG144141-5	MS		CVNO3	GRND WTR		1/20/2016	1/21/2016	L64529-2
WG144141-6	MB		CVNH3-FL	BLANK WTR		1/21/2016	1/21/2016	CONNUTS1
WG144141-6	MB		CVNO23	BLANK WTR		1/21/2016	1/21/2016	CONNUTS1
WG144141-6	MB		CVNO3	BLANK WTR		1/21/2016	1/21/2016	CONNUTS1
WG144141-6	MB		CVORTHOP	BLANK WTR		1/21/2016	1/21/2016	CONNUTS1
WG144141-7	LD		CVNH3-FL	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-7	LD		CVNO23	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-7	LD		CVORTHOP	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-8	MS		CVNH3-FL	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-8	MS		CVNO23	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-8	MS		CVORTHOP	FRESH WTR		1/21/2016	1/21/2016	L64605-1
WG144141-9	SB		CVNH3-FL	BLANK WTR		1/21/2016	1/21/2016	WG144141-6
WG144141-9	SB		CVORTHOP	BLANK WTR		1/21/2016	1/21/2016	WG144141-6
WG144141-10	LD		CVNH3-FL	LEACHATE		1/21/2016	1/21/2016	L64524-1

WG144141-10	LD	CVNO23	LEACHATE	1/21/2016	1/21/2016	L64524-1
WG144141-10	LD	CVORTHOP	LEACHATE	1/22/2016	1/22/2016	L64524-1
WG144141-11	MS	CVNH3-FL	LEACHATE	1/21/2016	1/21/2016	L64524-1
WG144141-11	MS	CVNO23	LEACHATE	1/21/2016	1/21/2016	L64524-1
WG144141-11	MS	CVORTHOP	LEACHATE	1/22/2016	1/22/2016	L64524-1
WG144141-12	LCS	CVNH3-FL	BLANK WTR	1/21/2016	1/21/2016	LEVEL1
WG144141-12	LCS	CVNO23	BLANK WTR	1/21/2016	1/21/2016	LEVEL1
WG144141-13	MB	CVNO23	BLANK WTR	1/22/2016	1/22/2016	CONNUTS1
WG144141-13	MB	CVORTHOP	BLANK WTR	1/22/2016	1/22/2016	CONNUTS1
WG144141-14	SB	CVNO23	BLANK WTR	1/22/2016	1/22/2016	WG144141-13
WG144141-14	SB	CVORTHOP	BLANK WTR	1/22/2016	1/22/2016	WG144141-13
WG144141-15	LCS	CVNO23	BLANK WTR	1/22/2016	1/22/2016	LEVEL1
WG144141-15	LCS	CVORTHOP	BLANK WTR	1/22/2016	1/22/2016	LEVEL1
WG144141-16	LD	CVNO23	STORM WTR	1/22/2016	1/22/2016	L64648-5
WG144141-16	LD	CVORTHOP	STORM WTR	1/22/2016	1/22/2016	L64648-5
WG144141-17	MS	CVNO23	STORM WTR	1/22/2016	1/22/2016	L64648-5
WG144141-17	MS	CVORTHOP	STORM WTR	1/22/2016	1/22/2016	L64648-5
WG144141-18	LCS	CVORTHOP	BLANK WTR	1/22/2016	1/22/2016	LEVEL1
WG144141-19	MB	CVNO3	BLANK WTR	1/22/2016	1/22/2016	CONNUTS1
WG144141-20	LCS	CVNO3	BLANK WTR	1/22/2016	1/22/2016	LEVEL1

WG144142 (TOTN, TOTP/421195, 421879) Department: 3 - Conventionals Move Date: 09-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64348-1	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-1	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-2	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-2	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-3	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-3	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-4	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-4	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-5	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-5	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-6	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-6	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-7	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64348-7	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	1/26/2016	1/28/2016	1/29/2016	
L64561-1	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	1/25/2016	1/28/2016	1/29/2016	
L64561-2	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	1/25/2016	1/28/2016	1/29/2016	

L64605-1	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-2	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-3	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-3	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-4	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-4	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-5	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-5	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-6	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-6	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-8	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-8	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-9	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-9	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-10	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-10	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-11	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-11	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-12	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-12	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-13	421195-150	Beaver Lake	CVTOTN	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64605-13	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64606-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64606-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	1/20/2016	1/28/2016	1/29/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/21/2016	1/28/2016	1/29/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/21/2016	1/28/2016	1/29/2016	FREP @ L64648-1
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/21/2016	1/28/2016	1/29/2016	FREP @ L64648-1
WG144142-1	MB		CVTOTN	BLANK WTR		1/28/2016	1/29/2016	MB1 01/28/16 11:15
WG144142-1	MB		CVTOTP	BLANK WTR		1/28/2016	1/29/2016	MB1 01/28/16 11:15
WG144142-2	SB		CVTOTN	BLANK WTR		1/28/2016	1/29/2016	WG144142-1
WG144142-2	SB		CVTOTP	BLANK WTR		1/28/2016	1/29/2016	WG144142-1
WG144142-3	LCS		CVTOTN	BLANK WTR		1/28/2016	1/29/2016	LEVEL1

WG144142-3	LCS	CVTOTP	BLANK WTR	1/28/2016	1/29/2016	LEVEL1
WG144142-4	LD	CVTOTN	FRESH WTR	1/28/2016	1/29/2016	L64605-3
WG144142-4	LD	CVTOTP	FRESH WTR	1/28/2016	1/29/2016	L64605-3
WG144142-5	MS	CVTOTN	FRESH WTR	1/28/2016	1/29/2016	L64605-4
WG144142-5	MS	CVTOTP	FRESH WTR	1/28/2016	1/29/2016	L64605-4
WG144142-6	LD	CVTOTN	STORM WTR	1/28/2016	1/29/2016	L64648-1
WG144142-6	LD	CVTOTP	STORM WTR	1/28/2016	1/29/2016	L64648-1
WG144142-7	MS	CVTOTN	STORM WTR	1/28/2016	1/29/2016	L64648-3
WG144142-7	MS	CVTOTP	STORM WTR	1/28/2016	1/29/2016	L64648-3
WG144142-8	MB	CVTOTN	BLANK WTR	1/28/2016	1/29/2016	MB2 01/28/16 11:15
WG144142-8	MB	CVTOTP	BLANK WTR	1/28/2016	1/29/2016	MB2 01/28/16 11:15
WG144142-9	LCS	CVTOTN	BLANK WTR	1/28/2016	1/29/2016	LEVEL1
WG144142-9	LCS	CVTOTP	BLANK WTR	1/28/2016	1/29/2016	LEVEL1
WG144142-10	LD	CVTOTN	FRESH WTR	1/28/2016	1/29/2016	L64348-1
WG144142-10	LD	CVTOTP	FRESH WTR	1/28/2016	1/29/2016	L64348-1
WG144142-11	MS	CVTOTN	FRESH WTR	1/28/2016	1/29/2016	L64348-1
WG144142-11	MS	CVTOTP	FRESH WTR	1/28/2016	1/29/2016	L64348-1

WG144182 (nutrients) Department: 3 - Conventionals Move Date: 28-JAN-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64503-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVNH3-FL	GRND WTR	1/22/2016	1/22/2016	1/26/2016	
L64561-1	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-1	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-1	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-2	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-2	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-2	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-3	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	BLANK WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-3	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	BLANK WTR	1/25/2016	1/26/2016	1/26/2016	
L64561-3	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	BLANK WTR	1/25/2016	1/26/2016	1/26/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/21/2016	1/22/2016	1/26/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/21/2016	1/22/2016	1/26/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/21/2016	1/22/2016	1/26/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/21/2016	1/22/2016	1/26/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/21/2016	1/22/2016	1/26/2016	FREP @ L64648-1
L64657-1	421185-100	Elliot West CSO Plant	CVNO23	EFFLUENT	1/21/2016	1/22/2016	1/26/2016	
L64658-1	421185-300	Alki CSO Plant	CVNO23	EFFLUENT	1/21/2016	1/22/2016	1/26/2016	
L64659-1	421185-200	Carkeek CSO Plant	CVNO23	EFFLUENT	1/21/2016	1/22/2016	1/26/2016	
L64685-1	421185-200	Carkeek CSO Plant	CVNO23	EFFLUENT	1/22/2016	1/26/2016	1/26/2016	

WG144182-1	MB	CVNH3-FL	BLANK WTR	1/26/2016	1/26/2016	CONNUTS1
WG144182-1	MB	CVNO23	BLANK WTR	1/26/2016	1/26/2016	CONNUTS1
WG144182-1	MB	CVORTHOP	BLANK WTR	1/26/2016	1/26/2016	CONNUTS1
WG144182-2	SB	CVNH3-FL	BLANK WTR	1/26/2016	1/26/2016	WG144182-1
WG144182-2	SB	CVNO23	BLANK WTR	1/26/2016	1/26/2016	WG144182-1
WG144182-2	SB	CVORTHOP	BLANK WTR	1/26/2016	1/26/2016	WG144182-1
WG144182-3	LCS	CVNH3-FL	BLANK WTR	1/26/2016	1/26/2016	LEVEL1
WG144182-3	LCS	CVNO23	BLANK WTR	1/26/2016	1/26/2016	LEVEL1
WG144182-3	LCS	CVORTHOP	BLANK WTR	1/26/2016	1/26/2016	LEVEL1
WG144182-4	LD	CVNH3-FL	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-4	LD	CVNO23	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-4	LD	CVORTHOP	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-5	MS	CVNH3-FL	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-5	MS	CVNO23	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-5	MS	CVORTHOP	BLANK WTR	1/26/2016	1/26/2016	L64561-3
WG144182-6	MB	CVNO23	BLANK WTR	1/22/2016	1/26/2016	CONNUTS1
WG144182-7	LD	CVNO23	EFFLUENT	1/22/2016	1/26/2016	L64658-1
WG144182-8	MS	CVNO23	EFFLUENT	1/22/2016	1/26/2016	L64658-1
WG144182-9	MB	CVNH3-FL	BLANK WTR	1/22/2016	1/26/2016	CONNUTS1
WG144182-10	SB	CVNH3-FL	BLANK WTR	1/22/2016	1/26/2016	WG144182-9
WG144182-11	MB	CVNH3-FL	BLANK WTR	1/22/2016	1/26/2016	CONNUTS1
WG144182-12	SB	CVNH3-FL	BLANK WTR	1/22/2016	1/26/2016	WG144182-11
WG144182-13	LD	CVNH3-FL	GRND WTR	1/22/2016	1/26/2016	L64503-4
WG144182-14	MS	CVNH3-FL	GRND WTR	1/22/2016	1/26/2016	L64503-4
WG144182-15	LD	CVNH3-FL	STORM WTR	1/22/2016	1/26/2016	L64648-5
WG144182-16	MS	CVNH3-FL	STORM WTR	1/22/2016	1/26/2016	L64648-5

WG144194 (TSS) Department: 3 - Conventionals Move Date: 05-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64348-1	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-2	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-3	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-4	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-5	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-6	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64348-7	421874-100	City of Shoreline Monthly Water Quality Mor	CVTSS	FRESH WTR	1/26/2016	1/27/2016	1/27/2016	
L64503-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	1/22/2016	1/27/2016	1/27/2016	
L64512-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	

L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/21/2016	1/27/2016	1/27/2016	FREP @ L64648-1
WG144194-1	MB		CVTSS	BLANK WTR		1/27/2016	1/27/2016	MB1 1/27
WG144194-2	LCS		CVTSS	BLANK WTR		1/27/2016	1/27/2016	LEVEL1
WG144194-3	LD		CVTSS	STORM WTR		1/27/2016	1/27/2016	L64648-9
WG144194-4	LD		CVTSS	GRND WTR		1/27/2016	1/27/2016	L64503-4
WG144194-5	LD		CVTSS	FRESH WTR		1/27/2016	1/27/2016	L64348-5

WG144296 (Assorted ALK: 2/2/16) Department: 3 - Conventionals Move Date: 03-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64503-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	1/22/2016	2/2/2016	2/2/2016	
L64529-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	1/29/2016	2/2/2016	2/2/2016	
L64641-4	421193	Department of Health - General	CVALK	FRESH WTR	1/22/2016	2/2/2016	2/2/2016	
L64641-5	421193	Department of Health - General	CVALK	FRESH WTR	1/22/2016	2/2/2016	2/2/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/21/2016	2/2/2016	2/2/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/21/2016	2/2/2016	2/2/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/21/2016	2/2/2016	2/2/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/21/2016	2/2/2016	2/2/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/21/2016	2/2/2016	2/2/2016	FREP @ L64648-1
L64684-1	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	1/28/2016	2/2/2016	2/2/2016	
L64684-2	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	1/28/2016	2/2/2016	2/2/2016	
L64684-3	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	1/28/2016	2/2/2016	2/2/2016	
L64691-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	FRESH WTR	1/26/2016	2/2/2016	2/2/2016	
L64691-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/26/2016	2/2/2016	2/2/2016	
L64691-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	1/26/2016	2/2/2016	2/2/2016	
L64692-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	FRESH WTR	1/27/2016	2/2/2016	2/2/2016	
L64717-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	CVALK	GRND WTR	2/1/2016	2/2/2016	2/2/2016	
L64717-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	CVALK	GRND WTR	2/1/2016	2/2/2016	2/2/2016	
L64717-4	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	CVALK	GRND WTR	2/1/2016	2/2/2016	2/2/2016	
L64717-5	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	CVALK	GRND WTR	2/1/2016	2/2/2016	2/2/2016	
WG144296-1	LCS		CVALK	BLANK WTR		2/2/2016	2/2/2016	LEVEL3
WG144296-2	LD		CVALK	GRND WTR		2/2/2016	2/2/2016	L64717-5
WG144296-3	LD		CVALK	STORM WTR		2/2/2016	2/2/2016	L64648-7
WG144296-4	LD		CVALK	FRESH WTR		2/2/2016	2/2/2016	L64641-5
WG144296-5	LCS		CVALK	BLANK WTR		2/2/2016	2/2/2016	LEVEL1
WG144296-6	LCS		CVALK	BLANK WTR		2/2/2016	2/2/2016	LEVEL2
WG144296-7	LCS		CVALK	BLANK WTR		2/2/2016	2/2/2016	LEVEL3

WG144296-8	LCS		CVALK	BLANK WTR		2/2/2016	2/2/2016	LEVEL4

WG144698 (TSS) Department: 3 - Conventionals Move Date: 08-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64714-1	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64714-2	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64714-3	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64714-4	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64714-5	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/1/2016	3/2/2016	3/2/2016	
WG144698-1	MB		CVTSS	BLANK WTR		3/2/2016	3/2/2016	
WG144698-2	LCS		CVTSS	BLANK WTR		3/2/2016	3/2/2016	LEVEL1
WG144698-3	LD		CVTSS	STORM WTR		3/2/2016	3/2/2016	L64714-4
WG144698-4	LD		CVTSS	STORM WTR		3/2/2016	3/2/2016	L64921-5

WG144716 (DISSNUTS) Department: 3 - Conventionals Move Date: 25-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64714-1	421195-180	Mercer Island Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-1	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-2	421195-180	Mercer Island Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-2	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-3	421195-180	Mercer Island Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-3	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-4	421195-180	Mercer Island Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-4	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-5	421195-180	Mercer Island Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-5	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64714-6	421195-180	Mercer Island Stormwater Monitoring	CVNO23	BLANK WTR	3/1/2016	3/9/2016	3/9/2016	FFB
L64714-6	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	BLANK WTR	3/1/2016	3/9/2016	3/9/2016	FFB

L64894-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-2	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-3	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-3	421195-150	Beaver Lake	CVNO23	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-3	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-4	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-4	421195-150	Beaver Lake	CVNO23	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64894-4	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	3/2/2016	3/9/2016	3/9/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/1/2016	3/9/2016	3/9/2016	
WG144716-1	MB		CVNH3-FL	BLANK WTR		3/9/2016	3/9/2016	MB1 3/8/16
WG144716-1	MB		CVNO23	BLANK WTR		3/9/2016	3/9/2016	MB1 3/8/16
WG144716-1	MB		CVORTHOP	BLANK WTR		3/9/2016	3/9/2016	MB1 3/8/16
WG144716-2	SB		CVNH3-FL	BLANK WTR		3/9/2016	3/9/2016	WG144716-1
WG144716-2	SB		CVNO23	BLANK WTR		3/9/2016	3/9/2016	WG144716-1
WG144716-2	SB		CVORTHOP	BLANK WTR		3/9/2016	3/9/2016	WG144716-1

WG144716-3	LCS	CVNH3-FL	BLANK WTR	3/9/2016	3/9/2016	LEVEL1
WG144716-3	LCS	CVNO23	BLANK WTR	3/9/2016	3/9/2016	LEVEL1
WG144716-3	LCS	CVORTHOP	BLANK WTR	3/9/2016	3/9/2016	LEVEL1
WG144716-4	LD	CVORTHOP	FRESH WTR	3/9/2016	3/9/2016	L64894-1
WG144716-5	MS	CVORTHOP	FRESH WTR	3/9/2016	3/9/2016	L64894-1
WG144716-6	LD	CVNO23	STORM WTR	3/9/2016	3/9/2016	L64714-4
WG144716-6	LD	CVORTHOP	STORM WTR	3/9/2016	3/9/2016	L64714-4
WG144716-7	MS	CVNO23	STORM WTR	3/9/2016	3/9/2016	L64714-4
WG144716-7	MS	CVORTHOP	STORM WTR	3/9/2016	3/9/2016	L64714-4
WG144716-8	LD	CVNH3-FL	STORM WTR	3/9/2016	3/9/2016	L64921-11
WG144716-8	LD	CVNO23	STORM WTR	3/9/2016	3/9/2016	L64921-11
WG144716-8	LD	CVORTHOP	STORM WTR	3/9/2016	3/9/2016	L64921-11
WG144716-9	MS	CVNH3-FL	STORM WTR	3/9/2016	3/9/2016	L64921-11
WG144716-9	MS	CVNO23	STORM WTR	3/9/2016	3/9/2016	L64921-11
WG144716-9	MS	CVORTHOP	STORM WTR	3/9/2016	3/9/2016	L64921-11

WG144755 (Total Nuts/421195,421422,) Department: 3 - Conventionals Move Date: 16-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64450-1	421195-150	Beaver Lake	CVTOTP	STORM WTR	2/29/2016	3/4/2016	3/8/2016	
L64450-2	421195-150	Beaver Lake	CVTOTP	STORM WTR	2/29/2016	3/4/2016	3/8/2016	
L64714-1	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-1	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-2	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-2	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-3	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-3	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-4	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-4	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-5	421195-180	Mercer Island Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64714-5	421195-180	Mercer Island Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64835-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/25/2016	3/4/2016	3/8/2016	
L64835-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/25/2016	3/4/2016	3/8/2016	
L64835-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/25/2016	3/4/2016	3/8/2016	
L64864-1	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	3/1/2016	3/4/2016	3/8/2016	
L64864-3	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	3/1/2016	3/4/2016	3/8/2016	
L64894-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	3/2/2016	3/4/2016	3/8/2016	
L64894-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	3/2/2016	3/4/2016	3/8/2016	
L64894-3	421195-150	Beaver Lake	CVTOTP	FRESH WTR	3/2/2016	3/4/2016	3/8/2016	
L64894-4	421195-150	Beaver Lake	CVTOTP	FRESH WTR	3/2/2016	3/4/2016	3/8/2016	

L64906-1	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	3/2/2016	3/4/2016	3/8/2016	
L64906-1	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	3/2/2016	3/4/2016	3/8/2016	
L64906-2	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	3/2/2016	3/4/2016	3/8/2016	
L64906-2	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	3/2/2016	3/4/2016	3/8/2016	
L64906-3	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	3/3/2016	3/4/2016	3/8/2016	
L64906-3	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	3/3/2016	3/4/2016	3/8/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/1/2016	3/4/2016	3/8/2016	
WG144755-1	MB		CVTOTN	BLANK WTR		3/4/2016	3/8/2016	MB1 03/04/16 11:15
WG144755-1	MB		CVTOTP	BLANK WTR		3/4/2016	3/8/2016	MB1 03/04/16 11:15
WG144755-2	SB		CVTOTN	BLANK WTR		3/4/2016	3/8/2016	WG144755-1
WG144755-2	SB		CVTOTP	BLANK WTR		3/4/2016	3/8/2016	WG144755-1
WG144755-3	LCS		CVTOTN	BLANK WTR		3/4/2016	3/8/2016	LEVEL1
WG144755-3	LCS		CVTOTP	BLANK WTR		3/4/2016	3/8/2016	LEVEL1
WG144755-4	LD		CVTOTN	STORM WTR		3/4/2016	3/8/2016	L64921-3
WG144755-4	LD		CVTOTP	STORM WTR		3/4/2016	3/8/2016	L64921-3
WG144755-5	MS		CVTOTN	STORM WTR		3/4/2016	3/8/2016	L64921-3
WG144755-5	MS		CVTOTP	STORM WTR		3/4/2016	3/8/2016	L64921-3
WG144755-6	MB		CVTOTN	BLANK WTR		3/4/2016	3/8/2016	MB2 03/04/16 11:15
WG144755-6	MB		CVTOTP	BLANK WTR		3/4/2016	3/8/2016	MB2 03/04/16 11:15
WG144755-7	LCS		CVTOTN	BLANK WTR		3/4/2016	3/8/2016	LEVEL1
WG144755-7	LCS		CVTOTP	BLANK WTR		3/4/2016	3/8/2016	LEVEL1
WG144755-8	LD		CVTOTP	EFFLUENT		3/4/2016	3/8/2016	L64864-3
WG144755-9	MS		CVTOTP	EFFLUENT		3/4/2016	3/8/2016	L64864-3
WG144755-10	LD		CVTOTP	FRESH WTR		3/4/2016	3/8/2016	L64835-3

WG144755-11 MS	CVTOTP	FRESH WTR	3/4/2016	3/8/2016	L64835-3
WG144755-12 LD	CVTOTN	GRND WTR	3/4/2016	3/8/2016	L64906-1
WG144755-12 LD	CVTOTP	GRND WTR	3/4/2016	3/8/2016	L64906-1
WG144755-13 MS	CVTOTN	GRND WTR	3/4/2016	3/8/2016	L64906-1
WG144755-13 MS	CVTOTP	GRND WTR	3/4/2016	3/8/2016	L64906-1

WG144865 (TSS) Department: 3 - Conventionals Move Date: 22-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64679-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64880-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64880-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64881-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64881-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64881-7	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64881-8	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64882-7	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64882-9	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64882-10	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64882-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/9/2016	3/11/2016	3/11/2016	
L64882-12	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64883-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64883-12	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64906-4	421195-240	Horseshoe Lake WQ	CVTSS	GRND WTR	3/10/2016	3/11/2016	3/11/2016	
L64947-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTSS	FRESH WTR	3/10/2016	3/11/2016	3/11/2016	
L64947-3	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTSS	FRESH WTR	3/10/2016	3/11/2016	3/11/2016	
L64962-3	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	3/11/2016	3/11/2016	3/11/2016	
L64962-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	3/11/2016	3/11/2016	3/11/2016	
L64965-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	3/11/2016	3/11/2016	3/11/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	

L65007-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	
L65007-8	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/9/2016	3/11/2016	3/11/2016	FREP @ 65007-3
WG144865-1	MB		CVTSS	BLANK WTR		3/11/2016	3/11/2016	
WG144865-2	LCS		CVTSS	BLANK WTR		3/11/2016	3/11/2016	LEVEL1
WG144865-3	LD		CVTSS	STORM WTR		3/11/2016	3/11/2016	L64679-1
WG144865-4	LD		CVTSS	GRND WTR		3/11/2016	3/11/2016	L64906-4
WG144865-5	LD		CVTSS	FRESH WTR		3/11/2016	3/11/2016	L64947-1
WG144865-6	MB		CVTSS	BLANK WTR		3/11/2016	3/11/2016	
WG144865-7	LCS		CVTSS	BLANK WTR		3/11/2016	3/11/2016	LEVEL1
WG144865-8	LD		CVTSS	STORM WTR		3/11/2016	3/11/2016	L65007-1

WG144930 (T.Nutrients/Various) Department: 3 - Conventionals Move Date: 25-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64906-4	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	3/10/2016	3/15/2016	3/16/2016	
L64906-4	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	3/10/2016	3/15/2016	3/16/2016	
L64947-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	3/10/2016	3/15/2016	3/16/2016	
L64947-3	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	3/10/2016	3/15/2016	3/16/2016	
L64948-1	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-1	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-2	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-2	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-3	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-3	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-4	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-4	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-5	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-5	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-6	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-6	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-7	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-7	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-8	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-8	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-9	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	
L64948-9	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016	

L64948-10	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64948-10	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64948-11	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64948-11	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64948-12	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64948-12	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	3/7/2016	3/15/2016	3/16/2016
L64949-1	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-1	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-2	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-2	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-3	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-3	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-4	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-4	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-5	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-5	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-6	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-6	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-8	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-8	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-9	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-9	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-10	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-10	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-11	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-11	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-12	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-12	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-13	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-13	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-14	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-14	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-15	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-15	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-16	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-16	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-17	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-17	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-19	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-19	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-20	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016

L64949-20	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-21	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-21	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-22	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-22	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-23	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-23	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-24	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-24	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-25	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-25	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-26	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-26	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-27	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-27	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-28	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-28	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-29	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-29	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-31	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64949-31	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/14/2016	3/15/2016	3/16/2016
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L65007-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016
L65007-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016

L65007-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	
L65007-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	3/9/2016	3/15/2016	3/16/2016	FREP @ 65007-3
L65007-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	3/9/2016	3/15/2016	3/16/2016	FREP @ 65007-3
WG144755-12	LD		CVTOTN	GRND WTR		3/4/2016	3/8/2016	L64906-1
WG144755-12	LD		CVTOTP	GRND WTR		3/4/2016	3/8/2016	L64906-1
WG144755-13	MS		CVTOTN	GRND WTR		3/4/2016	3/8/2016	L64906-1
WG144755-13	MS		CVTOTP	GRND WTR		3/4/2016	3/8/2016	L64906-1
WG144930-1	MB		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	MB1 03/15/16 11:35
WG144930-1	MB		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	MB1 03/15/16 11:35
WG144930-2	SB		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	WG144930-1
WG144930-2	SB		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	WG144930-1
WG144930-3	LCS		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	LEVEL1
WG144930-3	LCS		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	LEVEL1
WG144930-4	LD		CVTOTP	FRESH WTR		3/15/2016	3/16/2016	L64947-1
WG144930-5	MS		CVTOTP	FRESH WTR		3/15/2016	3/16/2016	L64947-1
WG144930-6	LD		CVTOTN	STORM WTR		3/15/2016	3/16/2016	L65007-2
WG144930-6	LD		CVTOTP	STORM WTR		3/15/2016	3/16/2016	L65007-2
WG144930-7	MS		CVTOTN	STORM WTR		3/15/2016	3/16/2016	L65007-2
WG144930-7	MS		CVTOTP	STORM WTR		3/15/2016	3/16/2016	L65007-2
WG144930-8	MB		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	MB2 03/15/16 11:35
WG144930-8	MB		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	MB2 03/15/16 11:35
WG144930-9	LCS		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	LEVEL1
WG144930-9	LCS		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	LEVEL1
WG144930-10	LD		CVTOTN	FRESH WTR		3/15/2016	3/16/2016	L64948-6
WG144930-10	LD		CVTOTP	FRESH WTR		3/15/2016	3/16/2016	L64948-6
WG144930-11	MS		CVTOTN	FRESH WTR		3/15/2016	3/16/2016	L64948-6
WG144930-11	MS		CVTOTP	FRESH WTR		3/15/2016	3/16/2016	L64948-6
WG144930-12	MB		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	MB3 03/15/16 11:35
WG144930-12	MB		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	MB3 03/15/16 11:35
WG144930-13	LCS		CVTOTN	BLANK WTR		3/15/2016	3/16/2016	LEVEL1
WG144930-13	LCS		CVTOTP	BLANK WTR		3/15/2016	3/16/2016	LEVEL1

WG144930-14 LD	CVTOTN	FRESH WTR	3/15/2016	3/16/2016	L64949-16
WG144930-14 LD	CVTOTP	FRESH WTR	3/15/2016	3/16/2016	L64949-16
WG144930-15 MS	CVTOTN	FRESH WTR	3/15/2016	3/16/2016	L64949-16
WG144930-15 MS	CVTOTP	FRESH WTR	3/15/2016	3/16/2016	L64949-16

WG144938 (DISSNUT) Department: 3 - Conventionals Move Date: 24-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64864-1	421430-300	OCS-Lake Haven Utility District routine testin	CVNH3-FL	EFFLUENT	3/1/2016	3/10/2016	3/10/2016	
L64864-1	421430-300	OCS-Lake Haven Utility District routine testin	CVORTHOP	EFFLUENT	3/1/2016	3/10/2016	3/10/2016	
L64864-2	421430-300	OCS-Lake Haven Utility District routine testin	CVNO23	EFFLUENT	3/2/2016	3/10/2016	3/10/2016	
L64864-3	421430-300	OCS-Lake Haven Utility District routine testin	CVNH3-FL	EFFLUENT	3/1/2016	3/10/2016	3/10/2016	
L64864-3	421430-300	OCS-Lake Haven Utility District routine testin	CVORTHOP	EFFLUENT	3/1/2016	3/10/2016	3/10/2016	
L64864-4	421430-300	OCS-Lake Haven Utility District routine testin	CVNO23	EFFLUENT	3/2/2016	3/10/2016	3/10/2016	
L64864-5	421430-300	OCS-Lake Haven Utility District routine testin	CVNH3-FL	BLANK WTR	3/2/2016	3/10/2016	3/10/2016	
L64864-5	421430-300	OCS-Lake Haven Utility District routine testin	CVNO23	BLANK WTR	3/2/2016	3/10/2016	3/10/2016	
L64864-5	421430-300	OCS-Lake Haven Utility District routine testin	CVORTHOP	BLANK WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-1	421195-240	Horseshoe Lake WQ	CVNH3-FL	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-1	421195-240	Horseshoe Lake WQ	CVNO23	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-1	421195-240	Horseshoe Lake WQ	CVORTHOP	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-2	421195-240	Horseshoe Lake WQ	CVNH3-FL	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-2	421195-240	Horseshoe Lake WQ	CVNO23	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-2	421195-240	Horseshoe Lake WQ	CVORTHOP	GRND WTR	3/2/2016	3/10/2016	3/10/2016	
L64906-3	421195-240	Horseshoe Lake WQ	CVNH3-FL	GRND WTR	3/3/2016	3/10/2016	3/10/2016	
L64906-3	421195-240	Horseshoe Lake WQ	CVNO23	GRND WTR	3/3/2016	3/10/2016	3/10/2016	
L64906-3	421195-240	Horseshoe Lake WQ	CVORTHOP	GRND WTR	3/3/2016	3/10/2016	3/10/2016	
L64906-4	421195-240	Horseshoe Lake WQ	CVNH3-FL	GRND WTR	3/10/2016	3/10/2016	3/10/2016	
L64906-4	421195-240	Horseshoe Lake WQ	CVNO23	GRND WTR	3/10/2016	3/10/2016	3/10/2016	
L64906-4	421195-240	Horseshoe Lake WQ	CVORTHOP	GRND WTR	3/10/2016	3/10/2016	3/10/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	

L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	3/9/2016	3/10/2016	3/10/2016	
WG144938-1	MB		CVNH3-FL	BLANK WTR		3/10/2016	3/10/2016	MB3 3/10/16
WG144938-1	MB		CVNO23	BLANK WTR		3/10/2016	3/10/2016	MB3 3/10/16
WG144938-1	MB		CVORTHOP	BLANK WTR		3/10/2016	3/10/2016	MB3 3/10/16
WG144938-2	SB		CVNH3-FL	BLANK WTR		3/10/2016	3/10/2016	WG144938-1
WG144938-2	SB		CVNO23	BLANK WTR		3/10/2016	3/10/2016	WG144938-1
WG144938-2	SB		CVORTHOP	BLANK WTR		3/10/2016	3/10/2016	WG144938-1
WG144938-3	LCS		CVNH3-FL	BLANK WTR		3/10/2016	3/10/2016	LEVEL1
WG144938-3	LCS		CVNO23	BLANK WTR		3/10/2016	3/10/2016	LEVEL1
WG144938-3	LCS		CVORTHOP	BLANK WTR		3/10/2016	3/10/2016	LEVEL1
WG144938-4	LD		CVNH3-FL	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-4	LD		CVNO23	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-4	LD		CVORTHOP	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-5	MS		CVNH3-FL	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-5	MS		CVNO23	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-5	MS		CVORTHOP	GRND WTR		3/10/2016	3/10/2016	L64906-3
WG144938-6	LD		CVNH3-FL	EFFLUENT		3/10/2016	3/10/2016	L64864-1
WG144938-6	LD		CVORTHOP	EFFLUENT		3/10/2016	3/10/2016	L64864-1
WG144938-7	MS		CVNH3-FL	EFFLUENT		3/10/2016	3/10/2016	L64864-1
WG144938-7	MS		CVORTHOP	EFFLUENT		3/10/2016	3/10/2016	L64864-1
WG144938-8	LD		CVNO23	EFFLUENT		3/10/2016	3/10/2016	L64864-4
WG144938-9	MS		CVNO23	EFFLUENT		3/10/2016	3/10/2016	L64864-4
WG144938-10	LD		CVNH3-FL	STORM WTR		3/10/2016	3/10/2016	L64999-7
WG144938-10	LD		CVNO23	STORM WTR		3/10/2016	3/10/2016	L64999-7
WG144938-10	LD		CVORTHOP	STORM WTR		3/10/2016	3/10/2016	L64999-7
WG144938-11	MS		CVNH3-FL	STORM WTR		3/10/2016	3/10/2016	L64999-7

WG144938-11 MS	CVNO23	STORM WTR	3/10/2016	3/10/2016	L64999-7	
WG144938-11 MS	CVORTHOP	STORM WTR	3/10/2016	3/10/2016	L64999-7	

WG145096 (Assorted ALK: 3/22/16) Department: 3 - Conventionals Move Date: 24-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64880-9	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64880-9	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64880-10	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/15/2016	3/22/2016	3/22/2016	
L64880-10	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/15/2016	3/22/2016	3/22/2016	
L64880-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64880-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64881-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64881-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64881-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64881-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64882-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64882-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/16/2016	3/22/2016	3/22/2016	
L64883-13	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK	GRND WTR	3/14/2016	3/22/2016	3/22/2016	
L64883-13	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVALK-BI	GRND WTR	3/14/2016	3/22/2016	3/22/2016	
L64934-1	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	3/17/2016	3/22/2016	3/22/2016	
L64934-2	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	3/17/2016	3/22/2016	3/22/2016	
L64934-3	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	3/17/2016	3/22/2016	3/22/2016	
L64934-4	421195-240	Horseshoe Lake WQ	CVALK	FRESH WTR	3/17/2016	3/22/2016	3/22/2016	
L64941-3	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVALK	GRND WTR	3/17/2016	3/22/2016	3/22/2016	
L64941-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVALK	GRND WTR	3/17/2016	3/22/2016	3/22/2016	
L64962-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVALK	GRND WTR	3/17/2016	3/22/2016	3/22/2016	
L64968-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/17/2016	3/22/2016	3/22/2016	
L64968-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/17/2016	3/22/2016	3/22/2016	
L64969-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/18/2016	3/22/2016	3/22/2016	
L64969-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/18/2016	3/22/2016	3/22/2016	
L64983-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/21/2016	3/22/2016	3/22/2016	
L64983-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVALK	GRND WTR	3/21/2016	3/22/2016	3/22/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	3/9/2016	3/22/2016	3/22/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVALK	STORM WTR	3/9/2016	3/22/2016	3/22/2016	
L65000-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65001-1	421195-190	Vashon Island Surface Water	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65001-2	421195-190	Vashon Island Surface Water	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65001-3	421195-190	Vashon Island Surface Water	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65001-4	421195-190	Vashon Island Surface Water	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	

L65017-1	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65017-2	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65017-3	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65017-4	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65017-5	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65017-6	421240A	STREAMS MONITOR (surf wtr)	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65030-1	421240-880	Pipers Creek Micro Source Tracking Study	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65030-2	421240-880	Pipers Creek Micro Source Tracking Study	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
L65030-3	421240-880	Pipers Creek Micro Source Tracking Study	CVALK	FRESH WTR	3/16/2016	3/22/2016	3/22/2016	
WG145096-1	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL3
WG145096-2	LD		CVALK	GRND WTR		3/22/2016	3/22/2016	L64882-1
WG145096-2	LD		CVALK-BI	GRND WTR		3/22/2016	3/22/2016	L64882-1
WG145096-3	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL3
WG145096-4	LD		CVALK	STORM WTR		3/22/2016	3/22/2016	L64999-3
WG145096-5	LD		CVALK	FRESH WTR		3/22/2016	3/22/2016	L65017-4
WG145096-6	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL1
WG145096-7	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL2
WG145096-8	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL3
WG145096-9	LCS		CVALK	BLANK WTR		3/22/2016	3/22/2016	LEVEL4

WG146466 (TSS/VSS) Department: 3 - Conventionals Move Date: 06-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65517-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/23/2016	6/27/2016	6/27/2016	
L65549-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/23/2016	6/27/2016	6/27/2016	
L65551-1	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVTSS	LEACHATE	6/22/2016	6/27/2016	6/27/2016	
L65551-1	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVVSS	LEACHATE	6/22/2016	6/27/2016	6/28/2016	
L65551-3	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVTSS	LEACHATE	6/22/2016	6/27/2016	6/27/2016	
L65551-3	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVVSS	LEACHATE	6/22/2016	6/27/2016	6/28/2016	
L65553-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/23/2016	6/27/2016	6/27/2016	
L65553-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/23/2016	6/27/2016	6/27/2016	
L65553-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/24/2016	6/27/2016	6/27/2016	
L65554-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/24/2016	6/27/2016	6/27/2016	
L65554-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/24/2016	6/27/2016	6/27/2016	
L65647-1	421301A	Georgetown Yard Industiral SW Monitoring	CVTSS	STORM WTR	6/23/2016	6/27/2016	6/27/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	6/23/2016	6/27/2016	6/27/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	6/23/2016	6/27/2016	6/27/2016	
WG146466-1	MB		CVTSS	BLANK WTR		6/27/2016	6/27/2016	MB1 160627
WG146466-1	MB		CVVSS	BLANK WTR		6/27/2016	6/28/2016	MB1 160627
WG146466-2	LCS		CVTSS	BLANK WTR		6/27/2016	6/27/2016	LEVEL2

WG146466-2	LCS	CVVSS	BLANK WTR	6/27/2016	6/28/2016	LEVEL2
WG146466-3	LD	CVTSS	GRND WTR	6/27/2016	6/27/2016	L65517-1
WG146466-4	LD	CVTSS	LEACHATE	6/27/2016	6/27/2016	L65551-1
WG146466-4	LD	CVVSS	LEACHATE	6/27/2016	6/28/2016	L65551-1
WG146466-5	LD	CVTSS	STORM WTR	6/27/2016	6/27/2016	L65647-1

WG146495 (NUTS-28) Department: 3 - Conventionals Move Date: 05-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65519-1	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-1	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-1	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-2	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-2	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-2	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-3	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	BLANK WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-3	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	BLANK WTR	6/23/2016	6/28/2016	6/28/2016	
L65519-3	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	BLANK WTR	6/23/2016	6/28/2016	6/28/2016	
L65544-43	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-44	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-46	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-47	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-48	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-49	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-50	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/16/2016	6/28/2016	6/28/2016	
L65544-52	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	6/16/2016	6/28/2016	6/28/2016	FFB
L65619-1	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-1	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-1	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-2	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-2	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-2	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-5	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-5	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-5	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-6	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-6	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-6	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-8	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-8	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	

L65619-8	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-9	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-9	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-9	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-10	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-10	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-10	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-11	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-11	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-11	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-12	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-12	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-12	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-13	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-13	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-13	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-14	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-14	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-14	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-15	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-15	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-15	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-16	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-16	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-16	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-17	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-17	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-17	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-21	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-21	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-21	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-22	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-22	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-22	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-23	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-23	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-23	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-24	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-24	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-24	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016
L65619-25	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016

L65619-25	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-25	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-26	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-26	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65619-26	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	6/27/2016	6/28/2016	6/28/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	6/23/2016	6/28/2016	6/28/2016	
L65650-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	6/24/2016	6/28/2016	6/28/2016	
L65650-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	6/24/2016	6/28/2016	6/28/2016	
L65650-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	6/24/2016	6/28/2016	6/28/2016	
WG146495-1	MB		CVNH3-FL	BLANK WTR		6/28/2016	6/28/2016	MB1 6/28
WG146495-1	MB		CVNO23	BLANK WTR		6/28/2016	6/28/2016	MB1 6/28
WG146495-1	MB		CVORTHOP	BLANK WTR		6/28/2016	6/28/2016	MB1 6/28
WG146495-2	SB		CVNH3-FL	BLANK WTR		6/28/2016	6/28/2016	WG146495-1
WG146495-2	SB		CVNO23	BLANK WTR		6/28/2016	6/28/2016	WG146495-1
WG146495-2	SB		CVORTHOP	BLANK WTR		6/28/2016	6/28/2016	WG146495-1
WG146495-3	LCS		CVNH3-FL	BLANK WTR		6/28/2016	6/28/2016	LEVEL1
WG146495-3	LCS		CVNO23	BLANK WTR		6/28/2016	6/28/2016	LEVEL1
WG146495-3	LCS		CVORTHOP	BLANK WTR		6/28/2016	6/28/2016	LEVEL1
WG146495-6	LD		CVORTHOP	FRESH WTR		6/28/2016	6/28/2016	L65544-49
WG146495-7	MS		CVORTHOP	FRESH WTR		6/28/2016	6/28/2016	L65544-49
WG146495-8	LD		CVNH3-FL	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-8	LD		CVNO23	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-8	LD		CVORTHOP	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-9	MS		CVNH3-FL	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-9	MS		CVNO23	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-9	MS		CVORTHOP	FRESH WTR		6/28/2016	6/28/2016	L65519-1
WG146495-10	LD		CVNH3-FL	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-10	LD		CVNO23	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-10	LD		CVORTHOP	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-11	MS		CVNH3-FL	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-11	MS		CVNO23	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-11	MS		CVORTHOP	STORM WTR		6/28/2016	6/28/2016	L65650-1
WG146495-12	MB		CVNH3-FL	BLANK WTR		6/28/2016	6/28/2016	MB2
WG146495-12	MB		CVNO23	BLANK WTR		6/28/2016	6/28/2016	MB2
WG146495-12	MB		CVORTHOP	BLANK WTR		6/28/2016	6/28/2016	MB2
WG146495-13	LCS		CVNH3-FL	BLANK WTR		6/28/2016	6/28/2016	LEVEL1

WG146495-13	LCS	CVNO23	BLANK WTR	6/28/2016	6/28/2016	LEVEL1
WG146495-13	LCS	CVORTHOP	BLANK WTR	6/28/2016	6/28/2016	LEVEL1
WG146495-14	LD	CVNH3-FL	FRESH WTR	6/28/2016	6/28/2016	L65619-11
WG146495-14	LD	CVNO23	FRESH WTR	6/28/2016	6/28/2016	L65619-11
WG146495-14	LD	CVORTHOP	FRESH WTR	6/28/2016	6/28/2016	L65619-11
WG146495-15	MS	CVNH3-FL	FRESH WTR	6/28/2016	6/28/2016	L65619-11
WG146495-15	MS	CVNO23	FRESH WTR	6/28/2016	6/28/2016	L65619-11
WG146495-15	MS	CVORTHOP	FRESH WTR	6/28/2016	6/28/2016	L65619-11

WG146500 (T Nutrients/Various) Department: 3 - Conventionals Move Date: 06-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65510-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65510-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65510-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65510-6	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65519-1	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	6/23/2016	6/28/2016	7/1/2016	
L65519-2	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	6/23/2016	6/28/2016	7/1/2016	
L65619-1	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-1	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-2	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-2	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-3	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-3	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-4	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-4	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-5	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-5	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-6	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-6	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-8	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-8	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-9	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-9	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-10	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-10	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-11	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-11	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-12	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65619-12	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	

L65619-13	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-13	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-14	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-14	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-15	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-15	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-16	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-16	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-17	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-17	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-19	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-19	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-20	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-20	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-21	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-21	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-22	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-22	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-23	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-23	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-24	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-24	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-25	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-25	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-26	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-26	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-27	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-27	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-28	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-28	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-29	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-29	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-31	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-31	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-32	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-32	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-33	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-33	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-34	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-34	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016
L65619-35	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/27/2016	6/28/2016	7/1/2016

L65619-35	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	6/27/2016	6/28/2016	7/1/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	6/23/2016	6/28/2016	7/1/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	6/23/2016	6/28/2016	7/1/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	6/23/2016	6/28/2016	7/1/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	6/23/2016	6/28/2016	7/1/2016	
WG146500-1	MB		CVTOTN	BLANK WTR		6/28/2016	7/1/2016	MB1 06/28/16 12:05
WG146500-1	MB		CVTOTP	BLANK WTR		6/28/2016	7/1/2016	MB1 06/28/16 12:05
WG146500-2	SB		CVTOTN	BLANK WTR		6/28/2016	7/1/2016	WG146500-1
WG146500-2	SB		CVTOTP	BLANK WTR		6/28/2016	7/1/2016	WG146500-1
WG146500-3	LCS		CVTOTN	BLANK WTR		6/28/2016	7/1/2016	LEVEL1
WG146500-3	LCS		CVTOTP	BLANK WTR		6/28/2016	7/1/2016	LEVEL1
WG146500-4	LD		CVTOTN	FRESH WTR		6/28/2016	7/1/2016	L65619-12
WG146500-4	LD		CVTOTP	FRESH WTR		6/28/2016	7/1/2016	L65619-12
WG146500-5	MS		CVTOTN	FRESH WTR		6/28/2016	7/1/2016	L65619-12
WG146500-5	MS		CVTOTP	FRESH WTR		6/28/2016	7/1/2016	L65619-12
WG146500-6	MB		CVTOTN	BLANK WTR		6/28/2016	7/1/2016	MB2 06/28/16 12:05
WG146500-6	MB		CVTOTP	BLANK WTR		6/28/2016	7/1/2016	MB2 06/28/16 12:05
WG146500-7	LCS		CVTOTN	BLANK WTR		6/28/2016	7/1/2016	LEVEL1
WG146500-7	LCS		CVTOTP	BLANK WTR		6/28/2016	7/1/2016	LEVEL1
WG146500-8	LD		CVTOTN	FRESH WTR		6/28/2016	7/1/2016	L65619-26
WG146500-8	LD		CVTOTP	FRESH WTR		6/28/2016	7/1/2016	L65619-26
WG146500-9	MS		CVTOTN	FRESH WTR		6/28/2016	7/1/2016	L65619-26
WG146500-9	MS		CVTOTP	FRESH WTR		6/28/2016	7/1/2016	L65619-26
WG146500-10	LD		CVTOTN	STORM WTR		6/28/2016	7/1/2016	L65650-1
WG146500-10	LD		CVTOTP	STORM WTR		6/28/2016	7/1/2016	L65650-1
WG146500-11	MS		CVTOTN	STORM WTR		6/28/2016	7/1/2016	L65650-1
WG146500-11	MS		CVTOTP	STORM WTR		6/28/2016	7/1/2016	L65650-1

WG146688 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 14-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65236-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	7/6/2016	7/7/2016	7/7/2016	
L65236-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	7/6/2016	7/7/2016	7/7/2016	
L65236-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	7/6/2016	7/7/2016	7/7/2016	
L65487-1	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	6/20/2016	6/21/2016	7/7/2016	
L65487-2	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	6/20/2016	6/21/2016	7/7/2016	
L65487-3	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	6/20/2016	6/21/2016	7/7/2016	
L65488-1	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	6/20/2016	6/21/2016	7/7/2016	
L65488-2	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	6/20/2016	6/21/2016	7/7/2016	
L65488-3	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	6/20/2016	6/21/2016	7/7/2016	

L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	6/23/2016	6/24/2016	7/7/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	6/23/2016	7/7/2016	7/7/2016	
WG146688-1	MB		CVTOC	BLANK WTR		7/7/2016	7/7/2016	MB1 7/7/16
WG146688-2	SB		CVTOC	BLANK WTR		7/7/2016	7/7/2016	WG146688-1
WG146688-3	LCS		CVDOC	BLANK WTR		7/7/2016	7/7/2016	LEVEL1
WG146688-3	LCS		CVTOC	BLANK WTR		7/7/2016	7/7/2016	LEVEL1
WG146688-4	LD		CVTOC	GRND WTR		7/7/2016	7/7/2016	L65236-5
WG146688-5	MS		CVTOC	GRND WTR		7/7/2016	7/7/2016	L65236-5
WG146688-6	MB		CVDOC	BLANK WTR		6/21/2016	7/7/2016	MB1 6/21/16
WG146688-7	SB		CVDOC	BLANK WTR		6/21/2016	7/7/2016	WG146688-6
WG146688-8	LD		CVDOC	FRESH WTR		6/21/2016	7/7/2016	L65487-3
WG146688-9	MS		CVDOC	FRESH WTR		6/21/2016	7/7/2016	L65487-3
WG146688-10	LD		CVDOC	STORM WTR		6/24/2016	7/7/2016	L65650-3
WG146688-10	LD		CVTOC	STORM WTR		7/7/2016	7/7/2016	L65650-3
WG146688-11	MS		CVDOC	STORM WTR		6/24/2016	7/7/2016	L65650-3
WG146688-11	MS		CVTOC	STORM WTR		7/7/2016	7/7/2016	L65650-3

WG147783 (T Nutrients/Various) Department: 3 - Conventionals Move Date: 29-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65991-1	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-1	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-2	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-2	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-3	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-3	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-4	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-4	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-5	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-5	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-6	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-6	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-9	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-9	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65991-10	421195-130	Volunteer Lakes City	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65991-10	421195-130	Volunteer Lakes City	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65992-1	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65992-1	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65992-2	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65992-2	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	

L65992-3	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-3	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-4	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016
L65992-4	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016
L65992-5	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-5	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-6	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-6	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-7	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-7	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-8	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-8	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-9	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-9	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-10	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-10	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-11	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-11	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-12	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-12	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-13	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-13	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-14	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-14	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-15	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-15	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-16	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-16	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-17	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-17	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-18	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-18	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-19	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-19	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-20	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-20	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-21	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-21	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016
L65992-22	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016
L65992-22	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016
L65992-23	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/13/2016	9/16/2016

L65992-23	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/13/2016	9/16/2016	
L65992-24	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/11/2016	9/19/2016	9/20/2016	
L65992-24	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/11/2016	9/19/2016	9/20/2016	
L65993-1	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-1	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-2	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-2	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-3	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-3	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-4	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-4	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-5	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-5	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-6	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-6	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-7	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-7	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-8	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-8	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-9	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-9	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-10	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-10	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-11	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-11	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-12	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-12	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L65993-14	422019	WRIA 7 Streams Ambient Monitoring	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	FREP @ L65993-1
L65993-14	422019	WRIA 7 Streams Ambient Monitoring	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	FREP @ L65993-1
L65997-1	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	9/6/2016	9/13/2016	9/16/2016	
L65997-3	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	9/6/2016	9/13/2016	9/16/2016	
L66087-39	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-39	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-40	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-40	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-41	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-41	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-42	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-42	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-43	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-43	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	

L66087-44	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-44	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-46	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-46	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-47	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-47	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-48	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-48	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-49	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-49	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-50	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66087-50	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	9/12/2016	9/13/2016	9/16/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	9/17/2016	9/19/2016	9/20/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	9/17/2016	9/19/2016	9/20/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	9/17/2016	9/19/2016	9/20/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	9/17/2016	9/19/2016	9/20/2016	
WG147783-1	MB		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	MB1 09/13/16 13:00
WG147783-1	MB		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	MB1 09/13/16 13:00
WG147783-2	SB		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	WG147783-1
WG147783-2	SB		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	WG147783-1
WG147783-3	LCS		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-3	LCS		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-4	LD		CVTOTN	FRESH WTR		9/13/2016	9/16/2016	L65991-10
WG147783-4	LD		CVTOTP	FRESH WTR		9/13/2016	9/16/2016	L65991-10
WG147783-5	MS		CVTOTN	FRESH WTR		9/13/2016	9/16/2016	L65991-10
WG147783-5	MS		CVTOTP	FRESH WTR		9/13/2016	9/16/2016	L65991-10
WG147783-6	MB		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	MB2 09/13/16 13:00
WG147783-6	MB		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	MB2 09/13/16 13:00
WG147783-7	LCS		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-7	LCS		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-8	LD		CVTOTN	FRESH WTR		9/19/2016	9/20/2016	L65992-24
WG147783-8	LD		CVTOTP	FRESH WTR		9/19/2016	9/20/2016	L65992-24
WG147783-9	MS		CVTOTN	FRESH WTR		9/19/2016	9/20/2016	L65992-24
WG147783-9	MS		CVTOTP	FRESH WTR		9/19/2016	9/20/2016	L65992-24
WG147783-10	MB		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	MB3 09/13/16 13:00
WG147783-10	MB		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	MB3 09/13/16 13:00
WG147783-11	LCS		CVTOTN	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-11	LCS		CVTOTP	BLANK WTR		9/13/2016	9/16/2016	LEVEL1
WG147783-12	LD		CVTOTN	FRESH WTR		9/13/2016	9/16/2016	L65993-12
WG147783-12	LD		CVTOTP	FRESH WTR		9/13/2016	9/16/2016	L65993-12
WG147783-13	MS		CVTOTN	FRESH WTR		9/13/2016	9/16/2016	L65993-12

WG147783-13	MS	CVTOTP	FRESH WTR	9/13/2016	9/16/2016	L65993-12
WG147783-14	MB	CVTOTN	BLANK WTR	9/19/2016	9/20/2016	MB1 09/19/16 10:25
WG147783-14	MB	CVTOTP	BLANK WTR	9/19/2016	9/20/2016	MB1 09/19/16 10:25
WG147783-15	SB	CVTOTN	BLANK WTR	9/19/2016	9/20/2016	WG147783-14
WG147783-15	SB	CVTOTP	BLANK WTR	9/19/2016	9/20/2016	WG147783-14
WG147783-16	LCS	CVTOTN	BLANK WTR	9/19/2016	9/20/2016	LEVEL1
WG147783-16	LCS	CVTOTP	BLANK WTR	9/19/2016	9/20/2016	LEVEL1
WG147783-17	LD	CVTOTN	STORM WTR	9/19/2016	9/20/2016	L66175-3
WG147783-17	LD	CVTOTP	STORM WTR	9/19/2016	9/20/2016	L66175-3
WG147783-18	MS	CVTOTN	STORM WTR	9/19/2016	9/20/2016	L66175-3
WG147783-18	MS	CVTOTP	STORM WTR	9/19/2016	9/20/2016	L66175-3
WG147783-19	LD	CVTOTP	EFFLUENT	9/13/2016	9/16/2016	L65997-3
WG147783-20	MS	CVTOTP	EFFLUENT	9/13/2016	9/16/2016	L65997-3

WG148004 (TSS+VSS) Department: 3 - Conventionals Move Date: 29-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	9/22/2016	9/23/2016	9/23/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	9/22/2016	9/23/2016	9/23/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	9/22/2016	9/23/2016	9/23/2016	
L65924-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVTSS	LEACHATE	9/21/2016	9/23/2016	9/23/2016	
L65924-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVVSS	LEACHATE	9/21/2016	9/23/2016	9/26/2016	
L66068-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	9/16/2016	9/23/2016	9/23/2016	
L66068-3	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	9/16/2016	9/23/2016	9/23/2016	
L66068-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	9/19/2016	9/23/2016	9/23/2016	
L66068-5	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	9/16/2016	9/23/2016	9/23/2016	
L66068-6	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	9/16/2016	9/23/2016	9/23/2016	
L66109-3	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	9/21/2016	9/23/2016	9/23/2016	
L66109-4	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	9/21/2016	9/23/2016	9/23/2016	
L66109-5	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	9/21/2016	9/23/2016	9/23/2016	
L66109-6	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	9/21/2016	9/23/2016	9/23/2016	
L66109-8	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	9/21/2016	9/23/2016	9/23/2016	
L66111-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	CVTSS	GRND WTR	9/16/2016	9/23/2016	9/23/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	9/17/2016	9/23/2016	9/23/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	9/17/2016	9/23/2016	9/23/2016	
L66210-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVTSS	LEACHATE	9/21/2016	9/23/2016	9/23/2016	
L66210-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVVSS	LEACHATE	9/21/2016	9/23/2016	9/26/2016	
L66210-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVTSS	LEACHATE	9/21/2016	9/23/2016	9/23/2016	
L66210-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVVSS	LEACHATE	9/21/2016	9/23/2016	9/26/2016	
WG148004-1	MB		CVTSS	BLANK WTR		9/23/2016	9/23/2016	

WG148004-1	MB	CVVSS	BLANK WTR	9/23/2016	9/26/2016	
WG148004-2	LCS	CVTSS	BLANK WTR	9/23/2016	9/23/2016	LEVEL2
WG148004-2	LCS	CVVSS	BLANK WTR	9/23/2016	9/26/2016	LEVEL2
WG148004-3	LD	CVTSS	LEACHATE	9/23/2016	9/23/2016	
WG148004-3	LD	CVVSS	LEACHATE	9/23/2016	9/26/2016	
WG148004-4	LD	CVTSS	GRND WTR	9/23/2016	9/23/2016	
WG148004-5	LD	CVTSS	FRESH WTR	9/23/2016	9/23/2016	
WG148004-6	LD	CVTSS	STORM WTR	9/23/2016	9/23/2016	
WG148004-7	LD	CVTSS	SALT WTR	9/23/2016	9/23/2016	

WG148025 (nuts-26) Department: 3 - Conventionals Move Date: 06-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO23	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO3	FRESH WTR	9/22/2016	9/23/2016	9/26/2016	
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVORTHOP	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO23	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO3	FRESH WTR	9/22/2016	9/23/2016	9/26/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVORTHOP	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO23	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNO3	FRESH WTR	9/22/2016	9/23/2016	9/26/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVORTHOP	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	9/17/2016	9/26/2016	9/26/2016	
L66180-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNO3	GRND WTR	9/23/2016	9/23/2016	9/26/2016	
L66181-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNO3	GRND WTR	9/23/2016	9/23/2016	9/26/2016	
L66181-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNO3	GRND WTR	9/23/2016	9/23/2016	9/26/2016	
WG148025-1	MB		CVNO23	BLANK WTR		9/26/2016	9/26/2016	MB1 9/26
WG148025-1	MB		CVNO3	BLANK WTR		9/23/2016	9/26/2016	MB1 9/26
WG148025-1	MB		CVORTHOP	BLANK WTR		9/26/2016	9/26/2016	MB1 9/26
WG148025-2	SB		CVNO23	BLANK WTR		9/26/2016	9/26/2016	WG148025-1
WG148025-2	SB		CVNO3	BLANK WTR		9/23/2016	9/26/2016	WG148025-1
WG148025-2	SB		CVORTHOP	BLANK WTR		9/26/2016	9/26/2016	WG148025-1
WG148025-3	LCS		CVNO23	BLANK WTR		9/26/2016	9/26/2016	LEVEL1
WG148025-3	LCS		CVNO3	BLANK WTR		9/26/2016	9/26/2016	LEVEL1
WG148025-3	LCS		CVORTHOP	BLANK WTR		9/26/2016	9/26/2016	LEVEL1

WG148025-4	LD	CVNO23	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148025-4	LD	CVNO3	FRESH WTR	9/23/2016	9/26/2016	L65922-5
WG148025-4	LD	CVORTHOP	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148025-5	MS	CVNO23	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148025-5	MS	CVNO3	FRESH WTR	9/23/2016	9/26/2016	L65922-5
WG148025-5	MS	CVORTHOP	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148025-6	LD	CVNO23	STORM WTR	9/26/2016	9/26/2016	L66175-1
WG148025-6	LD	CVORTHOP	STORM WTR	9/26/2016	9/26/2016	L66175-1
WG148025-7	MS	CVNO23	STORM WTR	9/26/2016	9/26/2016	L66175-1
WG148025-7	MS	CVORTHOP	STORM WTR	9/26/2016	9/26/2016	L66175-1
WG148025-8	MB	CVNO3	BLANK WTR	9/23/2016	9/26/2016	MB1 9/23
WG148025-9	SB	CVNO3	BLANK WTR	9/23/2016	9/26/2016	WG148025-8
WG148025-10	LD	CVNO3	GRND WTR	9/23/2016	9/26/2016	L66181-1
WG148025-11	MS	CVNO3	GRND WTR	9/23/2016	9/26/2016	L66181-1

WG148128 (TOC - various) Department: 3 - Conventionals Move Date: 03-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	9/22/2016	9/26/2016	9/26/2016	
L65924-3	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	9/21/2016	9/27/2016	9/27/2016	
L66033-1	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	9/19/2016	9/26/2016	9/26/2016	
L66033-2	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	9/19/2016	9/26/2016	9/26/2016	
L66033-3	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	9/19/2016	9/27/2016	9/27/2016	
L66034-1	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	9/19/2016	9/26/2016	9/26/2016	
L66034-2	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	9/19/2016	9/26/2016	9/26/2016	
L66034-3	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	9/19/2016	9/26/2016	9/26/2016	
L66113-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	9/14/2016	9/27/2016	9/27/2016	
L66113-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	9/14/2016	9/27/2016	9/27/2016	
L66113-4	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	9/14/2016	9/27/2016	9/27/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	9/17/2016	9/17/2016	9/26/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66180-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	9/23/2016	9/26/2016	9/26/2016	
L66181-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	9/23/2016	9/26/2016	9/26/2016	
L66181-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	9/23/2016	9/27/2016	9/27/2016	
L66210-1	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	9/21/2016	9/27/2016	9/27/2016	
L66210-3	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	9/21/2016	9/27/2016	9/27/2016	
WG148128-1	MB		CVTOC	BLANK WTR		9/26/2016	9/26/2016	MB1 9/26/16
WG148128-2	SB		CVTOC	BLANK WTR		9/26/2016	9/26/2016	WG148128-1

WG148128-3	LCS	CVTOC	BLANK WTR	9/26/2016	9/26/2016	LEVEL1
WG148128-4	LD	CVTOC	GRND WTR	9/27/2016	9/27/2016	L66181-4
WG148128-5	MS	CVTOC	GRND WTR	9/27/2016	9/27/2016	L66181-4
WG148128-6	LD	CVDOC	STORM WTR	9/17/2016	9/26/2016	L66175-3
WG148128-6	LD	CVTOC	STORM WTR	9/26/2016	9/26/2016	L66175-3
WG148128-7	MS	CVDOC	STORM WTR	9/17/2016	9/26/2016	L66175-3
WG148128-7	MS	CVTOC	STORM WTR	9/26/2016	9/26/2016	L66175-3
WG148128-8	MB	CVDOC	BLANK WTR	9/20/2016	9/27/2016	MB1 9/20/16
WG148128-9	SB	CVDOC	BLANK WTR	9/20/2016	9/26/2016	WG148128-8
WG148128-10	LCS	CVDOC	BLANK WTR	9/26/2016	9/26/2016	LEVEL1
WG148128-11	LD	CVTOC	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148128-12	MS	CVTOC	FRESH WTR	9/26/2016	9/26/2016	L65922-5
WG148128-13	LD	CVTOC	FRESH WTR	9/27/2016	9/27/2016	L66033-3
WG148128-14	MS	CVTOC	FRESH WTR	9/27/2016	9/27/2016	L66033-3
WG148128-15	MB	CVTOC	BLANK WTR	9/27/2016	9/27/2016	MB1 9/27/16
WG148128-16	SB	CVTOC	BLANK WTR	9/27/2016	9/27/2016	WG148128-15
WG148128-17	LCS	CVTOC	BLANK WTR	9/27/2016	9/27/2016	LEVEL1
WG148128-18	LD	CVTOC	LEACHATE	9/27/2016	9/27/2016	L65924-3
WG148128-19	MS	CVTOC	LEACHATE	9/27/2016	9/27/2016	L65924-3

WG148181 (NH3) Department: 3 - Conventionals Move Date: 06-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65922-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNH3-FL	FRESH WTR	9/22/2016	9/28/2016	9/28/2016	
L65922-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNH3-FL	FRESH WTR	9/22/2016	9/28/2016	9/28/2016	
L65922-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVNH3-FL	FRESH WTR	9/22/2016	9/28/2016	9/28/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	9/17/2016	9/28/2016	9/28/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	9/17/2016	9/28/2016	9/28/2016	
L66175-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	9/17/2016	9/28/2016	9/28/2016	
L66180-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNH3-FL	GRND WTR	9/23/2016	9/23/2016	9/28/2016	
L66181-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNH3-FL	GRND WTR	9/23/2016	9/23/2016	9/28/2016	
L66181-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVNH3-FL	GRND WTR	9/23/2016	9/23/2016	9/28/2016	
WG148086-10	MB		CVNH3-FL	BLANK WTR		9/28/2016	9/28/2016	MB3 9/28
WG148086-10	MB		CVNO23	BLANK WTR		9/28/2016	9/28/2016	MB3 9/28
WG148086-10	MB		CVORTHOP	BLANK WTR		9/28/2016	9/28/2016	MB3 9/28
WG148086-11	LCS		CVNH3-FL	BLANK WTR		9/28/2016	9/28/2016	LEVEL1
WG148086-11	LCS		CVNO23	BLANK WTR		9/28/2016	9/28/2016	LEVEL1
WG148086-11	LCS		CVORTHOP	BLANK WTR		9/28/2016	9/28/2016	LEVEL1
WG148181-1	LD		CVNH3-FL	STORM WTR		9/28/2016	9/28/2016	L66175-3
WG148181-2	MS		CVNH3-FL	STORM WTR		9/28/2016	9/28/2016	L66175-3

WG148181-3	LD	CVNH3-FL	FRESH WTR	9/28/2016	9/28/2016	L65922-1
WG148181-4	MS	CVNH3-FL	FRESH WTR	9/28/2016	9/28/2016	L65922-1
WG148181-5	MB	CVNH3-FL	BLANK WTR	9/23/2016	9/28/2016	MB1 9/23
WG148181-6	SB	CVNH3-FL	BLANK WTR	9/23/2016	9/28/2016	WG148181-5
WG148181-7	LD	CVNH3-FL	GRND WTR	9/23/2016	9/28/2016	L66181-1
WG148181-8	MS	CVNH3-FL	GRND WTR	9/23/2016	9/28/2016	L66181-1

WG148244 (T Nutrients/Various) Department: 3 - Conventionals Move Date: 13-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65994-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	9/13/2016	10/5/2016	10/10/2016	
L65994-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	9/13/2016	10/5/2016	10/10/2016	
L66080-8	422030	Rural Small Lakes	CVTOTN	FRESH WTR	9/28/2016	10/5/2016	10/10/2016	
L66080-8	422030	Rural Small Lakes	CVTOTP	FRESH WTR	9/28/2016	10/5/2016	10/10/2016	
L66151-1	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	9/29/2016	10/5/2016	10/10/2016	
L66151-1	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	9/29/2016	10/5/2016	10/10/2016	
L66151-2	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	9/26/2016	10/5/2016	10/10/2016	
L66151-2	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	9/26/2016	10/5/2016	10/10/2016	
L66151-4	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	9/28/2016	10/5/2016	10/10/2016	
L66151-4	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	9/28/2016	10/5/2016	10/10/2016	
L66151-5	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	9/28/2016	10/5/2016	10/10/2016	
L66151-5	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	9/28/2016	10/5/2016	10/10/2016	
L66151-6	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	10/6/2016	10/7/2016	10/10/2016	
L66151-6	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	10/6/2016	10/7/2016	10/10/2016	
L66151-7	421195-240	Horseshoe Lake WQ	CVTOTN	GRND WTR	9/26/2016	10/5/2016	10/10/2016	
L66151-7	421195-240	Horseshoe Lake WQ	CVTOTP	GRND WTR	9/26/2016	10/5/2016	10/10/2016	
L66154-1	421195-240	Horseshoe Lake WQ	CVTOTN	FRESH WTR	9/29/2016	10/5/2016	10/10/2016	
L66154-1	421195-240	Horseshoe Lake WQ	CVTOTP	FRESH WTR	9/29/2016	10/5/2016	10/10/2016	
L66154-3	421195-240	Horseshoe Lake WQ	CVTOTN	FRESH WTR	9/29/2016	10/5/2016	10/10/2016	
L66154-3	421195-240	Horseshoe Lake WQ	CVTOTP	FRESH WTR	9/29/2016	10/5/2016	10/10/2016	
L66190-1	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	10/4/2016	10/5/2016	10/10/2016	
L66190-3	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	10/4/2016	10/5/2016	10/10/2016	
L66268-1	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66268-1	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66268-2	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66268-2	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66268-3	421195-210	Hicklin Lake Routine	CVTOTN	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66268-3	421195-210	Hicklin Lake Routine	CVTOTP	FRESH WTR	10/4/2016	10/5/2016	10/10/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/6/2016	10/7/2016	10/10/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/6/2016	10/7/2016	10/10/2016	

L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/6/2016	10/7/2016	10/10/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/6/2016	10/7/2016	10/10/2016	
WG148244-1	MB		CVTOTN	BLANK WTR		10/5/2016	10/10/2016	MB1 10/06/16 13:00
WG148244-1	MB		CVTOTP	BLANK WTR		10/5/2016	10/10/2016	MB1 10/06/16 13:00
WG148244-2	SB		CVTOTN	BLANK WTR		10/5/2016	10/10/2016	WG148244-1
WG148244-2	SB		CVTOTP	BLANK WTR		10/5/2016	10/10/2016	WG148244-1
WG148244-3	LCS		CVTOTN	BLANK WTR		10/5/2016	10/10/2016	LEVEL1
WG148244-3	LCS		CVTOTP	BLANK WTR		10/5/2016	10/10/2016	LEVEL1
WG148244-4	LD		CVTOTN	GRND WTR		10/5/2016	10/10/2016	L66151-1
WG148244-4	LD		CVTOTP	GRND WTR		10/5/2016	10/10/2016	L66151-1
WG148244-5	MS		CVTOTN	GRND WTR		10/5/2016	10/10/2016	L66151-1
WG148244-5	MS		CVTOTP	GRND WTR		10/5/2016	10/10/2016	L66151-1
WG148244-6	LD		CVTOTN	FRESH WTR		10/5/2016	10/10/2016	L66154-3
WG148244-6	LD		CVTOTP	FRESH WTR		10/5/2016	10/10/2016	L66154-3
WG148244-7	MS		CVTOTN	FRESH WTR		10/5/2016	10/10/2016	L66154-3
WG148244-7	MS		CVTOTP	FRESH WTR		10/5/2016	10/10/2016	L66154-3
WG148244-8	LD		CVTOTP	EFFLUENT		10/5/2016	10/10/2016	L66190-1
WG148244-9	MS		CVTOTP	EFFLUENT		10/5/2016	10/10/2016	L66190-1
WG148244-10	MB		CVTOTN	BLANK WTR		10/7/2016	10/10/2016	MB1 10/07/16 14:00
WG148244-10	MB		CVTOTP	BLANK WTR		10/7/2016	10/10/2016	MB1 10/07/16 14:00
WG148244-11	SB		CVTOTN	BLANK WTR		10/7/2016	10/10/2016	WG148244-10
WG148244-11	SB		CVTOTP	BLANK WTR		10/7/2016	10/10/2016	WG148244-10
WG148244-12	LCS		CVTOTN	BLANK WTR		10/7/2016	10/10/2016	LEVEL1
WG148244-12	LCS		CVTOTP	BLANK WTR		10/7/2016	10/10/2016	LEVEL1
WG148244-13	LD		CVTOTN	STORM WTR		10/7/2016	10/10/2016	L66285-1
WG148244-13	LD		CVTOTP	STORM WTR		10/7/2016	10/10/2016	L66285-1
WG148244-14	MS		CVTOTN	STORM WTR		10/7/2016	10/10/2016	L66285-1
WG148244-14	MS		CVTOTP	STORM WTR		10/7/2016	10/10/2016	L66285-1

WG148269 (TSS) Department: 3 - Conventionals Move Date: 17-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66104-8	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-9	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-10	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-11	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-12	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-13	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-14	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-15	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	

L66104-16	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-17	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-18	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-19	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-20	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	FREP@L66104-21
L66104-21	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-22	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-23	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-24	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-25	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-26	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-27	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-28	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-29	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-30	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-31	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-32	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66104-33	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	10/4/2016	10/7/2016	10/7/2016	
L66151-6	421195-240	Horseshoe Lake WQ	CVTSS	GRND WTR	10/6/2016	10/7/2016	10/7/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/6/2016	10/7/2016	10/7/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/6/2016	10/7/2016	10/7/2016	
L66298-1	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTSS	GRND WTR	10/5/2016	10/7/2016	10/7/2016	
L66298-3	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTSS	GRND WTR	10/5/2016	10/7/2016	10/7/2016	
L66298-4	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTSS	GRND WTR	10/5/2016	10/7/2016	10/7/2016	
L66298-5	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTSS	GRND WTR	10/5/2016	10/7/2016	10/7/2016	
L66302-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/6/2016	10/7/2016	10/7/2016	
L66302-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/6/2016	10/7/2016	10/7/2016	
L66302-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/6/2016	10/7/2016	10/7/2016	
L66302-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/6/2016	10/7/2016	10/7/2016	
WG148269-1	MB		CVTSS	BLANK WTR		10/7/2016	10/7/2016	MB1 161007
WG148269-2	LCS		CVTSS	BLANK WTR		10/7/2016	10/7/2016	LEVEL1
WG148269-3	LD		CVTSS	SALT WTR		10/7/2016	10/7/2016	L66104-14
WG148269-4	MB		CVTSS	BLANK WTR		10/7/2016	10/7/2016	MB2 161007
WG148269-5	LCS		CVTSS	BLANK WTR		10/7/2016	10/7/2016	LEVEL1
WG148269-6	LD		CVTSS	STORM WTR		10/7/2016	10/7/2016	L66285-1
WG148269-7	LD		CVTSS	GRND WTR		10/7/2016	10/7/2016	L66298-4

WG148326 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 18-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments

L65721-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/11/2016	10/11/2016	10/11/2016	
L65721-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/11/2016	10/11/2016	10/11/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	10/6/2016	10/7/2016	10/11/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	10/6/2016	10/11/2016	10/11/2016	
L66302-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/6/2016	10/11/2016	10/11/2016	
L66302-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/6/2016	10/11/2016	10/11/2016	
L66302-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/6/2016	10/11/2016	10/11/2016	
L66302-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/6/2016	10/11/2016	10/11/2016	
L66305-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/10/2016	10/11/2016	10/11/2016	
L66305-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/7/2016	10/11/2016	10/11/2016	
L66305-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/7/2016	10/11/2016	10/11/2016	
L66305-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/10/2016	10/11/2016	10/11/2016	
L66307-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/10/2016	10/11/2016	10/11/2016	
L66307-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/10/2016	10/11/2016	10/11/2016	
L66307-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/11/2016	10/11/2016	10/11/2016	
L66333-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/6/2016	10/7/2016	10/11/2016	SAMP
L66333-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/6/2016	10/11/2016	10/11/2016	SAMP
L66333-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/6/2016	10/7/2016	10/11/2016	SAMP
L66333-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/6/2016	10/11/2016	10/11/2016	SAMP
WG148326-1	MB		CVDOC	BLANK WTR		10/11/2016	10/11/2016	MB1 10/11/16
WG148326-1	MB		CVTOC	BLANK WTR		10/11/2016	10/11/2016	MB1 10/11/16
WG148326-2	SB		CVDOC	BLANK WTR		10/11/2016	10/11/2016	WG148326-1
WG148326-2	SB		CVTOC	BLANK WTR		10/11/2016	10/11/2016	WG148326-1
WG148326-3	LCS		CVDOC	BLANK WTR		10/11/2016	10/11/2016	LEVEL1
WG148326-3	LCS		CVTOC	BLANK WTR		10/11/2016	10/11/2016	LEVEL1
WG148326-4	LD		CVTOC	GRND WTR		10/11/2016	10/11/2016	L66302-4
WG148326-5	MS		CVTOC	GRND WTR		10/11/2016	10/11/2016	L66302-4
WG148326-6	LD		CVDOC	STORM WTR		10/7/2016	10/11/2016	L66333-2
WG148326-6	LD		CVTOC	STORM WTR		10/11/2016	10/11/2016	L66333-2
WG148326-7	MS		CVDOC	STORM WTR		10/7/2016	10/11/2016	L66333-2
WG148326-7	MS		CVTOC	STORM WTR		10/11/2016	10/11/2016	L66333-2

WG148333 (NUTS-12) Department: 3 - Conventionals Move Date: 25-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66151-6	421195-240	Horseshoe Lake WQ	CVNH3-FL	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66151-6	421195-240	Horseshoe Lake WQ	CVNO23	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66151-6	421195-240	Horseshoe Lake WQ	CVORTHOP	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66190-5	421430-300	OCS-Lake Haven Utility District routine testin	CVNH3-FL	BLANK WTR	10/5/2016	10/12/2016	10/12/2016	
L66190-5	421430-300	OCS-Lake Haven Utility District routine testin	CVNO23	BLANK WTR	10/5/2016	10/12/2016	10/12/2016	

L66190-5	421430-300	OCS-Lake Haven Utility District routine testin	CVORTHOP	BLANK WTR	10/5/2016	10/12/2016	10/12/2016	
L66268-1	421195-210	Hicklin Lake Routine	CVNH3-FL	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-1	421195-210	Hicklin Lake Routine	CVNO23	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-1	421195-210	Hicklin Lake Routine	CVORTHOP	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-2	421195-210	Hicklin Lake Routine	CVNH3-FL	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-2	421195-210	Hicklin Lake Routine	CVNO23	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-2	421195-210	Hicklin Lake Routine	CVORTHOP	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-3	421195-210	Hicklin Lake Routine	CVNH3-FL	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-3	421195-210	Hicklin Lake Routine	CVNO23	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66268-3	421195-210	Hicklin Lake Routine	CVORTHOP	FRESH WTR	10/4/2016	10/12/2016	10/12/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/7/2016	10/12/2016	10/12/2016	FFB
L66285-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/7/2016	10/12/2016	10/12/2016	FFB
L66285-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/7/2016	10/12/2016	10/12/2016	FFB
L66338-1	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-1	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-1	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-2	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-2	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-2	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-3	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-3	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-3	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-4	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-4	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-4	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-5	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-5	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-5	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-6	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-6	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-6	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-7	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-7	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-7	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66338-8	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	

L66338-8	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-8	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-9	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-9	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-9	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-10	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-10	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-10	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-11	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-11	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-11	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66338-12	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	BLANK WTR	10/11/2016	10/12/2016	10/12/2016
L66338-12	421240A	STREAMS MONITOR (surf wtr)	CVNO23	BLANK WTR	10/11/2016	10/12/2016	10/12/2016
L66338-12	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	BLANK WTR	10/11/2016	10/12/2016	10/12/2016
L66339-1	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-1	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-1	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-2	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-2	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-2	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-3	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-3	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-3	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-4	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-4	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-4	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-5	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-5	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-5	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-6	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-6	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-6	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-7	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-7	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-7	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-8	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-8	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-8	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-9	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-9	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66339-9	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016

L66339-10	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-10	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-10	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-11	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-11	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-11	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-12	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-12	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-12	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-13	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	BLANK WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-13	421240A	STREAMS MONITOR (surf wtr)	CVNO23	BLANK WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-13	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	BLANK WTR	10/11/2016	10/12/2016	10/12/2016	
L66339-14	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	FREP @ L66339-3
L66339-14	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	FREP @ L66339-3
L66339-14	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	FREP @ L66339-3
L66344-3	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-3	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-3	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-4	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-4	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-4	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-19	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-19	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-19	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-20	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-20	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-20	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-34	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-34	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-34	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-35	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-35	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-35	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/10/2016	10/12/2016	10/12/2016	
L66344-37	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-37	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-37	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-38	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-38	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-38	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/10/2016	10/12/2016	10/12/2016	FFB
L66344-39	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	
L66344-39	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016	

L66344-39		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-40		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-40		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-40		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-41		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-41		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-41		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-42		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-42		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-42		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-43		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-43		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-43		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-44		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-44		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-44		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-46		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-46		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-46		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-47		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-47		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-47		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-48		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-48		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-48		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-49		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-49		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-49		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-50		421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-50		421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-50		421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/11/2016	10/12/2016	10/12/2016
L66344-52		421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/11/2016	10/12/2016	10/12/2016 FFB
L66344-52		421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/11/2016	10/12/2016	10/12/2016 FFB
L66344-52		421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/11/2016	10/12/2016	10/12/2016 FFB
WG148333-1	MB			CVNH3-FL	BLANK WTR		10/12/2016	10/12/2016 MB1 10/12
WG148333-1	MB			CVNO23	BLANK WTR		10/12/2016	10/12/2016 MB1 10/12
WG148333-1	MB			CVORTHOP	BLANK WTR		10/12/2016	10/12/2016 MB1 10/12
WG148333-2	SB			CVNH3-FL	BLANK WTR		10/12/2016	10/12/2016 WG148333-1
WG148333-2	SB			CVNO23	BLANK WTR		10/12/2016	10/12/2016 WG148333-1
WG148333-2	SB			CVORTHOP	BLANK WTR		10/12/2016	10/12/2016 WG148333-1
WG148333-3	LCS			CVNH3-FL	BLANK WTR		10/12/2016	10/12/2016 LEVEL1

WG148333-3	LCS	CVNO23	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-3	LCS	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-4	LD	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-4	LD	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-4	LD	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-5	MS	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-5	MS	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-5	MS	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66344-4
WG148333-6	MB	CVNH3-FL	BLANK WTR	10/12/2016	10/12/2016	MB2 10/12
WG148333-6	MB	CVNO23	BLANK WTR	10/12/2016	10/12/2016	MB2 10/12
WG148333-6	MB	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	MB2 10/12
WG148333-7	LCS	CVNH3-FL	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-7	LCS	CVNO23	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-7	LCS	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-8	LD	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-8	LD	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-8	LD	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-9	MS	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-9	MS	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-9	MS	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66339-5
WG148333-10	MB	CVNH3-FL	BLANK WTR	10/12/2016	10/12/2016	MB4 10/12
WG148333-10	MB	CVNO23	BLANK WTR	10/12/2016	10/12/2016	MB4 10/12
WG148333-10	MB	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	MB4 10/12
WG148333-11	SB	CVNH3-FL	BLANK WTR	10/12/2016	10/12/2016	WG148333-10
WG148333-11	SB	CVNO23	BLANK WTR	10/12/2016	10/12/2016	WG148333-10
WG148333-11	SB	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	WG148333-10
WG148333-12	LCS	CVNH3-FL	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-12	LCS	CVNO23	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-12	LCS	CVORTHOP	BLANK WTR	10/12/2016	10/12/2016	LEVEL1
WG148333-13	LD	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-13	LD	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-13	LD	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-14	MS	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-14	MS	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-14	MS	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66338-1
WG148333-15	LD	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66268-1
WG148333-15	LD	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66268-1
WG148333-15	LD	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66268-1
WG148333-16	MS	CVNH3-FL	FRESH WTR	10/12/2016	10/12/2016	L66268-1
WG148333-16	MS	CVNO23	FRESH WTR	10/12/2016	10/12/2016	L66268-1
WG148333-16	MS	CVORTHOP	FRESH WTR	10/12/2016	10/12/2016	L66268-1

WG148333-17 LD	CVNH3-FL	STORM WTR	10/12/2016	10/12/2016	L66285-1
WG148333-17 LD	CVNO23	STORM WTR	10/12/2016	10/12/2016	L66285-1
WG148333-17 LD	CVORTHOP	STORM WTR	10/12/2016	10/12/2016	L66285-1
WG148333-18 MS	CVNH3-FL	STORM WTR	10/12/2016	10/12/2016	L66285-1
WG148333-18 MS	CVNO23	STORM WTR	10/12/2016	10/12/2016	L66285-1
WG148333-18 MS	CVORTHOP	STORM WTR	10/12/2016	10/12/2016	L66285-1

WG148362 (nuts-13) Department: 3 - Conventionals Move Date: 10-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66360-1	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-1	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-1	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-2	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-2	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-2	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-3	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-3	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-3	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-4	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-4	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-4	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-5	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-5	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-5	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-6	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-6	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-6	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-7	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-7	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-7	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-8	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-8	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-8	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-9	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-9	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-9	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-10	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-10	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66360-10	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	

L66360-11	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-11	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-11	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-12	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-12	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-12	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66360-13	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	BLANK WTR	10/12/2016	10/13/2016	10/13/2016
L66360-13	421240A	STREAMS MONITOR (surf wtr)	CVNO23	BLANK WTR	10/12/2016	10/13/2016	10/13/2016
L66360-13	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	BLANK WTR	10/12/2016	10/13/2016	10/13/2016
L66361-1	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-1	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-1	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-2	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-2	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-2	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-3	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-3	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-3	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-4	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-4	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-4	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-5	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-5	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-5	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-6	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-6	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-6	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-7	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-7	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-7	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-8	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-8	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-8	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-9	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-9	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-9	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-10	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-10	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-10	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-11	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016
L66361-11	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016

L66361-11	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-12	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-12	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-12	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-13	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-13	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-13	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-14	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-14	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-14	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-15	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-15	421240A	STREAMS MONITOR (surf wtr)	CVNO23	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-15	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66361-16	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66361-3
L66361-16	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66361-3
L66361-16	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66361-3
L66364-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66364-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66364-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-1	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-1	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-1	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-2	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-2	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-2	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-3	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-3	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-3	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-4	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-4	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-4	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-5	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-5	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-5	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-6	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-6	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-6	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-7	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-7	421240A	STREAMS MONITOR (surf wtr)	CVNO23	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-7	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	BLANK WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-8	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	

L66365-8	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-8	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-9	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-9	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-9	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-10	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-10	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-10	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66365-11	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66365-1
L66365-11	421240A	STREAMS MONITOR (surf wtr)	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66365-1
L66365-11	421240A	STREAMS MONITOR (surf wtr)	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	FREP @ L66365-1
L66366-1	421195-190	Vashon Island Surface Water	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-1	421195-190	Vashon Island Surface Water	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-1	421195-190	Vashon Island Surface Water	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-2	421195-190	Vashon Island Surface Water	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-2	421195-190	Vashon Island Surface Water	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-2	421195-190	Vashon Island Surface Water	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-3	421195-190	Vashon Island Surface Water	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-3	421195-190	Vashon Island Surface Water	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-3	421195-190	Vashon Island Surface Water	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-4	421195-190	Vashon Island Surface Water	CVNH3-FL	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-4	421195-190	Vashon Island Surface Water	CVNO23	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66366-4	421195-190	Vashon Island Surface Water	CVORTHOP	FRESH WTR	10/12/2016	10/13/2016	10/13/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	10/13/2016	FFB
L66382-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/13/2016	10/13/2016	10/13/2016	FFB
L66382-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	10/13/2016	FFB
WG148362-1	MB		CVNH3-FL	BLANK WTR		10/13/2016	10/13/2016	MB1 10/13
WG148362-1	MB		CVNO23	BLANK WTR		10/13/2016	10/13/2016	MB1 10/13
WG148362-1	MB		CVORTHOP	BLANK WTR		10/13/2016	10/13/2016	MB1 10/13
WG148362-2	SB		CVNH3-FL	BLANK WTR		10/13/2016	10/13/2016	WG148362-1
WG148362-2	SB		CVNO23	BLANK WTR		10/13/2016	10/13/2016	WG148362-1
WG148362-2	SB		CVORTHOP	BLANK WTR		10/13/2016	10/13/2016	WG148362-1
WG148362-3	LCS		CVNH3-FL	BLANK WTR		10/13/2016	10/13/2016	LEVEL1
WG148362-3	LCS		CVNO23	BLANK WTR		10/13/2016	10/13/2016	LEVEL1
WG148362-3	LCS		CVORTHOP	BLANK WTR		10/13/2016	10/13/2016	LEVEL1

WG148362-4	LD	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-4	LD	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-4	LD	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-5	MS	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-5	MS	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-5	MS	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66360-8
WG148362-6	MB	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	MB2 10/13
WG148362-6	MB	CVNO23	BLANK WTR	10/13/2016	10/13/2016	MB2 10/13
WG148362-6	MB	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	MB2 10/13
WG148362-7	LCS	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-7	LCS	CVNO23	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-7	LCS	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-8	LD	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-8	LD	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-8	LD	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-9	MS	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-9	MS	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-9	MS	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66361-7
WG148362-10	MB	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	MB3 10/13
WG148362-10	MB	CVNO23	BLANK WTR	10/13/2016	10/13/2016	MB3 10/13
WG148362-10	MB	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	MB3 10/13
WG148362-11	LCS	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-11	LCS	CVNO23	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-11	LCS	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	LEVEL1
WG148362-12	LD	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-12	LD	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-12	LD	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-13	MS	CVNH3-FL	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-13	MS	CVNO23	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-13	MS	CVORTHOP	FRESH WTR	10/13/2016	10/13/2016	L66365-6
WG148362-14	MB	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	MB5 10/13
WG148362-14	MB	CVNO23	BLANK WTR	10/13/2016	10/13/2016	MB5 10/13
WG148362-14	MB	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	MB5 10/13
WG148362-15	SB	CVNH3-FL	BLANK WTR	10/13/2016	10/13/2016	WG148362-14
WG148362-15	SB	CVNO23	BLANK WTR	10/13/2016	10/13/2016	WG148362-14
WG148362-15	SB	CVORTHOP	BLANK WTR	10/13/2016	10/13/2016	WG148362-14
WG148362-16	LD	CVNH3-FL	STORM WTR	10/13/2016	10/13/2016	L66382-19
WG148362-16	LD	CVNO23	STORM WTR	10/13/2016	10/13/2016	L66382-19
WG148362-16	LD	CVORTHOP	STORM WTR	10/13/2016	10/13/2016	L66382-19
WG148362-17	MS	CVNH3-FL	STORM WTR	10/13/2016	10/13/2016	L66382-19
WG148362-17	MS	CVNO23	STORM WTR	10/13/2016	10/13/2016	L66382-19

WG148362-17	MS		CVORTHOP	STORM WTR		10/13/2016	10/13/2016	L66382-19

WG148385 (TSS/VSS) Department: 3 - Conventionals Move Date: 20-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65693-1	421422-CHSV	SWD-CHSW P Cedar Hills Surface Water Perm	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L65693-2	421422-CHSV	SWD-CHSW P Cedar Hills Surface Water Perm	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66314-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66314-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66314-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66314-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66314-5	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66314-5	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVVSS	LEACHATE	10/12/2016	10/14/2016	10/14/2016	
L66315-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/13/2016	10/14/2016	10/14/2016	
L66317-1	421422-ENLS	SWD-ENLS Enumclaw Wastewater Permit	CVTSS	IW WTR	10/12/2016	10/14/2016	10/14/2016	
L66318-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/13/2016	10/14/2016	10/14/2016	
L66327-1	421301A	Georgetown Yard Industiral SW Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66360-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	10/12/2016	10/14/2016	10/14/2016	
L66360-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	10/12/2016	10/14/2016	10/14/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	
L66408-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	SAMP
L66408-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	10/13/2016	10/14/2016	10/14/2016	SAMP
WG148385-1	MB		CVTSS	BLANK WTR		10/14/2016	10/14/2016	MB1 161014
WG148385-1	MB		CVVSS	BLANK WTR		10/14/2016	10/14/2016	MB1 161014
WG148385-2	LCS		CVTSS	BLANK WTR		10/14/2016	10/14/2016	LEVEL2
WG148385-2	LCS		CVVSS	BLANK WTR		10/14/2016	10/14/2016	LEVEL2
WG148385-3	LD		CVTSS	STORM WTR		10/14/2016	10/14/2016	L65693-1
WG148385-4	LD		CVTSS	LEACHATE		10/14/2016	10/14/2016	L66314-1
WG148385-4	LD		CVVSS	LEACHATE		10/14/2016	10/14/2016	L66314-1
WG148385-5	LD		CVTSS	GRND WTR		10/14/2016	10/14/2016	L66315-1
WG148385-6	LD		CVTSS	IW WTR		10/14/2016	10/14/2016	L66317-1
WG148385-7	LD		CVTSS	FRESH WTR		10/14/2016	10/14/2016	L66360-1

WG148527 (DISSNUT) Department: 3 - Conventionals Move Date: 03-NOV-16

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66278-1	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-1	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-1	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-2	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-2	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-2	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	FRESH WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-3	423484-850-5	Brightwater Floating Wetlands Project	CVNH3-FL	BLANK WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-3	423484-850-5	Brightwater Floating Wetlands Project	CVNO23	BLANK WTR	10/20/2016	10/20/2016	10/20/2016	
L66278-3	423484-850-5	Brightwater Floating Wetlands Project	CVORTHOP	BLANK WTR	10/20/2016	10/20/2016	10/20/2016	
L66314-4	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	10/18/2016	10/20/2016	10/20/2016	
L66314-7	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	10/17/2016	10/20/2016	10/20/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/13/2016	10/20/2016	10/20/2016	FFB
L66384-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/13/2016	10/20/2016	10/20/2016	FFB
L66384-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/13/2016	10/20/2016	10/20/2016	FFB
L66411-1	421185-100	Elliot West CSO Plant	CVNO23	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66411-13	421185-100	Elliot West CSO Plant	CVNO23	BLANK WTR	10/14/2016	10/20/2016	10/20/2016	
WG148527-1	MB		CVNH3-FL	BLANK WTR		10/20/2016	10/20/2016	MB3 10/20/16
WG148527-1	MB		CVNO23	BLANK WTR		10/20/2016	10/20/2016	MB3 10/20/16
WG148527-1	MB		CVORTHOP	BLANK WTR		10/20/2016	10/20/2016	MB3 10/20/16
WG148527-2	SB		CVNH3-FL	BLANK WTR		10/20/2016	10/20/2016	WG148527-1

WG148527-2	SB	CVNO23	BLANK WTR	10/20/2016	10/20/2016	WG148527-1
WG148527-2	SB	CVORTHOP	BLANK WTR	10/20/2016	10/20/2016	WG148527-1
WG148527-3	LCS	CVNH3-FL	BLANK WTR	10/20/2016	10/20/2016	LEVEL1
WG148527-3	LCS	CVNO23	BLANK WTR	10/20/2016	10/20/2016	LEVEL1
WG148527-3	LCS	CVORTHOP	BLANK WTR	10/20/2016	10/20/2016	LEVEL1
WG148527-4	LD	CVNH3-FL	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-4	LD	CVNO23	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-4	LD	CVORTHOP	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-5	MS	CVNH3-FL	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-5	MS	CVNO23	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-5	MS	CVORTHOP	STORM WTR	10/20/2016	10/20/2016	L66382-9
WG148527-6	LD	CVNH3-FL	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-6	LD	CVNO23	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-6	LD	CVORTHOP	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-7	MS	CVNH3-FL	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-7	MS	CVNO23	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-7	MS	CVORTHOP	FRESH WTR	10/20/2016	10/20/2016	L66278-1
WG148527-8	LD	CVNO23	LEACHATE	10/20/2016	10/20/2016	L66314-7
WG148527-9	MS	CVNO23	LEACHATE	10/20/2016	10/20/2016	L66314-7

WG148546 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 26-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66274-1	421937-200	Brightwater Pilot MBR Study	CVTOC	INFLUENT	10/3/2016	10/20/2016	10/20/2016	
L66274-2	421937-200	Brightwater Pilot MBR Study	CVTOC	EFFLUENT	10/3/2016	10/20/2016	10/20/2016	
L66275-2	421937-200	Brightwater Pilot MBR Study	CVTOC	INFLUENT	10/4/2016	10/20/2016	10/20/2016	
L66275-3	421937-200	Brightwater Pilot MBR Study	CVTOC	EFFLUENT	10/4/2016	10/20/2016	10/20/2016	
L66315-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/13/2016	10/20/2016	10/20/2016	
L66318-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/13/2016	10/20/2016	10/20/2016	
L66320-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/17/2016	10/20/2016	10/20/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	10/13/2016	10/13/2016	10/20/2016	
L66403-1	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	CVTOC	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66403-2	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	CVTOC	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66403-3	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	CVTOC	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66403-4	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	CVTOC	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66408-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/13/2016	10/13/2016	10/20/2016	SAMP
L66408-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/13/2016	10/13/2016	10/20/2016	SAMP
WG148546-1	MB		CVTOC	BLANK WTR		10/20/2016	10/20/2016	MB1 10/20/16

WG148546-2	SB	CVTOC	BLANK WTR	10/20/2016	10/20/2016	WG148546-1
WG148546-3	LCS	CVTOC	BLANK WTR	10/20/2016	10/20/2016	LEVEL1
WG148546-4	LD	CVTOC	FRESH WTR	10/20/2016	10/20/2016	L66403-3
WG148546-5	MS	CVTOC	FRESH WTR	10/20/2016	10/20/2016	L66403-3
WG148546-6	LD	CVTOC	GRND WTR	10/20/2016	10/20/2016	L66320-1
WG148546-7	MS	CVTOC	GRND WTR	10/20/2016	10/20/2016	L66320-1
WG148546-8	LD	CVTOC	INFLUENT	10/20/2016	10/20/2016	L66275-2
WG148546-9	MS	CVTOC	INFLUENT	10/20/2016	10/20/2016	L66275-2
WG148546-10	LD	CVTOC	EFFLUENT	10/20/2016	10/20/2016	L66275-3
WG148546-11	MS	CVTOC	EFFLUENT	10/20/2016	10/20/2016	L66275-3
WG148546-12	MB	CVDOC	BLANK WTR	10/18/2016	10/20/2016	MB1 10/18/16
WG148546-13	SB	CVDOC	BLANK WTR	10/18/2016	10/20/2016	WG148546-12
WG148546-14	LCS	CVDOC	BLANK WTR	10/20/2016	10/20/2016	LEVEL1
WG148546-15	LD	CVDOC	STORM WTR	10/13/2016	10/20/2016	L66408-1
WG148546-16	MS	CVDOC	STORM WTR	10/13/2016	10/20/2016	L66408-1

WG148580 (T Nutrients/Various) Department: 3 - Conventionals Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66278-1	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	10/20/2016	10/21/2016	10/27/2016	
L66278-2	423484-850-5	Brightwater Floating Wetlands Project	CVTOTP	FRESH WTR	10/20/2016	10/21/2016	10/27/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/13/2016	10/21/2016	10/27/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/20/2016	10/21/2016	10/27/2016	

L66453-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/20/2016	10/21/2016	10/27/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/19/2016	10/21/2016	10/27/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/20/2016	10/21/2016	10/27/2016	FREP@L66453-3
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/20/2016	10/21/2016	10/27/2016	FREP@L66453-3
WG148580-1	MB		CVTOTN	BLANK WTR		10/21/2016	10/27/2016	MB1 10/21/16 12:05
WG148580-1	MB		CVTOTP	BLANK WTR		10/21/2016	10/27/2016	MB1 10/21/16 12:05
WG148580-2	SB		CVTOTN	BLANK WTR		10/21/2016	10/27/2016	WG148580-1
WG148580-2	SB		CVTOTP	BLANK WTR		10/21/2016	10/27/2016	WG148580-1
WG148580-3	LCS		CVTOTN	BLANK WTR		10/21/2016	10/27/2016	LEVEL1
WG148580-3	LCS		CVTOTP	BLANK WTR		10/21/2016	10/27/2016	LEVEL1
WG148580-4	LD		CVTOTP	FRESH WTR		10/21/2016	10/27/2016	L66278-1
WG148580-5	MS		CVTOTP	FRESH WTR		10/21/2016	10/27/2016	L66278-1
WG148580-6	LD		CVTOTN	STORM WTR		10/21/2016	10/27/2016	L66382-19
WG148580-6	LD		CVTOTP	STORM WTR		10/21/2016	10/27/2016	L66382-19
WG148580-7	MS		CVTOTN	STORM WTR		10/21/2016	10/27/2016	L66382-19
WG148580-7	MS		CVTOTP	STORM WTR		10/21/2016	10/27/2016	L66382-19

WG148582 (TSS) Department: 3 - Conventionals Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66315-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/20/2016	10/21/2016	10/21/2016	
L66318-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/20/2016	10/21/2016	10/21/2016	
L66320-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/19/2016	10/21/2016	10/21/2016	
L66373-1	421183-200	IW Brightwater Keymanhole	CVTSS	INFLUENT	10/17/2016	10/21/2016	10/21/2016	
L66373-5	421183-200	IW Brightwater Keymanhole	CVTSS	EFFLUENT	10/17/2016	10/21/2016	10/21/2016	
L66374-1	421183-200	IW Brightwater Keymanhole	CVTSS	INFLUENT	10/18/2016	10/21/2016	10/21/2016	
L66374-5	421183-200	IW Brightwater Keymanhole	CVTSS	EFFLUENT	10/18/2016	10/21/2016	10/21/2016	
L66375-1	421183-200	IW Brightwater Keymanhole	CVTSS	INFLUENT	10/19/2016	10/21/2016	10/21/2016	
L66375-5	421183-200	IW Brightwater Keymanhole	CVTSS	EFFLUENT	10/19/2016	10/21/2016	10/21/2016	
L66430-3	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	10/19/2016	10/21/2016	10/21/2016	
L66430-4	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	10/19/2016	10/21/2016	10/21/2016	

L66430-5	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	10/19/2016	10/21/2016	10/21/2016	
L66430-6	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	10/19/2016	10/21/2016	10/21/2016	
L66430-8	421250BS	Ambient Intertidal Beaches-South	CVTSS	SALT WTR	10/19/2016	10/21/2016	10/21/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/19/2016	10/21/2016	10/21/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/19/2016	10/21/2016	10/21/2016	
L66437-1	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTSS	GRND WTR	10/19/2016	10/21/2016	10/21/2016	
L66442-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/19/2016	10/21/2016	10/21/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/19/2016	10/21/2016	10/21/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/19/2016	10/21/2016	10/21/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	FREP@L66453-3
L66453-17	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
L66453-18	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/20/2016	10/21/2016	10/21/2016	
WG148582-1	MB		CVTSS	BLANK WTR		10/21/2016	10/21/2016	MB1 161021
WG148582-2	LCS		CVTSS	BLANK WTR		10/21/2016	10/21/2016	LEVEL1
WG148582-3	LD		CVTSS	GRND WTR		10/21/2016	10/21/2016	L66315-2
WG148582-4	LD		CVTSS	INFLUENT		10/21/2016	10/21/2016	L66373-1
WG148582-5	LD		CVTSS	EFFLUENT		10/21/2016	10/21/2016	L66374-5
WG148582-6	LD		CVTSS	SALT WTR		10/21/2016	10/21/2016	L66430-3
WG148582-7	MB		CVTSS	BLANK WTR		10/21/2016	10/21/2016	MB2 161021
WG148582-8	LCS		CVTSS	BLANK WTR		10/21/2016	10/21/2016	LEVEL1
WG148582-9	LD		CVTSS	STORM WTR		10/21/2016	10/21/2016	L66453-3

WG148650 (NUTS!-26) Department: 3 - Conventionals Move Date: 14-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66435-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66435-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66435-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/20/2016	10/26/2016	10/26/2016	

L66453-1	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/19/2016	10/26/2016	10/26/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/20/2016	10/26/2016	10/26/2016	FREP@L66453-3
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	FREP@L66453-3
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/20/2016	10/26/2016	10/26/2016	FREP@L66453-3
L66453-16	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66453-16	421879-240	Federal Way Stormwater Monitoring	CVNO23	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66453-16	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	FFB
L66456-1	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-1	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-1	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-2	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-2	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-2	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-3	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-3	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-3	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-4	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-4	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-4	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-5	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-5	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-5	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	

L66456-6	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-6	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-6	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-8	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-8	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-8	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-9	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-9	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-9	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-10	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-10	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-10	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-11	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-11	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-11	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-12	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-12	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-12	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-13	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-13	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-13	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-14	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-14	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-14	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-15	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-15	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-15	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-16	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-16	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-16	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-17	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-17	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-17	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-19	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-19	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-19	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-20	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-20	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-20	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-21	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016
L66456-21	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016

L66456-21	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-22	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-22	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-22	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-23	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-23	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-23	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-24	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-24	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-24	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-25	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-25	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-25	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-26	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-26	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-26	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-27	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-27	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-27	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-28	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-28	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-28	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-29	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-29	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-29	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-31	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-31	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-31	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-32	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-32	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-32	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-33	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-33	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-33	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-34	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-34	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-34	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-35	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-35	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-35	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/24/2016	10/26/2016	10/26/2016	
L66456-37	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB

L66456-37	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB
L66456-37	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB
L66456-38	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB
L66456-38	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB
L66456-38	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/24/2016	10/26/2016	10/26/2016	FFB
L66458-1	421185-100	Elliot West CSO Plant	CVNO23	STORM WTR	10/20/2016	10/26/2016	10/26/2016	
L66458-12	421185-100	Elliot West CSO Plant	CVNO23	BLANK WTR	10/20/2016	10/26/2016	10/26/2016	Field Filtration Blank
WG148650-1	MB		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	MB1 10/26
WG148650-1	MB		CVNO23	BLANK WTR		10/26/2016	10/26/2016	MB1 10/26
WG148650-1	MB		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	MB1 10/26
WG148650-2	SB		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	WG148650-1
WG148650-2	SB		CVNO23	BLANK WTR		10/26/2016	10/26/2016	WG148650-1
WG148650-2	SB		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	WG148650-1
WG148650-3	LCS		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-3	LCS		CVNO23	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-3	LCS		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-4	LD		CVNH3-FL	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-4	LD		CVNO23	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-4	LD		CVORTHOP	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-5	MS		CVNH3-FL	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-5	MS		CVNO23	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-5	MS		CVORTHOP	FRESH WTR		10/26/2016	10/26/2016	L66456-1
WG148650-6	MB		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	MB2 10/26
WG148650-6	MB		CVNO23	BLANK WTR		10/26/2016	10/26/2016	MB2 10/26
WG148650-6	MB		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	MB2 10/26
WG148650-7	LCS		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-7	LCS		CVNO23	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-7	LCS		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-8	LD		CVNH3-FL	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-8	LD		CVNO23	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-8	LD		CVORTHOP	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-9	MS		CVNH3-FL	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-9	MS		CVNO23	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-9	MS		CVORTHOP	FRESH WTR		10/26/2016	10/26/2016	L66456-21
WG148650-10	MB		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	MB4 10/26
WG148650-10	MB		CVNO23	BLANK WTR		10/26/2016	10/26/2016	MB4 10/26
WG148650-10	MB		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	MB4 10/26
WG148650-11	LCS		CVNH3-FL	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-11	LCS		CVNO23	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-11	LCS		CVORTHOP	BLANK WTR		10/26/2016	10/26/2016	LEVEL1
WG148650-12	LD		CVNH3-FL	STORM WTR		10/26/2016	10/26/2016	L66453-5

WG148650-12 LD	CVNO23	STORM WTR	10/26/2016	10/26/2016	L66453-5	
WG148650-12 LD	CVORTHOP	STORM WTR	10/26/2016	10/26/2016	L66453-5	
WG148650-13 MS	CVNH3-FL	STORM WTR	10/26/2016	10/26/2016	L66453-5	
WG148650-13 MS	CVNO23	STORM WTR	10/26/2016	10/26/2016	L66453-5	
WG148650-13 MS	CVORTHOP	STORM WTR	10/26/2016	10/26/2016	L66453-5	

WG148655 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65721-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/21/2016	10/24/2016	10/24/2016	
L66307-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/21/2016	10/24/2016	10/24/2016	
L66314-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	10/12/2016	10/25/2016	10/25/2016	
L66314-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	10/12/2016	10/25/2016	10/25/2016	
L66314-4	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	10/18/2016	10/25/2016	10/25/2016	
L66314-5	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	10/12/2016	10/25/2016	10/25/2016	
L66314-7	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	10/17/2016	10/25/2016	10/25/2016	
L66315-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/20/2016	10/24/2016	10/24/2016	
L66318-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/20/2016	10/24/2016	10/24/2016	
L66318-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/21/2016	10/24/2016	10/24/2016	
L66320-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/19/2016	10/24/2016	10/24/2016	
L66320-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/21/2016	10/24/2016	10/24/2016	
L66330-1	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	10/17/2016	10/18/2016	10/24/2016	
L66330-1	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	10/17/2016	10/24/2016	10/24/2016	
L66330-2	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	10/17/2016	10/18/2016	10/24/2016	
L66330-2	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	10/17/2016	10/24/2016	10/24/2016	
L66330-3	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	10/17/2016	10/18/2016	10/24/2016	
L66330-3	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	10/17/2016	10/24/2016	10/24/2016	
L66331-1	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	10/17/2016	10/24/2016	10/24/2016	
L66331-2	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	10/17/2016	10/18/2016	10/24/2016	
L66331-2	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	10/17/2016	10/24/2016	10/24/2016	
L66331-3	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	10/17/2016	10/18/2016	10/24/2016	
L66331-3	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	10/17/2016	10/24/2016	10/24/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	10/13/2016	10/24/2016	10/24/2016	
L66408-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/13/2016	10/24/2016	10/24/2016	SAMP
L66408-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/13/2016	10/24/2016	10/24/2016	SAMP
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	10/19/2016	10/20/2016	10/24/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	10/19/2016	10/25/2016	10/25/2016	
L66437-1	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	CVTOC	GRND WTR	10/19/2016	10/24/2016	10/24/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/20/2016	10/21/2016	10/24/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/20/2016	10/25/2016	10/25/2016	

L66453-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/20/2016	10/21/2016	10/24/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/20/2016	10/25/2016	10/25/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/20/2016	10/21/2016	10/24/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/20/2016	10/25/2016	10/25/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/20/2016	10/21/2016	10/24/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/20/2016	10/25/2016	10/25/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/19/2016	10/21/2016	10/24/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/19/2016	10/25/2016	10/25/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/19/2016	10/21/2016	10/24/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/19/2016	10/25/2016	10/25/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/19/2016	10/21/2016	10/24/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/19/2016	10/25/2016	10/25/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/20/2016	10/21/2016	10/24/2016	FREP@L66453-3
L66453-8	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/20/2016	10/25/2016	10/25/2016	FREP@L66453-3
WG148655-1	MB		CVTOC	BLANK WTR		10/24/2016	10/24/2016	MB1 10/24/16
WG148655-2	SB		CVTOC	BLANK WTR		10/24/2016	10/24/2016	WG148655-1
WG148655-3	LCS		CVTOC	BLANK WTR		10/24/2016	10/24/2016	LEVEL1
WG148655-4	LD		CVTOC	GRND WTR		10/24/2016	10/24/2016	L66315-2
WG148655-5	MS		CVTOC	GRND WTR		10/24/2016	10/24/2016	L66315-2
WG148655-6	MB		CVDOC	BLANK WTR		10/18/2016	10/24/2016	MB1 10/18/16
WG148655-7	MB		CVDOC	BLANK WTR		10/21/2016	10/24/2016	MB1 10/21/16
WG148655-8	SB		CVDOC	BLANK WTR		10/18/2016	10/24/2016	WG148655-6
WG148655-9	LCS		CVDOC	BLANK WTR		10/24/2016	10/24/2016	LEVEL1
WG148655-10	LD		CVDOC	STORM WTR		10/21/2016	10/24/2016	L66453-7
WG148655-11	MS		CVDOC	STORM WTR		10/21/2016	10/24/2016	L66453-7
WG148655-12	LD		CVDOC	FRESH WTR		10/18/2016	10/24/2016	L66330-1
WG148655-13	MS		CVDOC	FRESH WTR		10/18/2016	10/24/2016	L66330-1
WG148655-14	LD		CVTOC	SALT WTR		10/24/2016	10/24/2016	L66331-1
WG148655-15	MS		CVTOC	SALT WTR		10/24/2016	10/24/2016	L66331-1
WG148655-16	MB		CVTOC	BLANK WTR		10/24/2016	10/24/2016	MB2 10/24/16
WG148655-17	LCS		CVTOC	BLANK WTR		10/24/2016	10/24/2016	LEVEL1
WG148655-18	MB		CVTOC	BLANK WTR		10/25/2016	10/25/2016	MB1 10/25/16
WG148655-19	SB		CVTOC	BLANK WTR		10/25/2016	10/25/2016	WG148655-18
WG148655-20	LCS		CVTOC	BLANK WTR		10/25/2016	10/25/2016	LEVEL1
WG148655-21	LD		CVTOC	STORM WTR		10/25/2016	10/25/2016	L66453-2
WG148655-22	MS		CVTOC	STORM WTR		10/25/2016	10/25/2016	L66453-2
WG148655-23	LD		CVTOC	LEACHATE		10/25/2016	10/25/2016	L66314-1
WG148655-24	MS		CVTOC	LEACHATE		10/25/2016	10/25/2016	L66314-1

WG148713 (LK/LG NUTS) Department: 3 - Conventionals Move Date: 22-NOV-16

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	11/9/2016	11/9/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	11/9/2016	11/9/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	11/9/2016	11/9/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	FREP@WBI
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	FREP@WBI
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	FREP@WBI
L66385-16	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66385-16	421879-240	Federal Way Stormwater Monitoring	CVNO23	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66385-16	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66456-39	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-39	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-39	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	

L66456-43	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-43	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-43	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-48	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-48	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-48	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-49	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-49	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-49	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-50	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-50	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-50	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	10/27/2016	10/31/2016	10/31/2016	
L66456-52	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66456-52	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66456-52	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	10/27/2016	10/31/2016	10/31/2016	FFB
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	

L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66499-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	FFB
L66499-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	FFB
L66499-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	10/26/2016	10/31/2016	10/31/2016	FFB
L66509-1	421185-100	Elliot West CSO Plant	CVNO23	STORM WTR	10/26/2016	10/31/2016	10/31/2016	
L66509-12	421185-100	Elliot West CSO Plant	CVNO23	BLANK WTR	10/28/2016	10/31/2016	10/31/2016	Field Filter Blank for Nutrients
WG148713-1	MB		CVNH3-FL	BLANK WTR		10/31/2016	10/31/2016	
WG148713-1	MB		CVNO23	BLANK WTR		10/31/2016	10/31/2016	
WG148713-1	MB		CVORTHOP	BLANK WTR		10/31/2016	10/31/2016	
WG148713-2	SB		CVNH3-FL	BLANK WTR		10/31/2016	10/31/2016	WG148713-1
WG148713-2	SB		CVNO23	BLANK WTR		10/31/2016	10/31/2016	WG148713-1
WG148713-2	SB		CVORTHOP	BLANK WTR		10/31/2016	10/31/2016	WG148713-1
WG148713-3	LCS		CVNH3-FL	BLANK WTR		10/31/2016	10/31/2016	LEVEL1
WG148713-3	LCS		CVNO23	BLANK WTR		10/31/2016	10/31/2016	LEVEL1
WG148713-3	LCS		CVORTHOP	BLANK WTR		10/31/2016	10/31/2016	LEVEL1
WG148713-4	LD		CVNH3-FL	FRESH WTR		10/31/2016	10/31/2016	

WG148713-4	LD	CVNO23	FRESH WTR	10/31/2016	10/31/2016	
WG148713-4	LD	CVORTHOP	FRESH WTR	10/31/2016	10/31/2016	
WG148713-5	MS	CVNH3-FL	FRESH WTR	10/31/2016	10/31/2016	
WG148713-5	MS	CVNO23	FRESH WTR	10/31/2016	10/31/2016	
WG148713-5	MS	CVORTHOP	FRESH WTR	10/31/2016	10/31/2016	
WG148713-6	LD	CVNH3-FL	STORM WTR	10/31/2016	10/31/2016	
WG148713-6	LD	CVNO23	STORM WTR	10/31/2016	10/31/2016	
WG148713-6	LD	CVORTHOP	STORM WTR	10/31/2016	10/31/2016	
WG148713-7	MS	CVNH3-FL	STORM WTR	10/31/2016	10/31/2016	
WG148713-7	MS	CVNO23	STORM WTR	10/31/2016	10/31/2016	
WG148713-7	MS	CVORTHOP	STORM WTR	10/31/2016	10/31/2016	
WG148713-8	MB	CVNH3-FL	BLANK WTR	10/31/2016	10/31/2016	
WG148713-8	MB	CVNO23	BLANK WTR	10/31/2016	10/31/2016	
WG148713-8	MB	CVORTHOP	BLANK WTR	10/31/2016	10/31/2016	
WG148713-9	LCS	CVNH3-FL	BLANK WTR	10/31/2016	10/31/2016	LEVEL1
WG148713-9	LCS	CVNO23	BLANK WTR	10/31/2016	10/31/2016	LEVEL1
WG148713-9	LCS	CVORTHOP	BLANK WTR	10/31/2016	10/31/2016	LEVEL1
WG148713-10	LD	CVNH3-FL	STORM WTR	10/31/2016	10/31/2016	
WG148713-10	LD	CVNO23	STORM WTR	10/31/2016	10/31/2016	
WG148713-10	LD	CVORTHOP	STORM WTR	10/31/2016	10/31/2016	
WG148713-11	MS	CVNH3-FL	STORM WTR	10/31/2016	10/31/2016	
WG148713-11	MS	CVNO23	STORM WTR	10/31/2016	10/31/2016	
WG148713-11	MS	CVORTHOP	STORM WTR	10/31/2016	10/31/2016	
WG148890-14	MB	CVNH3-FL	BLANK WTR	11/9/2016	11/9/2016	MB4 11/9
WG148890-14	MB	CVNO23	BLANK WTR	11/9/2016	11/9/2016	MB4 11/9
WG148890-14	MB	CVORTHOP-SW	BLANK WTR	11/9/2016	11/9/2016	MB4 11/9
WG148890-14	MB	CVSI	BLANK WTR	11/9/2016	11/9/2016	MB4 11/9
WG148890-15	LCS	CVNH3-FL	BLANK WTR	11/9/2016	11/9/2016	LEVEL1
WG148890-15	LCS	CVNO23	BLANK WTR	11/9/2016	11/9/2016	LEVEL1
WG148890-15	LCS	CVORTHOP-SW	BLANK WTR	11/9/2016	11/9/2016	LEVEL1
WG148890-15	LCS	CVSI	BLANK WTR	11/9/2016	11/9/2016	LEVEL1

WG148748 (TSS) Department: 3 - Conventionals Move Date: 07-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66318-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/28/2016	10/31/2016	11/1/2016	
L66350-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/28/2016	10/31/2016	11/1/2016	
L66350-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	10/28/2016	10/31/2016	11/1/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	

L66385-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	FREP@WBI
L66456-39	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-43	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-48	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-49	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66456-50	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	10/27/2016	10/31/2016	11/1/2016	
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66501-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
L66509-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	10/26/2016	10/31/2016	11/1/2016	
WG148748-1	MB		CVTSS	BLANK WTR		10/31/2016	11/1/2016	MB161031
WG148748-2	LCS		CVTSS	BLANK WTR		10/31/2016	11/1/2016	LEVEL1
WG148748-3	LD		CVTSS	FRESH WTR		10/31/2016	11/1/2016	L66456-47
WG148748-4	LD		CVTSS	STORM WTR		10/31/2016	11/1/2016	L66385-2
WG148748-5	MB		CVTSS	BLANK WTR		10/31/2016	11/1/2016	MB161031
WG148748-6	LCS		CVTSS	BLANK WTR		10/31/2016	11/1/2016	LEVEL1
WG148748-7	LD		CVTSS	STORM WTR		10/31/2016	11/1/2016	L66498-7
WG148748-8	LD		CVTSS	GRND WTR		10/31/2016	11/1/2016	L66350-4
WG148748-9	LD		CVTSS	STORM WTR		10/31/2016	11/1/2016	L66509-1

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

WG148823 (T Nutrients/Various) Department: 3 - Conventionals Move Date: 22-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016	FREP@WBI
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016	FREP@WBI
L66417-1	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	11/1/2016	11/3/2016	11/15/2016	
L66417-3	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	11/1/2016	11/3/2016	11/15/2016	
L66427-1	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOTP	FRESH WTR	11/2/2016	11/3/2016	11/15/2016	
L66427-2	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOTP	FRESH WTR	11/2/2016	11/3/2016	11/15/2016	
L66456-39	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-39	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-40	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-41	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-42	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-43	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-43	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-44	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-46	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	
L66456-47	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016	

L66456-48	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66456-48	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66456-49	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66456-49	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66456-50	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66456-50	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	10/27/2016	11/3/2016	11/15/2016
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	10/26/2016	11/3/2016	11/15/2016
L66540-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016
L66540-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016

L66540-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016	
L66540-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016	
L66540-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016	
L66540-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	11/1/2016	11/3/2016	11/15/2016	
L66540-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	11/1/2016	11/3/2016	11/15/2016	
L66540-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	10/31/2016	11/3/2016	11/15/2016	FREP@66540-1
L66540-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	10/31/2016	11/3/2016	11/15/2016	FREP@66540-1
WG148823-1	MB		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	MB1 11/03/16 13:30
WG148823-1	MB		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	MB1 11/03/16 13:30
WG148823-2	SB		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	WG148823-1
WG148823-2	SB		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	WG148823-1
WG148823-3	LCS		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-3	LCS		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-4	LD		CVTOTN	FRESH WTR		11/3/2016	11/15/2016	L66456-44
WG148823-4	LD		CVTOTP	FRESH WTR		11/3/2016	11/15/2016	L66456-44
WG148823-5	MS		CVTOTN	FRESH WTR		11/3/2016	11/15/2016	L66456-44
WG148823-5	MS		CVTOTP	FRESH WTR		11/3/2016	11/15/2016	L66456-44
WG148823-6	LD		CVTOTN	STORM WTR		11/3/2016	11/15/2016	L66385-5
WG148823-6	LD		CVTOTP	STORM WTR		11/3/2016	11/15/2016	L66385-5
WG148823-7	MS		CVTOTN	STORM WTR		11/3/2016	11/15/2016	L66385-5
WG148823-7	MS		CVTOTP	STORM WTR		11/3/2016	11/15/2016	L66385-5
WG148823-8	MB		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	MB2 11/03/16 13:30
WG148823-8	MB		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	MB2 11/03/16 13:30
WG148823-9	LCS		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-9	LCS		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-10	LD		CVTOTN	STORM WTR		11/3/2016	11/15/2016	L66498-11
WG148823-10	LD		CVTOTP	STORM WTR		11/3/2016	11/15/2016	L66498-11
WG148823-11	MS		CVTOTN	STORM WTR		11/3/2016	11/15/2016	L66498-11
WG148823-11	MS		CVTOTP	STORM WTR		11/3/2016	11/15/2016	L66498-11
WG148823-12	MB		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	MB3 11/03/16 13:30
WG148823-12	MB		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	MB3 11/03/16 13:30
WG148823-13	LCS		CVTOTN	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-13	LCS		CVTOTP	BLANK WTR		11/3/2016	11/15/2016	LEVEL1
WG148823-14	LD		CVTOTP	EFFLUENT		11/3/2016	11/15/2016	L66417-3
WG148823-15	MS		CVTOTP	EFFLUENT		11/3/2016	11/15/2016	L66417-3

WG148873 (TOC - various) Department: 3 - Conventionals Move Date: 09-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66318-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/28/2016	11/2/2016	11/2/2016	

L66320-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/24/2016	11/2/2016	11/2/2016	
L66350-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/24/2016	11/2/2016	11/2/2016	
L66350-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/28/2016	11/2/2016	11/2/2016	
L66350-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/28/2016	11/2/2016	11/2/2016	
L66350-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/24/2016	11/2/2016	11/2/2016	
L66351-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/26/2016	11/2/2016	11/2/2016	
L66354-2	421422-CHSW	SWD-CHSW Q Cedar Hills Surface Water Qua	CVTOC	FRESH WTR	10/31/2016	11/2/2016	11/2/2016	
L66354-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	11/1/2016	11/2/2016	11/2/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	FREP@WBI
L66419-1	421422-CHGV	SWD-CHGW-Appendix III GW Analytes	CVTOC	GRND WTR	10/26/2016	11/2/2016	11/2/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	STORM WTR	10/26/2016	11/2/2016	11/2/2016	
L66527-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	
L66540-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	11/1/2016	11/2/2016	11/2/2016	
L66540-8	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	10/31/2016	11/2/2016	11/2/2016	FREP@66540-1
WG148873-1	MB		CVTOC	BLANK WTR		11/2/2016	11/2/2016	MB1 11/2/16
WG148873-2	SB		CVTOC	BLANK WTR		11/2/2016	11/2/2016	WG148873-1
WG148873-3	LCS		CVTOC	BLANK WTR		11/2/2016	11/2/2016	LEVEL1
WG148873-4	LD		CVTOC	GRND WTR		11/2/2016	11/2/2016	L66350-5
WG148873-5	MS		CVTOC	GRND WTR		11/2/2016	11/2/2016	L66350-5
WG148873-6	LD		CVTOC	STORM WTR		11/2/2016	11/2/2016	L66499-3
WG148873-7	MS		CVTOC	STORM WTR		11/2/2016	11/2/2016	L66499-3
WG148873-8	LD		CVTOC	FRESH WTR		11/2/2016	11/2/2016	L66354-2
WG148873-9	MS		CVTOC	FRESH WTR		11/2/2016	11/2/2016	L66354-2

WG149032 (TOC/DOC - 421422/421879) Department: 3 - Conventionals Move Date: 22-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	

L66385-3	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/28/2016	11/16/2016	FREP@WBI
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	10/26/2016	10/26/2016	11/16/2016	
L66540-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	
L66540-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	
L66540-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	
L66540-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	
L66540-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	
L66540-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	11/1/2016	11/2/2016	11/16/2016	
L66540-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	10/31/2016	11/2/2016	11/16/2016	FREP@66540-1
L66587-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	11/10/2016	11/16/2016	11/16/2016	
L66607-2	421422-HOG\	SWD-HOGW-Appendix 3 GW Analytes	CVTOC	GRND WTR	11/14/2016	11/16/2016	11/16/2016	
L66607-6	421422-HOG\	SWD-HOGW-Appendix 3 GW Analytes	CVTOC	GRND WTR	11/14/2016	11/16/2016	11/16/2016	
WG149032-1	MB		CVTOC	BLANK WTR		11/16/2016	11/16/2016	MB1 11/16/16
WG149032-2	SB		CVTOC	BLANK WTR		11/16/2016	11/16/2016	WG149032-1
WG149032-3	LCS		CVTOC	BLANK WTR		11/16/2016	11/16/2016	LEVEL1
WG149032-4	LD		CVTOC	GRND WTR		11/16/2016	11/16/2016	L66607-6
WG149032-5	MS		CVTOC	GRND WTR		11/16/2016	11/16/2016	L66607-6
WG149032-6	MB		CVDOC	BLANK WTR		10/28/2016	11/16/2016	MB1 10/28/16
WG149032-7	MB		CVDOC	BLANK WTR		11/2/2016	11/16/2016	MB1 11/02/16
WG149032-8	SB		CVDOC	BLANK WTR		10/28/2016	11/16/2016	WG149032-6
WG149032-9	LCS		CVDOC	BLANK WTR		11/16/2016	11/16/2016	LEVEL1
WG149032-10	LD		CVDOC	STORM WTR		10/28/2016	11/16/2016	L66385-3
WG149032-11	MS		CVDOC	STORM WTR		10/28/2016	11/16/2016	L66385-3

WG149840 (TSS) Department: 3 - Conventionals Move Date: 25-JAN-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments

L66854-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	1/18/2017	1/19/2017	1/20/2017	
L66855-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTSS	GRND WTR	1/12/2017	1/19/2017	1/20/2017	
L66862-1	421422-CHSW	SWD-CHSW P Cedar Hills Surface Water Perm	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66862-2	421422-CHSW	SWD-CHSW P Cedar Hills Surface Water Perm	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66862-3	421422-CHSW	SWD-CHSW P Cedar Hills Surface Water Perm	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66910-1	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	CVTSS	STORM WTR	10/13/2016	1/19/2017	1/20/2017	
L66910-2	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	CVTSS	STORM WTR	10/13/2016	1/19/2017	1/20/2017	
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	FREP
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
WG149840-1	MB		CVTSS	BLANK WTR		1/19/2017	1/20/2017	MB170119
WG149840-2	LCS		CVTSS	BLANK WTR		1/19/2017	1/20/2017	LEVEL1
WG149840-3	LD		CVTSS	GRND WTR		1/19/2017	1/20/2017	L66855-1
WG149840-4	LD		CVTSS	STORM WTR		1/19/2017	1/20/2017	L66862-3
WG149840-5	LD		CVTSS	STORM WTR		1/19/2017	1/20/2017	L66937-6
WG149840-6	LD		CVTSS	STORM WTR		1/19/2017	1/20/2017	L66910-1
WG149840-7	MB		CVTSS	BLANK WTR		1/19/2017	1/20/2017	MB170119
WG149840-8	LCS		CVTSS	BLANK WTR		1/19/2017	1/20/2017	LEVEL1
WG149840-9	LD		CVTSS	STORM WTR		1/19/2017	1/20/2017	L66938-22

WG149845 (FedWay/EchoLkStorm) Department: 3 - Conventionals Move Date: 30-JAN-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	

L66937-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	FREP
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	FREP
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/18/2017	1/19/2017	1/20/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	1/17/2017	1/19/2017	1/20/2017	
WG149845-1	MB		CVTOTN	BLANK WTR		1/19/2017	1/20/2017	MB1 1/19/17 09:10
WG149845-1	MB		CVTOTP	BLANK WTR		1/19/2017	1/20/2017	MB1 1/19/17 09:10
WG149845-2	SB		CVTOTN	BLANK WTR		1/19/2017	1/20/2017	WG149845-1
WG149845-2	SB		CVTOTP	BLANK WTR		1/19/2017	1/20/2017	WG149845-1

WG149845-3	LCS	CVTOTN	BLANK WTR	1/19/2017	1/20/2017	LEVEL1
WG149845-3	LCS	CVTOTP	BLANK WTR	1/19/2017	1/20/2017	LEVEL1
WG149845-4	LD	CVTOTN	STORM WTR	1/19/2017	1/20/2017	L66938-3
WG149845-4	LD	CVTOTP	STORM WTR	1/19/2017	1/20/2017	L66938-3
WG149845-5	MS	CVTOTN	STORM WTR	1/19/2017	1/20/2017	L66938-3
WG149845-5	MS	CVTOTP	STORM WTR	1/19/2017	1/20/2017	L66938-3

WG149912 (NUTS-19) Department: 3 - Conventionals Move Date: 27-JAN-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66857-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNH3-FL	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66857-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/10/2017	1/19/2017	1/19/2017	
L66857-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	1/10/2017	1/19/2017	1/19/2017	
L66857-7	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	1/11/2017	1/19/2017	1/19/2017	
L66868-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNH3-FL	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66868-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNO23	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66868-1	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVORTHOP	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66868-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNH3-FL	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66868-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVNO23	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66868-3	421422-VALS-	SWD-VALS-M Vashon Leachate Monthly	CVORTHOP	LEACHATE	1/19/2017	1/19/2017	1/19/2017	
L66910-1	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	CVNH3-FL	STORM WTR	10/13/2016	1/18/2017	1/19/2017	
L66910-2	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	CVNH3-FL	STORM WTR	10/13/2016	1/18/2017	1/19/2017	
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	

L66937-4	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	FREP
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	FREP
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	FREP
L66937-16	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	BLANK WTR	1/18/2017	1/19/2017	1/19/2017	FFB
L66937-16	421879-240	Federal Way Stormwater Monitoring	CVNO23	BLANK WTR	1/18/2017	1/19/2017	1/19/2017	FFB
L66937-16	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	BLANK WTR	1/18/2017	1/19/2017	1/19/2017	FFB
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/18/2017	1/19/2017	1/19/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	

L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	1/17/2017	1/19/2017	1/19/2017	
L66942-1	421185-100	Elliot West CSO Plant	CVNO23	EFFLUENT	1/17/2017	1/19/2017	1/19/2017	
L66943-1	421185-200	Carkeek CSO Plant	CVNO23	EFFLUENT	1/17/2017	1/19/2017	1/19/2017	
L66944-1	421185-300	Alki CSO Plant	CVNO23	EFFLUENT	1/17/2017	1/19/2017	1/19/2017	
L66953-1	421185-200	Carkeek CSO Plant	CVNO23	EFFLUENT	1/18/2017	1/19/2017	1/19/2017	
L66954-1	421185-300	Alki CSO Plant	CVNO23	EFFLUENT	1/18/2017	1/19/2017	1/19/2017	
WG149912-1	MB		CVNH3-FL	BLANK WTR		1/19/2017	1/19/2017	MB1 1/19
WG149912-1	MB		CVNO23	BLANK WTR		1/19/2017	1/19/2017	MB1 1/19
WG149912-1	MB		CVORTHOP	BLANK WTR		1/19/2017	1/19/2017	MB1 1/19
WG149912-2	SB		CVNH3-FL	BLANK WTR		1/19/2017	1/19/2017	WG149912-1
WG149912-2	SB		CVNO23	BLANK WTR		1/19/2017	1/19/2017	WG149912-1
WG149912-2	SB		CVORTHOP	BLANK WTR		1/19/2017	1/19/2017	WG149912-1
WG149912-3	LCS		CVNH3-FL	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-3	LCS		CVNO23	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-3	LCS		CVORTHOP	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-4	LD		CVNO23	EFFLUENT		1/19/2017	1/19/2017	L66944-1
WG149912-5	MS		CVNO23	EFFLUENT		1/19/2017	1/19/2017	L66944-1
WG149912-6	LD		CVNH3-FL	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-6	LD		CVNO23	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-6	LD		CVORTHOP	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-7	MS		CVNH3-FL	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-7	MS		CVNO23	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-7	MS		CVORTHOP	STORM WTR		1/19/2017	1/19/2017	L66937-1
WG149912-8	MB		CVNH3-FL	BLANK WTR		1/19/2017	1/19/2017	MB2 1/19
WG149912-8	MB		CVNO23	BLANK WTR		1/19/2017	1/19/2017	MB2 1/19
WG149912-8	MB		CVORTHOP	BLANK WTR		1/19/2017	1/19/2017	MB2 1/19
WG149912-9	LCS		CVNH3-FL	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-9	LCS		CVNO23	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-9	LCS		CVORTHOP	BLANK WTR		1/19/2017	1/19/2017	LEVEL1
WG149912-10	LD		CVNH3-FL	STORM WTR		1/19/2017	1/19/2017	L66938-11
WG149912-10	LD		CVNO23	STORM WTR		1/19/2017	1/19/2017	L66938-11

WG149912-10	LD	CVORTHOP	STORM WTR	1/19/2017	1/19/2017	L66938-11
WG149912-11	MS	CVNH3-FL	STORM WTR	1/19/2017	1/19/2017	L66938-11
WG149912-11	MS	CVNO23	STORM WTR	1/19/2017	1/19/2017	L66938-11
WG149912-11	MS	CVORTHOP	STORM WTR	1/19/2017	1/19/2017	L66938-11
WG149912-12	MB	CVNH3-FL	BLANK WTR	1/19/2017	1/19/2017	MB3 1/19
WG149912-12	MB	CVNO23	BLANK WTR	1/19/2017	1/19/2017	MB3 1/19
WG149912-12	MB	CVORTHOP	BLANK WTR	1/19/2017	1/19/2017	MB3 1/19
WG149912-13	SB	CVNH3-FL	BLANK WTR	1/19/2017	1/19/2017	WG149912-12
WG149912-13	SB	CVNO23	BLANK WTR	1/19/2017	1/19/2017	WG149912-12
WG149912-13	SB	CVORTHOP	BLANK WTR	1/19/2017	1/19/2017	WG149912-12
WG149912-14	LD	CVNH3-FL	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-14	LD	CVNO23	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-14	LD	CVORTHOP	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-15	MS	CVNH3-FL	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-15	MS	CVNO23	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-15	MS	CVORTHOP	LEACHATE	1/19/2017	1/19/2017	L66868-3
WG149912-16	MB	CVNH3-FL	BLANK WTR	1/18/2017	1/19/2017	MB2 1/18
WG149912-17	SB	CVNH3-FL	BLANK WTR	1/18/2017	1/19/2017	WG149912-16
WG149912-18	LD	CVNH3-FL	STORM WTR	1/18/2017	1/19/2017	L66910-1
WG149912-19	MS	CVNH3-FL	STORM WTR	1/18/2017	1/19/2017	L66910-1

WG150134 (DOC - 421879) Department: 3 - Conventionals Move Date: 16-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66937-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	FREP
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/18/2017	1/18/2017	2/2/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/18/2017	1/18/2017	2/2/2017	

L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-21	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	BLANK WTR	1/17/2017	1/18/2017	2/2/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	1/17/2017	1/18/2017	2/2/2017	
WG150134-1	MB		CVDOC	BLANK WTR		2/2/2017	2/2/2017	MB1 2/2/17
WG150134-2	SB		CVDOC	BLANK WTR		2/2/2017	2/2/2017	WG150134-1
WG150134-3	LCS		CVDOC	BLANK WTR		2/2/2017	2/2/2017	LEVEL1
WG150134-4	LD		CVDOC	STORM WTR		1/18/2017	2/2/2017	L66938-15
WG150134-5	MS		CVDOC	STORM WTR		1/18/2017	2/2/2017	L66938-15
WG150134-6	MB		CVDOC	BLANK WTR		1/18/2017	2/2/2017	MB1 1/18/17

WG150174 (TOTP/TOTN-SWD/Lk Haven/Ec) Department: 3 - Conventionals Move Date: 17-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66738-1	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOTP	FRESH WTR	1/30/2017	2/10/2017	2/13/2017	
L66738-2	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOTP	FRESH WTR	1/30/2017	2/10/2017	2/13/2017	
L66738-5	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOTP	FRESH WTR	2/10/2017	2/10/2017	2/13/2017	
L66886-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	2/10/2017	2/10/2017	2/13/2017	
L66886-2	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	1/30/2017	2/10/2017	2/13/2017	
L66908-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/1/2017	2/10/2017	2/13/2017	
L66908-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/1/2017	2/10/2017	2/13/2017	
L66908-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOTP	FRESH WTR	2/1/2017	2/10/2017	2/13/2017	
L66958-1	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	2/7/2017	2/10/2017	2/13/2017	
L66958-3	421430-300	OCS-Lake Haven Utility District routine testin	CVTOTP	EFFLUENT	2/7/2017	2/10/2017	2/13/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/8/2017	2/10/2017	2/13/2017	FREP
L67069-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/8/2017	2/10/2017	2/13/2017	FREP

L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/9/2017	2/10/2017	2/13/2017	
WG150174-1	MB		CVTOTN	BLANK WTR		2/10/2017	2/13/2017	MB1 2/10/17 11:22
WG150174-1	MB		CVTOTP	BLANK WTR		2/10/2017	2/13/2017	MB1 2/10/17 11:22
WG150174-2	SB		CVTOTN	BLANK WTR		2/10/2017	2/13/2017	WG150174-1
WG150174-2	SB		CVTOTP	BLANK WTR		2/10/2017	2/13/2017	WG150174-1
WG150174-3	LCS		CVTOTN	BLANK WTR		2/10/2017	2/13/2017	LEVEL1
WG150174-3	LCS		CVTOTP	BLANK WTR		2/10/2017	2/13/2017	LEVEL1
WG150174-4	LD		CVTOTP	FRESH WTR		2/10/2017	2/13/2017	L66886-2
WG150174-5	MS		CVTOTP	FRESH WTR		2/10/2017	2/13/2017	L66886-2
WG150174-6	LD		CVTOTP	EFFLUENT		2/10/2017	2/13/2017	L66958-1
WG150174-7	MS		CVTOTP	EFFLUENT		2/10/2017	2/13/2017	L66958-1
WG150174-8	MB		CVTOTN	BLANK WTR		2/10/2017	2/13/2017	MB2 2/10/17 11:22
WG150174-8	MB		CVTOTP	BLANK WTR		2/10/2017	2/13/2017	MB2 2/10/17 11:22
WG150174-9	LCS		CVTOTN	BLANK WTR		2/10/2017	2/13/2017	LEVEL1
WG150174-9	LCS		CVTOTP	BLANK WTR		2/10/2017	2/13/2017	LEVEL1
WG150174-10	LD		CVTOTN	STORM WTR		2/10/2017	2/13/2017	L67069-6
WG150174-10	LD		CVTOTP	STORM WTR		2/10/2017	2/13/2017	L67069-6
WG150174-11	MS		CVTOTN	STORM WTR		2/10/2017	2/13/2017	L67069-6
WG150174-11	MS		CVTOTP	STORM WTR		2/10/2017	2/13/2017	L67069-6

WG150188 (Echo Stm DISSNUTs for 170) Department: 3 - Conventionals Move Date: 21-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	

L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-25	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
WG150188-1	MB		CVNH3-FL	BLANK WTR		2/9/2017	2/9/2017	MB3
WG150188-1	MB		CVNO23	BLANK WTR		2/9/2017	2/9/2017	MB3
WG150188-1	MB		CVORTHOP	BLANK WTR		2/9/2017	2/9/2017	MB3
WG150188-2	SB		CVNH3-FL	BLANK WTR		2/9/2017	2/9/2017	WG150188-1
WG150188-2	SB		CVNO23	BLANK WTR		2/9/2017	2/9/2017	WG150188-1
WG150188-2	SB		CVORTHOP	BLANK WTR		2/9/2017	2/9/2017	WG150188-1
WG150188-3	LCS		CVNH3-FL	BLANK WTR		2/9/2017	2/9/2017	LEVEL1
WG150188-3	LCS		CVNO23	BLANK WTR		2/9/2017	2/9/2017	LEVEL1
WG150188-3	LCS		CVORTHOP	BLANK WTR		2/9/2017	2/9/2017	LEVEL1
WG150188-4	LD		CVNH3-FL	STORM WTR		2/9/2017	2/9/2017	L67070-11
WG150188-4	LD		CVNO23	STORM WTR		2/9/2017	2/9/2017	L67070-11
WG150188-5	MS		CVNH3-FL	STORM WTR		2/9/2017	2/9/2017	L67070-11
WG150188-5	MS		CVNO23	STORM WTR		2/9/2017	2/9/2017	L67070-11
WG150188-6	LD		CVORTHOP	STORM WTR		2/9/2017	2/9/2017	L67070-1
WG150188-7	MS		CVORTHOP	STORM WTR		2/9/2017	2/9/2017	L67070-1

WG150226 (TSS) Department: 3 - Conventionals Move Date: 01-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66738-5	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTSS	FRESH WTR	2/10/2017	2/13/2017	2/14/2017	

L66886-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTSS	FRESH WTR	2/10/2017	2/13/2017	2/14/2017	
L66913-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L66913-4	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L66913-5	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	2/10/2017	2/13/2017	2/14/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	2/8/2017	2/13/2017	2/14/2017	FREP
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
L67104-1	423650	Elliott West Monitoring	CVTSS	STORM WTR	2/9/2017	2/13/2017	2/14/2017	
WG150226-1	MB		CVTSS	BLANK WTR		2/13/2017	2/14/2017	MB170213
WG150226-2	LCS		CVTSS	BLANK WTR		2/13/2017	2/14/2017	LEVEL1
WG150226-3	LD		CVTSS	FRESH WTR		2/13/2017	2/14/2017	L66886-1
WG150226-4	LD		CVTSS	STORM WTR		2/13/2017	2/14/2017	L67104-1
WG150226-5	LD		CVTSS	STORM WTR		2/13/2017	2/14/2017	L66913-5
WG150226-6	LD		CVTSS	STORM WTR		2/13/2017	2/14/2017	L67069-7
WG150226-7	MB		CVTSS	BLANK WTR		2/13/2017	2/14/2017	MB70213
WG150226-8	LCS		CVTSS	BLANK WTR		2/13/2017	2/14/2017	LEVEL1
WG150226-9	LD		CVTSS	STORM WTR		2/13/2017	2/14/2017	L67070-26

WG150290 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 01-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66738-5	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarte	CVTOC	FRESH WTR	2/10/2017	2/14/2017	2/14/2017	
L66886-1	421422-DUSV	SWD-DUSW Duvall Surface Water Quarterly	CVTOC	FRESH WTR	2/10/2017	2/14/2017	2/14/2017	
L66895-1	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	1/23/2017	1/24/2017	2/15/2017	
L66895-1	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	1/23/2017	2/22/2017	2/22/2017	
L66895-2	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	1/23/2017	1/24/2017	2/15/2017	

L66895-2	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	1/23/2017	2/15/2017	2/15/2017	
L66895-3	421250ON	Ambient Offshore Water Column-North	CVDOC	FRESH WTR	1/23/2017	1/24/2017	2/15/2017	
L66895-3	421250ON	Ambient Offshore Water Column-North	CVTOC	FRESH WTR	1/23/2017	2/15/2017	2/15/2017	
L66896-1	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	1/23/2017	1/24/2017	2/15/2017	
L66896-1	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	1/23/2017	2/15/2017	2/15/2017	
L66896-2	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	1/23/2017	1/24/2017	2/15/2017	
L66896-2	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	1/23/2017	2/15/2017	2/15/2017	
L66896-3	421250ON	Ambient Offshore Water Column-North	CVDOC	SALT WTR	1/23/2017	1/24/2017	2/15/2017	
L66896-3	421250ON	Ambient Offshore Water Column-North	CVTOC	SALT WTR	1/23/2017	2/15/2017	2/15/2017	
L67033-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/14/2017	2/15/2017	2/15/2017	
L67033-4	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/14/2017	2/15/2017	2/15/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/8/2017	2/10/2017	2/15/2017	FREP
L67069-8	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/8/2017	2/14/2017	2/14/2017	FREP
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/9/2017	2/10/2017	2/15/2017	
L67083-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/14/2017	2/15/2017	2/15/2017	
L67083-2	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/14/2017	2/15/2017	2/15/2017	
WG150290-1	MB		CVTOC	BLANK WTR		2/14/2017	2/14/2017	MB1 2/14/17
WG150290-2	SB		CVTOC	BLANK WTR		2/14/2017	2/14/2017	WG150290-1
WG150290-3	LCS		CVTOC	BLANK WTR		2/14/2017	2/14/2017	LEVEL1
WG150290-4	LD		CVTOC	STORM WTR		2/14/2017	2/14/2017	L67069-1
WG150290-5	MS		CVTOC	STORM WTR		2/14/2017	2/14/2017	L67069-1

WG150290-6	MB	CVTOC	BLANK WTR	2/15/2017	2/15/2017	MB1 2/15/17
WG150290-7	SB	CVTOC	BLANK WTR	2/15/2017	2/15/2017	WG150290-6
WG150290-8	LCS	CVTOC	BLANK WTR	2/15/2017	2/15/2017	LEVEL1
WG150290-9	LD	CVTOC	GRND WTR	2/15/2017	2/15/2017	L67083-1
WG150290-10	MS	CVTOC	GRND WTR	2/15/2017	2/15/2017	L67083-1
WG150290-11	MB	CVDOC	BLANK WTR	2/10/2017	2/15/2017	MB1 2/10/17
WG150290-12	SB	CVDOC	BLANK WTR	2/10/2017	2/15/2017	WG150290-11
WG150290-13	LCS	CVDOC	BLANK WTR	2/15/2017	2/15/2017	LEVEL1
WG150290-14	LD	CVDOC	STORM WTR	2/10/2017	2/15/2017	L67069-4
WG150290-15	MS	CVDOC	STORM WTR	2/10/2017	2/15/2017	L67069-4
WG150290-16	MB	CVDOC	BLANK WTR	1/24/2017	2/15/2017	MB 1/24/17
WG150290-17	LCS	CVDOC	BLANK WTR	2/15/2017	2/15/2017	LEVEL1
WG150290-18	LD	CVDOC	SALT WTR	1/24/2017	2/15/2017	L66896-1
WG150290-19	MS	CVDOC	SALT WTR	1/24/2017	2/15/2017	L66896-1
WG150290-20	LD	CVTOC	FRESH WTR	2/22/2017	2/22/2017	L66895-1
WG150290-21	MS	CVTOC	FRESH WTR	2/22/2017	2/22/2017	L66895-1
WG150463-1	MB	CVTOC	BLANK WTR	2/22/2017	2/22/2017	MB1 2/22/17
WG150463-3	LCS	CVTOC	BLANK WTR	2/22/2017	2/22/2017	LEVEL1

WG150292 (NUTS-16) Department: 3 - Conventionals Move Date: 27-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66745-5	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/16/2017	2/16/2017	2/16/2017	
L66745-5	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/16/2017	2/16/2017	2/16/2017	
L67033-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67033-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67033-4	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67033-4	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67033-6	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/16/2017	2/16/2017	2/16/2017	
L67033-6	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/16/2017	2/16/2017	2/16/2017	
L67051-1	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-2	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-3	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-3	421195-150	Beaver Lake	CVNO23	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-3	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-4	421195-150	Beaver Lake	CVNH3-FL	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-4	421195-150	Beaver Lake	CVNO23	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67051-4	421195-150	Beaver Lake	CVORTHOP	FRESH WTR	2/15/2017	2/16/2017	2/16/2017	
L67083-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67083-1	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/14/2017	2/15/2017	2/16/2017	

L67083-2	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNH3-FL	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67083-2	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVNO3	GRND WTR	2/14/2017	2/15/2017	2/16/2017	
L67100-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	2/14/2017	2/16/2017	2/16/2017	
L67100-1	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	2/14/2017	2/16/2017	2/16/2017	
L67100-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	2/15/2017	2/16/2017	2/16/2017	
L67100-3	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVORTHOP	LEACHATE	2/15/2017	2/16/2017	2/16/2017	
L67100-4	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	2/15/2017	2/16/2017	2/16/2017	
L67100-5	421422-CHLS-	SWD-CHLS-M Cedar Hills Leachate Monthly	CVNO23	LEACHATE	2/15/2017	2/16/2017	2/16/2017	
L67125-1	421185-100	Elliot West CSO Plant	CVNO23	EFFLUENT	2/8/2017	2/16/2017	2/16/2017	
L67125-2	421185-100	Elliot West CSO Plant	CVNO23	EFFLUENT	2/9/2017	2/16/2017	2/16/2017	
L67129-1	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-1	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-2	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-2	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-4	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-4	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-5	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-5	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-6	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-6	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-7	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-7	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-8	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-8	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-9	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-9	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-10	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-10	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-11	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-11	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-12	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-12	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-13	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-13	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-14	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-14	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67129-15	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	FREP@L67129-9
L67129-15	421304	Forestland-Weyerhaeuser Operations	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	FREP@L67129-9
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/15/2017	2/16/2017	2/16/2017	

L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	STORM WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	2/15/2017	2/16/2017	2/16/2017	
L67140-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	2/15/2017	2/16/2017	2/16/2017	
WG150292-1	MB		CVNH3-FL	BLANK WTR		2/15/2017	2/16/2017	MB5 2/15
WG150292-1	MB		CVNO3	BLANK WTR		2/15/2017	2/16/2017	MB5 2/15
WG150292-2	SB		CVNH3-FL	BLANK WTR		2/15/2017	2/16/2017	WG150292-1
WG150292-2	SB		CVNO3	BLANK WTR		2/15/2017	2/16/2017	WG150292-1
WG150292-3	LCS		CVNH3-FL	BLANK WTR		2/16/2017	2/16/2017	LEVEL1
WG150292-3	LCS		CVNO3	BLANK WTR		2/16/2017	2/16/2017	LEVEL1
WG150292-4	LD		CVNH3-FL	GRND WTR		2/15/2017	2/16/2017	L67083-2
WG150292-4	LD		CVNO3	GRND WTR		2/15/2017	2/16/2017	L67083-2
WG150292-5	MS		CVNH3-FL	GRND WTR		2/15/2017	2/16/2017	L67083-2
WG150292-5	MS		CVNO3	GRND WTR		2/15/2017	2/16/2017	L67083-2
WG150292-6	MB		CVNH3-FL	BLANK WTR		2/16/2017	2/16/2017	MB5 2/16
WG150292-6	MB		CVNO23	BLANK WTR		2/16/2017	2/16/2017	MB5 2/16
WG150292-6	MB		CVORTHOP	BLANK WTR		2/16/2017	2/16/2017	MB5 2/16
WG150292-7	SB		CVNH3-FL	BLANK WTR		2/16/2017	2/16/2017	WG150292-6
WG150292-7	SB		CVNO23	BLANK WTR		2/16/2017	2/16/2017	WG150292-6
WG150292-7	SB		CVORTHOP	BLANK WTR		2/16/2017	2/16/2017	WG150292-6
WG150292-8	LCS		CVNH3-FL	BLANK WTR		2/16/2017	2/16/2017	LEVEL1
WG150292-8	LCS		CVNO23	BLANK WTR		2/16/2017	2/16/2017	LEVEL1
WG150292-8	LCS		CVORTHOP	BLANK WTR		2/16/2017	2/16/2017	LEVEL1
WG150292-9	LD		CVNH3-FL	FRESH WTR		2/16/2017	2/16/2017	L67051-4
WG150292-9	LD		CVNO23	FRESH WTR		2/16/2017	2/16/2017	L67051-4

WG150292-9	LD	CVORTHOP	FRESH WTR	2/16/2017	2/16/2017	L67051-4
WG150292-10	MS	CVNH3-FL	FRESH WTR	2/16/2017	2/16/2017	L67051-4
WG150292-10	MS	CVNO23	FRESH WTR	2/16/2017	2/16/2017	L67051-4
WG150292-10	MS	CVORTHOP	FRESH WTR	2/16/2017	2/16/2017	L67051-4
WG150292-11	LD	CVNH3-FL	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-11	LD	CVNO23	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-11	LD	CVORTHOP	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-12	MS	CVNH3-FL	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-12	MS	CVNO23	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-12	MS	CVORTHOP	STORM WTR	2/16/2017	2/16/2017	L67140-1
WG150292-13	MB	CVNH3-FL	BLANK WTR	2/16/2017	2/16/2017	MB1 2/16
WG150292-13	MB	CVNO23	BLANK WTR	2/16/2017	2/16/2017	MB1 2/16
WG150292-14	SB	CVNH3-FL	BLANK WTR	2/16/2017	2/16/2017	WG150292-13
WG150292-14	SB	CVNO23	BLANK WTR	2/16/2017	2/16/2017	WG150292-13
WG150292-15	LCS	CVNH3-FL	BLANK WTR	2/16/2017	2/16/2017	LEVEL1
WG150292-15	LCS	CVNO23	BLANK WTR	2/16/2017	2/16/2017	LEVEL1
WG150292-16	LD	CVNH3-FL	STORM WTR	2/16/2017	2/16/2017	L67129-1
WG150292-16	LD	CVNO23	STORM WTR	2/16/2017	2/16/2017	L67129-1
WG150292-17	MS	CVNH3-FL	STORM WTR	2/16/2017	2/16/2017	L67129-1
WG150292-17	MS	CVNO23	STORM WTR	2/16/2017	2/16/2017	L67129-1
WG150292-18	MB	CVNH3-FL	BLANK WTR	2/16/2017	2/16/2017	MB6 2/16
WG150292-18	MB	CVNO3	BLANK WTR	2/16/2017	2/16/2017	MB6 2/16
WG150292-19	MB	CVNO23	BLANK WTR	2/16/2017	2/16/2017	MB7 2/16
WG150292-19	MB	CVORTHOP	BLANK WTR	2/16/2017	2/16/2017	MB7 2/16
WG150292-20	SB	CVNO23	BLANK WTR	2/16/2017	2/16/2017	WG150292-19
WG150292-20	SB	CVORTHOP	BLANK WTR	2/16/2017	2/16/2017	WG150292-19
WG150292-21	LCS	CVNO23	BLANK WTR	2/16/2017	2/16/2017	LEVEL1
WG150292-21	LCS	CVORTHOP	BLANK WTR	2/16/2017	2/16/2017	LEVEL1
WG150292-22	LD	CVNO23	LEACHATE	2/16/2017	2/16/2017	L67100-4
WG150292-23	MS	CVNO23	LEACHATE	2/16/2017	2/16/2017	L67100-4
WG150292-24	LD	CVNO23	EFFLUENT	2/16/2017	2/16/2017	L67125-2
WG150292-25	MS	CVNO23	EFFLUENT	2/16/2017	2/16/2017	L67125-2

WG150295 (TSS) Department: 3 - Conventionals Move Date: 01-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66745-5	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	2/16/2017	2/16/2017	2/21/2017	
L67020-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-3	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	

L67020-4	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-5	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-6	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-7	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-8	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-9	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-10	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-11	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-12	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67020-14	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	FREP @ L67020-2
L67023-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-3	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-4	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-5	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-6	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-7	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-8	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-9	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-10	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-11	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-12	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-13	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-14	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67023-16	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	FREP @ L67023-7
L67024-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-3	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-4	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-5	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67025-6	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67027-1	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67027-2	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67027-3	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67027-4	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	2/15/2017	2/16/2017	2/21/2017	
L67033-6	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	2/16/2017	2/16/2017	2/21/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	STORM WTR	2/15/2017	2/16/2017	2/21/2017	

WG150295-1	MB	CVTSS	BLANK WTR	2/16/2017	2/21/2017	MB170216
WG150295-2	LCS	CVTSS	BLANK WTR	2/16/2017	2/21/2017	LEVEL1
WG150295-3	LD	CVTSS	FRESH WTR	2/16/2017	2/21/2017	L67020-4
WG150295-4	LD	CVTSS	FRESH WTR	2/16/2017	2/21/2017	L67023-3
WG150295-5	MB	CVTSS	BLANK WTR	2/16/2017	2/21/2017	MB170216
WG150295-6	LCS	CVTSS	BLANK WTR	2/16/2017	2/21/2017	LEVEL1
WG150295-7	LD	CVTSS	FRESH WTR	2/16/2017	2/21/2017	L67025-5
WG150295-8	LD	CVTSS	STORM WTR	2/16/2017	2/21/2017	L67140-7
WG150295-9	MB	CVTSS	BLANK WTR	2/16/2017	2/21/2017	MB170216
WG150295-10	LCS	CVTSS	BLANK WTR	2/16/2017	2/21/2017	LEVEL1
WG150295-11	LD	CVTSS	FRESH WTR	2/16/2017	2/21/2017	L67027-3
WG150295-12	LD	CVTSS	GRND WTR	2/16/2017	2/21/2017	L67033-6
WG150295-13	LD	CVTSS	FRESH WTR	2/16/2017	2/21/2017	L67024-1

WG150306 (TOTP/TOTN/Streams/BeaverL) Department: 3 - Conventionals Move Date: 09-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67020-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	

L67020-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67020-14	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	FREP @ L67020-2
L67020-14	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	FREP @ L67020-2
L67023-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-7	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-8	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-9	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-10	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-11	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-12	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-13	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-14	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-14	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67023-16	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	FREP @ L67023-7
L67023-16	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	FREP @ L67023-7
L67024-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67024-1	422018-100	SWS Boise Creek Add-on to Routine Streams	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-1	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-2	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-3	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	

L67025-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-4	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-5	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67025-6	421240A	STREAMS MONITOR (surf wtr)	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-1	421195-190	Vashon Island Surface Water	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-1	421195-190	Vashon Island Surface Water	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-2	421195-190	Vashon Island Surface Water	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-2	421195-190	Vashon Island Surface Water	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-3	421195-190	Vashon Island Surface Water	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-3	421195-190	Vashon Island Surface Water	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-4	421195-190	Vashon Island Surface Water	CVTOTN	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67027-4	421195-190	Vashon Island Surface Water	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67051-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67051-2	421195-150	Beaver Lake	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67051-3	421195-150	Beaver Lake	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67051-4	421195-150	Beaver Lake	CVTOTP	FRESH WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-4	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-4	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	
L67141-8	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/15/2017	2/17/2017	2/22/2017	FREP

L67141-8	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/15/2017	2/17/2017	2/22/2017	FREP
L67141-17	421879-240	Federal Way Stormwater Monitoring	CVTOTN	STORM WTR	2/16/2017	2/17/2017	2/22/2017	
L67141-17	421879-240	Federal Way Stormwater Monitoring	CVTOTP	STORM WTR	2/16/2017	2/17/2017	2/22/2017	
WG150306-1	MB		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	MB1 2/17/17 08:40
WG150306-1	MB		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	MB1 2/17/17 08:40
WG150306-2	SB		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	WG150306-1
WG150306-2	SB		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	WG150306-1
WG150306-3	LCS		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-3	LCS		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-4	LD		CVTOTN	FRESH WTR		2/17/2017	2/22/2017	L67023-3
WG150306-4	LD		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67023-3
WG150306-5	MS		CVTOTN	FRESH WTR		2/17/2017	2/22/2017	L67023-3
WG150306-5	MS		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67023-3
WG150306-6	MB		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	MB2 2/17/17 08:40
WG150306-6	MB		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	MB2 2/17/17 08:40
WG150306-7	LCS		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-7	LCS		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-8	LD		CVTOTN	FRESH WTR		2/17/2017	2/22/2017	L67025-3
WG150306-8	LD		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67025-3
WG150306-9	MS		CVTOTN	FRESH WTR		2/17/2017	2/22/2017	L67025-3
WG150306-9	MS		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67025-3
WG150306-10	MB		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	MB3 2/17/17 08:40
WG150306-10	MB		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	MB3 2/17/17 08:40
WG150306-11	LCS		CVTOTN	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-11	LCS		CVTOTP	BLANK WTR		2/17/2017	2/22/2017	LEVEL1
WG150306-12	LD		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67051-3
WG150306-13	MS		CVTOTP	FRESH WTR		2/17/2017	2/22/2017	L67051-3
WG150306-14	LD		CVTOTN	STORM WTR		2/17/2017	2/22/2017	L67141-3
WG150306-14	LD		CVTOTP	STORM WTR		2/17/2017	2/22/2017	L67141-3
WG150306-15	MS		CVTOTN	STORM WTR		2/17/2017	2/22/2017	L67141-3
WG150306-15	MS		CVTOTP	STORM WTR		2/17/2017	2/22/2017	L67141-3

WG150461 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 03-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66745-5	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/16/2017	2/21/2017	2/21/2017	
L67033-6	421422-VAGV	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	2/16/2017	2/21/2017	2/21/2017	
L67105-1	421422-ENGV	SWD-ENGW Enumclaw Groundwater Quarte	CVTOC	GRND WTR	2/17/2017	2/21/2017	2/21/2017	
L67105-3	421422-ENGV	SWD-ENGW Enumclaw Groundwater Quarte	CVTOC	GRND WTR	2/17/2017	2/21/2017	2/21/2017	

L67105-4	421422-ENGV	SWD-ENGW Enumclaw Groundwater Quarte	CVTOC	GRND WTR	2/17/2017	2/21/2017	2/21/2017	
L67105-6	421422-ENGV	SWD-ENGW Enumclaw Groundwater Quarte	CVTOC	GRND WTR	2/17/2017	2/21/2017	2/21/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/16/2017	2/22/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/16/2017	2/21/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-4	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-4	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	
L67141-8	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/15/2017	2/17/2017	2/21/2017	FREP
L67141-8	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/15/2017	2/21/2017	2/21/2017	FREP
L67141-17	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	2/16/2017	2/17/2017	2/21/2017	
L67141-17	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	2/16/2017	2/21/2017	2/21/2017	
WG150461-1	MB		CVTOC	BLANK WTR		2/21/2017	2/21/2017	MB1 2/21/17
WG150461-2	SB		CVTOC	BLANK WTR		2/21/2017	2/21/2017	WG150461-1
WG150461-3	LCS		CVTOC	BLANK WTR		2/21/2017	2/21/2017	LEVEL1
WG150461-4	LD		CVTOC	GRND WTR		2/21/2017	2/21/2017	L67105-1
WG150461-5	MS		CVTOC	GRND WTR		2/21/2017	2/21/2017	L67105-1
WG150461-6	LD		CVTOC	STORM WTR		2/21/2017	2/21/2017	L67141-5
WG150461-7	MS		CVTOC	STORM WTR		2/21/2017	2/21/2017	L67141-5
WG150461-8	MB		CVDOC	BLANK WTR		2/16/2017	2/21/2017	MB1 2/16/17
WG150461-9	SB		CVDOC	BLANK WTR		2/16/2017	2/21/2017	WG150461-8
WG150461-10	LCS		CVDOC	BLANK WTR		2/21/2017	2/21/2017	LEVEL1
WG150461-11	LD		CVDOC	STORM WTR		2/16/2017	2/22/2017	L67140-1
WG150461-12	MS		CVDOC	STORM WTR		2/16/2017	2/22/2017	L67140-1
WG150461-13	MB		CVDOC	BLANK WTR		2/17/2017	2/21/2017	MB1 2/17/17
WG150461-14	LCS		CVDOC	BLANK WTR		2/22/2017	2/22/2017	LEVEL1

WG150997 (nuts!-29) Department: 3 - Conventionals Move Date: 19-APR-17

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67369-1	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-1	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-1	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-2	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-2	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-2	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-3	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-3	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-3	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-4	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-4	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-4	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-5	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-5	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-5	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-6	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-6	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-6	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-8	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-8	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-8	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-9	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-9	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-9	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-10	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-10	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-10	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-11	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-11	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-11	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-12	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-12	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-12	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-13	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-13	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-13	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-14	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-14	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-14	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	

L67369-15	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-15	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-15	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-16	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-16	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-16	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-17	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-17	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-17	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-19	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-19	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-19	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-20	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-20	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-20	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-21	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-21	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-21	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-22	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-22	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-22	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-23	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-23	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-23	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-24	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-24	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-24	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-25	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-25	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-25	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-26	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-26	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-26	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-27	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-27	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-27	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-28	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-28	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-28	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017
L67369-29	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017

L67369-29	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-29	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-31	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-31	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-31	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-32	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-32	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-32	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/29/2017	3/29/2017	
L67369-33	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-33	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-33	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-34	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-34	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-34	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-35	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-35	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-35	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	
L67369-37	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-37	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-37	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-38	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-38	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-38	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67369-39	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-19
L67369-39	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-19
L67369-39	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-19
L67369-40	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-40	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-40	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-41	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-41	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-41	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-42	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-42	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-42	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-43	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-43	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-43	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-44	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-44	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-44	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	

L67369-45	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-45	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-45	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-47	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-47	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-47	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-48	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-48	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-48	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-49	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-49	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-49	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-50	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-50	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-50	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-51	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-51	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-51	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/28/2017	3/30/2017	3/30/2017	
L67369-53	421235	MAJOR LAKES (wtr col)	CVNH3-FL	BLANK WTR	3/28/2017	3/30/2017	3/30/2017	FFB
L67369-53	421235	MAJOR LAKES (wtr col)	CVNO23	BLANK WTR	3/28/2017	3/30/2017	3/30/2017	FFB
L67369-53	421235	MAJOR LAKES (wtr col)	CVORTHOP	BLANK WTR	3/28/2017	3/30/2017	3/30/2017	FFB
L67369-54	421235	MAJOR LAKES (wtr col)	CVNH3-FL	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-29
L67369-54	421235	MAJOR LAKES (wtr col)	CVNO23	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-29
L67369-54	421235	MAJOR LAKES (wtr col)	CVORTHOP	FRESH WTR	3/27/2017	3/30/2017	3/30/2017	FREP_P67369-29
L67371-1	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-1	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-1	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-3	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-3	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-3	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-4	421195-240	Horseshoe Lake WQ	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-4	421195-240	Horseshoe Lake WQ	CVNO23	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67371-4	421195-240	Horseshoe Lake WQ	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	3/30/2017	
L67398-1	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-1	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-1	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	

L67398-3	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-16	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67398-16	421879-240	Federal Way Stormwater Monitoring	CVNO23	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67398-16	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	BLANK WTR	3/27/2017	3/30/2017	3/30/2017	FFB
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	
L67413-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNH3-FL	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	FFB
L67413-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVNO23	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	FFB
L67413-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVORTHOP	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	FFB
L67443-1	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-7	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	STORM WTR	3/29/2017	3/30/2017	3/30/2017	

L67443-7	421879-240	Federal Way Stormwater Monitoring	CVNO23	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-7	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	STORM WTR	3/29/2017	3/30/2017	3/30/2017	
L67443-8	421879-240	Federal Way Stormwater Monitoring	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	3/30/2017	FFB
L67443-8	421879-240	Federal Way Stormwater Monitoring	CVNO23	BLANK WTR	3/30/2017	3/30/2017	3/30/2017	FFB
L67443-8	421879-240	Federal Way Stormwater Monitoring	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	3/30/2017	FFB
WG150997-1	MB		CVNH3-FL	BLANK WTR		3/29/2017	3/29/2017	MB2 3/29
WG150997-1	MB		CVNO23	BLANK WTR		3/29/2017	3/29/2017	MB2 3/29
WG150997-1	MB		CVORTHOP	BLANK WTR		3/29/2017	3/29/2017	MB2 3/29
WG150997-2	SB		CVNH3-FL	BLANK WTR		3/29/2017	3/29/2017	WG150997-1
WG150997-2	SB		CVNO23	BLANK WTR		3/29/2017	3/29/2017	WG150997-1
WG150997-2	SB		CVORTHOP	BLANK WTR		3/29/2017	3/29/2017	WG150997-1
WG150997-3	LCS		CVNH3-FL	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-3	LCS		CVNO23	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-3	LCS		CVORTHOP	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-4	LD		CVNH3-FL	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-4	LD		CVNO23	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-4	LD		CVORTHOP	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-5	MS		CVNH3-FL	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-5	MS		CVNO23	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-5	MS		CVORTHOP	FRESH WTR		3/29/2017	3/29/2017	L67369-15
WG150997-6	MB		CVNH3-FL	BLANK WTR		3/29/2017	3/29/2017	MB4 3/29
WG150997-6	MB		CVNO23	BLANK WTR		3/29/2017	3/29/2017	MB4 3/29
WG150997-6	MB		CVORTHOP	BLANK WTR		3/29/2017	3/29/2017	MB4 3/29
WG150997-7	LCS		CVNH3-FL	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-7	LCS		CVNO23	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-7	LCS		CVORTHOP	BLANK WTR		3/29/2017	3/29/2017	LEVEL1
WG150997-8	LD		CVNH3-FL	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-8	LD		CVNO23	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-8	LD		CVORTHOP	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-9	MS		CVNH3-FL	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-9	MS		CVNO23	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-9	MS		CVORTHOP	FRESH WTR		3/29/2017	3/29/2017	L67369-32
WG150997-10	MB		CVNH3-FL	BLANK WTR		3/30/2017	3/30/2017	MB3 3/30
WG150997-10	MB		CVNO23	BLANK WTR		3/30/2017	3/30/2017	MB3 3/30
WG150997-10	MB		CVORTHOP	BLANK WTR		3/30/2017	3/30/2017	MB3 3/30
WG150997-11	LCS		CVNH3-FL	BLANK WTR		3/30/2017	3/30/2017	LEVEL1
WG150997-11	LCS		CVNO23	BLANK WTR		3/30/2017	3/30/2017	LEVEL1
WG150997-11	LCS		CVORTHOP	BLANK WTR		3/30/2017	3/30/2017	LEVEL1
WG150997-12	LD		CVNH3-FL	FRESH WTR		3/30/2017	3/30/2017	L67369-44
WG150997-12	LD		CVNO23	FRESH WTR		3/30/2017	3/30/2017	L67369-44
WG150997-12	LD		CVORTHOP	FRESH WTR		3/30/2017	3/30/2017	L67369-44

WG150997-13 MS	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	L67369-44
WG150997-13 MS	CVNO23	FRESH WTR	3/30/2017	3/30/2017	L67369-44
WG150997-13 MS	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	L67369-44
WG150997-14 LD	CVNH3-FL	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-14 LD	CVNO23	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-14 LD	CVORTHOP	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-15 MS	CVNH3-FL	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-15 MS	CVNO23	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-15 MS	CVORTHOP	STORM WTR	3/30/2017	3/30/2017	L67398-7
WG150997-16 MB	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	MB4 3/30
WG150997-16 MB	CVNO23	BLANK WTR	3/30/2017	3/30/2017	MB4 3/30
WG150997-16 MB	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	MB4 3/30
WG150997-17 SB	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	WG150997-16
WG150997-17 SB	CVNO23	BLANK WTR	3/30/2017	3/30/2017	WG150997-16
WG150997-17 SB	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	WG150997-16
WG150997-18 LCS	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-18 LCS	CVNO23	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-18 LCS	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-19 MB	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	MB5 3/30
WG150997-19 MB	CVNO23	BLANK WTR	3/30/2017	3/30/2017	MB5 3/30
WG150997-19 MB	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	MB5 3/30
WG150997-20 LCS	CVNH3-FL	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-20 LCS	CVNO23	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-20 LCS	CVORTHOP	BLANK WTR	3/30/2017	3/30/2017	LEVEL1
WG150997-21 LD	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	L67371-4
WG150997-21 LD	CVNO23	FRESH WTR	3/30/2017	3/30/2017	L67371-4
WG150997-21 LD	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	L67371-4
WG150997-22 MS	CVNH3-FL	FRESH WTR	3/30/2017	3/30/2017	L67371-4
WG150997-22 MS	CVNO23	FRESH WTR	3/30/2017	3/30/2017	L67371-4
WG150997-22 MS	CVORTHOP	FRESH WTR	3/30/2017	3/30/2017	L67371-4

WG151013 (TOTN/TOTP/Shoreline/LkSam) Department: 3 - Conventionals Move Date: 11-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67053-1	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-1	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-2	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-2	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-3	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-3	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	

L67053-4	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-4	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-5	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-5	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-6	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-6	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-7	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67053-7	421874-100	City of Shoreline Monthly Water Quality Mor	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-40	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-40	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-41	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-41	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-42	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-42	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-43	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-43	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-44	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-44	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-45	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-45	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-47	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-47	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-48	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-48	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-49	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-49	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-50	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-50	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-51	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67369-51	421235	MAJOR LAKES (wtr col)	CVTOTP	FRESH WTR	3/28/2017	3/30/2017	4/3/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTN	BLANK WTR	3/29/2017	3/30/2017	4/3/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOTP	BLANK WTR	3/29/2017	3/30/2017	4/3/2017	
WG151013-1	MB		CVTOTN	BLANK WTR		3/30/2017	4/3/2017	MB1 3/30/17 08:00
WG151013-1	MB		CVTOTP	BLANK WTR		3/30/2017	4/3/2017	MB1 3/30/17 08:00
WG151013-2	SB		CVTOTN	BLANK WTR		3/30/2017	4/3/2017	WG151013-1
WG151013-2	SB		CVTOTP	BLANK WTR		3/30/2017	4/3/2017	WG151013-1
WG151013-3	LCS		CVTOTN	BLANK WTR		3/30/2017	4/3/2017	LEVEL1
WG151013-3	LCS		CVTOTP	BLANK WTR		3/30/2017	4/3/2017	LEVEL1
WG151013-4	LD		CVTOTN	FRESH WTR		3/30/2017	4/3/2017	L67053-7
WG151013-4	LD		CVTOTP	FRESH WTR		3/30/2017	4/3/2017	L67053-7
WG151013-5	MS		CVTOTN	FRESH WTR		3/30/2017	4/3/2017	L67053-7

WG151013-5	MS		CVTOTP	FRESH WTR	3/30/2017	4/3/2017	L67053-7

WG151018 (TSS) Department: 3 - Conventionals Move Date: 07-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67328-1	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-2	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-3	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-4	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-5	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-6	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-7	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-8	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-9	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-10	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-11	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-12	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-13	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-14	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-15	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-16	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-17	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-18	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-19	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-20	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-21	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-22	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-23	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-24	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-25	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-26	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-27	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67328-28	421093-100	West Point EBO discharge sampling due to flc	CVTSS	SALT WTR	3/29/2017	3/30/2017	4/3/2017	
L67356-1	421185-100	Elliot West CSO Plant	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTSS	BLANK WTR	3/29/2017	3/30/2017	4/3/2017	
L67433-1	421937	Brightwater Operations	CVTSS	OTHR WTR	3/29/2017	3/30/2017	4/3/2017	
L67433-2	421937	Brightwater Operations	CVTSS	OTHR WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	

L67443-4	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
L67443-7	421879-240	Federal Way Stormwater Monitoring	CVTSS	STORM WTR	3/29/2017	3/30/2017	4/3/2017	
WG151018-1	MB		CVTSS	BLANK WTR		3/30/2017	4/3/2017	MB170330
WG151018-2	LCS		CVTSS	BLANK WTR		3/30/2017	4/3/2017	LEVEL1
WG151018-3	LD		CVTSS	SALT WTR		3/30/2017	4/3/2017	L67328-15
WG151018-4	MB		CVTSS	BLANK WTR		3/30/2017	4/3/2017	MB170330
WG151018-5	LCS		CVTSS	BLANK WTR		3/30/2017	4/3/2017	LEVEL1
WG151018-6	LD		CVTSS	SALT WTR		3/30/2017	4/3/2017	L67328-28
WG151018-7	LD		CVTSS	OTHR WTR		3/30/2017	4/3/2017	L67433-1
WG151018-8	LD		CVTSS	STORM WTR		3/30/2017	4/3/2017	L67356-1
WG151018-9	LD		CVTSS	STORM WTR		3/30/2017	4/3/2017	L67443-4

WG151031 (TOC - various) Department: 3 - Conventionals Move Date: 10-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67398-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/26/2017	3/30/2017	3/30/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVTOC	BLANK WTR	3/29/2017	3/30/2017	3/30/2017	
L67433-1	421937	Brightwater Operations	CVTOC	OTHR WTR	3/29/2017	3/30/2017	3/30/2017	
L67433-2	421937	Brightwater Operations	CVTOC	OTHR WTR	3/29/2017	3/30/2017	3/30/2017	
WG151031-1	MB		CVTOC	BLANK WTR		3/30/2017	3/30/2017	MB1 3/30/17
WG151031-2	SB		CVTOC	BLANK WTR		3/30/2017	3/30/2017	WG151031-1
WG151031-3	LCS		CVTOC	BLANK WTR		3/30/2017	3/30/2017	LEVEL1
WG151031-4	LD		CVTOC	OTHR WTR		3/30/2017	3/30/2017	L67433-2
WG151031-5	MS		CVTOC	OTHR WTR		3/30/2017	3/30/2017	L67433-2
WG151031-6	LD		CVTOC	STORM WTR		3/30/2017	3/30/2017	L67398-7
WG151031-7	MS		CVTOC	STORM WTR		3/30/2017	3/30/2017	L67398-7

WG151181 (TOC/DOC - various) Department: 3 - Conventionals Move Date: 20-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67335-1	421879-240	Federal Way Stormwater Monitoring	CVDOC	STORM WTR	3/14/2017	3/16/2017	4/10/2017	

L67335-1	421879-240	Federal Way Stormwater Monitoring	CVTOC	STORM WTR	3/14/2017	4/10/2017	4/10/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	CVDOC	BLANK WTR	3/29/2017	3/30/2017	4/10/2017	
L67427-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/5/2017	4/10/2017	4/10/2017	
L67427-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/5/2017	4/10/2017	4/10/2017	
L67427-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/7/2017	4/10/2017	4/10/2017	
L67427-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/7/2017	4/10/2017	4/10/2017	
L67463-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/7/2017	4/10/2017	4/10/2017	
L67463-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/7/2017	4/10/2017	4/10/2017	
L67463-8	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	CVTOC	GRND WTR	4/7/2017	4/10/2017	4/10/2017	
WG151181-1	MB		CVTOC	BLANK WTR		4/10/2017	4/10/2017	MB1 4/10/17
WG151181-2	SB		CVTOC	BLANK WTR		4/10/2017	4/10/2017	WG151181-1
WG151181-3	LCS		CVTOC	BLANK WTR		4/10/2017	4/10/2017	LEVEL1
WG151181-4	LD		CVTOC	GRND WTR		4/10/2017	4/10/2017	L67463-8
WG151181-5	MS		CVTOC	GRND WTR		4/10/2017	4/10/2017	L67463-8
WG151181-6	MB		CVDOC	BLANK WTR		3/30/2017	4/10/2017	MB1 3/30/17
WG151181-7	LCS		CVDOC	BLANK WTR		4/10/2017	4/10/2017	LEVEL1

WG143803 (ECHO) Department: 2 - Environmental Services Move Date: 30-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	12/8/2015	12/8/2015	12/8/2015	
WG143803-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG143803-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG143803-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG143803-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG143803-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG143803-6	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG144380 (echolk) Department: 2 - Environmental Services Move Date: 11-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/21/2016	1/21/2016	1/21/2016	

L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/21/2016	1/21/2016	1/21/2016	
WG144380-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144380-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144380-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144380-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG144920 (Echo LK 3/1/16) Department: 2 - Environmental Services Move Date: 15-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/1/2016	3/1/2016	3/1/2016	
WG144920-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144920-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144920-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144920-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144920-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144920-6	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG144991 (echo lk) Department: 2 - Environmental Services Move Date: 22-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments

L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	3/9/2016	3/9/2016	3/9/2016	
WG144991-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144991-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144991-3	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144991-4	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG144991-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-6	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-7	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-8	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-9	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-10	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-11	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG144991-12	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG148099 (Echo lk 091716) Department: 2 - Environmental Services Move Date: 04-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	9/17/2016	9/17/2016	9/17/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	9/17/2016	9/17/2016	9/17/2016	
L66175-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	9/17/2016	9/17/2016	9/17/2016	
L66175-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	9/17/2016	9/17/2016	9/17/2016	
WG148099-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148099-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148099-3	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148099-4	CS		ESS-YSI-EXO	BLANK WTR				RANGE1

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

WG148600 (ECho DTS 101316) Department: 2 - Environmental Services Move Date: 25-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/13/2016	10/13/2016	10/13/2016	
WG148600-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148600-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148600-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG148600-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG148617 (EchoLK 101916) Department: 2 - Environmental Services Move Date: 25-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/19/2016	10/19/2016	10/19/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/19/2016	10/19/2016	10/19/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	10/19/2016	10/19/2016	10/19/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/19/2016	10/19/2016	10/19/2016	
WG148617-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148617-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148617-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG148617-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG148805 (Echo LK 102616) Department: 2 - Environmental Services Move Date: 09-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	

L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	10/26/2016	10/26/2016	10/26/2016	
WG148805-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148805-2	FREP		ESS-YSI-EXO	STORM WTR				L66498-1 RANGE1
WG148805-3	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148805-4	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148805-5	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148805-6	FREP		ESS-YSI-EXO	STORM WTR				L66498-19 RANGE1
WG148805-7	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG148805-8	CS		ESS-YSI-EXO	BLANK WTR				RANGE1

WG149919 (ECHO011717) Department: 2 - Environmental Services Move Date: 02-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/18/2017	1/18/2017	1/18/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/18/2017	1/18/2017	1/18/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/18/2017	1/18/2017	1/18/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/18/2017	1/18/2017	1/18/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	

L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	1/17/2017	1/17/2017	1/17/2017	
WG149919-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG149919-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG149919-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG149919-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG149919-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG149919-6	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG150448 (Echo 020917) Department: 2 - Environmental Services Move Date: 28-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/9/2017	2/9/2017	2/9/2017	
WG150448-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG150448-2	FREP		ESS-YSI-EXO	STORM WTR				L67070-11 RANGE1
WG150448-3	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG150448-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150448-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150448-6	FREP		ESS-FIELDMETER	STORM WTR				L67070-11 RANGE1
WG150448-7	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150448-8	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG150454 () Department: 2 - Environmental Services Move Date: 28-FEB-17

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-FIELDMETER	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ESS-YSI-EXO	STORM WTR	2/15/2017	2/15/2017	2/15/2017	
WG150454-1	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG150454-2	CS		ESS-YSI-EXO	BLANK WTR				RANGE1
WG150454-3	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150454-4	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150454-5	CS		ESS-FIELDMETER	BLANK WTR				RANGE1
WG150454-6	CS		ESS-FIELDMETER	BLANK WTR				RANGE1

WG143380 () Department: 5 - Microbiology Move Date: 14-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	12/8/2015	12/8/2015	12/9/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	12/8/2015	12/8/2015	12/9/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	12/8/2015	12/8/2015	12/9/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	12/8/2015	12/8/2015	12/9/2015	
WG143335-3	PC		MCFC-MF	BLANK WTR		12/8/2015	12/9/2015	QC-PERFORMED:08-DE -15
WG143335-4	NC		MCFC-MF	BLANK WTR		12/8/2015	12/9/2015	QC-PERFORMED:08-DE -15
WG143335-5	BF		MCFC-MF	BLANK WTR		12/8/2015	12/9/2015	QC-PERFORMED:08-DE -15
WG143335-6	AF		MCFC-MF	BLANK WTR		12/8/2015	12/9/2015	QC-PERFORMED:08-DE -15

WG144109 (Shoreline-Echo Lake Storm) Department: 5 - Microbiology Move Date: 26-JAN-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	1/21/2016	1/21/2016	1/22/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	1/21/2016	1/21/2016	1/22/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	1/21/2016	1/21/2016	1/22/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	1/21/2016	1/21/2016	1/22/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	1/21/2016	1/21/2016	1/22/2016	FREP @ L64648-1
WG144109-1	LD		MCFC-MF	STORM WTR		1/21/2016	1/22/2016	L64648-1
WG144109-2	PC		MCFC-MF	BLANK WTR		1/21/2016	1/22/2016	QC-PERFORMED:21-JAN-16
WG144109-3	NC		MCFC-MF	BLANK WTR		1/21/2016	1/22/2016	QC-PERFORMED:21-JAN-16

WG144109-4	BF	MCFC-MF	BLANK WTR	1/21/2016	1/22/2016	QC-PERFORMED:21-JAN-16
WG144109-5	AF	MCFC-MF	BLANK WTR	1/21/2016	1/22/2016	QC-PERFORMED:21-JAN-16

WG144681 () Department: 5 - Microbiology Move Date: 07-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/1/2016	3/1/2016	3/2/2016	
WG144680-2	PC		MCFC-MF	BLANK WTR		3/1/2016	3/2/2016	QC-PERFORMED: 01-MAR-16
WG144680-3	NC		MCFC-MF	BLANK WTR		3/1/2016	3/2/2016	QC-PERFORMED: 01-MAR-16
WG144680-4	BF		MCFC-MF	BLANK WTR		3/1/2016	3/2/2016	QC-PERFORMED: 01-MAR-16
WG144680-5	AF		MCFC-MF	BLANK WTR		3/1/2016	3/2/2016	QC-PERFORMED: 01-MAR-16

WG144816 () Department: 5 - Microbiology Move Date: 18-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	3/9/2016	3/10/2016	3/11/2016	
WG144816-1	PC		MCFC-MF	BLANK WTR		3/10/2016	3/11/2016	QC-PERFORMED: 10-MAR-16
WG144816-2	NC		MCFC-MF	BLANK WTR		3/10/2016	3/11/2016	QC-PERFORMED: 10-MAR-16
WG144816-3	BF		MCFC-MF	BLANK WTR		3/10/2016	3/11/2016	QC-PERFORMED: 10-MAR-16
WG144816-4	AF		MCFC-MF	BLANK WTR		3/10/2016	3/11/2016	QC-PERFORMED: 10-MAR-16

WG147869 (Shoreline-Echo Lake Storm) Department: 5 - Microbiology Move Date: 27-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66175-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	9/17/2016	9/17/2016	9/18/2016	
L66175-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	9/17/2016	9/17/2016	9/18/2016	
WG147869-1	LD		MCFC-MF	STORM WTR		9/17/2016	9/18/2016	L66175-4
WG147869-2	PC		MCFC-MF	BLANK WTR		9/17/2016	9/18/2016	QC-PERFORMED:17-SEP-16
WG147869-3	NC		MCFC-MF	BLANK WTR		9/17/2016	9/18/2016	QC-PERFORMED:17-SEP-16
WG147869-4	BF		MCFC-MF	BLANK WTR		9/17/2016	9/18/2016	QC-PERFORMED:17-SEP-16
WG147869-5	AF		MCFC-MF	BLANK WTR		9/17/2016	9/18/2016	QC-PERFORMED:17-SEP-16

WG148369 () Department: 5 - Microbiology Move Date: 17-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
WG148370-2	PC		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-3	NC		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-4	BF		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-5	AF		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16

WG148370 (Shoreline-Echo Lake Storm) Department: 5 - Microbiology Move Date: 22-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66384-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
L66384-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCFC-MF	STORM WTR	10/13/2016	10/13/2016	10/14/2016	
WG148370-1	LD		MCFC-MF	STORM WTR		10/13/2016	10/14/2016	L66384-4
WG148370-2	PC		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-3	NC		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-4	BF		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16
WG148370-5	AF		MCFC-MF	BLANK WTR		10/13/2016	10/14/2016	QC-PERFORMED:13-OCT-16

WG154875 () Department: 5 - Microbiology Move Date: 31-OCT-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	

L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2017	10/13/2017	10/14/2017	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	
WG154875-1	PC		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-2	NC		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-3	BF		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-4	AF		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16

WG148783 (Shoreline-Echo Lake Storm) Department: 5 - Microbiology Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66435-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/20/2016	10/20/2016	10/21/2016	
L66435-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/20/2016	10/20/2016	10/21/2016	
WG148783-1	PC		MCMODEC-MF	BLANK WTR		10/20/2016	10/21/2016	QC-PERFORMED:20-OCT-16
WG148783-2	NC		MCMODEC-MF	BLANK WTR		10/20/2016	10/21/2016	QC-PERFORMED:20-OCT-16
WG148783-3	BF		MCMODEC-MF	BLANK WTR		10/20/2016	10/21/2016	QC-PERFORMED:20-OCT-16
WG148783-4	AF		MCMODEC-MF	BLANK WTR		10/20/2016	10/21/2016	QC-PERFORMED:20-OCT-16
WG148783-5	LD		MCMODEC-MF	STORM WTR		10/20/2016	10/21/2016	L66435-2

WG148784 () Department: 5 - Microbiology Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
WG148784-1	PC		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-2	NC		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-3	BF		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-4	AF		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16

WG148785 () Department: 5 - Microbiology Move Date: 02-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66499-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
L66499-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/26/2016	10/26/2016	10/27/2016	
WG148784-1	PC		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-2	NC		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-3	BF		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16
WG148784-4	AF		MCMODEC-MF	BLANK WTR		10/26/2016	10/27/2016	QC-PERFORMED:26-OCT-16

WG149830 (Shoreline-Echo Lake Storm) Department: 5 - Microbiology Move Date: 26-JAN-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/18/2017	1/18/2017	1/19/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/18/2017	1/18/2017	1/19/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	1/17/2017	1/18/2017	1/19/2017	
WG149830-1	LD		MCMODEC-MF	STORM WTR		1/18/2017	1/19/2017	L66938-17
WG149830-2	PC		MCMODEC-MF	BLANK WTR		1/18/2017	1/19/2017	QC-PERFORMED:18-JAN-17
WG149830-3	NC		MCMODEC-MF	BLANK WTR		1/18/2017	1/19/2017	QC-PERFORMED:18-JAN-17
WG149831-4	BF		MCFC-MF	BLANK WTR		1/18/2017	1/19/2017	QC-PERFORMED:18-JAN-17
WG149831-5	AF		MCFC-MF	BLANK WTR		1/18/2017	1/19/2017	QC-PERFORMED:18-JAN-17

WG150142 () Department: 5 - Microbiology Move Date: 22-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/9/2017	2/9/2017	2/10/2017	

WG150130-3	BF	MCMODEC-MF	BLANK WTR		2/9/2017	2/10/2017	QC-PERFORMED:09-FEB-17
WG150130-4	AF	MCMODEC-MF	BLANK WTR		2/9/2017	2/10/2017	QC-PERFORMED:09-FEB-17
WG150142-1	PC	MCMODEC-MF	BLANK WTR		2/9/2017	2/10/2017	QC-PERFORMED:09-FEB-17
WG150142-2	NC	MCMODEC-MF	BLANK WTR		2/9/2017	2/10/2017	QC-PERFORMED:09-FEB-17

WG150278 () Department: 5 - Microbiology Move Date: 22-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/15/2017	2/16/2017	2/17/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/15/2017	2/16/2017	2/17/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/15/2017	2/16/2017	2/17/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	2/15/2017	2/16/2017	2/17/2017	
WG150278-1	PC		MCMODEC-MF	BLANK WTR		2/16/2017	2/17/2017	QC-PERFORMED:16-FEB-17
WG150278-2	NC		MCMODEC-MF	BLANK WTR		2/16/2017	2/17/2017	QC-PERFORMED:16-FEB-17
WG150278-3	BF		MCMODEC-MF	BLANK WTR		2/16/2017	2/17/2017	QC PERFORMED: 16-FEB-17
WG150278-4	AF		MCMODEC-MF	BLANK WTR		2/16/2017	2/17/2017	QC PERFORMED: 16-FEB-17

WG143599 (12/16/15 Misc Totals) Department: 6 - Metals Move Date: 28-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64116-1	421422-VASW	SWD Vashon Surface Water Quarterly Locatic	MTHARD-ICPMS	FRESH WTR	12/11/2015	12/16/2015	12/24/2015	
L64116-1	421422-VASW	SWD Vashon Surface Water Quarterly Locatic	MTICPMS	FRESH WTR	12/11/2015	12/16/2015	12/19/2015	
L64196-1	421195-180	Mercer Island Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/7/2015	12/16/2015	12/24/2015	
L64196-1	421195-180	Mercer Island Stormwater Monitoring	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64196-2	421195-180	Mercer Island Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/7/2015	12/16/2015	12/24/2015	
L64196-2	421195-180	Mercer Island Stormwater Monitoring	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64196-3	421195-180	Mercer Island Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/7/2015	12/16/2015	12/24/2015	
L64196-3	421195-180	Mercer Island Stormwater Monitoring	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64196-4	421195-180	Mercer Island Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/7/2015	12/16/2015	12/24/2015	
L64196-4	421195-180	Mercer Island Stormwater Monitoring	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64196-5	421195-180	Mercer Island Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/7/2015	12/16/2015	12/24/2015	
L64196-5	421195-180	Mercer Island Stormwater Monitoring	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64254-7	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/14/2015	12/16/2015	12/19/2015	
L64254-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/11/2015	12/16/2015	12/19/2015	
L64254-12	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/11/2015	12/16/2015	12/19/2015	
L64254-13	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/10/2015	12/16/2015	12/19/2015	
L64254-14	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/14/2015	12/16/2015	12/19/2015	
L64254-21	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/14/2015	12/16/2015	12/19/2015	
L64254-22	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	12/14/2015	12/16/2015	12/19/2015	

L64369-1	421185-100	Elliot West CSO Plant	MTICPMS	STORM WTR	12/6/2015	12/16/2015	12/19/2015	
L64374-1	421185-100	Elliot West CSO Plant	MTICPMS	STORM WTR	12/7/2015	12/16/2015	12/19/2015	
L64374-2	421185-100	Elliot West CSO Plant	MTICPMS	STORM WTR	12/8/2015	12/16/2015	12/19/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/8/2015	12/16/2015	12/24/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	12/8/2015	12/16/2015	12/19/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/8/2015	12/16/2015	12/24/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	12/8/2015	12/16/2015	12/19/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/8/2015	12/16/2015	12/24/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	12/8/2015	12/16/2015	12/19/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	12/8/2015	12/16/2015	12/24/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	12/8/2015	12/16/2015	12/19/2015	
WG143599-1	MB		MTHARD-ICPMS	BLANK WTR		12/16/2015	12/24/2015	METHOD BLANK
WG143599-1	MB		MTICPMS	BLANK WTR		12/16/2015	12/19/2015	METHOD BLANK
WG143599-2	SB		MTHARD-ICPMS	BLANK WTR		12/16/2015	12/24/2015	WG143599-1 MS-20
WG143599-2	SB		MTICPMS	BLANK WTR		12/16/2015	12/19/2015	WG143599-1 MS-20
WG143599-3	LD		MTHARD-ICPMS	FRESH WTR		12/16/2015	12/24/2015	L64116-1 RPD-LIQ
WG143599-3	LD		MTICPMS	FRESH WTR		12/16/2015	12/19/2015	L64116-1 RPD-LIQ
WG143599-4	MS		MTHARD-ICPMS	FRESH WTR		12/16/2015	12/24/2015	L64116-1 MS-20
WG143599-4	MS		MTICPMS	FRESH WTR		12/16/2015	12/19/2015	L64116-1 MS-20

WG143810 (SWD, Echo LK) Department: 6 - Metals Move Date: 06-JAN-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64336-1	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-2	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-3	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-4	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-7	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-8	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-10	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-11	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64336-12	421422-CHSV	SWD-CHSW M Cedar Hills Surface Water Mor	MTICPMS-DISS	FRESH WTR	12/14/2015	12/30/2015	1/6/2016	
L64362-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/21/2015	12/30/2015	1/6/2016	
L64362-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/21/2015	12/30/2015	1/6/2016	
L64362-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/21/2015	12/30/2015	1/6/2016	
L64362-5	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/21/2015	12/30/2015	1/6/2016	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	12/8/2015	12/30/2015	1/6/2016	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	12/8/2015	12/30/2015	1/6/2016	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	12/8/2015	12/30/2015	1/6/2016	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	12/8/2015	12/30/2015	1/6/2016	

L64421-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/22/2015	12/30/2015	1/6/2016	
L64421-4	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/22/2015	12/30/2015	1/6/2016	
L64421-6	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	12/22/2015	12/30/2015	1/6/2016	
WG143810-1	MB		MTICPMS-DISS	BLANK WTR		12/30/2015	1/6/2016	METHOD BLANK
WG143810-2	SB		MTICPMS-DISS	BLANK WTR		12/30/2015	1/6/2016	WG143810-1 MS-20
WG143810-3	LD		MTICPMS-DISS	FRESH WTR		12/30/2015	1/6/2016	L64336-3 RPD-LIQ
WG143810-4	MS		MTICPMS-DISS	FRESH WTR		12/30/2015	1/6/2016	L64336-3 MS-20

WG144203 (SWD,hrdnss 29-JAN-16) Department: 6 - Metals Move Date: 04-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64524-1	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	MTICP	LEACHATE	1/13/2016	1/29/2016	2/1/2016	
L64524-3	421422-VALS	SWD-VALS-M Vashon Leachate Monthly	MTICP	LEACHATE	1/13/2016	1/29/2016	2/1/2016	
L64525-1	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	MTICP	LEACHATE	1/13/2016	1/29/2016	2/1/2016	
L64525-3	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	MTICP	LEACHATE	1/13/2016	1/29/2016	2/1/2016	
L64525-4	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	MTICP	LEACHATE	1/14/2016	1/29/2016	2/1/2016	
L64525-5	421422-CHLS	SWD-CHLS-M Cedar Hills Leachate Monthly	MTICP	LEACHATE	1/12/2016	1/29/2016	2/1/2016	
L64572-1	421422-VALS	SWD-VALS-P Vashon Leachate Permit	MTICP	LEACHATE	1/26/2016	1/29/2016	2/1/2016	
L64581-1	421422-FALS	SWD-FALS Factoria Wastewater Permit	MTICP	LEACHATE	1/27/2016	1/29/2016	2/1/2016	
L64582-1	421422-RELS	SWD-RELS Renton Wastewater Permit	MTICP	LEACHATE	1/27/2016	1/29/2016	2/1/2016	
L64583-1	421422-HTLS	SWD-HTLS Houghton Wastewater Permit	MTICP	LEACHATE	1/27/2016	1/29/2016	2/1/2016	
L64586-1	421422-ALLS	SWD-ALLS Algona Wastewater Permit	MTICP	LEACHATE	1/27/2016	1/29/2016	2/1/2016	
L64586-2	421422-ALLS	SWD-ALLS Algona Wastewater Permit	MTICP	LEACHATE	1/27/2016	1/29/2016	2/1/2016	
L64641-4	421193	Department of Health - General	MTHARD-ICP	FRESH WTR	1/22/2016	1/29/2016	2/1/2016	
L64641-4	421193	Department of Health - General	MTICP	FRESH WTR	1/22/2016	1/29/2016	2/1/2016	
L64641-5	421193	Department of Health - General	MTHARD-ICP	FRESH WTR	1/22/2016	1/29/2016	2/1/2016	
L64641-5	421193	Department of Health - General	MTICP	FRESH WTR	1/22/2016	1/29/2016	2/1/2016	
L64691-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICP	FRESH WTR	1/26/2016	1/29/2016	2/1/2016	
L64691-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICP	FRESH WTR	1/26/2016	1/29/2016	2/1/2016	
L64691-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICP	STORM WTR	1/26/2016	1/29/2016	2/1/2016	
L64691-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICP	STORM WTR	1/26/2016	1/29/2016	2/1/2016	
L64691-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICP	STORM WTR	1/26/2016	1/29/2016	2/1/2016	
L64691-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICP	STORM WTR	1/26/2016	1/29/2016	2/1/2016	
L64692-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICP	FRESH WTR	1/27/2016	1/29/2016	2/1/2016	
L64692-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICP	FRESH WTR	1/27/2016	1/29/2016	2/1/2016	
WG144203-1	SB		MTHARD-ICP	BLANK WTR		1/29/2016	2/1/2016	WG144203-2 ICPM
WG144203-1	SB		MTICP	BLANK WTR		1/29/2016	2/1/2016	WG144203-2 ICPM
WG144203-2	MB		MTHARD-ICP	BLANK WTR		1/29/2016	2/1/2016	METHOD BLANK
WG144203-2	MB		MTICP	BLANK WTR		1/29/2016	2/1/2016	METHOD BLANK
WG144203-3	LD		MTICP	LEACHATE		1/29/2016	2/1/2016	L64525-3 RPD-LIQ

WG144203-4	MS	MTICP	LEACHATE	1/29/2016	2/1/2016	L64525-3	ICPM
WG144203-5	LD	MTHARD-ICP	FRESH WTR	1/29/2016	2/1/2016	L64641-5	RPD-LIQ
WG144203-5	LD	MTICP	FRESH WTR	1/29/2016	2/1/2016	L64641-5	RPD-LIQ
WG144203-6	MS	MTHARD-ICP	FRESH WTR	1/29/2016	2/1/2016	L64641-5	ICPM
WG144203-6	MS	MTICP	FRESH WTR	1/29/2016	2/1/2016	L64641-5	ICPM

WG144318 (2/4/16 Misc Totals) Department: 6 - Metals Move Date: 05-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64503-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	1/22/2016	2/4/2016	2/4/2016	
L64512-1	421185-100	Elliot West CSO Plant	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64512-1	421185-100	Elliot West CSO Plant	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64513-1	421185-200	Carkeek CSO Plant	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64513-1	421185-200	Carkeek CSO Plant	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64513-4	421185-200	Carkeek CSO Plant	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64513-4	421185-200	Carkeek CSO Plant	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64513-5	421185-200	Carkeek CSO Plant	MTHARD-ICPMS	STORM WTR	1/22/2016	2/4/2016	2/5/2016	
L64513-5	421185-200	Carkeek CSO Plant	MTICPMS	STORM WTR	1/22/2016	2/4/2016	2/4/2016	
L64514-1	421185-300	Alki CSO Plant	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64514-1	421185-300	Alki CSO Plant	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64514-4	421185-300	Alki CSO Plant	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64514-4	421185-300	Alki CSO Plant	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64529-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	1/29/2016	2/4/2016	2/4/2016	
L64620-1	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64620-2	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64620-4	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64620-6	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64620-7	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64620-10	421937	Brightwater Operations	MTICPMS	STORM WTR	1/13/2016	2/4/2016	2/4/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/21/2016	2/4/2016	2/5/2016	FREP @ L64648-1
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/21/2016	2/4/2016	2/4/2016	FREP @ L64648-1
L64699-1	423639-001	Fremont Siphon Construction	MTICPMS	OTHR WTR	2/3/2016	2/4/2016	2/4/2016	

WG144318-1	MB	MTHARD-ICPMS	BLANK WTR	2/4/2016	2/5/2016	METHOD BLANK
WG144318-1	MB	MTICPMS	BLANK WTR	2/4/2016	2/4/2016	METHOD BLANK
WG144318-2	SB	MTHARD-ICPMS	BLANK WTR	2/4/2016	2/5/2016	WG144318-1 MS-20
WG144318-2	SB	MTICPMS	BLANK WTR	2/4/2016	2/4/2016	WG144318-1 MS-20
WG144318-3	LD	MTICPMS	GRND WTR	2/4/2016	2/4/2016	L64503-4 RPD-LIQ
WG144318-4	MS	MTICPMS	GRND WTR	2/4/2016	2/4/2016	L64503-4 MS-20
WG144318-5	LD	MTHARD-ICPMS	STORM WTR	2/4/2016	2/5/2016	L64512-1 RPD-LIQ
WG144318-5	LD	MTICPMS	STORM WTR	2/4/2016	2/4/2016	L64512-1 RPD-LIQ
WG144318-6	MS	MTHARD-ICPMS	STORM WTR	2/4/2016	2/5/2016	L64512-1 MS-20
WG144318-6	MS	MTICPMS	STORM WTR	2/4/2016	2/4/2016	L64512-1 MS-20

WG144381 (SWD diss) Department: 6 - Metals Move Date: 12-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64512-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	1/21/2016	2/9/2016	2/11/2016	
L64529-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	1/29/2016	2/9/2016	2/11/2016	
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/21/2016	2/9/2016	2/11/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/21/2016	2/9/2016	2/11/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/21/2016	2/9/2016	2/11/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/21/2016	2/9/2016	2/11/2016	
L64717-1	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/1/2016	2/9/2016	2/11/2016	
L64717-4	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/1/2016	2/9/2016	2/11/2016	
L64717-5	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/1/2016	2/9/2016	2/11/2016	
L64727-1	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/5/2016	2/9/2016	2/11/2016	
L64727-3	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/3/2016	2/9/2016	2/11/2016	
L64729-1	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/2/2016	2/9/2016	2/11/2016	
L64729-3	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/2/2016	2/9/2016	2/11/2016	
L64729-4	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/2/2016	2/9/2016	2/11/2016	
L64732-1	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/3/2016	2/9/2016	2/11/2016	
L64732-3	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/3/2016	2/9/2016	2/11/2016	
L64732-4	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/3/2016	2/9/2016	2/11/2016	
L64733-1	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/4/2016	2/9/2016	2/11/2016	
L64733-3	421422-CFGV	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	2/4/2016	2/9/2016	2/11/2016	
WG144381-1	MB		MTICPMS-DISS	BLANK WTR		2/9/2016	2/11/2016	METHOD BLANK
WG144381-2	SB		MTICPMS-DISS	BLANK WTR		2/9/2016	2/11/2016	WG144381-1 MS-20
WG144381-3	LD		MTICPMS-DISS	GRND WTR		2/9/2016	2/11/2016	L64717-4 RPD-LIQ
WG144381-4	MS		MTICPMS-DISS	GRND WTR		2/9/2016	2/11/2016	L64717-4 MS-20

WG145188 (Echo LK) Department: 6 - Metals Move Date: 06-APR-16

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/1/2016	3/31/2016	4/5/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/1/2016	3/31/2016	4/4/2016	
WG145188-1	MB		MTHARD-ICPMS	BLANK WTR		3/31/2016	4/5/2016	METHOD BLANK
WG145188-1	MB		MTICPMS	BLANK WTR		3/31/2016	4/4/2016	METHOD BLANK
WG145188-2	SB		MTHARD-ICPMS	BLANK WTR		3/31/2016	4/5/2016	WG145188-1 MS-20
WG145188-2	SB		MTICPMS	BLANK WTR		3/31/2016	4/4/2016	WG145188-1 MS-20
WG145188-3	LD		MTHARD-ICPMS	STORM WTR		3/31/2016	4/5/2016	L64921-7 RPD-LIQ
WG145188-3	LD		MTICPMS	STORM WTR		3/31/2016	4/4/2016	L64921-7 RPD-LIQ
WG145188-4	MS		MTHARD-ICPMS	STORM WTR		3/31/2016	4/5/2016	L64921-7 MS-20
WG145188-4	MS		MTICPMS	STORM WTR		3/31/2016	4/4/2016	L64921-7 MS-20

WG145215 (SWD, Echo LK, Elliot West) Department: 6 - Metals Move Date: 13-APR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64880-8	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/15/2016	4/4/2016	4/4/2016	
L64880-9	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64880-10	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/15/2016	4/4/2016	4/4/2016	
L64880-11	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64880-12	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/15/2016	4/4/2016	4/4/2016	
L64881-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64881-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64912-2	423650	Elliott West Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	

L64913-3	421422-DUGV	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64921-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/1/2016	4/4/2016	4/4/2016	
L64964-1	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
L64968-3	421422-PUGV	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	3/16/2016	4/4/2016	4/4/2016	
WG145215-1	MB		MTICPMS-DISS	BLANK WTR		4/4/2016	4/4/2016	METHOD BLANK
WG145215-2	SB		MTICPMS-DISS	BLANK WTR		4/4/2016	4/4/2016	WG145215-1 MS-20
WG145215-3	LD		MTICPMS-DISS	GRND WTR		4/4/2016	4/4/2016	L64880-9 RPD-LIQ
WG145215-4	MS		MTICPMS-DISS	GRND WTR		4/4/2016	4/4/2016	L64880-9 MS-20

WG145236 (Elliot West, Echo LK) Department: 6 - Metals Move Date: 07-APR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64993-1	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-2	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-3	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-4	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-5	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-6	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/1/2016	4/5/2016	4/5/2016	
L64993-7	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/4/2016	4/5/2016	4/5/2016	
L64993-8	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/4/2016	4/5/2016	4/5/2016	
L64993-9	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/4/2016	4/5/2016	4/5/2016	
L64993-10	421937-300	Brightwater Special Requests	MTICPMS	OTHR WTR	3/4/2016	4/5/2016	4/5/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	

L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/9/2016	4/5/2016	4/6/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	3/9/2016	4/5/2016	4/5/2016	
WG145236-1	MB		MTHARD-ICPMS	BLANK WTR		4/5/2016	4/6/2016	METHOD BLANK
WG145236-1	MB		MTICPMS	BLANK WTR		4/5/2016	4/5/2016	METHOD BLANK
WG145236-2	SB		MTHARD-ICPMS	BLANK WTR		4/5/2016	4/6/2016	WG145236-1 MS-20
WG145236-2	SB		MTICPMS	BLANK WTR		4/5/2016	4/5/2016	WG145236-1 MS-20
WG145236-3	LD		MTHARD-ICPMS	STORM WTR		4/5/2016	4/6/2016	L64999-11 RPD-LIQ
WG145236-3	LD		MTICPMS	STORM WTR		4/5/2016	4/5/2016	L64999-11 RPD-LIQ
WG145236-4	MS		MTHARD-ICPMS	STORM WTR		4/5/2016	4/6/2016	L64999-11 MS-20
WG145236-4	MS		MTICPMS	STORM WTR		4/5/2016	4/5/2016	L64999-11 MS-20

WG145266 (Echo LK) Department: 6 - Metals Move Date: 08-APR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	
L65007-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/9/2016	4/7/2016	4/7/2016	FREP @ 65007-3
WG145266-1	MB		MTICPMS-DISS	BLANK WTR		4/7/2016	4/7/2016	METHOD BLANK
WG145266-2	SB		MTICPMS-DISS	BLANK WTR		4/7/2016	4/7/2016	WG145266-1 MS-20
WG145266-3	LD		MTICPMS-DISS	STORM WTR		4/7/2016	4/7/2016	L64999-5 RPD-LIQ

WG145266-4	MS	MTICPMS-DISS	STORM WTR	4/7/2016	4/7/2016	L64999-5 MS-20	

WG146738 (14-JUL-16 swd) Department: 6 - Metals Move Date: 20-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65236-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/6/2016	7/14/2016	7/19/2016	
L65236-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/6/2016	7/14/2016	7/19/2016	
L65236-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/6/2016	7/14/2016	7/19/2016	
L65476-1	421422-CHSW	SWD-CHSW P Cedar Hills Surface Water Perm	MTICPMS	STORM WTR	7/12/2016	7/14/2016	7/19/2016	
L65476-3	421422-CHSW	SWD-CHSW P Cedar Hills Surface Water Perm	MTICPMS	STORM WTR	7/12/2016	7/14/2016	7/19/2016	
L65510-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	6/27/2016	7/14/2016	7/20/2016	
L65510-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	6/27/2016	7/14/2016	7/19/2016	
L65510-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	6/27/2016	7/14/2016	7/20/2016	
L65510-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	6/27/2016	7/14/2016	7/19/2016	
L65510-4	421422-VASW	SWD Vashon Surface Water Quarterly Locatic	MTHARD-ICPMS	FRESH WTR	6/29/2016	7/14/2016	7/20/2016	
L65510-4	421422-VASW	SWD Vashon Surface Water Quarterly Locatic	MTICPMS	FRESH WTR	6/29/2016	7/14/2016	7/19/2016	
L65510-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	6/27/2016	7/14/2016	7/20/2016	
L65510-5	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	6/27/2016	7/14/2016	7/19/2016	
L65510-6	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	6/27/2016	7/14/2016	7/20/2016	
L65510-6	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	6/27/2016	7/14/2016	7/19/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	6/23/2016	7/14/2016	7/20/2016	
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	6/23/2016	7/14/2016	7/19/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	6/23/2016	7/14/2016	7/20/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	6/23/2016	7/14/2016	7/19/2016	
L65701-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/8/2016	7/14/2016	7/19/2016	
L65701-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/7/2016	7/14/2016	7/19/2016	
L65701-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/8/2016	7/14/2016	7/19/2016	
L65701-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/11/2016	7/14/2016	7/19/2016	
L65701-7	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/8/2016	7/14/2016	7/19/2016	
L65702-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/8/2016	7/14/2016	7/19/2016	
L65702-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/8/2016	7/14/2016	7/19/2016	
L65702-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	7/11/2016	7/14/2016	7/19/2016	
WG146738-1	MB		MTHARD-ICPMS	BLANK WTR		7/14/2016	7/20/2016	METHOD BLANK
WG146738-1	MB		MTICPMS	BLANK WTR		7/14/2016	7/19/2016	METHOD BLANK
WG146738-2	SB		MTHARD-ICPMS	BLANK WTR		7/14/2016	7/20/2016	WG146738-1 MS-20
WG146738-2	SB		MTICPMS	BLANK WTR		7/14/2016	7/19/2016	WG146738-1 MS-20
WG146738-3	LD		MTHARD-ICPMS	FRESH WTR		7/14/2016	7/20/2016	L65510-1 RPD-LIQ
WG146738-3	LD		MTICPMS	FRESH WTR		7/14/2016	7/19/2016	L65510-1 RPD-LIQ
WG146738-4	MS		MTHARD-ICPMS	FRESH WTR		7/14/2016	7/20/2016	L65510-1 MS-20
WG146738-4	MS		MTICPMS	FRESH WTR		7/14/2016	7/19/2016	L65510-1 MS-20

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

WG146905 (7/22/16 Echo Lake Diss) Department: 6 - Metals Move Date: 22-JUL-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65650-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	6/23/2016	7/22/2016	7/22/2016	
L65650-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	6/23/2016	7/22/2016	7/22/2016	
WG146905-1	MB		MTICPMS-DISS	BLANK WTR		7/22/2016	7/22/2016	METHOD BLANK
WG146905-2	SB		MTICPMS-DISS	BLANK WTR		7/22/2016	7/22/2016	WG146905-1 MS-20
WG146905-3	LD		MTICPMS-DISS	STORM WTR		7/22/2016	7/22/2016	L65650-1 RPD-LIQ
WG146905-4	MS		MTICPMS-DISS	STORM WTR		7/22/2016	7/22/2016	L65650-1 MS-20

WG147984 (SWD, Echo LK) Department: 6 - Metals Move Date: 29-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66065-3	421422-DUG\	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	9/15/2016	9/26/2016	9/26/2016	
L66066-1	421422-DUG\	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	9/15/2016	9/26/2016	9/26/2016	
L66066-3	421422-DUG\	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	9/13/2016	9/26/2016	9/26/2016	
L66066-5	421422-DUG\	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	9/13/2016	9/26/2016	9/26/2016	
L66068-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66068-3	421422-DUG\	SWD-DUGW Duvall Groundwater Quarterly	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66068-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/19/2016	9/26/2016	9/26/2016	
L66068-5	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66068-6	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66111-1	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/15/2016	9/26/2016	9/26/2016	
L66111-3	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/15/2016	9/26/2016	9/26/2016	
L66111-4	421422-HTGV	SWD-HTGW Houghton Groundwater Quarter	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66123-4	421196-130	Roads Groundwater	MTICPMS-DISS	GRND WTR	9/16/2016	9/26/2016	9/26/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	9/17/2016	9/26/2016	9/26/2016	
WG147984-1	MB		MTICPMS-DISS	BLANK WTR		9/26/2016	9/26/2016	METHOD BLANK
WG147984-2	SB		MTICPMS-DISS	BLANK WTR		9/26/2016	9/26/2016	WG147984-1 MS-20
WG147984-3	LD		MTICPMS-DISS	GRND WTR		9/26/2016	9/26/2016	L66068-3 RPD-LIQ
WG147984-4	MS		MTICPMS-DISS	GRND WTR		9/26/2016	9/26/2016	L66068-3 MS-20

WG148332 (12-OCT-16 SWD, Storms Dis) Department: 6 - Metals Move Date: 21-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66151-1	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	9/29/2016	10/12/2016	10/12/2016	

L66151-2	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	9/26/2016	10/12/2016	10/12/2016	
L66151-4	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	9/28/2016	10/12/2016	10/12/2016	
L66151-5	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	9/28/2016	10/12/2016	10/12/2016	
L66151-6	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66151-7	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	GRND WTR	9/26/2016	10/12/2016	10/12/2016	
L66154-1	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	FRESH WTR	9/29/2016	10/12/2016	10/12/2016	
L66154-3	421195-240	Horseshoe Lake WQ	MTICPMS-DISS	FRESH WTR	9/29/2016	10/12/2016	10/12/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66305-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66305-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/7/2016	10/12/2016	10/12/2016	
L66305-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/7/2016	10/12/2016	10/12/2016	
L66305-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66307-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66307-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66333-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	SAMP
L66333-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	SAMP
WG148332-1	MB		MTICPMS-DISS	BLANK WTR		10/12/2016	10/12/2016	METHOD BLANK
WG148332-2	SB		MTICPMS-DISS	BLANK WTR		10/12/2016	10/12/2016	WG148332-1 MS-20
WG148332-3	LD		MTICPMS-DISS	GRND WTR		10/12/2016	10/12/2016	L66151-1 RPD-LIQ
WG148332-4	MS		MTICPMS-DISS	GRND WTR		10/12/2016	10/12/2016	L66151-1 MS-20
WG148332-5	LD		MTICPMS-DISS	GRND WTR		10/12/2016	10/12/2016	L66305-1 RPD-LIQ
WG148332-6	MS		MTICPMS-DISS	GRND WTR		10/12/2016	10/12/2016	L66305-1 MS-20

WG148337 (Echo LK, SWD) Department: 6 - Metals Move Date: 19-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65721-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/11/2016	10/12/2016	10/12/2016	
L65721-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/11/2016	10/12/2016	10/12/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	9/17/2016	10/12/2016	10/19/2016	
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	9/17/2016	10/12/2016	10/12/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	9/17/2016	10/12/2016	10/19/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	9/17/2016	10/12/2016	10/12/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/6/2016	10/12/2016	10/19/2016	
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/6/2016	10/12/2016	10/19/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/6/2016	10/12/2016	10/12/2016	
L66298-1	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	MTICPMS	GRND WTR	10/5/2016	10/12/2016	10/12/2016	
L66298-3	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	MTICPMS	GRND WTR	10/5/2016	10/12/2016	10/12/2016	
L66298-4	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	MTICPMS	GRND WTR	10/5/2016	10/12/2016	10/12/2016	

L66298-5	421422-CHGV	SWD-CHGW-OS Cedar Hills Groundwater Off-	MTICPMS	GRND WTR	10/5/2016	10/12/2016	10/12/2016	
L66302-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66302-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66302-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66302-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/6/2016	10/12/2016	10/12/2016	
L66305-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66305-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/7/2016	10/12/2016	10/12/2016	
L66305-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/7/2016	10/12/2016	10/12/2016	
L66305-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66307-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
L66307-4	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS	GRND WTR	10/10/2016	10/12/2016	10/12/2016	
WG148337-1	MB		MTHARD-ICPMS	BLANK WTR		10/12/2016	10/19/2016	METHOD BLANK
WG148337-1	MB		MTICPMS	BLANK WTR		10/12/2016	10/12/2016	METHOD BLANK
WG148337-2	SB		MTHARD-ICPMS	BLANK WTR		10/12/2016	10/19/2016	WG148337-1 MS-20
WG148337-2	SB		MTICPMS	BLANK WTR		10/12/2016	10/12/2016	WG148337-1 MS-20
WG148337-3	LD		MTHARD-ICPMS	STORM WTR		10/12/2016	10/19/2016	L66175-1 RPD-LIQ
WG148337-3	LD		MTICPMS	STORM WTR		10/12/2016	10/12/2016	L66175-1 RPD-LIQ
WG148337-4	MS		MTHARD-ICPMS	STORM WTR		10/12/2016	10/19/2016	L66175-1 MS-20
WG148337-4	MS		MTICPMS	STORM WTR		10/12/2016	10/12/2016	L66175-1 MS-20
WG148337-5	LD		MTICPMS	GRND WTR		10/12/2016	10/12/2016	L66298-5 RPD-LIQ
WG148337-6	MS		MTICPMS	GRND WTR		10/12/2016	10/12/2016	L66298-5 MS-20

WG148522 (20-OCT-16 SWD Diss) Department: 6 - Metals Move Date: 27-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L65721-2	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/11/2016	10/20/2016	10/20/2016	
L65721-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/11/2016	10/20/2016	10/20/2016	
L66162-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	10/14/2016	10/20/2016	10/20/2016	
L66163-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66307-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/11/2016	10/20/2016	10/20/2016	
L66315-1	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/13/2016	10/20/2016	10/20/2016	
L66318-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/13/2016	10/20/2016	10/20/2016	
L66403-1	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	MTICPMS-DISS	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66403-2	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	MTICPMS-DISS	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	

L66403-3	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	MTICPMS-DISS	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
L66403-4	421422-CHSW	SWD-CHSW - A5 TD Cedar Hills Surface Area S	MTICPMS-DISS	FRESH WTR	10/14/2016	10/20/2016	10/20/2016	
WG148522-1	MB		MTICPMS-DISS	BLANK WTR		10/20/2016	10/20/2016	METHOD BLANK
WG148522-2	SB		MTICPMS-DISS	BLANK WTR		10/20/2016	10/20/2016	WG148522-1 MS-20
WG148522-3	LD		MTICPMS-DISS	GRND WTR		10/20/2016	10/20/2016	L65721-2 RPD-LIQ
WG148522-4	MS		MTICPMS-DISS	GRND WTR		10/20/2016	10/20/2016	L65721-2 MS-20

WG148782 (02-NOV-16 Echo Lk, Fed Wa) Department: 6 - Metals Move Date: 08-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/13/2016	11/2/2016	11/7/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/13/2016	11/2/2016	11/3/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/2/2016	11/7/2016	
L66385-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/2/2016	11/3/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/2/2016	11/7/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/2/2016	11/3/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/2/2016	11/7/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/2/2016	11/3/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/2/2016	11/7/2016	
L66385-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/2/2016	11/3/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/19/2016	11/2/2016	11/7/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/19/2016	11/2/2016	11/3/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/19/2016	11/2/2016	11/7/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/19/2016	11/2/2016	11/3/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/20/2016	11/2/2016	11/7/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/20/2016	11/2/2016	11/3/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/20/2016	11/2/2016	11/7/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/20/2016	11/2/2016	11/3/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/20/2016	11/2/2016	11/7/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/20/2016	11/2/2016	11/3/2016	

L66453-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/20/2016	11/2/2016	11/7/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/20/2016	11/2/2016	11/3/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/19/2016	11/2/2016	11/7/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/19/2016	11/2/2016	11/3/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/19/2016	11/2/2016	11/7/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/19/2016	11/2/2016	11/3/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/19/2016	11/2/2016	11/7/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/19/2016	11/2/2016	11/3/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/20/2016	11/2/2016	11/7/2016	FREP@L66453-3
L66453-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/20/2016	11/2/2016	11/3/2016	FREP@L66453-3
WG148782-1	MB		MTHARD-ICPMS	BLANK WTR		11/2/2016	11/7/2016	METHOD BLANK
WG148782-1	MB		MTICPMS	BLANK WTR		11/2/2016	11/3/2016	METHOD BLANK
WG148782-2	SB		MTHARD-ICPMS	BLANK WTR		11/2/2016	11/7/2016	WG148782-1 MS-20
WG148782-2	SB		MTICPMS	BLANK WTR		11/2/2016	11/3/2016	WG148782-1 MS-20
WG148782-3	LD		MTHARD-ICPMS	STORM WTR		11/2/2016	11/7/2016	L66384-1 RPD-LIQ
WG148782-3	LD		MTICPMS	STORM WTR		11/2/2016	11/3/2016	L66384-1 RPD-LIQ
WG148782-4	MS		MTHARD-ICPMS	STORM WTR		11/2/2016	11/7/2016	L66384-1 MS-20
WG148782-4	MS		MTICPMS	STORM WTR		11/2/2016	11/3/2016	L66384-1 MS-20

WG148826 (04-NOV-16 Echo, FedWay Di) Department: 6 - Metals Move Date: 18-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	FREP@WBI
L66453-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/20/2016	11/4/2016	11/4/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/20/2016	11/4/2016	11/4/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/20/2016	11/4/2016	11/4/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/19/2016	11/4/2016	11/4/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/19/2016	11/4/2016	11/4/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/19/2016	11/4/2016	11/4/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/20/2016	11/4/2016	11/4/2016	FREP@L66453-3
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/4/2016	11/4/2016	
WG148826-1	MB		MTICPMS-DISS	BLANK WTR		11/4/2016	11/4/2016	METHOD BLANK
WG148826-2	SB		MTICPMS-DISS	BLANK WTR		11/4/2016	11/4/2016	WG148826-1 MS-20

WG148826-3	LD	MTICPMS-DISS	STORM WTR		11/4/2016	11/4/2016	L66453-3 RPD-LIQ
WG148826-4	MS	MTICPMS-DISS	STORM WTR		11/4/2016	11/4/2016	L66453-3 MS-20

WG148827 (04-NOV-16 Echo, FedWay) Department: 6 - Metals Move Date: 23-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66385-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66385-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66385-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66385-8	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	FREP@WBI
L66385-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	FREP@WBI
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	11/4/2016	11/16/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	11/4/2016	11/7/2016	
WG148827-1	MB		MTHARD-ICPMS	BLANK WTR		11/4/2016	11/16/2016	METHOD BLANK
WG148827-1	MB		MTICPMS	BLANK WTR		11/4/2016	11/7/2016	METHOD BLANK

WG148827-2	SB	MTHARD-ICPMS	BLANK WTR	11/4/2016	11/16/2016	WG148827-1 MS-20
WG148827-2	SB	MTICPMS	BLANK WTR	11/4/2016	11/7/2016	WG148827-1 MS-20
WG148827-3	LD	MTHARD-ICPMS	STORM WTR	11/4/2016	11/16/2016	L66385-8 RPD-LIQ
WG148827-3	LD	MTICPMS	STORM WTR	11/4/2016	11/7/2016	L66385-8 RPD-LIQ
WG148827-4	MS	MTHARD-ICPMS	STORM WTR	11/4/2016	11/16/2016	L66385-8 MS-20
WG148827-4	MS	MTICPMS	STORM WTR	11/4/2016	11/7/2016	L66385-8 MS-20

WG148971 (SWD, Federal Way Diss) Department: 6 - Metals Move Date: 18-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66351-5	421422-CHGV	SWD-CHGW Cedar Hills Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/2/2016	11/15/2016	11/15/2016	
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/19/2016	11/15/2016	11/15/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/19/2016	11/15/2016	11/15/2016	
L66442-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	10/20/2016	11/15/2016	11/15/2016	
L66442-3	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	10/20/2016	11/15/2016	11/15/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/20/2016	11/15/2016	11/15/2016	
L66536-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/4/2016	11/15/2016	11/15/2016	
L66537-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/7/2016	11/15/2016	11/15/2016	
L66537-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/3/2016	11/15/2016	11/15/2016	
L66537-4	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/3/2016	11/15/2016	11/15/2016	
L66537-5	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/3/2016	11/15/2016	11/15/2016	
L66537-6	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/3/2016	11/15/2016	11/15/2016	
L66538-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/4/2016	11/15/2016	11/15/2016	
L66538-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/4/2016	11/15/2016	11/15/2016	
L66538-4	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/4/2016	11/15/2016	11/15/2016	
L66550-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/7/2016	11/15/2016	11/15/2016	
L66553-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/7/2016	11/15/2016	11/15/2016	
L66553-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/7/2016	11/15/2016	11/15/2016	
L66553-4	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/8/2016	11/15/2016	11/15/2016	
L66553-5	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarte	MTICPMS-DISS	GRND WTR	11/8/2016	11/15/2016	11/15/2016	
WG148971-1	MB		MTICPMS-DISS	BLANK WTR		11/15/2016	11/15/2016	METHOD BLANK
WG148971-2	SB		MTICPMS-DISS	BLANK WTR		11/15/2016	11/15/2016	WG148971-1 MS-20
WG148971-3	LD		MTICPMS-DISS	GRND WTR		11/15/2016	11/15/2016	L66550-1 RPD-LIQ
WG148971-4	MS		MTICPMS-DISS	GRND WTR		11/15/2016	11/15/2016	L66550-1 MS-20

WG149168 (Ecco LK, Elliot West Diss) Department: 6 - Metals Move Date: 30-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	

L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66540-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
L66540-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
L66540-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
L66540-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
L66540-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	11/1/2016	11/28/2016	11/28/2016	
L66540-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	FREP@66540-1
L66564-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	11/15/2016	11/28/2016	11/28/2016	
WG149168-1	MB		MTICPMS-DISS	BLANK WTR		11/28/2016	11/28/2016	METHOD BLANK
WG149168-2	SB		MTICPMS-DISS	BLANK WTR		11/28/2016	11/28/2016	WG149168-1 MS-20
WG149168-3	LD		MTICPMS-DISS	STORM WTR		11/28/2016	11/28/2016	L66498-19 RPD-LIQ
WG149168-4	MS		MTICPMS-DISS	STORM WTR		11/28/2016	11/28/2016	L66498-19 MS-20

WG149178 (digested diss) Department: 6 - Metals Move Date: 30-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66385-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/26/2016	11/28/2016	11/28/2016	
L66540-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
L66540-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	10/31/2016	11/28/2016	11/28/2016	
WG149178-1	MB		MTICPMS-DISS	BLANK WTR		11/28/2016	11/28/2016	METHOD BLANK
WG149178-2	SB		MTICPMS-DISS	BLANK WTR		11/28/2016	11/28/2016	WG149178-1 MS-20
WG149178-3	LD		MTICPMS-DISS	STORM WTR		11/28/2016	11/28/2016	L66499-1 RPD-LIQ
WG149178-4	MS		MTICPMS-DISS	STORM WTR		11/28/2016	11/28/2016	L66499-1 MS-20

WG150180 (14-FEB-17 Echo_Fed Storms) Department: 6 - Metals Move Date: 17-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66937-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	

L66937-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	FREP
L66937-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	FREP
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/18/2017	2/14/2017	2/17/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/18/2017	2/14/2017	2/16/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/18/2017	2/14/2017	2/17/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/18/2017	2/14/2017	2/16/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	1/17/2017	2/14/2017	2/17/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
L66945-21	421185-100	Elliot West CSO Plant	MTICPMS	STORM WTR	1/17/2017	2/14/2017	2/16/2017	
WG150180-1	MB		MTHARD-ICPMS	BLANK WTR		2/14/2017	2/17/2017	METHOD BLANK
WG150180-1	MB		MTICPMS	BLANK WTR		2/14/2017	2/16/2017	METHOD BLANK
WG150180-2	SB		MTHARD-ICPMS	BLANK WTR		2/14/2017	2/17/2017	WG150180-1 MS-20
WG150180-2	SB		MTICPMS	BLANK WTR		2/14/2017	2/16/2017	WG150180-1 MS-20
WG150180-3	LD		MTHARD-ICPMS	STORM WTR		2/14/2017	2/17/2017	L66937-2 RPD-LIQ

WG150180-3	LD	MTICPMS	STORM WTR		2/14/2017	2/16/2017	L66937-2 RPD-LIQ
WG150180-4	MS	MTHARD-ICPMS	STORM WTR		2/14/2017	2/17/2017	L66937-2 MS-20
WG150180-4	MS	MTICPMS	STORM WTR		2/14/2017	2/16/2017	L66937-2 MS-20

WG150217 (Fed Way) Department: 6 - Metals Move Date: 17-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66937-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/18/2017	2/13/2017	2/13/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/18/2017	2/13/2017	2/13/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	1/17/2017	2/13/2017	2/13/2017	
WG150217-1	MB		MTICPMS-DISS	BLANK WTR		2/13/2017	2/13/2017	METHOD BLANK
WG150217-2	SB		MTICPMS-DISS	BLANK WTR		2/13/2017	2/13/2017	WG150217-1 MS-20
WG150217-3	LD		MTICPMS-DISS	STORM WTR		2/13/2017	2/13/2017	L66937-3 RPD-LIQ
WG150217-4	MS		MTICPMS-DISS	STORM WTR		2/13/2017	2/13/2017	L66937-3 MS-20

WG150358 (21-FEB-17 Echo,SWD, Int) Department: 6 - Metals Move Date: 24-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	10/26/2016	2/21/2017	2/24/2017	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	10/26/2016	2/21/2017	2/23/2017	
L66908-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	2/1/2017	2/21/2017	2/24/2017	
L66908-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	2/1/2017	2/21/2017	2/23/2017	
L66908-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	2/1/2017	2/21/2017	2/24/2017	
L66908-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	2/1/2017	2/21/2017	2/23/2017	

L66908-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	2/1/2017	2/21/2017	2/24/2017	
L66908-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	MTICPMS	FRESH WTR	2/1/2017	2/21/2017	2/23/2017	
L66948-1	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	BLANK WTR	1/23/2017	2/21/2017	2/23/2017	FLDBLK (for L66949, L66950, L66951)
L66949-1	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	INFLUENT	1/23/2017	2/21/2017	2/23/2017	
L66949-4	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/23/2017	2/21/2017	2/23/2017	
L66949-7	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/23/2017	2/21/2017	2/23/2017	
L66950-1	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	INFLUENT	1/24/2017	2/21/2017	2/23/2017	
L66950-4	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/24/2017	2/21/2017	2/23/2017	
L66950-7	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/24/2017	2/21/2017	2/23/2017	
L66951-1	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	INFLUENT	1/25/2017	2/21/2017	2/23/2017	
L66951-4	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/25/2017	2/21/2017	2/23/2017	
L66951-7	421186B	RTP INPLNT 3 DAY INT (inf,eff,sl)	MTICPMS	EFFLUENT	1/25/2017	2/21/2017	2/23/2017	
L67089-1	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
L67089-2	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
L67089-3	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
L67089-4	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
L67089-5	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
L67089-6	421937	Brightwater Operations	MTICPMS	STORM WTR	2/9/2017	2/21/2017	2/23/2017	
WG150358-1	MB		MTHARD-ICPMS	BLANK WTR		2/21/2017	2/24/2017	METHOD BLANK
WG150358-1	MB		MTICPMS	BLANK WTR		2/21/2017	2/23/2017	METHOD BLANK
WG150358-2	SB		MTHARD-ICPMS	BLANK WTR		2/21/2017	2/24/2017	WG150358-1 MS-20
WG150358-2	SB		MTICPMS	BLANK WTR		2/21/2017	2/23/2017	WG150358-1 MS-20
WG150358-3	LD		MTHARD-ICPMS	FRESH WTR		2/21/2017	2/24/2017	L66908-3 RPD-LIQ
WG150358-3	LD		MTICPMS	FRESH WTR		2/21/2017	2/23/2017	L66908-3 RPD-LIQ
WG150358-4	MS		MTHARD-ICPMS	FRESH WTR		2/21/2017	2/24/2017	L66908-3 MS-20
WG150358-4	MS		MTICPMS	FRESH WTR		2/21/2017	2/23/2017	L66908-3 MS-20

WG150452 (27-FEB-17 FedWay, Echo) Department: 6 - Metals Move Date: 10-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66824-1	421195-260	Ravensdale Monthly GW	MTICPMS	GRND WTR	2/23/2017	2/27/2017	3/10/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	

L67069-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	FREP
L67069-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	2/8/2017	2/27/2017	3/10/2017	FREP
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/9/2017	2/27/2017	3/10/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	STORM WTR	2/15/2017	2/27/2017	3/10/2017	
WG150452-1	MB		MTHARD-ICPMS	BLANK WTR		2/27/2017	3/10/2017	METHOD BLANK
WG150452-1	MB		MTICPMS	BLANK WTR		2/27/2017	3/10/2017	METHOD BLANK
WG150452-2	SB		MTHARD-ICPMS	BLANK WTR		2/27/2017	3/10/2017	WG150452-1 MS-20
WG150452-2	SB		MTICPMS	BLANK WTR		2/27/2017	3/10/2017	WG150452-1 MS-20
WG150452-3	LD		MTHARD-ICPMS	STORM WTR		2/27/2017	3/10/2017	L67069-1 RPD-LIQ
WG150452-3	LD		MTICPMS	STORM WTR		2/27/2017	3/10/2017	L67069-1 RPD-LIQ
WG150452-4	MS		MTHARD-ICPMS	STORM WTR		2/27/2017	3/10/2017	L67069-1 MS-20
WG150452-4	MS		MTICPMS	STORM WTR		2/27/2017	3/10/2017	L67069-1 MS-20

WG150558 (Echo Lk, Fed Way Diss) Department: 6 - Metals Move Date: 10-MAR-17

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66913-1	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L66913-4	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L66913-5	421185-100	Elliot West CSO Plant	MTICPMS-DISS	STORM WTR	2/10/2017	3/7/2017	3/7/2017	
L67069-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/8/2017	3/7/2017	3/7/2017	FREP
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/9/2017	3/7/2017	3/7/2017	
WG150558-1	MB		MTICPMS-DISS	BLANK WTR		3/7/2017	3/7/2017	METHOD BLANK
WG150558-2	SB		MTICPMS-DISS	BLANK WTR		3/7/2017	3/7/2017	WG150558-1 MS-20
WG150558-3	LD		MTICPMS-DISS	STORM WTR		3/7/2017	3/7/2017	L66913-1 RPD-LIQ
WG150558-4	MS		MTICPMS-DISS	STORM WTR		3/7/2017	3/7/2017	L66913-1 MS-20

WG150726 (SWD, Echo LK, Fed Way) Department: 6 - Metals Move Date: 22-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	
L67141-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	2/15/2017	3/20/2017	3/20/2017	FREP
WG150726-1	MB		MTICPMS-DISS	BLANK WTR		3/20/2017	3/20/2017	METHOD BLANK
WG150726-2	SB		MTICPMS-DISS	BLANK WTR		3/20/2017	3/20/2017	WG150726-1 MS-20

WG150726-3	LD	MTICPMS-DISS	GRND WTR	3/20/2017	3/20/2017	L67140-1 RPD-LIQ
WG150726-4	MS	MTICPMS-DISS	GRND WTR	3/20/2017	3/20/2017	L67140-1 MS-20

WG151091 (05-APR-17 Fed Way Diss) Department: 6 - Metals Move Date: 18-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67335-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/14/2017	4/5/2017	4/5/2017	
L67335-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/14/2017	4/5/2017	4/5/2017	
L67335-8	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/14/2017	4/5/2017	4/5/2017	FREP
L67398-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/26/2017	4/5/2017	4/5/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/26/2017	4/5/2017	4/5/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/26/2017	4/5/2017	4/5/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/26/2017	4/5/2017	4/5/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/26/2017	4/5/2017	4/5/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS-DISS	BLANK WTR	3/29/2017	4/5/2017	4/5/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/29/2017	4/5/2017	4/5/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/29/2017	4/5/2017	4/5/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/29/2017	4/5/2017	4/5/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/29/2017	4/5/2017	4/5/2017	
L67443-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS-DISS	STORM WTR	3/29/2017	4/5/2017	4/5/2017	
WG151091-1	MB		MTICPMS-DISS	BLANK WTR		4/5/2017	4/5/2017	METHOD BLANK
WG151091-2	SB		MTICPMS-DISS	BLANK WTR		4/5/2017	4/5/2017	WG151091-1 MS-20
WG151091-3	LD		MTICPMS-DISS	STORM WTR		4/5/2017	4/5/2017	L67335-6 RPD-LIQ
WG151091-4	MS		MTICPMS-DISS	STORM WTR		4/5/2017	4/5/2017	L67335-6 MS-20

WG151216 (12-APR-17 FedWay, Echo Lk) Department: 6 - Metals Move Date: 17-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67398-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	

L67398-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67398-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/26/2017	4/12/2017	4/13/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTHARD-ICPMS	BLANK WTR	3/29/2017	4/12/2017	4/13/2017	
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MTICPMS	BLANK WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	3/29/2017	4/12/2017	4/13/2017	
L67499-1	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-1	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-2	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-2	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-3	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-3	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-4	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-4	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-5	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-5	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-6	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-6	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-7	421879-240	Federal Way Stormwater Monitoring	MTHARD-ICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
L67499-7	421879-240	Federal Way Stormwater Monitoring	MTICPMS	STORM WTR	4/5/2017	4/12/2017	4/13/2017	
WG151216-1	MB		MTHARD-ICPMS	BLANK WTR		4/12/2017	4/13/2017	METHOD BLANK
WG151216-1	MB		MTICPMS	BLANK WTR		4/12/2017	4/13/2017	METHOD BLANK
WG151216-2	SB		MTHARD-ICPMS	BLANK WTR		4/12/2017	4/13/2017	WG151216-1 MS-20
WG151216-2	SB		MTICPMS	BLANK WTR		4/12/2017	4/13/2017	WG151216-1 MS-20
WG151216-3	LD		MTHARD-ICPMS	STORM WTR		4/12/2017	4/13/2017	L67499-7 RPD-LIQ
WG151216-3	LD		MTICPMS	STORM WTR		4/12/2017	4/13/2017	L67499-7 RPD-LIQ
WG151216-4	MS		MTHARD-ICPMS	STORM WTR		4/12/2017	4/13/2017	L67499-7 MS-20
WG151216-4	MS		MTICPMS	STORM WTR		4/12/2017	4/13/2017	L67499-7 MS-20

WG143425 (dl#431 wtph-dx) Department: 7 - Organics Move Date: 15-DEC-15

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64251-1	423639-001	Fremont Siphon Construction	ORWTPH-DX	OTHR WTR	12/3/2015	12/10/2015	12/14/2015	
L64308-1	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/9/2015	12/10/2015	12/14/2015	
L64308-3	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/9/2015	12/10/2015	12/14/2015	
L64308-5	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/9/2015	12/10/2015	12/14/2015	
L64308-6	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/10/2015	12/10/2015	12/14/2015	
L64308-7	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/9/2015	12/10/2015	12/14/2015	
L64308-8	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/9/2015	12/10/2015	12/14/2015	
L64308-9	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/10/2015	12/10/2015	12/14/2015	
L64308-10	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/10/2015	12/10/2015	12/14/2015	
L64308-11	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	12/10/2015	12/10/2015	12/14/2015	
L64319-1	423639-001	Fremont Siphon Construction	ORWTPH-DX	OTHR WTR	12/10/2015	12/10/2015	12/14/2015	
L64379-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	12/8/2015	12/10/2015	12/14/2015	
L64379-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	12/8/2015	12/10/2015	12/14/2015	
WG143425-1	MB		ORWTPH-DX	BLANK WTR		12/10/2015	12/14/2015	MB151210
WG143425-2	SB		ORWTPH-DX	BLANK WTR		12/10/2015	12/14/2015	WG143425-1
WG143425-3	LD		ORWTPH-DX	GRND WTR		12/10/2015	12/14/2015	L64308-8
WG143425-4	LD		ORWTPH-DX	GRND WTR		12/10/2015	12/14/2015	L64308-11

WG143498 (bl#373 pah-sim) Department: 7 - Organics Move Date: 21-DEC-15

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64308-1	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/9/2015	12/14/2015	12/16/2015	
L64308-3	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/9/2015	12/14/2015	12/16/2015	
L64308-4	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/8/2015	12/14/2015	12/16/2015	
L64308-5	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/9/2015	12/14/2015	12/16/2015	
L64308-6	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/10/2015	12/14/2015	12/16/2015	
L64308-7	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/9/2015	12/14/2015	12/16/2015	
L64308-8	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/9/2015	12/14/2015	12/16/2015	
L64308-9	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/10/2015	12/14/2015	12/16/2015	
L64308-10	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/10/2015	12/14/2015	12/16/2015	
L64308-11	421196-170	Roads UST Groundwater	ORPAH-SIM	GRND WTR	12/10/2015	12/14/2015	12/16/2015	
L64379-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	12/8/2015	12/14/2015	12/17/2015	
L64379-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	12/8/2015	12/14/2015	12/17/2015	
L64379-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	12/8/2015	12/14/2015	12/17/2015	
L64379-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	12/8/2015	12/14/2015	12/17/2015	
WG143498-1	MB		ORPAH-SIM	BLANK WTR		12/14/2015	12/16/2015	MB151214
WG143498-2	SB		ORPAH-SIM	BLANK WTR		12/14/2015	12/16/2015	WG143498-1
WG143498-3	MS		ORPAH-SIM	GRND WTR		12/14/2015	12/16/2015	L64308-9
WG143498-4	MSD		ORPAH-SIM	GRND WTR		12/14/2015	12/16/2015	WG143498-3 L64308-9

WG144149 (bl#380 pah-sim) Department: 7 - Organics Move Date: 02-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64648-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/21/2016	1/25/2016	1/29/2016	
L64648-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/21/2016	1/25/2016	1/29/2016	
L64648-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/21/2016	1/25/2016	1/29/2016	
L64648-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/21/2016	1/25/2016	1/29/2016	
L64648-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/21/2016	1/25/2016	1/29/2016	FREP @ L64648-1
WG144149-1	MB		ORPAH-SIM	BLANK WTR		1/25/2016	1/29/2016	MB160125
WG144149-2	SB		ORPAH-SIM	BLANK WTR		1/25/2016	1/29/2016	WG144149-1
WG144149-3	SBD		ORPAH-SIM	BLANK WTR		1/25/2016	1/29/2016	WG144149-2 WG144149-1
WG144149-4	MS		ORPAH-SIM	STORM WTR		1/25/2016	1/29/2016	L64648-1

WG144205 (dl#436 wtph-dx) Department: 7 - Organics Move Date: 05-FEB-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64597-1	423639-001	Fremont Siphon Construction	ORWTPH-DX	OTHR WTR	1/21/2016	1/28/2016	2/1/2016	
L64598-1	423639-001	Fremont Siphon Construction	ORWTPH-DX	OTHR WTR	1/28/2016	1/28/2016	2/1/2016	
L64648-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/21/2016	1/28/2016	2/1/2016	
L64648-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/21/2016	1/28/2016	2/1/2016	
L64648-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/21/2016	1/28/2016	2/1/2016	
L64648-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/21/2016	1/28/2016	2/1/2016	
L64648-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/21/2016	1/28/2016	2/1/2016	FREP @ L64648-2
WG144205-1	MB		ORWTPH-DX	BLANK WTR		1/28/2016	2/1/2016	MB160128
WG144205-2	SB		ORWTPH-DX	BLANK WTR		1/28/2016	2/1/2016	WG144205-1
WG144205-3	LD		ORWTPH-DX	OTHR WTR		1/28/2016	2/1/2016	L64597-1

WG144726 (PAHSIM BL#388) Department: 7 - Organics Move Date: 14-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64921-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
L64921-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
L64921-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
L64921-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
L64921-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
L64921-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/1/2016	3/3/2016	3/8/2016	
WG144726-1	MB		ORPAH-SIM	BLANK WTR		3/3/2016	3/8/2016	MB160303

WG144726-2	SB	ORPAH-SIM	BLANK WTR	3/3/2016	3/8/2016	WG144726-1
WG144726-3	SBD	ORPAH-SIM	BLANK WTR	3/3/2016	3/8/2016	WG144726-2 WG144726-1
WG144726-4	MS	ORPAH-SIM	STORM WTR	3/3/2016	3/8/2016	L64921-13

WG144921 (bl#392 pah-sim) Department: 7 - Organics Move Date: 29-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64999-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L64999-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L64999-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/18/2016	
L64999-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L64999-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/18/2016	
L64999-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L64999-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/18/2016	
L64999-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L64999-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/18/2016	
L65007-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	
L65007-8	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/9/2016	3/15/2016	3/17/2016	FREP @ 65007-3
WG144921-1	MB		ORPAH-SIM	BLANK WTR		3/15/2016	3/17/2016	MB160315
WG144921-2	SB		ORPAH-SIM	BLANK WTR		3/15/2016	3/17/2016	WG144921-1
WG144921-3	MS		ORPAH-SIM	STORM WTR		3/15/2016	3/17/2016	L65007-1
WG144921-4	MSD		ORPAH-SIM	STORM WTR		3/15/2016	3/17/2016	WG144921-3 L65007-1

WG144946 (Dx DL#442) Department: 7 - Organics Move Date: 23-MAR-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L64999-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-12	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-14	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	

L64999-16	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
L64999-18	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	3/9/2016	3/16/2016	3/18/2016	
WG144946-1	MB		ORWTPH-DX	BLANK WTR		3/16/2016	3/18/2016	MB160316
WG144946-2	SB		ORWTPH-DX	BLANK WTR		3/16/2016	3/18/2016	WG144946-1
WG144946-3	LD		ORWTPH-DX	STORM WTR		3/16/2016	3/18/2016	L64999-6

WG147964 (WTPH-Dx DL#451) Department: 7 - Organics Move Date: 27-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66123-4	421196-130	Roads Groundwater	ORWTPH-DX	GRND WTR	9/16/2016	9/21/2016	9/26/2016	
L66175-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	9/17/2016	9/21/2016	9/26/2016	
L66175-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	9/17/2016	9/21/2016	9/26/2016	
WG147964-1	MB		ORWTPH-DX	BLANK WTR		9/21/2016	9/26/2016	MB160921
WG147964-2	SB		ORWTPH-DX	BLANK WTR		9/21/2016	9/26/2016	WG147964-1
WG147964-3	LD		ORWTPH-DX	GRND WTR		9/21/2016	9/26/2016	L66123-4

WG147966 (PAH-SIM BL#419) Department: 7 - Organics Move Date: 27-SEP-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66175-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	9/17/2016	9/21/2016	9/23/2016	
L66175-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	9/17/2016	9/21/2016	9/23/2016	
WG147966-1	MB		ORPAH-SIM	BLANK WTR		9/21/2016	9/23/2016	MB160921
WG147966-2	SB		ORPAH-SIM	BLANK WTR		9/21/2016	9/23/2016	WG147966-1
WG147966-3	MS		ORPAH-SIM	STORM WTR		9/21/2016	9/23/2016	L66175-1
WG147966-4	MSD		ORPAH-SIM	STORM WTR		9/21/2016	9/23/2016	WG147966-3 L66175-1

WG148302 (PAH-SIM bl#426) Department: 7 - Organics Move Date: 20-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66285-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/6/2016	10/11/2016	10/12/2016	
L66285-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/6/2016	10/11/2016	10/12/2016	
WG148302-1	MB		ORPAH-SIM	BLANK WTR		10/11/2016	10/12/2016	MB161011
WG148302-2	SB		ORPAH-SIM	BLANK WTR		10/11/2016	10/12/2016	WG148302-1
WG148302-3	SBD		ORPAH-SIM	BLANK WTR		10/11/2016	10/12/2016	WG148302-2 WG148302-1
WG148302-4	MS		ORPAH-SIM	STORM WTR		10/11/2016	10/12/2016	L66285-1

WG148456 (Dx DL#452) Department: 7 - Organics Move Date: 08-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66327-1	421301A	Georgetown Yard Industiral SW Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66382-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66382-12	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66382-18	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66382-20	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66384-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
L66384-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	10/18/2016	11/1/2016	
WG148456-1	MB		ORWTPH-DX	BLANK WTR		10/18/2016	11/1/2016	MB161018
WG148456-2	SB		ORWTPH-DX	BLANK WTR		10/18/2016	11/1/2016	WG148456-1
WG148456-3	LD		ORWTPH-DX	STORM WTR		10/18/2016	11/1/2016	L66384-4

WG148458 (PAH-SIM bl#430) Department: 7 - Organics Move Date: 21-OCT-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
L66384-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
L66384-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/13/2016	10/18/2016	10/19/2016	
WG148458-1	MB		ORPAH-SIM	BLANK WTR		10/18/2016	10/19/2016	MB161018
WG148458-2	SB		ORPAH-SIM	BLANK WTR		10/18/2016	10/19/2016	WG148458-1
WG148458-3	MS		ORPAH-SIM	STORM WTR		10/18/2016	10/19/2016	L66384-3
WG148458-4	MSD		ORPAH-SIM	STORM WTR		10/18/2016	10/19/2016	WG148458-3 L66384-3

WG148595 (dl#453 wtph-dx) Department: 7 - Organics Move Date: 08-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66368-1	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/17/2016	10/24/2016	11/2/2016	
L66368-2	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/19/2016	10/24/2016	11/2/2016	
L66368-3	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/17/2016	10/24/2016	11/2/2016	
L66368-5	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/20/2016	10/24/2016	11/2/2016	
L66368-6	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/20/2016	10/24/2016	11/2/2016	
L66368-7	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/20/2016	10/24/2016	11/2/2016	
L66368-8	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/19/2016	10/24/2016	11/2/2016	
L66368-9	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/19/2016	10/24/2016	11/2/2016	
L66368-10	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/20/2016	10/24/2016	11/2/2016	

L66368-11	421196-170	Roads UST Groundwater	ORWTPH-DX	GRND WTR	10/19/2016	10/24/2016	11/2/2016	
L66435-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/20/2016	10/24/2016	11/2/2016	
L66435-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/20/2016	10/24/2016	11/2/2016	
WG148595-1	MB		ORWTPH-DX	BLANK WTR		10/24/2016	11/2/2016	MB161024
WG148595-2	SB		ORWTPH-DX	BLANK WTR		10/24/2016	11/2/2016	WG148595-1
WG148595-3	LD		ORWTPH-DX	GRND WTR		10/24/2016	11/2/2016	L66368-1
WG148595-4	LD		ORWTPH-DX	STORM WTR		10/24/2016	11/2/2016	L66435-2

WG148652 (bl#434 pah-sim) Department: 7 - Organics Move Date: 21-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66435-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/19/2016	10/26/2016	11/7/2016	
L66435-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/19/2016	10/26/2016	11/7/2016	
L66453-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/20/2016	10/26/2016	11/7/2016	
L66453-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/20/2016	10/26/2016	11/7/2016	
L66453-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/20/2016	10/26/2016	11/7/2016	
L66453-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/20/2016	10/26/2016	11/7/2016	
L66453-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/19/2016	10/26/2016	11/7/2016	
L66453-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/19/2016	10/26/2016	11/7/2016	
L66453-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/19/2016	10/26/2016	11/7/2016	
L66453-8	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/20/2016	10/26/2016	11/7/2016	FREP@L66453-3
WG148652-1	MB		ORPAH-SIM	BLANK WTR		10/26/2016	11/7/2016	MB161026
WG148652-2	SB		ORPAH-SIM	BLANK WTR		10/26/2016	11/7/2016	WG148652-1
WG148652-3	MS		ORPAH-SIM	STORM WTR		10/26/2016	11/7/2016	L66435-3
WG148652-4	MSD		ORPAH-SIM	STORM WTR		10/26/2016	11/7/2016	WG148652-3 L66435-3

WG148678 (PAH-SIM bl#435) Department: 7 - Organics Move Date: 09-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66498-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66498-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	

L66498-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66499-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
L66499-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	10/26/2016	10/27/2016	11/4/2016	
WG148678-1	MB		ORPAH-SIM	BLANK WTR		10/27/2016	11/4/2016	MB161027
WG148678-2	SB		ORPAH-SIM	BLANK WTR		10/27/2016	11/4/2016	WG148678-1
WG148678-3	MS		ORPAH-SIM	STORM WTR		10/27/2016	11/4/2016	L66499-3
WG148678-4	MSD		ORPAH-SIM	STORM WTR		10/27/2016	11/4/2016	WG148678-3 L66499-3

WG148679 (WTPH-Dx DL#454) Department: 7 - Organics Move Date: 08-NOV-16

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66498-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-12	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-18	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-20	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66498-23	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66499-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
L66499-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	10/26/2016	10/27/2016	11/3/2016	
WG148679-1	MB		ORWTPH-DX	BLANK WTR		10/27/2016	11/3/2016	MB161027
WG148679-2	SB		ORWTPH-DX	BLANK WTR		10/27/2016	11/3/2016	WG148679-1
WG148679-3	LD		ORWTPH-DX	STORM WTR		10/27/2016	11/3/2016	L66498-2
WG148679-4	LD		ORWTPH-DX	STORM WTR		10/27/2016	11/3/2016	L66499-2

WG149842 (Dx DL#456) Department: 7 - Organics Move Date: 30-JAN-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66910-1	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	1/19/2017	1/25/2017	
L66910-2	421874-715	SPU Thornton Creek Fish Toxicity Monitoring	ORWTPH-DX	STORM WTR	10/13/2016	1/19/2017	1/25/2017	
L66938-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-12	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-14	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/18/2017	1/19/2017	1/25/2017	

L66938-16	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/18/2017	1/19/2017	1/25/2017	
L66938-18	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-20	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
L66938-23	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	1/17/2017	1/19/2017	1/25/2017	
WG149842-1	MB		ORWTPH-DX	BLANK WTR		1/19/2017	1/25/2017	MB170119
WG149842-2	SB		ORWTPH-DX	BLANK WTR		1/19/2017	1/25/2017	WG149842-1
WG149842-3	LD		ORWTPH-DX	STORM WTR		1/19/2017	1/25/2017	L66938-14
WG149842-4	LD		ORWTPH-DX	STORM WTR		1/19/2017	1/25/2017	L66910-2

WG149895 (PAH-SIM BL#453) Department: 7 - Organics Move Date: 10-FEB-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66937-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66937-8	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	FREP
L66938-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/7/2017	
L66938-13	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/18/2017	1/23/2017	2/8/2017	
L66938-15	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/18/2017	1/23/2017	2/8/2017	
L66938-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/8/2017	
L66938-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/8/2017	
L66938-22	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/8/2017	
L66963-1	421220	TROUBLE CALL	ORPAH-SIM	STORM WTR	1/17/2017	1/23/2017	2/8/2017	
WG149895-1	MB		ORPAH-SIM	BLANK WTR		1/23/2017	2/7/2017	MB170123
WG149895-2	SB		ORPAH-SIM	BLANK WTR		1/23/2017	2/7/2017	WG149895-1
WG149895-3	MS		ORPAH-SIM	STORM WTR		1/23/2017	2/7/2017	L66937-5
WG149895-4	MSD		ORPAH-SIM	STORM WTR		1/23/2017	2/7/2017	WG149895-3 L66937-5

WG150220 (dl#457 wtph-dx) Department: 7 - Organics Move Date: 07-MAR-17

LIMSView Batch Report for SAM Echo Lake Stormwater Sampling - Data Validation

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66936-1	421301A	Georgetown Yard Industiral SW Monitoring	ORWTPH-DX	STORM WTR	2/8/2017	2/13/2017	2/23/2017	
L67070-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-10	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-12	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
L67070-27	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/9/2017	2/13/2017	2/23/2017	
WG150220-1	MB		ORWTPH-DX	BLANK WTR		2/13/2017	2/23/2017	MB170213
WG150220-2	SB		ORWTPH-DX	BLANK WTR		2/13/2017	2/23/2017	WG150220-1
WG150220-3	SBD		ORWTPH-DX	BLANK WTR		2/13/2017	2/23/2017	WG150220-2 WG150220-1

WG150221 (bl#462 pah-sim) Department: 7 - Organics Move Date: 02-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67069-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	
L67069-8	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/8/2017	2/13/2017	2/15/2017	FREP
L67070-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/15/2017	
L67070-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/15/2017	
L67070-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/16/2017	
L67070-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/16/2017	
L67070-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/16/2017	
L67070-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/16/2017	
L67070-26	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/9/2017	2/13/2017	2/16/2017	
WG150221-1	MB		ORPAH-SIM	BLANK WTR		2/13/2017	2/15/2017	MB170213
WG150221-2	SB		ORPAH-SIM	BLANK WTR		2/13/2017	2/15/2017	WG150221-1
WG150221-3	SBD		ORPAH-SIM	BLANK WTR		2/13/2017	2/15/2017	WG150221-2 WG150221-1
WG150221-4	MS		ORPAH-SIM	STORM WTR		2/13/2017	2/15/2017	L67069-1

WG150368 (Dx DL#458) Department: 7 - Organics Move Date: 03-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments

L67140-2	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/15/2017	2/21/2017	2/24/2017	
L67140-4	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/15/2017	2/21/2017	2/24/2017	
L67140-6	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/15/2017	2/21/2017	2/24/2017	
L67140-8	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORWTPH-DX	STORM WTR	2/15/2017	2/21/2017	2/24/2017	
WG150368-1	MB		ORWTPH-DX	BLANK WTR		2/21/2017	2/24/2017	MB170221
WG150368-2	SB		ORWTPH-DX	BLANK WTR		2/21/2017	2/24/2017	WG150368-1
WG150368-3	SBD		ORWTPH-DX	BLANK WTR		2/21/2017	2/24/2017	WG150368-2 WG150368-1

WG150370 (PAH-SIM BL#468) Department: 7 - Organics Move Date: 02-MAR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67140-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67140-3	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67140-5	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67140-7	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	
L67141-8	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/15/2017	2/21/2017	2/23/2017	FREP
L67141-17	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	2/16/2017	2/21/2017	2/23/2017	
WG150370-1	MB		ORPAH-SIM	BLANK WTR		2/21/2017	2/23/2017	MB170221
WG150370-2	SB		ORPAH-SIM	BLANK WTR		2/21/2017	2/23/2017	WG150370-1
WG150370-3	MS		ORPAH-SIM	STORM WTR		2/21/2017	2/23/2017	L67141-4
WG150370-4	MSD		ORPAH-SIM	STORM WTR		2/21/2017	2/23/2017	WG150370-3 L67141-4

WG151046 (bl#484 pah-sim) Department: 7 - Organics Move Date: 06-APR-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L67413-1	421879-250	Shoreline-Echo Lake Stormwater Monitoring	ORPAH-SIM	BLANK WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-1	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-2	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-3	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-4	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-5	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
L67443-6	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	

L67443-7	421879-240	Federal Way Stormwater Monitoring	ORPAH-SIM	STORM WTR	3/29/2017	4/3/2017	4/4/2017	
WG151046-1	MB		ORPAH-SIM	BLANK WTR		4/3/2017	4/4/2017	MB170403
WG151046-2	SB		ORPAH-SIM	BLANK WTR		4/3/2017	4/4/2017	WG151046-1
WG151046-3	MS		ORPAH-SIM	STORM WTR		4/3/2017	4/4/2017	L67443-4
WG151046-4	MSD		ORPAH-SIM	STORM WTR		4/3/2017	4/4/2017	WG151046-3 L67443-4

WG154875 () Department: 5 - Microbiology Move Date: 31-OCT-17

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	Comments
L66382-9	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	
L66382-11	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	
L66382-17	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2017	10/13/2017	10/14/2017	
L66382-19	421879-250	Shoreline-Echo Lake Stormwater Monitoring	MCMODEC-MF	STORM WTR	10/13/2016	10/13/2017	10/14/2017	
WG154875-1	PC		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-2	NC		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-3	BF		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16
WG154875-4	AF		MCMODEC-MF	BLANK WTR		10/13/2017	10/14/2017	QC-PERFORMED:13-OCT-16

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG143407 (DISSNUT) Run ID: R208849

MB:WG143407-1 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:WG143407-1 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:WG143407-1 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

MB:WG143407-1 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD
(Method Blank)

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

SB:WG143407-2 MB:WG143407-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0397	99		80--120

SB:WG143407-2 MB:WG143407-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.792	99		80--120

SB:WG143407-2 MB:WG143407-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0192	96		80--120

SB:WG143407-2 MB:WG143407-1 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Silica	0.05	0.1	mg/L	<MDL	2	1.98	99		80--120

LCS:WG143407-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0504	101		85--115

LCS:WG143407-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.803	100		85--115

LCS:WG143407-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0194	97		85--115

LCS:WG143407-3 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Silica	0.05	0.1	mg/L	2	2.02	101		85--115

LD:WG143407-4 L64311-19 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	<MDL			0--20

LD:WG143407-4 L64311-19 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.186	0.185	0		0--20

LD:WG143407-4 L64311-19 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00655	0.0065	1		0--20

LD:WG143407-4 L64311-19 Matrix: FRESH WTR Listtype:CVSI Method:WHITLEDGE 1981 Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Silica	0.05	0.1	mg/L	9.09	9.07	0		0--20

MS:WG143407-5 L64311-19 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0434	109		75--125

MS:WG143407-5 L64311-19 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.186	0.8	0.995	101		75--125

MS:WG143407-5 L64311-19 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00655	0.02	0.0253	94		75--125

MS:WG143407-5 L64311-19 Matrix: FRESH WTR Listtype:CVSI Method:WHITLEDGE 1981 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Silica	0.05	0.1	mg/L	9.09	2	11.1	101		75--125

MB:WG143407-6 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:WG143407-6 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:WG143407-6 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:WG143407-7 MB:WG143407-6 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0381	95		80--120

SB:WG143407-7 MB:WG143407-6 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.777	97		80--120

SB:WG143407-7 MB:WG143407-6 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0184	92		80--120

LCS:WG143407-8 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0499	100		85--115

LCS:WG143407-8 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.801	100		85--115

LCS:WG143407-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0186	93		85--115

LD:WG143407-9 L64311-23 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0022	0.0023			0--20

LD:WG143407-9 L64311-23 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.186	0.186	0		0--20

LD:WG143407-9 L64311-23 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00654	0.00645	1		0--20

MS:WG143407-10 L64311-23 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0022	0.04	0.0428	101		75--125

MS:WG143407-10 L64311-23 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.186	0.8	0.968	98		75--125

MS:WG143407-10 L64311-23 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00654	0.02	0.0244	89		75--125

LD:WG143407-11 L64310-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.01	0.0071			0--20

LD:WG143407-11 L64310-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.271	0.273	1		0--20

LD:WG143407-11 L64310-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00577	0.00517	11		0--20

MS:WG143407-12 L64310-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.01	0.04	0.0478	94		75--125

MS:WG143407-12 L64310-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.271	0.8	1.06	98		75--125

MS:WG143407-12 L64310-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00577	0.02	0.0229	86		75--125

LD:WG143407-13 L64379-6 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Ammonia Nitrogen	0.02	0.1	mg/L	0.305	0.305	0		0--20

LD:WG143407-13 L64379-6 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0877	0.0875	0		0--20

LD:WG143407-13 L64379-6 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.005	0.02	mg/L	0.0057	<MDL			0--20

MS:WG143407-14 L64379-6 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.02	0.1	mg/L	0.305	0.04	0.717	103		75--125

MS:WG143407-14 L64379-6 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0877	0.8	0.876	99		75--125

MS:WG143407-14 L64379-6 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.005	0.02	mg/L	0.0057	0.02	0.189	92		75--125

MB:WG143407-15 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:WG143407-15 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:WG143407-15 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:WG143407-16 MB:WG143407-15 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0369	92		80--120

SB:WG143407-16 MB:WG143407-15 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.768	96		80--120

SB:WG143407-16 MB:WG143407-15 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0178	89		80--120

LCS:WG143407-17 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0468	94		85--115

LCS:WG143407-17 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.77	96		85--115

LCS:WG143407-17 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0176	88		85--115

LD:WG143407-18 L64296-3 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0048	0.0045			0--20

LD:WG143407-18 L64296-3 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.909	0.891	2		0--20

LD:WG143407-18 L64296-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00295	0.00269	9		0--20

MS:WG143407-19 L64296-3 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0048	0.04	0.0454	101		75--125

MS:WG143407-19 L64296-3 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.909	0.8	1.73	103		75--125

MS:WG143407-19 L64296-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00295	0.02	0.0207	89		75--125

Workgroup: WG143430 (tss-2-12/10) Run ID: R208648

MB:WG143430-1 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

LCS:WG143430-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5.1	10	mg/L	100	95	95		80--120

LD:WG143430-3 L64379-6 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	59.6	59.6	0		0--25

LD:WG143430-4 L64296-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4.1	mg/L	157	154	2		0--25

MB:WG143430-5 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

LCS:WG143430-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5.2	10	mg/L	100	93.8	94		80--120

LD:WG143430-7 L64311-4 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	0.8	0.7			0--25

MB:WG143430-8 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

LCS:WG143430-9 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG143430-10 L64311-30 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	<MDL	<MDL			0--25

Workgroup: WG143546 (NUTS-12/15) Run ID: R208938

MB:WG143546-1 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:WG143546-1 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:WG143546-2 MB:WG143546-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.996	100		80--120

SB:WG143546-2 MB:WG143546-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

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

LCS:WG143546-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.854	85		85--115

LCS:WG143546-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0925	93		85--115

LD:WG143546-4 L64196-5 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.157	0.149	5		0--20

LD:WG143546-4 L64196-5 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0298	0.0286	4		0--20

MS:WG143546-5 L64196-5 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-180 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.157	1	1.17	101		75--125

MS:WG143546-5 L64196-5 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-180 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0298	0.1	0.126	96		75--125

MB:WG143546-6 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:WG143546-6 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:WG143546-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.853	85		85--115

LCS:WG143546-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0892	89		85--115

LD:WG143546-8 L64336-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.018	0.0184	2		0--20

MS:WG143546-9 L64336-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.018	0.1	0.115	97		75--125

LD:WG143546-10 L64310-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0291	0.0297	2		0--20

MS:WG143546-11 L64310-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0291	0.1	0.129	100		75--125

LD:WG143546-12 L64379-8 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.794	0.788	1		0--20

LD:WG143546-12 L64379-8 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.387	0.381	2		0--20

MS:WG143546-13 L64379-8 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.794	1	1.79	99		75--125

MS:WG143546-13 L64379-8 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.387	0.1	0.482	95		75--125

Workgroup: WG143627 (TOC/421422) Run ID: R208827

MB:WG143627-1 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:WG143627-2 MB:WG143627-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.7	107		80--120

LCS:WG143627-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.6	106		85--115

MB:WG143627-4 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

LCS:WG143627-5 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Total Organic Carbon	0.5	1	mg/L	10	9.98	100	85--115

LD:WG143627-6 L64331-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	100	200	mg/L	263	258	2		0--20

MS:WG143627-7 L64331-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	100	200	mg/L	263	10	2320	103		75--125

LD:WG143627-8 L64083-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.63	3.76	4		0--20

MS:WG143627-9 L64083-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.63	10	14	104		75--125

LD:WG143627-10 L64254-22 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	12.4	11.3	10		0--20

MS:WG143627-11 L64254-22 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	12.4	10	62.1	99		75--125

MB:WG143627-12 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:WG143627-13 MB:WG143627-12 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.8	108		80--120

LCS:WG143627-14 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.7	107		85--115

MB:WG143627-15 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

LCS:WG143627-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

LD:WG143627-17 L64254-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.3	3.26	1		0--20

MS:WG143627-18 L64254-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.3	10	13.2	99		75--125

MB:WG143627-19 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

LCS:WG143627-20 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

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

MB:WG143627-21 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:WG143627-22 MB:WG143627-21 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.68	97		80--120

LCS:WG143627-23 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.8	98		85--115

LD:WG143627-24 L64356-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.73	0.72			0--20

MS:WG143627-25 L64356-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.73	10	10.3	96		75--125

LD:WG143627-26 L64066-7 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421240-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	9.65	9.76	1		0--20

MS:WG143627-27 L64066-7 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421240-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	9.65	10	29	97		75--125

MB:WG143627-28 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:WG143627-29 MB:WG143627-28 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.7	107		80--120

LCS:WG143627-30 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.7	107		85--115

LD:WG143627-31 L64253-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.69	0.68			0--20

MS:WG143627-32 L64253-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.69	10	10.7	100		75--125

LD:WG143627-33 L64362-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	11.8	11.7	1		0--20

MS:WG143627-34 L64362-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	11.8	10	33	106		75--125

Workgroup: WG143741 (DOC/421240, 323589, 421879) Run ID: R208985

MB:WG143741-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG143741-2 MB:WG143741-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.68	97		80--120

LCS:WG143741-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.84	98		85--115

LD:WG143741-4 L64066-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421240-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Dissolved Organic Carbon	0.5	1	mg/L	8.16	8.36	2	0--20

MS:WG143741-5 L64066-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421240-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	8.16	10	18	98		75--125

MB:WG143741-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

MB:WG143741-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

Workgroup: WG143826 (TOC, DOC/421422, 421250 & others) Run ID: R209028

MB:WG143826-1 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:WG143826-2 MB:WG143826-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.91	99		80--120

LCS:WG143826-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.91	99		85--115

LD:WG143826-4 L64421-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	<MDL			0--20

MS:WG143826-5 L64421-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.55	95		75--125

LD:WG143826-6 L64112-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.83	5.92	2		0--20

MS:WG143826-7 L64112-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.83	10	15.6	98		75--125

LD:WG143826-8 L64378-2 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B Project:421185 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.17	2.06	5		0--20

LD:WG143826-8 L64378-2 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:421185 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.34	2.43	4		0--20

MS:WG143826-9 L64378-3 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B Project:421185 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.22	10	10.8	95		75--125

MS:WG143826-9 L64378-3 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:421185 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.11	10	10.7	96		75--125

MB:WG143826-10 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

LCS:WG143826-11 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

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

LD:WG143826-12 L64454-4 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.4	2.31	4		0--20

MS:WG143826-13 L64454-4 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.2	10	12.3	101		75--125

MS:WG143826-13 L64454-4 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.4	10	12.3	99		75--125

MB:WG143826-14 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG143826-15 MB:WG143826-14 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.1	101		80--120

LCS:WG143826-16 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.9	109		85--115

MB:WG143826-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LD:WG143826-18 L64192-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.46	1.44	1		0--20

MS:WG143826-19 L64192-2 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.08	10	11.9	98		75--125

MB:WG143826-20 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LD:WG143826-21 L64454-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.34	2.35	0		0--20

MB:WG143826-22 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LCS:WG143826-23 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.6	106		85--115

Workgroup: WG144141 (nutrients) Run ID: R209505

MB:WG144141-1 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:WG144141-1 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:WG144141-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

MB:WG144141-1 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:WG144141-2 MB:WG144141-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	0.986	99		80--120

SB:WG144141-2 MB:WG144141-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.784	98		80--120

LCS:WG144141-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

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

LCS:WG144141-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.99	99		85--115

LCS:WG144141-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.792	99		85--115

LCS:WG144141-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0193	96		85--115

LD:WG144141-4 L64529-2 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	<MDL	<MDL			0--20

LD:WG144141-4 L64529-2 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrate Nitrogen	0.05	0.2	mg/L	4.12	4.06	1		0--20

MS:WG144141-5 L64529-2 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	<MDL	0.2	0.201	100		75--125

MS:WG144141-5 L64529-2 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.05	0.2	mg/L	4.12	4	8.11	100		75--125

MB:WG144141-6 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:WG144141-6 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:WG144141-6 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

MB:WG144141-6 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

LD:WG144141-7 L64605-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0727	0.0732	1		0--20

LD:WG144141-7 L64605-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.124	0.122	1		0--20

LD:WG144141-7 L64605-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0122	0.0124	2		0--20

MS:WG144141-8 L64605-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0727	0.04	0.104	79		75--125

MS:WG144141-8 L64605-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.124	1	1.08	96		75--125

MS:WG144141-8 L64605-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0122	0.02	0.0297	87		75--125

SB:WG144141-9 MB:WG144141-6 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0375	94		80--120

SB:WG144141-9 MB:WG144141-6 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.019	95		80--120

LD:WG144141-10 L64524-1 Matrix: LEACHATE Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0066	0.006			0--20

LD:WG144141-10 L64524-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.09	1.1	0		0--20

LD:WG144141-10 L64524-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-M Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00094	0.00097			0--20

MS:WG144141-11 L64524-1 Matrix: LEACHATE Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0066	0.04	0.0449	96		75--125

MS:WG144141-11 L64524-1 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.09	1	2.05	96		75--125

MS:WG144141-11 L64524-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00094	0.02	0.0162	76		75--125

LCS:WG144141-12 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0521	104		85--115

LCS:WG144141-12 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.962	96		85--115

MB:WG144141-13 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:WG144141-13 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:WG144141-14 MB:WG144141-13 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit

Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	0.969	97	80--120

SB:WG144141-14 MB:WG144141-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0189	95		80--120

LCS:WG144141-15 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.992	99		85--115

LCS:WG144141-15 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0186	93		85--115

LD:WG144141-16 L64648-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0478	0.0481	1		0--20

LD:WG144141-16 L64648-5 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.002	0.00233	17		0--20

MS:WG144141-17 L64648-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0478	1	0.998	95		75--125

MS:WG144141-17 L64648-5 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.002	0.02	0.019	85		75--125

LCS:WG144141-18 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0175	87		85--115

MB:WG144141-19 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

LCS:WG144141-20 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.765	96		85--115

Workgroup: WG144142 (TOTN, TOTP/421195, 421879) Run ID: R209437

MB:WG144142-1 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:WG144142-1 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:WG144142-2 MB:WG144142-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.981	98		80--120

SB:WG144142-2 MB:WG144142-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0985	98		80--120

LCS:WG144142-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.902	90		85--115

LCS:WG144142-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0934	93		85--115

LD:WG144142-4 L64605-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.572	0.565	1		0--20

LD:WG144142-4 L64605-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0369	0.0358	3		0--20

MS:WG144142-5 L64605-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.567	1	1.58	101		75--125

MS:WG144142-5 L64605-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.036	0.1	0.133	97		75--125

LD:WG144142-6 L64648-1 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.324	0.328	1		0--20

LD:WG144142-6 L64648-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.07	0.0707	1		0--20

MS:WG144142-7 L64648-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.302	1	1.29	99		75--125

MS:WG144142-7 L64648-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.192	0.1	0.296	104		75--125

MB:WG144142-8 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:WG144142-8 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:WG144142-9 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.908	91		85--115

LCS:WG144142-9 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.093	93		85--115

LD:WG144142-10 L64348-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421874-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.84	1.87	1		0--20

LD:WG144142-10 L64348-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421874-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0724	0.0741	2		0--20

MS:WG144142-11 L64348-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.84	1	2.86	102		75--125

MS:WG144142-11 L64348-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0724	0.1	0.171	99		75--125

Workgroup: WG144182 (nutrients) Run ID: R209406

MB:WG144182-1 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:WG144182-1 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:WG144182-1 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:WG144182-2 MB:WG144182-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0371	93		80--120

SB:WG144182-2 MB:WG144182-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	0.998	100		80--120

SB:WG144182-2 MB:WG144182-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0197	99		80--120

LCS:WG144182-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0488	98		85--115

LCS:WG144182-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.993	99		85--115

LCS:WG144182-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0191	96		85--115

LD:WG144182-4 L64561-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	<MDL			0--20

LD:WG144182-4 L64561-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	<MDL			0--20

LD:WG144182-4 L64561-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	<MDL			0--20

MS:WG144182-5 L64561-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0361	90		75--125

MS:WG144182-5 L64561-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	0.965	97		75--125

MS:WG144182-5 L64561-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0193	96		75--125

MB:WG144182-6 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

LD:WG144182-7 L64658-1 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.16	1.16	0		0--20

MS:WG144182-8 L64658-1 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.16	1	2.13	97		75--125

MB:WG144182-9 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

SB:WG144182-10 MB:WG144182-9 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.036	90		80--120

MB:WG144182-11 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

SB:WG144182-12 MB:WG144182-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0352	88		80--120

LD:WG144182-13 L64503-4 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0172	0.0158	9		0--20

MS:WG144182-14 L64503-4 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0172	0.04	0.0523	88		75--125

LD:WG144182-15 L64648-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.193	0.188	3		0--20

MS:WG144182-16 L64648-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.193	0.04	0.368	88		75--125

Workgroup: WG144194 (TSS) Run ID: R209392

MB:WG144194-1 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

LCS:WG144194-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	105	105		80--120

LD:WG144194-3 L64648-9 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.6	3.1	mg/L	38.8	40.5	4		0--25

LD:WG144194-4 L64503-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	38.4	38.9	1		0--25

LD:WG144194-5 L64348-5 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421874-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.4	3.6	6		0--25

Workgroup: WG144296 (Assorted ALK: 2/2/16) Run ID: R209511

LCS:WG144296-1 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	50	50.4	101		90--110

LD:WG144296-2 L64717-5 Matrix: GRND WTR Listtype:CVALK Method:SM2320-B Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	64.8	64.9	0		0--10

LD:WG144296-3 L64648-7 Matrix: STORM WTR Listtype:CVALK Method:SM2320-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	11.4	11.6	1		0--10

LD:WG144296-4 L64641-5 Matrix: FRESH WTR Listtype:CVALK Method:SM2320-B Project:421193 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	44.7	44.8	0		0--10

LCS:WG144296-5 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	10	10	100		85--115

LCS:WG144296-6 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	25	24.6	99		85--115

LCS:WG144296-7 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	50	49.8	100		90--110

LCS:WG144296-8 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	250	240	96		90--110

Workgroup: WG144698 (TSS) Run ID: R210024

MB:WG144698-1 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

LCS:WG144698-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	96	96		80--120

LD:WG144698-3 L64714-4 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2.5	5	mg/L	193	199	3		0--25

LD:WG144698-4 L64921-5 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.7	3.3	mg/L	40.3	41.4	3		0--25

Workgroup: WG144716 (DISSNUTS) Run ID: R210500

MB:WG144716-1 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:WG144716-1 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:WG144716-1 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:WG144716-2 MB:WG144716-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0321	80		80--120

SB:WG144716-2 MB:WG144716-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

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

SB:WG144716-2 MB:WG144716-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0204	102		80--120

LCS:WG144716-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.051	102		85--115

LCS:WG144716-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	1.03	103		85--115

LCS:WG144716-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0183	92		85--115

LD:WG144716-4 L64894-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00707	0.0073	3		0--20

MS:WG144716-5 L64894-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00707	0.02	0.0251	90		75--125

LD:WG144716-6 L64714-4 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0457	0.0457	0		0--20

LD:WG144716-6 L64714-4 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0125	0.0124	0		0--20

MS:WG144716-7 L64714-4 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-180 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0457	1	1.07	102		75--125

MS:WG144716-7 L64714-4 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-180 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0125	0.02	0.0316	95		75--125

LD:WG144716-8 L64921-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0044	0.0041			0--20

LD:WG144716-8 L64921-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.309	0.306	1		0--20

LD:WG144716-8 L64921-11 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.01	0.04	mg/L	0.311	0.295	6		0--20

MS:WG144716-9 L64921-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0044	0.04	0.0399	89		75--125

MS:WG144716-9 L64921-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.309	1	1.32	101		75--125

MS:WG144716-9 L64921-11 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.01	0.04	mg/L	0.311	0.4	0.729	104		75--125

Workgroup: WG144755 (Total Nuts/421195,421422,421879,421430) Run ID: R210168

MB:WG144755-1 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:WG144755-1 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:WG144755-2 MB:WG144755-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.02	102		80--120

SB:WG144755-2 MB:WG144755-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.101	101		80--120

LCS:WG144755-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.978	98		85--115

LCS:WG144755-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0965	96		85--115

LD:WG144755-4 L64921-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.651	0.663	2		0--20

LD:WG144755-4 L64921-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.223	0.227	2		0--20

MS:WG144755-5 L64921-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Total Nitrogen	0.05	0.1	mg/L	0.651	1	1.7	105	75--125

MS:WG144755-5 L64921-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.223	0.1	0.328	104		75--125

MB:WG144755-6 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:WG144755-6 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:WG144755-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.984	98		85--115

LCS:WG144755-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0969	97		85--115

LD:WG144755-8 L64864-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	2.42	2.46	2		0--20

MS:WG144755-9 L64864-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	2.42	0.1	3.45	102		75--125

LD:WG144755-10 L64835-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0579	0.0586	1		0--20

MS:WG144755-11 L64835-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0579	0.1	0.162	105		75--125

LD:WG144755-12 L64906-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	2.27	2.29	1		0--20

LD:WG144755-12 L64906-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0115	0.0111	4		0--20

MS:WG144755-13 L64906-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	2.27	1	3.3	103		75--125

MS:WG144755-13 L64906-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0115	0.1	0.113	101		75--125

Workgroup: WG144865 (TSS) Run ID: R210237

MB:WG144865-1 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

LCS:WG144865-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	92	92		80--120

LD:WG144865-3 L64679-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	3.3	6.7	mg/L	49.3	46	7		0--25

LD:WG144865-4 L64906-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	27.8	27.2	2		0--25

LD:WG144865-5 L64947-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

MB:WG144865-6 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

LCS:WG144865-7 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG144865-8 L65007-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5.4	5.6	4		0--25

Workgroup: WG144930 (T.Nutrients/Various) Run ID: R210428

MB:WG144930-1 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:WG144930-1 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:WG144930-2 MB:WG144930-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit

Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.04	104	80--120

SB:WG144930-2 MB:WG144930-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.103	103		80--120

LCS:WG144930-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.973	97		85--115

LCS:WG144930-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0961	96		85--115

LD:WG144930-4 L64947-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0208	0.0176	16		0--20

MS:WG144930-5 L64947-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-DUSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0208	0.1	0.12	100		75--125

LD:WG144930-6 L65007-2 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.445	0.443	0		0--20

LD:WG144930-6 L65007-2 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.407	0.406	0		0--20

MS:WG144930-7 L65007-2 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.445	1	1.48	104		75--125

MS:WG144930-7 L65007-2 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.407	0.1	0.507	101		75--125

MB:WG144930-8 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:WG144930-8 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:WG144930-9 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.985	99		85--115

LCS:WG144930-9 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.096	96		85--115

LD:WG144930-10 L64948-6 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.294	0.293	0		0--20

LD:WG144930-10 L64948-6 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.007	0.0077			0--20

MS:WG144930-11 L64948-6 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.294	1	1.33	103		75--125

MS:WG144930-11 L64948-6 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.007	0.1	0.108	101		75--125

MB:WG144930-12 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:WG144930-12 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:WG144930-13 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.983	98		85--115

LCS:WG144930-13 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0947	95		85--115

LD:WG144930-14 L64949-16 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.393	0.389	1		0--20

LD:WG144930-14 L64949-16 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0168	0.0159	5		0--20

MS:WG144930-15 L64949-16 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.393	1	1.43	104		75--125

MS:WG144930-15 L64949-16 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0168	0.1	0.117	100		75--125

LD:WG144755-12 L64906-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	2.27	2.29	1		0--20

LD:WG144755-12 L64906-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0115	0.0111	4		0--20

MS:WG144755-13 L64906-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	2.27	1	3.3	103		75--125

MS:WG144755-13 L64906-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0115	0.1	0.113	101		75--125

Workgroup: WG144938 (DISSNUT) Run ID: R210408

MB:WG144938-1 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:WG144938-1 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:WG144938-1 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:WG144938-2 MB:WG144938-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0376	94	80--120

SB:WG144938-2 MB:WG144938-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.826	103		80--120

SB:WG144938-2 MB:WG144938-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0194	97		80--120

LCS:WG144938-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0481	96		85--115

LCS:WG144938-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.8	100		85--115

LCS:WG144938-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0175	88		85--115

LD:WG144938-4 L64906-3 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0113	0.0112	1		0--20

LD:WG144938-4 L64906-3 Matrix: GRND WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	2.66	2.61	2		0--20

LD:WG144938-4 L64906-3 Matrix: GRND WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00601	0.00623	4		0--20

MS:WG144938-5 L64906-3 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0113	0.04	0.0425	78		75--125

MS:WG144938-5 L64906-3 Matrix: GRND WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	2.66	4	6.72	102		75--125

MS:WG144938-5 L64906-3 Matrix: GRND WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00601	0.02	0.0229	84		75--125

LD:WG144938-6 L64864-1 Matrix: EFFLUENT Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.4	2	mg/L	9.74	9.7	0		0--20

LD:WG144938-6 L64864-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.1	0.4	mg/L	3.03	3.06	1		0--20

MS:WG144938-7 L64864-1 Matrix: EFFLUENT Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.4	2	mg/L	9.74	8	17.8	100		75--125

MS:WG144938-7 L64864-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.1	0.4	mg/L	3.03	4	7.47	111		75--125

LD:WG144938-8 L64864-4 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.2	0.8	mg/L	6.98	6.95	0		0--20

MS:WG144938-9 L64864-4 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.2	0.8	mg/L	6.98	16	23.6	104		75--125

LD:WG144938-10 L64999-7 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0023	0.0025			0--20

LD:WG144938-10 L64999-7 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.309	0.314	1		0--20

LD:WG144938-10 L64999-7 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.01	0.04	mg/L	0.343	0.344	0		0--20

MS:WG144938-11 L64999-7 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0023	0.04	0.043	102		75--125

MS:WG144938-11 L64999-7 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.309	0.8	1.14	104		75--125

MS:WG144938-11 L64999-7 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.01	0.04	mg/L	0.343	0.4	0.8	114		75--125

Workgroup: WG145096 (Assorted ALK: 3/22/16) Run ID: R210482

LCS:WG145096-1 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	50	49.1	98		90--110

LD:WG145096-2 L64882-1 Matrix: GRND WTR Listtype:CVALK Method:SM2320-B Project:421422-CHGW Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	141	141	0		0--10

LD:WG145096-2 L64882-1 Matrix: GRND WTR Listtype:CVALK-BI Method:SM2320-B BI Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Alkalinity, Bicarbonate	1	5	mg CaCO3/L	141	141	0		0--10

LCS:WG145096-3 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	50	50.5	101		90--110

LD:WG145096-4 L64999-3 Matrix: STORM WTR Listtype:CVALK Method:SM2320-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	15.3	15.2	1		0--10

LD:WG145096-5 L65017-4 Matrix: FRESH WTR Listtype:CVALK Method:SM2320-B Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	106	107	1		0--10

LCS:WG145096-6 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	10	9.63	96		85--115

LCS:WG145096-7 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	25	24.8	99		85--115

LCS:WG145096-8 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Alkalinity	1	5	mg CaCO3/L	50	50.2	100		90--110

LCS:WG145096-9 Matrix: BLANK WTR Listtype:CVALK Method:SM2320-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Total Alkalinity	1	5	mg CaCO3/L	250	245	98	90--110

Workgroup: WG146466 (TSS/VSS) Run ID: R212357

MB:WG146466-1 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:WG146466-1 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		<MDL

LCS:WG146466-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	52.9	56	106		74--126

LCS:WG146466-2 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Volatile Suspended Solids	0.5	1	mg/L	37.6	40.8	109		73--127

LD:WG146466-3 L65517-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	13.2	14.9	12		0--25

LD:WG146466-4 L65551-1 Matrix: LEACHATE Listtype:CVTSS Method:SM2540-D Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1.4	2.44	54	*	0--25

LD:WG146466-4 L65551-1 Matrix: LEACHATE Listtype:CVVSS Method:EPA 160.4 Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Volatile Suspended Solids	1	2	mg/L	2	2.67	29	*	0--25

LD:WG146466-5 L65647-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421301A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	132	132	0		0--25

Workgroup: WG146495 (NUTS-28) Run ID: R212266

MB:WG146495-1 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:WG146495-1 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:WG146495-1 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:WG146495-2 MB:WG146495-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0405	101		80--120

SB:WG146495-2 MB:WG146495-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.803	100		80--120

SB:WG146495-2 MB:WG146495-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0203	102		80--120

LCS:WG146495-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0506	101		85--115

LCS:WG146495-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.814	102		85--115

LCS:WG146495-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0207	104		85--115

LD:WG146495-6 L65544-49 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00058	0.00056			0--20

MS:WG146495-7 L65544-49 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00058	0.02	0.0189	92		75--125

LD:WG146495-8 L65519-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0037	0.0035			0--20

LD:WG146495-8 L65519-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.514	0.512	0		0--20

LD:WG146495-8 L65519-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00576	0.0057	1		0--20

MS:WG146495-9 L65519-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0037	0.04	0.0382	86		75--125

MS:WG146495-9 L65519-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.514	0.8	1.27	94	75--125

MS:WG146495-9 L65519-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00576	0.02	0.0238	90		75--125

LD:WG146495-10 L65650-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.02	0.1	mg/L	0.233	0.233	0		0--20

LD:WG146495-10 L65650-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.437	0.438	0		0--20

LD:WG146495-10 L65650-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.132	0.132	0		0--20

MS:WG146495-11 L65650-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.02	0.1	mg/L	0.233	0.04	0.669	109		75--125

MS:WG146495-11 L65650-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.437	0.8	1.19	94		75--125

MS:WG146495-11 L65650-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.132	0.02	0.15	91		75--125

MB:WG146495-12 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:WG146495-12 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:WG146495-12 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:WG146495-13 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.052	104		85--115

LCS:WG146495-13 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.817	102		85--115

LCS:WG146495-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0211	106		85--115

LD:WG146495-14 L65619-11 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0052	0.0052			0--20

LD:WG146495-14 L65619-11 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.014	0.013			0--20

LD:WG146495-14 L65619-11 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00058	0.00059			0--20

MS:WG146495-15 L65619-11 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0052	0.04	0.0496	111		75--125

MS:WG146495-15 L65619-11 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.014	0.8	0.796	98		75--125

MS:WG146495-15 L65619-11 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00058	0.02	0.0191	93		75--125

Workgroup: WG146500 (T Nutrients/Various) Run ID: R212328

MB:WG146500-1 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:WG146500-1 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:WG146500-2 MB:WG146500-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.07	107		80--120

SB:WG146500-2 MB:WG146500-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0928	93		80--120

LCS:WG146500-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.999	100		85--115

LCS:WG146500-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0915	91		85--115

LD:WG146500-4 L65619-12 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.226	0.22	2		0--20

LD:WG146500-4 L65619-12 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0094	0.0087			0--20

MS:WG146500-5 L65619-12 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.226	1	1.26	103		75--125

MS:WG146500-5 L65619-12 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0094	0.1	0.102	93		75--125

MB:WG146500-6 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:WG146500-6 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:WG146500-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.972	97		85--115

LCS:WG146500-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Total Phosphorus	0.005	0.01	mg/L	0.1	0.0878	88	85--115

LD:WG146500-8 L65619-26 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.371	0.382	3		0--20

LD:WG146500-8 L65619-26 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0102	0.0103	1		0--20

MS:WG146500-9 L65619-26 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.371	1	1.53	116		75--125

MS:WG146500-9 L65619-26 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0102	0.1	0.106	96		75--125

LD:WG146500-10 L65650-1 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.15	0.3	mg/L	2.14	2.23	4		0--20

LD:WG146500-10 L65650-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.308	0.311	1		0--20

MS:WG146500-11 L65650-1 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.15	0.3	mg/L	2.14	1	5.21	102		75--125

MS:WG146500-11 L65650-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.308	0.1	0.399	91		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG146688 (TOC/DOC - various) Run ID: R212463

MB:WG146688-1 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:WG146688-2 MB:WG146688-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

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

LCS:WG146688-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.95	99		85--115

LCS:WG146688-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.86	99		85--115

LD:WG146688-4 L65236-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.24	4.43	4		0--20

MS:WG146688-5 L65236-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.24	10	13.7	94		75--125

MB:WG146688-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG146688-7 MB:WG146688-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10	100		80--120

LD:WG146688-8 L65487-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.66	1.68	1		0--20

MS:WG146688-9 L65487-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.66	10	11.5	98		75--125

LD:WG146688-10 L65650-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	2.5	5	mg/L	15.4	15.8	3		0--20

LD:WG146688-10 L65650-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	21.5	23.2	8		0--20

MS:WG146688-11 L65650-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	2.5	5	mg/L	15.4	10	64.2	98		75--125

MS:WG146688-11 L65650-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	21.5	10	70.7	98		75--125

Workgroup: WG147783 (T Nutrients/Various) Run ID: R214111

MB:WG147783-1 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:WG147783-1 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:WG147783-2 MB:WG147783-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.977	98		80--120

SB:WG147783-2 MB:WG147783-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.101	101		80--120

LCS:WG147783-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.965	96		85--115

LCS:WG147783-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.101	101		85--115

LD:WG147783-4 L65991-10 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-130 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.349	0.364	4		0--20

LD:WG147783-4 L65991-10 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-130 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0169	0.021	22	*	0--20

MS:WG147783-5 L65991-10 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-130 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.349	1	1.38	103		75--125

MS:WG147783-5 L65991-10 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-130 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0169	0.1	0.115	98		75--125

MB:WG147783-6 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:WG147783-6 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:WG147783-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.972	97		85--115

LCS:WG147783-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.096	96		85--115

LD:WG147783-8 L65992-24 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422030 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.599	0.622	4		0--20

LD:WG147783-8 L65992-24 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422030 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0342	0.0317	7		0--20

MS:WG147783-9 L65992-24 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422030 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.599	1	1.6	100		75--125

MS:WG147783-9 L65992-24 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422030 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0342	0.1	0.124	90		75--125

MB:WG147783-10 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:WG147783-10 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:WG147783-11 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	1.03	103		85--115

LCS:WG147783-11 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0978	98		85--115

LD:WG147783-12 L65993-12 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.305	0.318	4		0--20

LD:WG147783-12 L65993-12 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	<MDL			0--20

MS:WG147783-13 L65993-12 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.305	1	1.36	105		75--125

MS:WG147783-13 L65993-12 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.101	101		75--125

MB:WG147783-14 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:WG147783-14 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:WG147783-15 MB:WG147783-14 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.983	98		80--120

SB:WG147783-15 MB:WG147783-14 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0978	98		80--120

LCS:WG147783-16 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.961	96		85--115

LCS:WG147783-16 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0981	98		85--115

LD:WG147783-17 L66175-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.15	0.3	mg/L	2.28	2.26	1		0--20

LD:WG147783-17 L66175-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.015	0.03	mg/L	0.259	0.269	4		0--20

MS:WG147783-18 L66175-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.15	0.3	mg/L	2.28	1	5.17	97		75--125

MS:WG147783-18 L66175-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.015	0.03	mg/L	0.259	0.1	0.562	101		75--125

LD:WG147783-19 L65997-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.15	0.3	mg/L	4.01	4.04	1		0--20

MS:WG147783-20 L65997-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.15	0.3	mg/L	4.01	0.1	7.15	105		75--125

Workgroup: WG148004 (TSS+VSS) Run ID: R214014

MB:WG148004-1 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:WG148004-1 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		<MDL

LCS:WG148004-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	55	56.1	102		74--126

LCS:WG148004-2 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Volatile Suspended Solids	0.5	1	mg/L	39.1	41.1	105		73--127

LD:WG148004-3 L65924-3 Matrix: LEACHATE Listtype:CVTSS Method:SM2540-D Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5.8	5.8	0		0--25

LD:WG148004-3 L65924-3 Matrix: LEACHATE Listtype:CVVSS Method:EPA 160.4 Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Volatile Suspended Solids	1	2	mg/L	3.8	4	5		0--25

LD:WG148004-4 L66111-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-HTGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	33.2	33.6	1		0--25

LD:WG148004-5 L65922-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	30.2	31.1	3		0--25

LD:WG148004-6 L66175-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	32.4	33.2	2		0--25

LD:WG148004-7 L66109-8 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421250BS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	3.4	3.8			0--25

Workgroup: WG148025 (nuts-26) Run ID: R214295

MB:WG148025-1 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:WG148025-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

MB:WG148025-1 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:WG148025-2 MB:WG148025-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.831	104		80--120

SB:WG148025-2 MB:WG148025-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.831	104		80--120

SB:WG148025-2 MB:WG148025-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0218	109		80--120

LCS:WG148025-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.83	104		85--115

LCS:WG148025-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.83	104		85--115

LCS:WG148025-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.021	105		85--115

LD:WG148025-4 L65922-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.95	1.94	0		0--20

LD:WG148025-4 L65922-5 Matrix: FRESH WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	1.95	1.94	0		0--20

LD:WG148025-4 L65922-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VASW Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0315	0.0325	3		0--20

MS:WG148025-5 L65922-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.95	0.8	2.75	100		75--125

MS:WG148025-5 L65922-5 Matrix: FRESH WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	1.95	0.8	2.75	100		75--125

MS:WG148025-5 L65922-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0315	0.02	0.0514	99		75--125

LD:WG148025-6 L66175-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.422	0.418	1		0--20

LD:WG148025-6 L66175-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.109	0.109	1		0--20

MS:WG148025-7 L66175-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.422	0.8	1.22	100		75--125

MS:WG148025-7 L66175-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.109	0.02	0.129	98		75--125

MB:WG148025-8 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual

Nitrate Nitrogen	0.01	0.04	mg/L	<MDL

SB:WG148025-9 MB:WG148025-8 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.793	99		80--120

LD:WG148025-10 L66181-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrate Nitrogen	0.05	0.2	mg/L	3.27	3.24	1		0--20

MS:WG148025-11 L66181-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.05	0.2	mg/L	3.27	0.8	3.89	78		75--125

Workgroup: WG148128 (TOC - various) Run ID: R214128

MB:WG148128-1 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:WG148128-2 MB:WG148128-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

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

LCS:WG148128-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.76	98		85--115

LD:WG148128-4 L66181-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.76	0.77			0--20

MS:WG148128-5 L66181-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.76	10	9.92	92		75--125

LD:WG148128-6 L66175-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	5	10	mg/L	16.5	18.8	13		0--20

LD:WG148128-6 L66175-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	5	10	mg/L	19.6	20.5	5		0--20

MS:WG148128-7 L66175-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	5	10	mg/L	16.5	10	115	98		75--125

MS:WG148128-7 L66175-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	5	10	mg/L	19.6	10	117	98		75--125

MB:WG148128-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG148128-9 MB:WG148128-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.69	97		80--120

LCS:WG148128-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.86	99		85--115

LD:WG148128-11 L65922-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.15	4.65	11		0--20

MS:WG148128-12 L65922-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.15	10	15.1	109		75--125

LD:WG148128-13 L66033-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.74	1.81	4		0--20

MS:WG148128-14 L66033-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.74	10	12.2	104		75--125

MB:WG148128-15 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:WG148128-16 MB:WG148128-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.53	95		80--120

LCS:WG148128-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.41	94		85--115

LD:WG148128-18 L65924-3 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	6.03	5.87	3		0--20

MS:WG148128-19 L65924-3 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	6.03	10	25.1	95		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG148181 (NH3) Run ID: R214202

LD:WG148181-1 L66175-3 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.456	0.458	0		0--20

MS:WG148181-2 L66175-3 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.456	0.04	0.628	86		75--125

LD:WG148181-3 L65922-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0074	0.0075			0--20

MS:WG148181-4 L65922-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0074	0.04	0.048	101		75--125

MB:WG148181-5 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

SB:WG148181-6 MB:WG148181-5 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.038	95		80--120

LD:WG148181-7 L66181-1 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0077	<MDL			0--20

MS:WG148181-8 L66181-1 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0077	0.04	0.045	93		75--125

MB:WG148086-10 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

LCS:WG148086-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0528	106		85--115

Workgroup: WG148244 (T Nutrients/Various) Run ID: R214412

MB:WG148244-1 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:WG148244-1 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:WG148244-2 MB:WG148244-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.987	99		80--120

SB:WG148244-2 MB:WG148244-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.097	97		80--120

LCS:WG148244-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.95	95		85--115

LCS:WG148244-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0949	95		85--115

LD:WG148244-4 L66151-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.989	1		0--20

LD:WG148244-4 L66151-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0111	0.0104	7		0--20

MS:WG148244-5 L66151-1 Matrix: GRND WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	1	2.02	102		75--125

MS:WG148244-5 L66151-1 Matrix: GRND WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0111	0.1	0.108	97		75--125

LD:WG148244-6 L66154-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.889	0.883	1		0--20

LD:WG148244-6 L66154-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0159	0.0156	2		0--20

MS:WG148244-7 L66154-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.889	1	1.89	100		75--125

MS:WG148244-7 L66154-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0159	0.1	0.115	99		75--125

LD:WG148244-8 L66190-1 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	2.16	2.05	6		0--20

MS:WG148244-9 L66190-1 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	2.16	0.1	3.02	86		75--125

MB:WG148244-10 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:WG148244-10 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:WG148244-11 MB:WG148244-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1	100		80--120

SB:WG148244-11 MB:WG148244-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.1	100		80--120

LCS:WG148244-12 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.956	96		85--115

LCS:WG148244-12 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0967	97		85--115

LD:WG148244-13 L66285-1 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Total Nitrogen	0.05	0.1	mg/L	1.25	1.25	0	0--20

LD:WG148244-13 L66285-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.166	0.166	0		0--20

MS:WG148244-14 L66285-1 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.25	1	2.25	100		75--125

MS:WG148244-14 L66285-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.166	0.1	0.261	94		75--125

Workgroup: WG148269 (TSS) Run ID: R214322

MB:WG148269-1 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

LCS:WG148269-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	93	93		80--120

LD:WG148269-3 L66104-14 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	1.2	1.6			0--25

MB:WG148269-4 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

LCS:WG148269-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	96	96		80--120

LD:WG148269-6 L66285-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	18.4	19.5	6		0--25

LD:WG148269-7 L66298-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW-OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	<MDL	<MDL			0--25

Workgroup: WG148326 (TOC/DOC - various) Run ID: R214371

MB:WG148326-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

MB:WG148326-1 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:WG148326-2 MB:WG148326-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.82	98		80--120

SB:WG148326-2 MB:WG148326-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.86	99		80--120

LCS:WG148326-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

LCS:WG148326-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD

(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.97	100		85--115

LD:WG148326-4 L66302-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	<MDL			0--20

MS:WG148326-5 L66302-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.77	98		75--125

LD:WG148326-6 L66333-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	0.92	0.77			0--20

LD:WG148326-6 L66333-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.97	1.02	5		0--20

MS:WG148326-7 L66333-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	0.92	10	11	101		75--125

MS:WG148326-7 L66333-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.97	10	11.4	104		75--125

Workgroup: WG148333 (NUTS-12) Run ID: R214396

MB:WG148333-1 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:WG148333-1 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:WG148333-1 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:WG148333-2 MB:WG148333-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0377	94		80--120

SB:WG148333-2 MB:WG148333-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.789	99		80--120

SB:WG148333-2 MB:WG148333-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.02	100		80--120

LCS:WG148333-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0485	97		85--115

LCS:WG148333-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.776	97		85--115

LCS:WG148333-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.02	100		85--115

LD:WG148333-4 L66344-4 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.04	0.0399	0		0--20

LD:WG148333-4 L66344-4 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.03	0.03			0--20

LD:WG148333-4 L66344-4 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00845	0.00857	2		0--20

MS:WG148333-5 L66344-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.04	0.04	0.0797	99		75--125

MS:WG148333-5 L66344-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.03	0.8	0.811	98		75--125

MS:WG148333-5 L66344-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00845	0.02	0.0273	94		75--125

MB:WG148333-6 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:WG148333-6 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:WG148333-6 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:WG148333-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0479	96		85--115

LCS:WG148333-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.789	99		85--115

LCS:WG148333-7 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0201	101		85--115

LD:WG148333-8 L66339-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0151	0.0156	3		0--20

LD:WG148333-8 L66339-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.215	0.213	1		0--20

LD:WG148333-8 L66339-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0557	0.0548	2		0--20

MS:WG148333-9 L66339-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0151	0.04	0.0538	97		75--125

MS:WG148333-9 L66339-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.215	0.8	1.01	99		75--125

MS:WG148333-9 L66339-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0557	0.02	0.0743	93		75--125

MB:WG148333-10 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:WG148333-10 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:WG148333-10 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:WG148333-11 MB:WG148333-10 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0397	99		80--120

SB:WG148333-11 MB:WG148333-10 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.822	103		80--120

SB:WG148333-11 MB:WG148333-10 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0207	104		80--120

LCS:WG148333-12 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0495	99		85--115

LCS:WG148333-12 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.797	100	85--115

LCS:WG148333-12 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0204	102		85--115

LD:WG148333-13 L66338-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0049	0.0057			0--20

LD:WG148333-13 L66338-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.765	0.766	0		0--20

LD:WG148333-13 L66338-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0257	0.0256	0		0--20

MS:WG148333-14 L66338-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0049	0.04	0.0425	94		75--125

MS:WG148333-14 L66338-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.765	0.8	1.57	101		75--125

MS:WG148333-14 L66338-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0257	0.02	0.0451	97		75--125

LD:WG148333-15 L66268-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0089	0.009			0--20

LD:WG148333-15 L66268-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	<MDL			0--20

LD:WG148333-15 L66268-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00207	0.00206	1		0--20

MS:WG148333-16 L66268-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0089	0.04	0.0516	107		75--125

MS:WG148333-16 L66268-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.816	102		75--125

MS:WG148333-16 L66268-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00207	0.02	0.021	95		75--125

LD:WG148333-17 L66285-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.155	0.155	0		0--20

LD:WG148333-17 L66285-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.429	0.428	0		0--20

LD:WG148333-17 L66285-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.077	0.0782	2		0--20

MS:WG148333-18 L66285-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.155	0.04	0.195	98		75--125

MS:WG148333-18 L66285-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.429	0.8	1.25	102		75--125

MS:WG148333-18 L66285-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.077	0.02	0.096	95		75--125

Workgroup: WG148362 (nuts-13) Run ID: R214482

MB:WG148362-1 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:WG148362-1 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:WG148362-1 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:WG148362-2 MB:WG148362-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0394	98		80--120

SB:WG148362-2 MB:WG148362-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.804	101		80--120

SB:WG148362-2 MB:WG148362-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD

(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0205	103		80--120

LCS:WG148362-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0513	103		85--115

LCS:WG148362-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.8	100		85--115

LCS:WG148362-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0208	104		85--115

LD:WG148362-4 L66360-8 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0205	0.02	2		0--20

LD:WG148362-4 L66360-8 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.446	0.443	1		0--20

LD:WG148362-4 L66360-8 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0329	0.0312	5		0--20

MS:WG148362-5 L66360-8 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0205	0.04	0.06	99		75--125

MS:WG148362-5 L66360-8 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.446	0.8	1.25	101	75--125

MS:WG148362-5 L66360-8 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0329	0.02	0.0507	89		75--125

MB:WG148362-6 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:WG148362-6 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:WG148362-6 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:WG148362-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0501	100		85--115

LCS:WG148362-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.796	100		85--115

LCS:WG148362-7 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0201	101		85--115

LD:WG148362-8 L66361-7 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0264	0.0242	9		0--20

LD:WG148362-8 L66361-7 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.38	1.36	1		0--20

LD:WG148362-8 L66361-7 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0425	0.0393	8		0--20

MS:WG148362-9 L66361-7 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0264	0.04	0.0646	95		75--125

MS:WG148362-9 L66361-7 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.38	0.8	2.16	98		75--125

MS:WG148362-9 L66361-7 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0425	0.02	0.0594	85		75--125

MB:WG148362-10 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:WG148362-10 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:WG148362-10 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:WG148362-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0516	103		85--115

LCS:WG148362-11 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.793	99		85--115

LCS:WG148362-11 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0205	102		85--115

LD:WG148362-12 L66365-6 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0075	0.0077			0--20

LD:WG148362-12 L66365-6 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.868	0.862	1		0--20

LD:WG148362-12 L66365-6 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0259	0.0261	1		0--20

MS:WG148362-13 L66365-6 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0075	0.04	0.0487	103		75--125

MS:WG148362-13 L66365-6 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.868	0.8	1.66	99		75--125

MS:WG148362-13 L66365-6 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0259	0.02	0.0455	98		75--125

MB:WG148362-14 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:WG148362-14 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:WG148362-14 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:WG148362-15 MB:WG148362-14 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0385	96		80--120

SB:WG148362-15 MB:WG148362-14 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.786	98		80--120

SB:WG148362-15 MB:WG148362-14 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0201	101		80--120

LD:WG148362-16 L66382-19 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0044	0.0044			0--20

LD:WG148362-16 L66382-19 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.1	0.101	1		0--20

LD:WG148362-16 L66382-19 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.015	0.0153	2		0--20

MS:WG148362-17 L66382-19 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0044	0.04	0.045	102		75--125

MS:WG148362-17 L66382-19 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.1	0.8	0.888	99		75--125

MS:WG148362-17 L66382-19 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.015	0.02	0.0343	96		75--125

Workgroup: WG148385 (TSS/VSS) Run ID: R214462

MB:WG148385-1 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:WG148385-1 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		<MDL

LCS:WG148385-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	62.6	69.4	111		74--126

LCS:WG148385-2 Matrix: BLANK WTR Listtype:CVVSS Method:EPA 160.4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Volatile Suspended Solids	0.5	1	mg/L	44.5	51.2	115		73--127

LD:WG148385-3 L65693-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.4	2.9	mg/L	117	122	5		0--25

LD:WG148385-4 L66314-1 Matrix: LEACHATE Listtype:CVTSS Method:SM2540-D Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LD:WG148385-4 L66314-1 Matrix: LEACHATE Listtype:CVVSS Method:EPA 160.4 Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Volatile Suspended Solids	1	2	mg/L	<MDL	1			0--25

LD:WG148385-5 L66315-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LD:WG148385-6 L66317-1 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421422-ENLS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	6.3	13	mg/L	63.8	61.3	4		0--25

LD:WG148385-7 L66360-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	6.2	6.4	3		0--25

Workgroup: WG148527 (DISSNUT) Run ID: R214773

MB:WG148527-1 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:WG148527-1 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:WG148527-1 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:WG148527-2 MB:WG148527-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0386	97		80--120

SB:WG148527-2 MB:WG148527-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.791	99		80--120

SB:WG148527-2 MB:WG148527-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.022	110		80--120

LCS:WG148527-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0501	100		85--115

LCS:WG148527-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.786	98		85--115

LCS:WG148527-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0202	101		85--115

LD:WG148527-4 L66382-9 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.112	0.111	0		0--20

LD:WG148527-4 L66382-9 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.139	0.136	3		0--20

LD:WG148527-4 L66382-9 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00808	0.00811	0		0--20

MS:WG148527-5 L66382-9 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.112	0.04	0.153	103		75--125

MS:WG148527-5 L66382-9 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.139	0.8	0.924	98		75--125

MS:WG148527-5 L66382-9 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00808	0.02	0.0259	89		75--125

LD:WG148527-6 L66278-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0427	0.0429	0		0--20

LD:WG148527-6 L66278-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.523	0.526	1		0--20

LD:WG148527-6 L66278-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0226	0.0228	1		0--20

MS:WG148527-7 L66278-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.0427	0.04	0.0813	96	75--125

MS:WG148527-7 L66278-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.523	0.8	1.26	92		75--125

MS:WG148527-7 L66278-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0226	0.02	0.039	82		75--125

LD:WG148527-8 L66314-7 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.5	2	mg/L	<MDL	<MDL			0--20

MS:WG148527-9 L66314-7 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.5	2	mg/L	<MDL	40	36.6	92		75--125

Workgroup: WG148546 (TOC/DOC - various) Run ID: R214599

MB:WG148546-1 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:WG148546-2 MB:WG148546-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

LCS:WG148546-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.6	106		85--115

LD:WG148546-4 L66403-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-A5-TD Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	9.54	9.38	2		0--20

MS:WG148546-5 L66403-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-A5-TD Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	9.54	10	29.6	100		75--125

LD:WG148546-6 L66320-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	<MDL			0--20

MS:WG148546-7 L66320-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.92	99		75--125

LD:WG148546-8 L66275-2 Matrix: INFLUENT Listtype:CVTOC Method:SM5310-B Project:421937-200 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	25	50	mg/L	88.5	84.5	5		0--20

MS:WG148546-9 L66275-2 Matrix: INFLUENT Listtype:CVTOC Method:SM5310-B Project:421937-200 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	25	50	mg/L	88.5	10	561	95		75--125

LD:WG148546-10 L66275-3 Matrix: EFFLUENT Listtype:CVTOC Method:SM5310-B Project:421937-200 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	10	20	mg/L	87.1	82.2	6		0--20

MS:WG148546-11 L66275-3 Matrix: EFFLUENT Listtype:CVTOC Method:SM5310-B Project:421937-200 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	10	20	mg/L	87.1	10	289	101		75--125

MB:WG148546-12 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG148546-13 MB:WG148546-12 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.97	100		80--120

LCS:WG148546-14 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.3	103		85--115

LD:WG148546-15 L66408-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.61	1.54	4		0--20

MS:WG148546-16 L66408-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.61	10	11	94		75--125

Workgroup: WG148580 (T Nutrients/Various) Run ID: R214875

MB:WG148580-1 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:WG148580-1 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:WG148580-2 MB:WG148580-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.975	97		80--120

SB:WG148580-2 MB:WG148580-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit

Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0986	99	80--120

LCS:WG148580-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.882	88		85--115

LCS:WG148580-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0915	91		85--115

LD:WG148580-4 L66278-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423484-850-5 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.169	0.172	2		0--20

MS:WG148580-5 L66278-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423484-850-5 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.169	0.1	0.276	107		75--125

LD:WG148580-6 L66382-19 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.308	0.315	2		0--20

LD:WG148580-6 L66382-19 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0409	0.0422	3		0--20

MS:WG148580-7 L66382-19 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.308	1	1.31	100		75--125

MS:WG148580-7 L66382-19 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0409	0.1	0.138	97		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG148582 (TSS) Run ID: R214632

MB:WG148582-1 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

LCS:WG148582-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG148582-3 L66315-2 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1.6	1.8			0--25

LD:WG148582-4 L66373-1 Matrix: INFLUENT Listtype:CVTSS Method:SM2540-D Project:421183-200 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	10	20	mg/L	228	224	2		0--25

LD:WG148582-5 L66374-5 Matrix: EFFLUENT Listtype:CVTSS Method:SM2540-D Project:421183-200 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LD:WG148582-6 L66430-3 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421250BS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	2.8	2.9			0--25

MB:WG148582-7 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

LCS:WG148582-8 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	98	98		80--120

LD:WG148582-9 L66453-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.6	3.4	6		0--25

Workgroup: WG148650 (NUTS!-26) Run ID: R214738

MB:WG148650-1 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:WG148650-1 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:WG148650-1 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:WG148650-2 MB:WG148650-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0407	102		80--120

SB:WG148650-2 MB:WG148650-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.852	107		80--120

SB:WG148650-2 MB:WG148650-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0211	106		80--120

LCS:WG148650-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0524	105		85--115

LCS:WG148650-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.852	107		85--115

LCS:WG148650-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0214	107		85--115

LD:WG148650-4 L66456-1 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0211	0.0208	2		0--20

LD:WG148650-4 L66456-1 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0719	0.072	0		0--20

LD:WG148650-4 L66456-1 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00339	0.00336	1		0--20

MS:WG148650-5 L66456-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0211	0.04	0.0603	98		75--125

MS:WG148650-5 L66456-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0719	0.8	0.905	104		75--125

MS:WG148650-5 L66456-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00339	0.02	0.0226	96		75--125

MB:WG148650-6 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:WG148650-6 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:WG148650-6 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:WG148650-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0506	101		85--115

LCS:WG148650-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.816	102		85--115

LCS:WG148650-7 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.021	105		85--115

LD:WG148650-8 L66456-21 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0147	0.0148	1		0--20

LD:WG148650-8 L66456-21 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.07	0.0701	0		0--20

LD:WG148650-8 L66456-21 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0013	0.0012			0--20

MS:WG148650-9 L66456-21 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0147	0.04	0.0503	89		75--125

MS:WG148650-9 L66456-21 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.07	0.8	0.884	102		75--125

MS:WG148650-9 L66456-21 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0013	0.02	0.0205	96		75--125

MB:WG148650-10 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:WG148650-10 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:WG148650-10 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:WG148650-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0512	102		85--115

LCS:WG148650-11 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.811	101		85--115

LCS:WG148650-11 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0207	104		85--115

LD:WG148650-12 L66453-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0746	0.0755	1		0--20

LD:WG148650-12 L66453-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.153	0.153	1		0--20

LD:WG148650-12 L66453-5 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0131	0.0127	3		0--20

MS:WG148650-13 L66453-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0746	0.04	0.112	94		75--125

MS:WG148650-13 L66453-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.153	0.8	0.959	101		75--125

MS:WG148650-13 L66453-5 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0131	0.02	0.0331	100		75--125

Workgroup: WG148655 (TOC/DOC - various) Run ID: R214812

MB:WG148655-1 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:WG148655-2 MB:WG148655-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.61	96		80--120

LCS:WG148655-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.82	98		85--115

LD:WG148655-4 L66315-2 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.04	1.02	2		0--20

MS:WG148655-5 L66315-2 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.04	10	10.4	93		75--125

MB:WG148655-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

MB:WG148655-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG148655-8 MB:WG148655-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.38	94		80--120

LCS:WG148655-9 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.46	95		85--115

LD:WG148655-10 L66453-7 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	7.72	7.79	1		0--20

MS:WG148655-11 L66453-7 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	7.72	10	16.3	86		75--125

LD:WG148655-12 L66330-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.26	1.15	10		0--20

MS:WG148655-13 L66330-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.26	10	12.1	108		75--125

LD:WG148655-14 L66331-1 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.94	0.9			0--20

MS:WG148655-15 L66331-1 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.94	10	12.2	113		75--125

MB:WG148655-16 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

LCS:WG148655-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.9	109		85--115

MB:WG148655-18 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:WG148655-19 MB:WG148655-18 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

LCS:WG148655-20 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

LD:WG148655-21 L66453-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	11.9	12.1	2		0--20

MS:WG148655-22 L66453-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	11.9	10	31.8	100		75--125

LD:WG148655-23 L66314-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	100	200	mg/L	542	544	0		0--20

MS:WG148655-24 L66314-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	100	200	mg/L	542	10	2620	104		75--125

Workgroup: WG148713 (LK/LG NUTS) Run ID: R215067

MB:WG148713-1 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:WG148713-1 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:WG148713-1 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:WG148713-2 MB:WG148713-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0408	102		80--120

SB:WG148713-2 MB:WG148713-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.867	108		80--120

SB:WG148713-2 MB:WG148713-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.021	105		80--120

LCS:WG148713-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0539	108		85--115

LCS:WG148713-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.882	110		85--115

LCS:WG148713-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0216	108		85--115

LD:WG148713-4 L66456-49 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	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.0131	0.0132	0		0--20

LD:WG148713-4 L66456-49 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.106	0.105	0		0--20

LD:WG148713-4 L66456-49 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00226	0.00227	0		0--20

MS:WG148713-5 L66456-49 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0131	0.04	0.0522	98		75--125

MS:WG148713-5 L66456-49 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.106	0.8	0.956	106		75--125

MS:WG148713-5 L66456-49 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00226	0.02	0.022	99		75--125

LD:WG148713-6 L66385-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0387	0.0384	1		0--20

LD:WG148713-6 L66385-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0863	0.0851	1		0--20

LD:WG148713-6 L66385-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0211	0.021	0		0--20

MS:WG148713-7 L66385-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0387	0.04	0.0737	88		75--125

MS:WG148713-7 L66385-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0863	0.8	0.93	105		75--125

MS:WG148713-7 L66385-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0211	0.02	0.0415	102		75--125

MB:WG148713-8 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:WG148713-8 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:WG148713-8 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:WG148713-9 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0528	106		85--115

LCS:WG148713-9 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.842	105		85--115

LCS:WG148713-9 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0213	107		85--115

LD:WG148713-10 L66498-17 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0422	0.0415	2		0--20

LD:WG148713-10 L66498-17 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.036	0.036			0--20

LD:WG148713-10 L66498-17 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0279	0.0279	0		0--20

MS:WG148713-11 L66498-17 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0422	0.04	0.0832	102		75--125

MS:WG148713-11 L66498-17 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.036	0.8	0.9	108		75--125

MS:WG148713-11 L66498-17 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0279	0.02	0.0486	104		75--125

MB:WG148890-14 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:WG148890-14 Matrix: BLANK WTR Listtype:CVORTHOP-SW Method:SM4500-P-F S Project: Pkey:STD
(Method Blank)

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

MB:WG148890-14 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

LCS:WG148890-15 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.049	98		85--115

LCS:WG148890-15 Matrix: BLANK WTR Listtype:CVORTHOP-SW Method:SM4500-P-F S Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.005	0.01	mg/L	0.02	0.0198	99		85--115

LCS:WG148890-15 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.798	100		85--115

Workgroup: WG148748 (TSS) Run ID: R214839

MB:WG148748-1 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

LCS:WG148748-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	92	92		80--120

LD:WG148748-3 L66456-47 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	0.6	<MDL			0--25

LD:WG148748-4 L66385-2 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Total Suspended Solids	1	2	mg/L	4.8	5.33	11	0--25

MB:WG148748-5 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

LCS:WG148748-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	89	89		80--120

LD:WG148748-7 L66498-7 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1.8	1.5			0--25

LD:WG148748-8 L66350-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LD:WG148748-9 L66509-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	227	250	10		0--25

Workgroup: WG148823 (T Nutrients/Various) Run ID: R215238

MB:WG148823-1 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:WG148823-1 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:WG148823-2 MB:WG148823-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.01	101		80--120

SB:WG148823-2 MB:WG148823-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.102	102		80--120

LCS:WG148823-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.951	95		85--115

LCS:WG148823-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0971	97		85--115

LD:WG148823-4 L66456-44 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.34	0.354	4		0--20

LD:WG148823-4 L66456-44 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.105	0.109	4		0--20

MS:WG148823-5 L66456-44 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.34	1	1.35	101		75--125

MS:WG148823-5 L66456-44 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.105	0.1	0.207	102		75--125

LD:WG148823-6 L66385-5 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.647	0.614	5		0--20

LD:WG148823-6 L66385-5 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0961	0.0925	4		0--20

MS:WG148823-7 L66385-5 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.647	1	1.62	97		75--125

MS:WG148823-7 L66385-5 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0961	0.1	0.183	87		75--125

MB:WG148823-8 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:WG148823-8 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:WG148823-9 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.954	95		85--115

LCS:WG148823-9 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0963	96		85--115

LD:WG148823-10 L66498-11 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.702	0.693	1		0--20

LD:WG148823-10 L66498-11 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.204	0.204	0		0--20

MS:WG148823-11 L66498-11 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.702	1	1.72	102		75--125

MS:WG148823-11 L66498-11 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.204	0.1	0.303	99		75--125

MB:WG148823-12 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:WG148823-12 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:WG148823-13 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.945	95		85--115

LCS:WG148823-13 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0976	98		85--115

LD:WG148823-14 L66417-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.15	0.3	mg/L	2.47	2.66	7		0--20

MS:WG148823-15 L66417-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Total Phosphorus	0.15	0.3	mg/L	2.47	0.1	5.75	109	75--125

Workgroup: WG148873 (TOC - various) Run ID: R214972

MB:WG148873-1 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:WG148873-2 MB:WG148873-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.7	97		80--120

LCS:WG148873-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

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

LD:WG148873-4 L66350-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	<MDL			0--20

MS:WG148873-5 L66350-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		75--125

LD:WG148873-6 L66499-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	8.33	8.9	7		0--20

MS:WG148873-7 L66499-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	8.33	10	18.9	106		75--125

LD:WG148873-8 L66354-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.7	7.1	6		0--20

MS:WG148873-9 L66354-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.7	10	15.9	92		75--125

Workgroup: WG149032 (TOC/DOC - 421422/421879) Run ID: R215175

MB:WG149032-1 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:WG149032-2 MB:WG149032-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.91	99		80--120

LCS:WG149032-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

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

LD:WG149032-4 L66607-6 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HOGW_APP3 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.98	2.4	19		0--20

MS:WG149032-5 L66607-6 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HOGW_APP3 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.98	10	11	90		75--125

MB:WG149032-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

MB:WG149032-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD

(Method Blank)

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

SB:WG149032-8 MB:WG149032-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.87	99		80--120

LCS:WG149032-9 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

LD:WG149032-10 L66385-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.01	1.91	5		0--20

MS:WG149032-11 L66385-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.01	10	11.7	97		75--125

Workgroup: WG149840 (TSS) Run ID: R216217

MB:WG149840-1 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

LCS:WG149840-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG149840-3 L66855-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	14.8	15.4	4		0--25

LD:WG149840-4 L66862-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2.8	3.58	24		0--25

LD:WG149840-5 L66937-6 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	22.4	21.6	4		0--25

LD:WG149840-6 L66910-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421874-715 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	19.6	19.6	0	H,SH	0--25

MB:WG149840-7 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

LCS:WG149840-8 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	98	98		80--120

LD:WG149840-9 L66938-22 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	225	225	0		0--25

Workgroup: WG149845 (FedWay/EchoLkStorm) Run ID: R216218

MB:WG149845-1 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:WG149845-1 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

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

SB:WG149845-2 MB:WG149845-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.01	101		80--120

SB:WG149845-2 MB:WG149845-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.1	100		80--120

LCS:WG149845-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.966	97		85--115

LCS:WG149845-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.098	98		85--115

LD:WG149845-4 L66938-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.2	1.19	1		0--20

LD:WG149845-4 L66938-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.287	0.284	1		0--20

MS:WG149845-5 L66938-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.2	1	2.19	99		75--125

MS:WG149845-5 L66938-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.287	0.1	0.382	94		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG149912 (NUTS-19) Run ID: R216262

MB:WG149912-1 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:WG149912-1 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:WG149912-1 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:WG149912-2 MB:WG149912-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0398	99		80--120

SB:WG149912-2 MB:WG149912-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	1.05	105		80--120

SB:WG149912-2 MB:WG149912-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0213	106		80--120

LCS:WG149912-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0539	108		85--115

LCS:WG149912-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	1.05	105		85--115

LCS:WG149912-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0179	90		85--115

LD:WG149912-4 L66944-1 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.04	0.16	mg/L	0.9	0.893	1		0--20

MS:WG149912-5 L66944-1 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.04	0.16	mg/L	0.9	1	4.66	94		75--125

LD:WG149912-6 L66937-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0906	0.0911	1		0--20

LD:WG149912-6 L66937-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0962	0.0973	1		0--20

LD:WG149912-6 L66937-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0128	0.0127	0		0--20

MS:WG149912-7 L66937-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0906	0.04	0.128	94		75--125

MS:WG149912-7 L66937-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0962	1	1.09	99		75--125

MS:WG149912-7 L66937-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0128	0.02	0.0328	100		75--125

MB:WG149912-8 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:WG149912-8 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:WG149912-8 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:WG149912-9 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0536	107		85--115

LCS:WG149912-9 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

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

LCS:WG149912-9 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0197	99		85--115

LD:WG149912-10 L66938-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0174	0.0167	4		0--20

LD:WG149912-10 L66938-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.26	1.28	2		0--20

LD:WG149912-10 L66938-11 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.002	0.008	mg/L	0.136	0.14	2		0--20

MS:WG149912-11 L66938-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0174	0.04	0.0559	96		75--125

MS:WG149912-11 L66938-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1.26	1	2.26	99		75--125

MS:WG149912-11 L66938-11 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.002	0.008	mg/L	0.136	0.02	0.216	100		75--125

MB:WG149912-12 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:WG149912-12 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:WG149912-12 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:WG149912-13 MB:WG149912-12 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0396	99		80--120

SB:WG149912-13 MB:WG149912-12 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD

(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	1	0.924	92		80--120

SB:WG149912-13 MB:WG149912-12 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0203	101		80--120

LD:WG149912-14 L66868-3 Matrix: LEACHATE Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.008	0.04	mg/L	0.014	0.014			0--20

LD:WG149912-14 L66868-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.04	0.16	mg/L	0.558	0.565	1		0--20

LD:WG149912-14 L66868-3 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.002	0.008	mg/L	0.0468	0.0476	2		0--20

MS:WG149912-15 L66868-3 Matrix: LEACHATE Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.008	0.04	mg/L	0.014	0.04	0.174	100		75--125

MS:WG149912-15 L66868-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.04	0.16	mg/L	0.558	1	4.21	91		75--125

MS:WG149912-15 L66868-3 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.002	0.008	mg/L	0.0468	0.02	0.123	96		75--125

MB:WG149912-16 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

SB:WG149912-17 MB:WG149912-16 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0404	101		80--120

LD:WG149912-18 L66910-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421874-715 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0698	0.0697	0		0--20

MS:WG149912-19 L66910-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421874-715 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0698	0.04	0.108	95		75--125

Workgroup: WG150134 (DOC - 421879) Run ID: R216701

MB:WG150134-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG150134-2 MB:WG150134-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.78	98		80--120

LCS:WG150134-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10	100		85--115

LD:WG150134-4 L66938-15 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	5.58	5.79	4		0--20

MS:WG150134-5 L66938-15 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	5.58	10	14.7	91		75--125

MB:WG150134-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

Workgroup: WG150174 (TOTP/TOTN-SWD/Lk Haven/Echo/FedWay) Run ID: R216642

MB:WG150174-1 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:WG150174-1 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:WG150174-2 MB:WG150174-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.03	103		80--120

SB:WG150174-2 MB:WG150174-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0999	100		80--120

LCS:WG150174-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.974	97		85--115

LCS:WG150174-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0962	96		85--115

LD:WG150174-4 L66886-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-DUSW Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.009	0.0087			0--20

MS:WG150174-5 L66886-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-DUSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.009	0.1	0.105	96		75--125

LD:WG150174-6 L66958-1 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	0.333	0.362	8		0--20

MS:WG150174-7 L66958-1 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.05	0.1	mg/L	0.333	0.1	1.29	96		75--125

MB:WG150174-8 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:WG150174-8 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:WG150174-9 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.96	96		85--115

LCS:WG150174-9 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0919	92		85--115

LD:WG150174-10 L67069-6 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Total Nitrogen	0.05	0.1	mg/L	0.502	0.503	0	0--20

LD:WG150174-10 L67069-6 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0655	0.0654	0		0--20

MS:WG150174-11 L67069-6 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.502	1	1.54	104		75--125

MS:WG150174-11 L67069-6 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0655	0.1	0.158	92		75--125

Workgroup: WG150188 (Echo Stm DISSNUTs for 170209) Run ID: R216583

MB:WG150188-1 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:WG150188-1 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:WG150188-1 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:WG150188-2 MB:WG150188-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0378	94		80--120

SB:WG150188-2 MB:WG150188-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.792	99		80--120

SB:WG150188-2 MB:WG150188-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0183	92		80--120

LCS:WG150188-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0532	106		85--115

LCS:WG150188-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.85	106		85--115

LCS:WG150188-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0195	97		85--115

LD:WG150188-4 L67070-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0079	0.0071			0--20

LD:WG150188-4 L67070-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.262	0.248	5		0--20

MS:WG150188-5 L67070-11 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0079	0.04	0.0443	91		75--125

MS:WG150188-5 L67070-11 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.262	0.8	1.1	104		75--125

LD:WG150188-6 L67070-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00541	0.00528	2		0--20

MS:WG150188-7 L67070-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00541	0.02	0.0234	90		75--125

Workgroup: WG150226 (TSS) Run ID: R216634

MB:WG150226-1 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

LCS:WG150226-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	93	93		80--120

LD:WG150226-3 L66886-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1.6	1			0--25

LD:WG150226-4 L67104-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423650 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	147	149	1		0--25

LD:WG150226-5 L66913-5 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	36.8	43.4	16		0--25

LD:WG150226-6 L67069-7 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Total Suspended Solids	1.3	2.5	mg/L	26.8	28.5	6	0--25

MB:WG150226-7 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

LCS:WG150226-8 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	98	98		80--120

LD:WG150226-9 L67070-26 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2.8	3.6	25		0--25

Workgroup: WG150290 (TOC/DOC - various) Run ID: R216896

MB:WG150290-1 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:WG150290-2 MB:WG150290-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10	100		80--120

LCS:WG150290-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

LD:WG150290-4 L67069-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.21	1.35	11		0--20

MS:WG150290-5 L67069-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.21	10	11.3	101		75--125

MB:WG150290-6 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:WG150290-7 MB:WG150290-6 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.5	105		80--120

LCS:WG150290-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

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

LD:WG150290-9 L67083-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.04	3.99	1		0--20

MS:WG150290-10 L67083-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.04	10	13.8	98		75--125

MB:WG150290-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG150290-12 MB:WG150290-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.94	99		80--120

LCS:WG150290-13 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

LD:WG150290-14 L67069-4 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	6.41	6.62	3		0--20

MS:WG150290-15 L67069-4 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	6.41	10	16.6	102		75--125

MB:WG150290-16 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LCS:WG150290-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.3	103		85--115

LD:WG150290-18 L66896-1 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	0.76	0.75			0--20

MS:WG150290-19 L66896-1 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	0.76	10	11.2	104		75--125

LD:WG150290-20 L66895-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.08	0.97	11		0--20

MS:WG150290-21 L66895-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.08	10	10.4	93		75--125

MB:WG150463-1 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

LCS:WG150463-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.56	96		85--115

Workgroup: WG150292 (NUTS-16) Run ID: R216784

MB:WG150292-1 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:WG150292-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

SB:WG150292-2 MB:WG150292-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.041	103		80--120

SB:WG150292-2 MB:WG150292-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.773	97		80--120

LCS:WG150292-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0525	105		85--115

LCS:WG150292-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.778	97		85--115

LD:WG150292-4 L67083-2 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0178	0.0179	1		0--20

LD:WG150292-4 L67083-2 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	<MDL			0--20

MS:WG150292-5 L67083-2 Matrix: GRND WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0178	0.04	0.0595	104		75--125

MS:WG150292-5 L67083-2 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.779	97		75--125

MB:WG150292-6 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:WG150292-6 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:WG150292-6 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:WG150292-7 MB:WG150292-6 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0409	102		80--120

SB:WG150292-7 MB:WG150292-6 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.776	97		80--120

SB:WG150292-7 MB:WG150292-6 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0197	99		80--120

LCS:WG150292-8 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0527	105		85--115

LCS:WG150292-8 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.974	97		85--115

LCS:WG150292-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0194	97		85--115

LD:WG150292-9 L67051-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0022	0.0025			0--20

LD:WG150292-9 L67051-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.246	0.246	0		0--20

LD:WG150292-9 L67051-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00271	0.00276	2		0--20

MS:WG150292-10 L67051-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0022	0.04	0.0441	105		75--125

MS:WG150292-10 L67051-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.246	0.8	0.998	94		75--125

MS:WG150292-10 L67051-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00271	0.02	0.0188	81		75--125

LD:WG150292-11 L67140-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.221	0.222	0		0--20

LD:WG150292-11 L67140-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.124	0.122	2		0--20

LD:WG150292-11 L67140-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00522	0.00488	7		0--20

MS:WG150292-12 L67140-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.01	0.05	mg/L	0.221	0.04	0.423	101		75--125

MS:WG150292-12 L67140-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.124	0.8	0.875	94		75--125

MS:WG150292-12 L67140-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00522	0.02	0.0241	94		75--125

MB:WG150292-13 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:WG150292-13 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

SB:WG150292-14 MB:WG150292-13 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0421	105		80--120

SB:WG150292-14 MB:WG150292-13 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.769	96		80--120

LCS:WG150292-15 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0527	105		85--115

LCS:WG150292-15 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.956	96		85--115

LD:WG150292-16 L67129-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421304 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0031	0.0029			0--20

LD:WG150292-16 L67129-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421304 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.638	0.634	1		0--20

MS:WG150292-17 L67129-1 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.0031	0.04	0.0453	105	75--125

MS:WG150292-17 L67129-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.638	0.8	1.39	94		75--125

MB:WG150292-18 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:WG150292-18 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD
(Method Blank)

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

MB:WG150292-19 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:WG150292-19 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:WG150292-20 MB:WG150292-19 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.727	91		80--120

SB:WG150292-20 MB:WG150292-19 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0189	94		80--120

LCS:WG150292-21 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	1	0.934	93		85--115

LCS:WG150292-21 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0181	91		85--115

LD:WG150292-22 L67100-4 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.1	0.4	mg/L	<MDL	<MDL			0--20

MS:WG150292-23 L67100-4 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.1	0.4	mg/L	<MDL	0.8	6.68	84		75--125

LD:WG150292-24 L67125-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	1.13	1.14	1		0--20

MS:WG150292-25 L67125-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421185-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	1.13	0.8	4.78	91		75--125

Workgroup: WG150295 (TSS) Run ID: R216838

MB:WG150295-1 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

LCS:WG150295-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	94	94		80--120

LD:WG150295-3 L67020-4 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	9.3	9.6	3		0--25

LD:WG150295-4 L67023-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	0.5	1	mg/L	16.7	16.9	1		0--25

MB:WG150295-5 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

LCS:WG150295-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG150295-7 L67025-5 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	3.3	6.67	mg/L	381	365	4		0--25

LD:WG150295-8 L67140-7 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2	2.4	18		0--25

MB:WG150295-9 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

LCS:WG150295-10 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	108	108		80--120

LD:WG150295-11 L67027-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	102	109	7		0--25

LD:WG150295-12 L67033-6 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-VAGW Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	1.8			0--25

LD:WG150295-13 L67024-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:422018-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	14.4	15.4	7		0--25

Workgroup: WG150306 (TOTP/TOTN/Streams/BeaverLk/Storms) Run ID: R216827

MB:WG150306-1 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:WG150306-1 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:WG150306-2 MB:WG150306-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1	100		80--120

SB:WG150306-2 MB:WG150306-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0994	99		80--120

LCS:WG150306-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.948	95		85--115

LCS:WG150306-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0968	97		85--115

LD:WG150306-4 L67023-3 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	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.732	0.732	0		0--20

LD:WG150306-4 L67023-3 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	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.053	0.0491	8		0--20

MS:WG150306-5 L67023-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.732	1	1.73	100		75--125

MS:WG150306-5 L67023-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.053	0.1	0.148	95		75--125

MB:WG150306-6 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:WG150306-6 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:WG150306-7 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.972	97		85--115

LCS:WG150306-7 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0971	97		85--115

LD:WG150306-8 L67025-3 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	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.64	1.67	2		0--20

LD:WG150306-8 L67025-3 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	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.182	0.187	2		0--20

MS:WG150306-9 L67025-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1.64	1	2.71	107		75--125

MS:WG150306-9 L67025-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.182	0.1	0.295	113		75--125

MB:WG150306-10 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:WG150306-10 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:WG150306-11 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.987	99		85--115

LCS:WG150306-11 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0958	96		85--115

LD:WG150306-12 L67051-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0644	0.0641	1		0--20

MS:WG150306-13 L67051-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0644	0.1	0.162	98		75--125

LD:WG150306-14 L67141-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.244	0.242	1		0--20

LD:WG150306-14 L67141-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.0357	4		0--20

MS:WG150306-15 L67141-3 Matrix: STORM WTR Listtype:CVTOTN Method:SM4500-N-C Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.244	1	1.28	104		75--125

MS:WG150306-15 L67141-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.1	0.135	98		75--125

Workgroup: WG150461 (TOC/DOC - various) Run ID: R216895

MB:WG150461-1 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:WG150461-2 MB:WG150461-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.62	96		80--120

LCS:WG150461-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit

Total Organic Carbon	0.5	1	mg/L	10	10.1	101	85--115

LD:WG150461-4 L67105-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-ENGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	<MDL			0--20

MS:WG150461-5 L67105-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-ENGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		75--125

LD:WG150461-6 L67141-5 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.12	3.09	1		0--20

MS:WG150461-7 L67141-5 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.12	10	12.4	93		75--125

MB:WG150461-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

SB:WG150461-9 MB:WG150461-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.59	96		80--120

LCS:WG150461-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

LD:WG150461-11 L67140-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.89	2.93	2		0--20

MS:WG150461-12 L67140-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.89	10	12.4	95		75--125

MB:WG150461-13 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LCS:WG150461-14 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.67	97		85--115

Workgroup: WG150997 (nuts!-29) Run ID: R217638

MB:WG150997-1 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:WG150997-1 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:WG150997-1 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:WG150997-2 MB:WG150997-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0352	88		80--120

SB:WG150997-2 MB:WG150997-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.791	99		80--120

SB:WG150997-2 MB:WG150997-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0226	113		80--120

LCS:WG150997-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0485	97		85--115

LCS:WG150997-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.791	99		85--115

LCS:WG150997-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.022	110		85--115

LD:WG150997-4 L67369-15 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0039	0.0052			0--20

LD:WG150997-4 L67369-15 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.236	0.237	1		0--20

LD:WG150997-4 L67369-15 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00461	0.0046	0		0--20

MS:WG150997-5 L67369-15 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0039	0.04	0.034	75		75--125

MS:WG150997-5 L67369-15 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.236	0.8	1.02	98		75--125

MS:WG150997-5 L67369-15 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00461	0.02	0.0231	92		75--125

MB:WG150997-6 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:WG150997-6 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:WG150997-6 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:WG150997-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0481	96		85--115

LCS:WG150997-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.779	97		85--115

LCS:WG150997-7 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0207	103		85--115

LD:WG150997-8 L67369-32 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	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.004	0.0037			0--20

LD:WG150997-8 L67369-32 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.231	0.233	1		0--20

LD:WG150997-8 L67369-32 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00394	0.00397	1		0--20

MS:WG150997-9 L67369-32 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.004	0.04	0.0408	92		75--125

MS:WG150997-9 L67369-32 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.231	0.8	1.03	100		75--125

MS:WG150997-9 L67369-32 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.00394	0.02	0.0224	92		75--125

MB:WG150997-10 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:WG150997-10 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:WG150997-10 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:WG150997-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0481	96		85--115

LCS:WG150997-11 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.774	97		85--115

LCS:WG150997-11 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0212	106		85--115

LD:WG150997-12 L67369-44 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	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0021	0.0021			0--20

LD:WG150997-12 L67369-44 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	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.335	0.33	2		0--20

LD:WG150997-12 L67369-44 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	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0011	0.0012			0--20

MS:WG150997-13 L67369-44 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0021	0.04	0.0433	103		75--125

MS:WG150997-13 L67369-44 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.335	0.8	1.11	96		75--125

MS:WG150997-13 L67369-44 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0011	0.02	0.0226	108		75--125

LD:WG150997-14 L67398-7 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0056	0.0056			0--20

LD:WG150997-14 L67398-7 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.302	0.301	1		0--20

LD:WG150997-14 L67398-7 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.014	0.014	0		0--20

MS:WG150997-15 L67398-7 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0056	0.04	0.0455	100		75--125

MS:WG150997-15 L67398-7 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.302	0.8	1.07	96		75--125

MS:WG150997-15 L67398-7 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.014	0.02	0.032	90		75--125

MB:WG150997-16 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:WG150997-16 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:WG150997-16 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:WG150997-17 MB:WG150997-16 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	<MDL	0.04	0.0393	98		80--120

SB:WG150997-17 MB:WG150997-16 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.8	100		80--120

SB:WG150997-17 MB:WG150997-16 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	<MDL	0.02	0.0205	103		80--120

LCS:WG150997-18 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0482	96		85--115

LCS:WG150997-18 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.757	95		85--115

LCS:WG150997-18 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.02	100		85--115

MB:WG150997-19 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:WG150997-19 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:WG150997-19 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:WG150997-20 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.05	0.0498	100		85--115

LCS:WG150997-20 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.763	95		85--115

LCS:WG150997-20 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.02	0.0211	106		85--115

LD:WG150997-21 L67371-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Ammonia Nitrogen	0.002	0.01	mg/L	0.0142	0.0142	0		0--20

LD:WG150997-21 L67371-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.436	0.441	1		0--20

LD:WG150997-21 L67371-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0017	0.0015			0--20

MS:WG150997-22 L67371-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Ammonia Nitrogen	0.002	0.01	mg/L	0.0142	0.04	0.0545	101	75--125

MS:WG150997-22 L67371-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.436	0.8	1.22	98		75--125

MS:WG150997-22 L67371-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Orthophosphate Phosphorus	0.0005	0.002	mg/L	0.0017	0.02	0.0191	87		75--125

Workgroup: WG151013 (TOTN/TOTP/Shoreline/LkSamm) Run ID: R217578

MB:WG151013-1 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:WG151013-1 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:WG151013-2 MB:WG151013-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1	100		80--120

SB:WG151013-2 MB:WG151013-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0987	99		80--120

LCS:WG151013-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	1	0.966	97		85--115

LCS:WG151013-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.098	98		85--115

LD:WG151013-4 L67053-7 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421874-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.988	0.988	0		0--20

LD:WG151013-4 L67053-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421874-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0417	0.0452	8		0--20

MS:WG151013-5 L67053-7 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Nitrogen	0.05	0.1	mg/L	0.988	1	2.04	105		75--125

MS:WG151013-5 L67053-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Phosphorus	0.005	0.01	mg/L	0.0417	0.1	0.143	101		75--125

Workgroup: WG151018 (TSS) Run ID: R217566

MB:WG151018-1 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

LCS:WG151018-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	91	91		80--120

LD:WG151018-3 L67328-15 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421093-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	3.6	2.2			0--25

MB:WG151018-4 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

LCS:WG151018-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	109	109		80--120

LD:WG151018-6 L67328-28 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421093-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	2.2	2.3			0--25

LD:WG151018-7 L67433-1 Matrix: OTHR WTR Listtype:CVTSS Method:SM2540-D Project:421937 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LD:WG151018-8 L67356-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	70	72	3		0--25

LD:WG151018-9 L67443-4 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1.8	2			0--25

Workgroup: WG151031 (TOC - various) Run ID: R217526

MB:WG151031-1 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:WG151031-2 MB:WG151031-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

LCS:WG151031-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

LD:WG151031-4 L67433-2 Matrix: OTHR WTR Listtype:CVTOC Method:SM5310-B Project:421937 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.44	6.43	0		0--20

MS:WG151031-5 L67433-2 Matrix: OTHR WTR Listtype:CVTOC Method:SM5310-B Project:421937 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.44	10	16.6	101		75--125

LD:WG151031-6 L67398-7 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.34	5.12	4		0--20

MS:WG151031-7 L67398-7 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.34	10	15	96		75--125

Workgroup: WG151181 (TOC/DOC - various) Run ID: R217772

MB:WG151181-1 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:WG151181-2 MB:WG151181-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.84	98		80--120

LCS:WG151181-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.81	98		85--115

LD:WG151181-4 L67463-8 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.55	0.5			0--20

MS:WG151181-5 L67463-8 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.55	10	10.5	99		75--125

MB:WG151181-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

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

LCS:WG151181-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

Workgroup: WG143803 (ECHO) Run ID: R208965

CS:WG143803-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	72.8	99		90--110
pH, Field			pH	6.86	6.78	0.08		0--.2

CS:WG143803-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.1	99		90--110
Dissolved Oxygen Saturation, Field			%	99.5	99.7	100.2		96--104
pH, Field			pH	6.86	6.78	0.08		0--.2
Barometric Pressure, Field			mmHg	99.5	756.5	760.3		700--800

CS:WG143803-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.6	101		80--120

CS:WG143803-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	54.9	100		80--120

CS:WG143803-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.6	100		80--120

CS:WG143803-6 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	55.3	101		80--120

Workgroup: WG144380 (echolk) Run ID: R209611

CS:WG144380-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	74	100		90--110
pH, Field			pH	6.86	6.82	0.04		0--.2

CS:WG144380-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73	99		90--110
Dissolved Oxygen Saturation, Field			%	99.5	98.7	99.2		96--104
pH, Field			pH	6.86	6.82	0.04		0--.2
Barometric Pressure, Field			mmHg	99.5	756.2	760		700--800

CS:WG144380-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	53.1	53.7	101		80--120

CS:WG144380-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	53.1	54	102		80--120

Workgroup: WG144920 (Echo LK 3/1/16) Run ID: R210259

CS:WG144920-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.6	102		90--110
pH, Field			pH	6.86	6.85	0.01		0--.2

CS:WG144920-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.5	102		90--110
Dissolved Oxygen Saturation, Field			%	99.3	98.3	99		96--104
pH, Field			pH	6.86	6.89	0.03		0--.2
Barometric Pressure, Field			mmHg	99.3	754.4	759.7		700--800

CS:WG144920-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.6	101		80--120

CS:WG144920-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	54.8	100		80--120

CS:WG144920-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.7	103		80--120

CS:WG144920-6 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	56.6	103		80--120

Workgroup: WG144991 (echo lk) Run ID: R210340

CS:WG144991-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD

(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.4	102		90--110
pH, Field			pH	6.86	6.87	0.01		0--.2

CS:WG144991-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.1	102		90--110
Dissolved Oxygen Saturation, Field			%	99	99.1	100.1		96--104
pH, Field			pH	6.86	6.88	0.02		0--.2
Barometric Pressure, Field			mmHg	99	752.2	759.8		700--800

CS:WG144991-3 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	74.8	101		90--110
pH, Field			pH	6.86	6.87	0.01		0--.2

CS:WG144991-4 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75	101		90--110
Dissolved Oxygen Saturation, Field			%	99	99.1	100.1		96--104
pH, Field			pH	6.86	6.89	0.03		0--.2
Barometric Pressure, Field			mmHg	99	752.2	759.8		700--800

CS:WG144991-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.5	100		80--120

CS:WG144991-6 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	54.8	100		80--120

CS:WG144991-7 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.54	5.6	100		80--120

CS:WG144991-8 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	54.7	54.8	100		80--120

CS:WG144991-9 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.02	5.1	101		80--120

CS:WG144991-10 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	53.1	53.3	100		80--120

CS:WG144991-11 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.02	5.1	101		80--120

CS:WG144991-12 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	53.1	54.1	102		80--120

Workgroup: WG146594 (Echo) Run ID: R212356
No QC sample found for this workgroup

Workgroup: WG148099 (Echo lk 091716) Run ID: R214079

CS:WG148099-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	56.9	57	100		80--120

CS:WG148099-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	74.6	101		90--110
pH, Field			pH	6.86	6.9	0.04		0--.2

CS:WG148099-3 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	56.9	57.3	101		80--120

CS:WG148099-4 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.7	100		90--110
Dissolved Oxygen Saturation, Field			%	99.9	100	100.1		96--104
pH, Field			pH	6.86	6.89	0.03		0--.2
Barometric Pressure, Field			mmHg	99.9	759	759.8		700--800

Workgroup: WG148599 (Echo LK 100616) Run ID: R214638
No QC sample found for this workgroup

Workgroup: WG148600 (ECho DTS 101316) Run ID: R214640

CS:WG148600-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.4	102		90--110
pH, Field			pH	6.86	6.84	0.02		0--.2

CS:WG148600-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.3	102		90--110
Dissolved Oxygen Saturation, Field			%	98.5	98.7	100.2		96--104
pH, Field			pH	6.86	6.86	0		0--.2
Barometric Pressure, Field			mmHg	98.5	748.4	759.8		700--800

CS:WG148600-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.82	5.8	100		80--120

CS:WG148600-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.82	6	103		80--120

Workgroup: WG148617 (EchoLK 101916) Run ID: R214655

CS:WG148617-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.1	102		90--110
pH, Field			pH	6.86	6.87	0.01		0--.2

CS:WG148617-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.1	102		90--110
Dissolved Oxygen Saturation, Field			%	100.4	101	100.6		96--104
pH, Field			pH	6.86	6.9	0.04		0--.2
Barometric Pressure, Field			mmHg	100.4	763.3	760.3		700--800

CS:WG148617-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.82	5.9	102		80--120

CS:WG148617-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.9	5.9	100		80--120

Workgroup: WG148805 (Echo LK 102616) Run ID: R214894

CS:WG148805-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	76.3	103		90--110
pH, Field			pH	6.86	6.83	0.03		0--.2

FREP:WG148805-2 L66498-1 Matrix: STORM WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project:421879-250 Pkey:STD
(Field Replicate)

Parameter	MDL	RDL	Units	SAMP Value	FREP Value	RPD	Qual	LabLimit

Conductivity, Field	0.5	10	umhos/cm	15	13.3	12.01	*	0--10
Dissolved Oxygen, Field	0.5	1	mg/L	10.7	10.7	0.09		0--10
pH, Field			pH	7.61	7.6	0.01		0--.2
Sample Temperature, Field			deg C	11.2	11.3	0.049		0--.3

CS:WG148805-3 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	75.8	103		90--110
Dissolved Oxygen Saturation, Field			%	100.2	100.2	100		96--104
pH, Field			pH	6.86	6.92	0.06		0--.2
Barometric Pressure, Field			mmHg	100.2	761.3	759.8		700--800

CS:WG148805-4 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.3	5.3	100		80--120

CS:WG148805-5 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	55.8	55.7	100		80--120

FREP:WG148805-6 L66498-19 Matrix: STORM WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project:421879-250 Pkey:STD
(Field Replicate)

Parameter	MDL	RDL	Units	SAMP Value	FREP Value	RPD	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	18	17.9	1		0--20

CS:WG148805-7 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.3	5.4	102		80--120

CS:WG148805-8 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	55.8	56.3	101		80--120

Workgroup: WG149919 (ECHO011717) Run ID: R216256

CS:WG149919-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD

(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.4	99		90--110
pH, Field			pH	6.86	6.81	0.05		0--.2

CS:WG149919-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	72.9	99		90--110
Dissolved Oxygen Saturation, Field			%	98.8	99.2	100.4		96--104
pH, Field			pH	6.86	6.86	0		0--.2
Barometric Pressure, Field			mmHg	98.8	750.7	759.8		700--800

CS:WG149919-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6	101		80--120

CS:WG149919-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	57.5	100		80--120

CS:WG149919-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6.3	105		80--120

CS:WG149919-6 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	59.4	103		80--120

Workgroup: WG150448 (Echo 020917) Run ID: R216884

CS:WG150448-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.3	99		90--110
pH, Field			pH	6.86	6.82	0.04		0--.2

FREP:WG150448-2 L67070-11 Matrix: STORM WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project:421879-250 Pkey:STD
(Field Replicate)

Parameter	MDL	RDL	Units	SAMP Value	FREP Value	RPD	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	165	152	7.89		0--10
Dissolved Oxygen, Field	0.5	1	mg/L	10.5	10.6	0.47		0--10
pH, Field			pH	6.37	6.41	0.04		0--.2
Sample Temperature, Field			deg C	5.2	5.3	0.059		0--.3

CS:WG150448-3 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.2	99		90--110
Dissolved Oxygen Saturation, Field			%	97.8	97.5	99.7		96--104
pH, Field			pH	6.86	6.88	0.02		0--.2
Barometric Pressure, Field			mmHg	97.8	743.3	760		700--800

CS:WG150448-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6	101		80--120

CS:WG150448-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	57.3	100		80--120

FREP:WG150448-6 L67070-11 Matrix: STORM WTR Listtype:ESS-FIELDMETER Method:NONE Project:421879-250 Pkey:STD
(Field Replicate)

Parameter	MDL	RDL	Units	SAMP Value	FREP Value	RPD	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	10.4	7.1	38	*	0--20

CS:WG150448-7 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6	100		80--120

CS:WG150448-8 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	58	101		80--120

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG150454 () Run ID: R216886

CS:WG150454-1 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	73.6	100		90--110
pH, Field			pH	6.86	6.83	0.03		0--.2

CS:WG150454-2 Matrix: BLANK WTR Listtype:ESS-YSI-EXO Method:KCEL SOP# 245 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Conductivity, Field	0.5	10	umhos/cm	73.9	74.3	101		90--110
Dissolved Oxygen Saturation, Field			%	98.6	98.6	100		96--104
pH, Field			pH	6.86	6.88	0.02		0--.2
Barometric Pressure, Field			mmHg	98.6	749.2	759.8		700--800

CS:WG150454-3 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6	101		80--120

CS:WG150454-4 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	57.2	100		80--120

CS:WG150454-5 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	5.96	6	100		80--120

CS:WG150454-6 Matrix: BLANK WTR Listtype:ESS-FIELDMETER Method:NONE Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	TrueValue	CS Value	% Rec.	Qual	LabLimit
Turbidity, Field	0.5	2	NTU	57.4	57.5	100		80--120

Workgroup: WG151081 (Echo Blanks) Run ID: R217626
No QC sample found for this workgroup

Workgroup: WG143380 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R208392

PC:WG143335-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG143335-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG143335-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG143335-6 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG144109 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R209302

LD:WG144109-1 L64648-1 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precisi	Qual
Fecal Coliform			CFU/100ml	14	22	0.2	0.64	N1

PC:WG144109-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG144109-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG144109-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual

Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG144109-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG144681 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R210027

PC:WG144680-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG144680-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG144680-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG144680-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG144816 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R210209

PC:WG144816-1 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG144816-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG144816-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG144816-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG147869 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R213814

LD:WG147869-1 L66175-4 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precisi	Qual
Fecal Coliform			CFU/100ml	610	490	0.1	0.48	N2

PC:WG147869-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG147869-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG147869-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG147869-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG148369 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R214524

PC:WG148370-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG148370-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG148370-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG148370-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG148370 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R214468

LD:WG148370-1 L66384-4 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precisi	Qual
Fecal Coliform			CFU/100ml	200	400	0.3	0.65	N3

PC:WG148370-2 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG148370-3 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG148370-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG148370-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG154875 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R222183

PC:WG154875-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG154875-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG154875-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG154875-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

Workgroup: WG148783 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R214866

PC:WG148783-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG148783-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG148783-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG148783-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

LD:WG148783-5 L66435-2 Matrix: STORM WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precisi	Qual
Escherichia coli			CFU/100ml	730	680	0.03	0.1	N1

Workgroup: WG148784 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R214867

PC:WG148784-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG148784-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG148784-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG148784-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

Workgroup: WG148785 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R214869

PC:WG148784-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD

(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG148784-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG148784-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG148784-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

Workgroup: WG149830 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R216299

LD:WG149830-1 L66938-17 Matrix: STORM WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precisi	Qual
Escherichia coli			CFU/100ml	120	88	0.13	0.27	N2

PC:WG149830-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG149830-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG149831-4 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

AF:WG149831-5 Matrix: BLANK WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Fecal Coliform		1	CFU/100ml		<MDL,PASS

Workgroup: WG150142 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R216576

PC:WG150142-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG150142-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG150130-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG150130-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

Workgroup: WG150278 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R216718

PC:WG150278-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG150278-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG150278-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD

(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli	1		CFU/100ml		<MDL,PASS

AF:WG150278-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli	1		CFU/100ml		<MDL,PASS

Workgroup: WG143599 (12/16/15 Misc Totals) Run ID: R208866

MB:WG143599-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG143599-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A 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	2	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
Iron, Total, ICP-MS	10	50	ug/L		<MDL
Manganese, Total, ICP-MS	0.1	0.5	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	0.1	0.5	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
Tin, Total, ICP-MS	0.5	1.5	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:WG143599-2 MB:WG143599-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	30.7	93		85--115

SB:WG143599-2 MB:WG143599-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	17.6	88		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5010	100		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4750	95		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	20.3	102		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4550	91		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4470	89		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	17.7	88		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	17.8	89		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4610	92		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	17.8	89		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.7	89		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	18.9	95		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.2	96		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	93		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19	95		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.1	95		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	18	90		85--115
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	18.5	93		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	17.8	89		85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	18.7	93		85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	19	95		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.2	91		85--115

LD:WG143599-3 L64116-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW-SW-E Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	55	55.4	1		0--20

LD:WG143599-3 L64116-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW-SW-E Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit

Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	5550	5480	1		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	7740	7860	2		0--20
Aluminum, Total, ICP-MS	10	50	ug/L	1230	1330	7		0--20
Potassium, Total, ICP-MS	100	500	ug/L	1760	1800	2		0--20
Calcium, Total, ICP-MS	50	50	ug/L	9250	9220	0		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	5.09	5.33	5		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	3.29	3.44	4		0--20
Iron, Total, ICP-MS	10	50	ug/L	1320	1390	6		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	42.6	44	3		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.73	0.746	2		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	4.23	4.35	3		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	2.94	2.96	1		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	3.89	3.98	2		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	1.6	1.62	1		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
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	<MDL			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	17.9	18.5	4		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	0.844	0.84	0		0--20

MS:WG143599-4 L64116-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW-SW-E Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	55	33.1	84	88		75--125

MS:WG143599-4 L64116-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW-SW-E Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	17.4	87		75--125
Sodium, Total, ICP-MS	100	100	ug/L	5550	5000	10700	103		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	7740	5000	12100	88		75--125
Aluminum, Total, ICP-MS	10	50	ug/L	1230	20	1330		4xRul	75--125
Potassium, Total, ICP-MS	100	500	ug/L	1760	5000	6340	92		75--125
Calcium, Total, ICP-MS	50	50	ug/L	9250	5000	13600	88		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	5.09	20	23.5	92		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	3.29	20	21.7	92		75--125
Iron, Total, ICP-MS	10	50	ug/L	1320	5000	6160	97		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	42.6	20	60.6	90		75--125

Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.73	20	18.6	90	75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	4.23	20	24.4	101	75--125
Copper, Total, ICP-MS	0.2	2	ug/L	2.94	20	22.9	100	75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	3.89	20	23.3	97	75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	1.6	20	20.6	95	75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	18.7	94	75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.2	101	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95	75--125
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	15	75	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.6	93	75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	17.9	20	37.4	98	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.2	101	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.844	20	20.6	99	75--125

Workgroup: WG143810 (SWD, Echo LK) Run ID: R209061

MB:WG143810-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Aluminum, Dissolved, ICP-MS	2	10	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Tin, Dissolved, ICP-MS	0.5	1.5	ug/L		<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L		<MDL
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG143810-2 MB:WG143810-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.4	97		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5220	104		85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	5110	102		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	20.3	101		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5230	105		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4930	99		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.8	99		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.8	99		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5110	102		85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.6	103		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106		85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21	105		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	102		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	104		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.3	106		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	99		85--115
Tin, Dissolved, ICP-MS	0.5	1.5	ug/L	<MDL	20	19.6	98		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.2	96		85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.6	98		85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.2	101		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	100		85--115

LD:WG143810-3 L64336-3 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	3160	3150	0		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	1340	1330	1		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	61.3	60.9	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	921	932	1		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	5370	5410	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.27	0.27			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	12	12			0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.614	0.628	2		0--20

Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.16	0.15		0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	0.42	0.42		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.3	1.2		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	0.14		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
Tin, Dissolved, ICP-MS	0.5	1.5	ug/L	<MDL	<MDL		0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL		0--20
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	8.16	8.28	1	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:WG143810-4 L64336-3 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	3160	5000	7460	86		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	1340	5000	5700	87		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	61.3	20	83.1	109		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	921	5000	5790	97		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	5370	5000	9490	82		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.27	20	19.9	98		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.8	99		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	12	5000	4980	99		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.614	20	20.3	98		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.16	20	20.7	103		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	0.42	20	21	103		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.3	20	21.6	102		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	20	20.4	101		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.6	103		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.9	105		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	99		75--125
Tin, Dissolved, ICP-MS	0.5	1.5	ug/L	<MDL	20	19.6	98		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.6	98		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	8.16	20	27.3	96		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.3	101		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG144203 (SWD,hrdnss 29-JAN-16) Run ID: R209468

SB:WG144203-1 MB:WG144203-2 Matrix: BLANK WTR Listtype:MTHARD-ICP Method:EPA 200.7*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.25	1.24	mg CaCO3/L	<MDL	169	177	105		85--115

SB:WG144203-1 MB:WG144203-2 Matrix: BLANK WTR Listtype:MTICP Method:EPA 200.7*SW846 6010C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Silver, Total, ICP	4	20	ug/L	<MDL	500	514	103		85--115
Aluminum, Total, ICP	100	500	ug/L	<MDL	25500	27100	106		85--115
Arsenic, Total, ICP	25	125	ug/L	<MDL	500	540	108		85--115
Barium, Total, ICP	1	5	ug/L	<MDL	500	524	105		85--115
Beryllium, Total, ICP	1	5	ug/L	<MDL	500	524	105		85--115
Calcium, Total, ICP	50	250	ug/L	<MDL	25500	27400	107		85--115
Cadmium, Total, ICP	2	10	ug/L	<MDL	500	529	106		85--115
Cobalt, Total, ICP	3	15	ug/L	<MDL	500	513	103		85--115
Chromium, Total, ICP	3	15	ug/L	<MDL	500	520	104		85--115
Copper, Total, ICP	4	20	ug/L	<MDL	500	526	105		85--115
Iron, Total, ICP	50	250	ug/L	<MDL	25500	26700	105		85--115
Potassium, Total, ICP	150	750	ug/L	<MDL	30000	32500	108		85--115
Magnesium, Total, ICP	30	150	ug/L	<MDL	25500	26400	103		85--115
Manganese, Total, ICP	2	10	ug/L	<MDL	500	510	102		85--115
Sodium, Total, ICP	500	2500	ug/L	<MDL	25500	28100	110		85--115
Nickel, Total, ICP	5	25	ug/L	<MDL	500	508	102		85--115
Phosphorus, Total, ICP	50	250	ug/L	<MDL	500	530	106		85--115
Lead, Total, ICP	20	100	ug/L	<MDL	500	516	103		85--115
Antimony, Total, ICP	15	75	ug/L	<MDL	500	533	107		85--115
Selenium, Total, ICP	25	125	ug/L	<MDL	500	521	104		85--115
Tin, Total, ICP	20	100	ug/L	<MDL	500	516	103		85--115
Thallium, Total, ICP	40	200	ug/L	<MDL	500	518	104		85--115
Vanadium, Total, ICP	10	50	ug/L	<MDL	500	525	105		85--115
Zinc, Total, ICP	5	25	ug/L	<MDL	500	527	105		85--115

MB:WG144203-2 Matrix: BLANK WTR Listtype:MTHARD-ICP Method:EPA 200.7*SM2340B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.25	1.24	mg CaCO3/L		<MDL

MB:WG144203-2 Matrix: BLANK WTR Listtype:MTICP Method:EPA 200.7*SW846 6010C Project: Pkey:STD
(Method Blank)

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Parameter	MDL	RDL	Units	MB Value	Qual
Silver, Total, ICP	4	20	ug/L		<MDL
Aluminum, Total, ICP	100	500	ug/L		<MDL
Arsenic, Total, ICP	25	125	ug/L		<MDL
Barium, Total, ICP	1	5	ug/L		<MDL
Beryllium, Total, ICP	1	5	ug/L		<MDL
Calcium, Total, ICP	50	250	ug/L		<MDL
Cadmium, Total, ICP	2	10	ug/L		<MDL
Cobalt, Total, ICP	3	15	ug/L		<MDL
Chromium, Total, ICP	3	15	ug/L		<MDL
Copper, Total, ICP	4	20	ug/L		<MDL
Iron, Total, ICP	50	250	ug/L		<MDL
Potassium, Total, ICP	150	750	ug/L		<MDL
Magnesium, Total, ICP	30	150	ug/L		<MDL
Manganese, Total, ICP	2	10	ug/L		<MDL
Sodium, Total, ICP	500	2500	ug/L		<MDL
Nickel, Total, ICP	5	25	ug/L		<MDL
Phosphorus, Total, ICP	50	250	ug/L		<MDL
Lead, Total, ICP	20	100	ug/L		<MDL
Antimony, Total, ICP	15	75	ug/L		<MDL
Selenium, Total, ICP	25	125	ug/L		<MDL
Tin, Total, ICP	20	100	ug/L		<MDL
Thallium, Total, ICP	40	200	ug/L		<MDL
Vanadium, Total, ICP	10	50	ug/L		<MDL
Zinc, Total, ICP	5	25	ug/L		<MDL

LD:WG144203-3 L64525-3 Matrix: LEACHATE Listtype:MTICP Method:EPA 200.7*SW846 6010C Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Silver, Total, ICP	4	20	ug/L	<MDL	<MDL			0--20
Aluminum, Total, ICP	100	500	ug/L	<MDL	<MDL			0--20
Arsenic, Total, ICP	25	125	ug/L	<MDL	<MDL			0--20
Barium, Total, ICP	1	5	ug/L	27.2	27.5	1		0--20
Beryllium, Total, ICP	1	5	ug/L	<MDL	<MDL			0--20
Calcium, Total, ICP	50	250	ug/L	25900	26200	1		0--20
Cadmium, Total, ICP	2	10	ug/L	<MDL	<MDL			0--20
Cobalt, Total, ICP	3	15	ug/L	<MDL	<MDL			0--20
Chromium, Total, ICP	3	15	ug/L	<MDL	<MDL			0--20
Copper, Total, ICP	4	20	ug/L	14	14			0--20
Iron, Total, ICP	50	250	ug/L	3660	3720	1		0--20
Potassium, Total, ICP	150	750	ug/L	9260	9270	0		0--20
Magnesium, Total, ICP	30	150	ug/L	7190	7270	1		0--20

Manganese, Total, ICP	2	10	ug/L	131	133	1	0--20
Sodium, Total, ICP	500	2500	ug/L	16100	16100	0	0--20
Nickel, Total, ICP	5	25	ug/L	7.7	9.3		0--20
Phosphorus, Total, ICP	50	250	ug/L	52	55		0--20
Lead, Total, ICP	20	100	ug/L	<MDL	<MDL		0--20
Antimony, Total, ICP	15	75	ug/L	<MDL	<MDL		0--20
Selenium, Total, ICP	25	125	ug/L	<MDL	<MDL		0--20
Tin, Total, ICP	20	100	ug/L	<MDL	<MDL		0--20
Thallium, Total, ICP	40	200	ug/L	<MDL	<MDL		0--20
Vanadium, Total, ICP	10	50	ug/L	<MDL	<MDL		0--20
Zinc, Total, ICP	5	25	ug/L	10	10		0--20

MS:WG144203-4 L64525-3 Matrix: LEACHATE Listtype:MTICP Method:EPA 200.7*SW846 6010C Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Silver, Total, ICP	4	20	ug/L	<MDL	500	499	100		75--125
Aluminum, Total, ICP	100	500	ug/L	<MDL	25500	26400	104		75--125
Arsenic, Total, ICP	25	125	ug/L	<MDL	500	520	104		75--125
Barium, Total, ICP	1	5	ug/L	27.2	500	536	102		75--125
Beryllium, Total, ICP	1	5	ug/L	<MDL	500	512	102		75--125
Calcium, Total, ICP	50	250	ug/L	25900	25500	52200	103		75--125
Cadmium, Total, ICP	2	10	ug/L	<MDL	500	508	102		75--125
Cobalt, Total, ICP	3	15	ug/L	<MDL	500	501	100		75--125
Chromium, Total, ICP	3	15	ug/L	<MDL	500	509	102		75--125
Copper, Total, ICP	4	20	ug/L	14	500	518	101		75--125
Iron, Total, ICP	50	250	ug/L	3660	25500	29700	102		75--125
Potassium, Total, ICP	150	750	ug/L	9260	30000	41600	108		75--125
Magnesium, Total, ICP	30	150	ug/L	7190	25500	32800	101		75--125
Manganese, Total, ICP	2	10	ug/L	131	500	630	100		75--125
Sodium, Total, ICP	500	2500	ug/L	16100	25500	42500	103		75--125
Nickel, Total, ICP	5	25	ug/L	7.7	500	505	99		75--125
Phosphorus, Total, ICP	50	250	ug/L	52	500	571	104		75--125
Lead, Total, ICP	20	100	ug/L	<MDL	500	497	99		75--125
Antimony, Total, ICP	15	75	ug/L	<MDL	500	525	105		75--125
Selenium, Total, ICP	25	125	ug/L	<MDL	500	502	100		75--125
Tin, Total, ICP	20	100	ug/L	<MDL	500	508	102		75--125
Thallium, Total, ICP	40	200	ug/L	<MDL	500	488	98		75--125
Vanadium, Total, ICP	10	50	ug/L	<MDL	500	511	102		75--125
Zinc, Total, ICP	5	25	ug/L	10	500	518	102		75--125

LD:WG144203-5 L64641-5 Matrix: FRESH WTR Listtype:MTHARD-ICP Method:EPA 200.7*SM2340B Project:421193 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.25	1.24	mg CaCO3/L	44	44.5	1		0--20

LD:WG144203-5 L64641-5 Matrix: FRESH WTR Listtype:MTICP Method:EPA 200.7*SW846 6010C Project:421193 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Calcium, Total, ICP	50	250	ug/L	11500	11600	1		0--20
Magnesium, Total, ICP	30	150	ug/L	3720	3760	1		0--20

MS:WG144203-6 L64641-5 Matrix: FRESH WTR Listtype:MTHARD-ICP Method:EPA 200.7*SM2340B Project:421193 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.25	1.24	mg CaCO3/L	44	169	213	100		75--125

MS:WG144203-6 L64641-5 Matrix: FRESH WTR Listtype:MTICP Method:EPA 200.7*SW846 6010C Project:421193 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Calcium, Total, ICP	50	250	ug/L	11500	25500	37300	101		75--125
Magnesium, Total, ICP	30	150	ug/L	3720	25500	29200	100		75--125

Workgroup: WG144318 (2/4/16 Misc Totals) Run ID: R209576

MB:WG144318-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG144318-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A 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
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
Iron, Total, ICP-MS	10	50	ug/L		<MDL
Manganese, Total, ICP-MS	0.1	0.5	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	0.1	0.5	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:WG144318-2 MB:WG144318-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	32.8	99		85--115

SB:WG144318-2 MB:WG144318-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	4920	98		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5070	101		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4830	97		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4760	95		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.3	97		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	19.5	97		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4950	99		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.3	102		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	21.1	106		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20	100		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.5	98		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.8	104		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	100		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.5	98		85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.1	96		85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.6	103		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103		85--115

LD:WG144318-3 L64503-4 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD

(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	8220	8300	1		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	15400	15800	3		0--20
Potassium, Total, ICP-MS	100	500	ug/L	1610	1640	2		0--20
Calcium, Total, ICP-MS	50	50	ug/L	26500	26800	1		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	3.7	3.79	3		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	2.07	2.3	11		0--20
Iron, Total, ICP-MS	10	50	ug/L	7600	7830	3		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	308	312	1		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.495	0.498	1		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.86	1.94	4		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	7.37	7.51	2		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	2.5	2.58	5		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	219	224	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	0.075	0.074			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	0.3	0.3			0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	16.9	17.4	3		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	0.18	0.18			0--20

MS:WG144318-4 L64503-4 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		75--125
Sodium, Total, ICP-MS	100	100	ug/L	8220	5000	12500	85		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	15400	5000	20400	100		75--125
Potassium, Total, ICP-MS	100	500	ug/L	1610	5000	6320	94		75--125
Calcium, Total, ICP-MS	50	50	ug/L	26500	5000	31200		4xRul	75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	3.7	20	23	96		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	2.07	20	21.6	98		75--125
Iron, Total, ICP-MS	10	50	ug/L	7600	5000	12500	98		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	308	20	329		4xRul	75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.495	20	19.9	97		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.86	20	23	106		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	7.37	20	28.1	104		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	2.5	20	23.8	107		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	219	20	242		4xRul	75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	18.8	94		75--125

Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.4	102	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.075	20	19.6	98	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	0.3	20	19.6	96	75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	16.9	20	36.1	96	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.7	103	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.18	20	20.7	103	75--125

LD:WG144318-5 L64512-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	24	23.5	2		0--20

LD:WG144318-5 L64512-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Magnesium, Total, ICP-MS	50	50	ug/L	1710	1650	4		0--20
Calcium, Total, ICP-MS	50	50	ug/L	6780	6700	1		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	3.36	3.29	2		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	3.33	3.37	1		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	29.3	29.1	1		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	99.3	97.7	2		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	2.41	2.2	9		0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.13	0.13			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	0.89	0.92			0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	21.4	22.2	3		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	9.87	9.87	0		0--20

MS:WG144318-6 L64512-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	24	33.1	55.2	94		75--125

MS:WG144318-6 L64512-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	1710	5000	6540	97		75--125
Calcium, Total, ICP-MS	50	50	ug/L	6780	5000	11300	91		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	3.36	20	22.3	95		75--125

Nickel, Total, ICP-MS	0.1	0.5	ug/L		3.33	20	23.9	103	75--125
Copper, Total, ICP-MS	0.2	2	ug/L		29.3	20	49.5	101	75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L		99.3	20	117	4xRul	75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L		2.41	20	21.7	97	75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL		20	18.7	94	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		0.13	20	19.5	97	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L		0.89	20	18.9	90	75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L		21.4	20	39.9	92	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL		20	20.2	101	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L		9.87	20	30	101	75--125

Workgroup: WG144381 (SWD diss) Run ID: R209679

MB:WG144381-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG144381-2 MB:WG144381-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit

Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	107	85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5000	100	85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	5040	101	85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5160	103	85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4780	96	85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.7	98	85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.7	98	85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5040	101	85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	20.3	102	85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	101	85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	104	85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.2	101	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.9	105	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.5	107	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.6	103	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.7	103	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.2	101	85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	20.2	101	85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.1	100	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101	85--115

LD:WG144381-3 L64717-4 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	3000	2990	0		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	2520	2530	0		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	587	586	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	7930	7980	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.094	0.094			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.14	0.14			0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.39	0.38			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.57	0.52			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			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
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	4.15	4.15	0	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:WG144381-4 L64717-4 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	22.5	112		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	3000	5000	7670	93		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	2520	5000	7310	96		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	587	5000	5720	103		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	7930	5000	12800	98		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.094	20	19.9	99		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.4	102		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5130	103		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.14	20	21	104		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	99		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.39	20	21.5	106		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.4	102		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.57	20	21.8	106		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	105		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.9	109		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.5	102		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	21.1	105		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.9	105		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	4.15	20	24.9	104		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.4	102		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	103		75--125

Workgroup: WG145188 (Echo LK) Run ID: R210689

MB:WG145188-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG145188-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL

Calcium, Total, ICP-MS	50	50	ug/L	<MDL
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL

SB:WG145188-2 MB:WG145188-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	33.1	100		85--115

SB:WG145188-2 MB:WG145188-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5160	103		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4760	95		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	21.7	108		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.9	105		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.9	105		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.1	105		85--115

LD:WG145188-3 L64921-7 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	25.3	25.8	2		0--20

LD:WG145188-3 L64921-7 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	1790	1820	2		0--20
Calcium, Total, ICP-MS	50	50	ug/L	7200	7310	2		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	4.12	4.14	1		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	7.22	7.35	2		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.24	0.25			0--20

MS:WG145188-4 L64921-7 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	25.3	33.1	59	102		75--125

MS:WG145188-4 L64921-7 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	1790	5000	6950	103		75--125
Calcium, Total, ICP-MS	50	50	ug/L	7200	5000	12200	99		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	4.12	20	26.2	110		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	7.22	20	27.4	101		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.7	104		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.24	20	21.1	104		75--125

Workgroup: WG145215 (SWD, Echo LK, Elliot West) Run ID: R210797

MB:WG145215-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG145215-2 MB:WG145215-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.8	104		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5140	103		85--115

Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	4990	100	85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5100	102	85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4640	93	85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.2	101	85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.3	102	85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5020	100	85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	21.1	106	85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.9	104	85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.1	106	85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.1	105	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.8	104	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	105	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.2	106	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.5	103	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.8	99	85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.9	100	85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	21.4	107	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	104	85--115

LD:WG145215-3 L64880-9 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	18400	18400	0		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	53700	54300	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	6270	6250	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	146000	149000	2		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	<MDL			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	2720	2810	3		0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	1880	1890	0		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.13	0.13			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.48	0.47			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.68	0.712	5		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
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	32.8	33	1		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:WG145215-4 L64880-9 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	16.1	80		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	18400	5000	23000	93		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	53700	5000	56500		4xRul	75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	6270	5000	11100	96		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	146000	5000	153000		4xRul	75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.8	99		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.4	97		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	2720	5000	7710	100		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	1880	20	1940		4xRul	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.13	20	17.1	85		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.48	20	20.1	98		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.5	97		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	103		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.68	20	24.5	119		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	23.1	115		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20	100		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.3	101		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.2	101		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	32.8	20	53.1	101		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.8	104		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.4	102		75--125

Workgroup: WG145236 (Elliot West, Echo LK) Run ID: R210698

MB:WG145236-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG145236-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL

Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG145236-2 MB:WG145236-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	31.5	95		85--115

SB:WG145236-2 MB:WG145236-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4890	98		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4570	91		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	20.3	101		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.2	101		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115

LD:WG145236-3 L64999-11 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	15	15	0		0--20

LD:WG145236-3 L64999-11 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	941	930	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	4460	4460	0		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	3.26	3.25	0		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	4.56	4.36	4		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.3	0.31			0--20

MS:WG145236-4 L64999-11 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	15	33.1	45.7	93		75--125

MS:WG145236-4 L64999-11 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit

Magnesium, Total, ICP-MS	50	50	ug/L	941	5000	5750	96	75--125
Calcium, Total, ICP-MS	50	50	ug/L	4460	5000	8810	87	75--125
Copper, Total, ICP-MS	0.2	2	ug/L	3.26	20	23.4	101	75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	4.56	20	24.2	98	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	98	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.3	20	20.5	101	75--125

Workgroup: WG145266 (Echo LK) Run ID: R210732

MB:WG145266-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG145266-2 MB:WG145266-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.6	98		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19	95		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.6	93		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115

LD:WG145266-3 L64999-5 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	4.13	4.06	2		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	9.98	9.96	0		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:WG145266-4 L64999-5 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	4.13	20	23.8	98		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	9.98	20	30	100		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.4	102		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG146738 (14-JUL-16 swd) Run ID: R212608

MB:WG146738-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG146738-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A 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	2	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
Iron, Total, ICP-MS	10	50	ug/L		<MDL
Manganese, Total, ICP-MS	0.1	0.5	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	0.1	0.5	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
Tin, Total, ICP-MS	0.5	1.5	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:WG146738-2 MB:WG146738-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	32.1	97		85--115

SB:WG146738-2 MB:WG146738-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	4980	100		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4890	98		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	19.9	99		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4930	99		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4800	96		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.3	102		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.3	102		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	5020	100		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	20.2	101		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.1	101		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	21	105		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.5	103		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	100		85--115
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	19.5	98		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.4	97		85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.8	99		85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.7	104		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115

LD:WG146738-3 L65510-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	87.1	89.6	3		0--20

LD:WG146738-3 L65510-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	7090	7380	4		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	12000	12400	3		0--20
Aluminum, Total, ICP-MS	2	10	ug/L	63.7	68.8	8		0--20
Potassium, Total, ICP-MS	100	500	ug/L	1370	1430	5		0--20
Calcium, Total, ICP-MS	50	50	ug/L	15100	15500	2		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.17	1.28	9		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.77	0.85			0--20
Iron, Total, ICP-MS	10	50	ug/L	989	1040	5		0--20

Manganese, Total, ICP-MS	0.1	0.5	ug/L	492	496	1	0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.296	0.304	2	0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.38	1.33	4	0--20
Copper, Total, ICP-MS	0.2	2	ug/L	0.9	0.7		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	1.2	1.3		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	3.56	3.72	4	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	0.407	0.42	3	0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	<MDL		0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL		0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	2.41	2.5	4	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	0.36	0.36		0--20

MS:WG146738-4 L65510-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	87.1	33.1	118	94		75--125

MS:WG146738-4 L65510-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		75--125
Sodium, Total, ICP-MS	100	100	ug/L	7090	5000	11900	95		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	12000	5000	16800	96		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	63.7	20	87.8	120		75--125
Potassium, Total, ICP-MS	100	500	ug/L	1370	5000	6240	97		75--125
Calcium, Total, ICP-MS	50	50	ug/L	15100	5000	19700	92		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.17	20	21.6	102		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.77	20	21	101		75--125
Iron, Total, ICP-MS	10	50	ug/L	989	5000	6060	102		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	492	20	498		4xRul	75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.296	20	19.9	98		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.38	20	21.5	101		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	0.9	20	20.7	99		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	1.2	20	20.9	99		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	3.56	20	23.1	98		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.4	97		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	0.407	20	20.9	102		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	100		75--125
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	19.2	96		75--125

Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.7	99	75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	2.41	20	22.6	101	75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.5	102	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.36	20	20.1	99	75--125

Workgroup: WG146905 (7/22/16 Echo Lake Diss) Run ID: R212677

MB:WG146905-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG146905-2 MB:WG146905-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.7	104		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	21	105		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	21	105		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.6	108		85--115

LD:WG146905-3 L65650-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	12.6	12.8	2		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	87.8	90	2		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	0.38	0.4			0--20

MS:WG146905-4 L65650-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	12.6	20	33.9	107		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	87.8	20	111		4xRul	75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.6	103		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.38	20	22.1	109		75--125

Workgroup: WG147984 (SWD, Echo LK) Run ID: R214024

MB:WG147984-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	ug/L		<MDL
Selenium, Dissolved, ICP-MS	0.5	1	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L		<MDL
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG147984-2 MB:WG147984-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4930	99		85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	4940	99		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5070	101		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4910	98		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.9	99		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.2	101		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5170	103		85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	20.8	104		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.6	103		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.4	102		85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21	105		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.4	102		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	105		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.7	103		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.1	101		85--115

Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	20	100	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106	85--115

LD:WG147984-3 L66068-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Sodium, Dissolved, ICP-MS	100	100	ug/L	10600	10600	0		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	3830	3850	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	611	614	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	7540	7530	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	2.36	2.37	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.84	1.86	1		0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	11	11			0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.2	0.19			0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			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	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.654	0.667	2		0--20
Selenium, Dissolved, ICP-MS	0.5	1	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
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	2.89	2.85	2		0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG147984-4 L66068-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Sodium, Dissolved, ICP-MS	100	100	ug/L	10600	5000	15400	97		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	3830	5000	8740	98		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	611	5000	5620	100		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	7540	5000	12100	91		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	2.36	20	22.2	99		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.84	20	21.8	100		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	11	5000	5030	100		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	0.2	20	19.7	98		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.8	104		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.7	109		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	103		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.654	20	21.2	103		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.5	108		75--125

Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.8	104	75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.4	102	75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	2.89	20	23.2	102	75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.1	106	75--125

Workgroup: WG148332 (12-OCT-16 SWD, Storms Diss) Run ID: R214416

MB:WG148332-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Aluminum, Dissolved, ICP-MS	2	10	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG148332-2 MB:WG148332-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	94		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5060	101		85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	4920	98		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	18.4	92		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	4970	99		85--115

Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4830	97	85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.1	90	85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.2	91	85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5170	103	85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	18	90	85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.1	91	85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.1	90	85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	17.7	89	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	21.1	106	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	17.7	88	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	18.2	91	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.6	93	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.7	88	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	17.1	85	85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	17.3	87	85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.1	91	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18	90	85--115

LD:WG148332-3 L66151-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421195-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	3940	3970	1		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	4890	4880	0		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	<MDL			0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	20000	20200	1		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.27	0.24			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	58.6	57.3	2		0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	3.82	3.87	1		0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.32	0.32			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	0.21			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.35	0.35			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:WG148332-4 L66151-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421195-240 Pkey:STD
(Matrix Spike)

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	3940	5000	8620	94		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	4890	5000	9750	97		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	19.2	96		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	20000	5000	24600		4xRul	75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.27	20	20.1	99		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	58.6	5000	4990	99		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	3.82	20	22	91		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.32	20	20.4	100		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.7	99		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.7	104		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.35	20	21.1	104		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	104		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.6	103		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	100		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.5	98		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.1	101		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		75--125

LD:WG148332-5 L66305-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	7230	7280	1		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	13600	13500	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1160	1160	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	17000	17000	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.586	0.594	1		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.21	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	<MDL			0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.19	0.19			0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.85	0.85			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.613	0.658	7		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	1.14	1.1	4		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
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	4.6	4.58	0		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:WG148332-6 L66305-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	7230	5000	12000	96		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	13600	5000	18600	100		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1160	5000	5910	95		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	17000	5000	21700	93		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.586	20	19.5	94		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.21	20	19.4	96		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4820	96		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	18	90		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.8	89		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.19	20	19.4	96		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.2	96		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	0.85	20	21.4	103		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.613	20	20.8	101		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	1.14	20	23.8	113		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.4	102		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.7	99		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	4.6	20	24.7	101		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	20	100		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		75--125

Workgroup: WG148337 (Echo LK, SWD) Run ID: R214528

MB:WG148337-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG148337-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A 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

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
Iron, Total, ICP-MS	10	50	ug/L	<MDL
Manganese, Total, ICP-MS	0.1	0.5	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	0.1	0.5	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:WG148337-2 MB:WG148337-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	32.4	98		85--115

SB:WG148337-2 MB:WG148337-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	4920	98		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4940	99		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4880	98		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4830	97		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.2	96		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	19.6	98		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4930	99		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	95		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	19.7	98		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.9	100		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.3	102		85--115

Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.6	103	85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	100	85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.7	99	85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	19.1	95	85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.8	104	85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	100	85--115

LD:WG148337-3 L66175-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	24.8	24.3	2		0--20

LD:WG148337-3 L66175-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	901	892	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	8460	8280	2		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	27.1	26.9	1		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	137	136	1		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.1	0.11			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	3.25	3.17	2		0--20

MS:WG148337-4 L66175-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	24.8	33.1	58	100		75--125

MS:WG148337-4 L66175-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	901	5000	5970	101		75--125
Calcium, Total, ICP-MS	50	50	ug/L	8460	5000	13400	98		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	27.1	20	48.4	106		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	137	20	156		4xRul	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.1	20	20.9	104		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	3.25	20	24.9	108		75--125

LD:WG148337-5 L66298-5 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHGW-OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	28900	29700	3		0--20

Magnesium, Total, ICP-MS	50	50	ug/L	5020	5180	3	0--20
Potassium, Total, ICP-MS	100	500	ug/L	1720	1740	2	0--20
Calcium, Total, ICP-MS	50	50	ug/L	17200	17400	1	0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	<MDL		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	<MDL		0--20
Iron, Total, ICP-MS	10	50	ug/L	15	15		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	27.8	28.5	2	0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	2.4	2.26	6	0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	5.03	5.14	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
Barium, Total, ICP-MS	0.5	0.5	ug/L	4.67	4.65	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	0.16	0.13		0--20

MS:WG148337-6 L66298-5 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHGW-OS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.5	98		75--125
Sodium, Total, ICP-MS	100	100	ug/L	28900	5000	33700		4xRul	75--125
Magnesium, Total, ICP-MS	50	50	ug/L	5020	5000	10200	103		75--125
Potassium, Total, ICP-MS	100	500	ug/L	1720	5000	6620	98		75--125
Calcium, Total, ICP-MS	50	50	ug/L	17200	5000	21400	82		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.2	101		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.4	102		75--125
Iron, Total, ICP-MS	10	50	ug/L	15	5000	4950	99		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	27.8	20	46	91		75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.5	97		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	104		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	2.4	20	23.2	104		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	5.03	20	24.7	98		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.5	98		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.1	106		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	20.2	101		75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	4.67	20	24.5	99		75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	21.1	106		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.16	20	20.6	102		75--125

Workgroup: WG148522 (20-OCT-16 SWD Diss) Run ID: R214721

MB:WG148522-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG148522-2 MB:WG148522-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4990	100		85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	4940	99		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	4820	96		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4750	95		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.3	96		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.4	97		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4940	99		85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	18.9	94		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.2	96		85--115

Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101	85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.2	101	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.8	99	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.2	101	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.7	99	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.2	96	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	17.9	90	85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	18.8	94	85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.9	94	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	94	85--115

LD:WG148522-3 L65721-2 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	8370	8500	2		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	19700	19900	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1760	1770	1		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	26600	26700	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	<MDL			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	1840	1840	0		0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	155	157	1		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			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	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.577	0.588	2		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
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	10.8	11	2		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:WG148522-4 L65721-2 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	8370	5000	13300	99		75--125

Magnesium, Dissolved, ICP-M	50	50	ug/L	19700	5000	24600	100	75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1760	5000	6550	96	75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	26600	5000	31400	4xRul	75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.1	96	75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.4	97	75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	1840	5000	6650	96	75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	155	20	173	4xRul	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92	75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100	75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.7	99	75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.9	99	75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.577	20	21.2	103	75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.9	110	75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.6	98	75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.4	97	75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.6	93	75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	10.8	20	30.2	97	75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.1	95	75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	94	75--125

Workgroup: WG148782 (02-NOV-16 Echo Lk, Fed Way) Run ID: R214950

MB:WG148782-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG148782-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG148782-2 MB:WG148782-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	33	100		85--115

SB:WG148782-2 MB:WG148782-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5070	101		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4870	97		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	22.9	114		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	22.8	114		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	21.8	109		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	22.1	111		85--115

LD:WG148782-3 L66384-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	14.4	14.3	1		0--20

LD:WG148782-3 L66384-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	657	656	0		0--20
Calcium, Total, ICP-MS	50	50	ug/L	4690	4650	1		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	13.7	14.4	5		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	100	99	1		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.057	0.057			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	2.12	2.14	1		0--20

MS:WG148782-4 L66384-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	14.4	33.1	45.4	94		75--125

MS:WG148782-4 L66384-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	657	5000	5410	95		75--125
Calcium, Total, ICP-MS	50	50	ug/L	4690	5000	9250	91		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	13.7	20	35.6	110		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	100	20	118		4xRul	75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.057	20	20.7	103		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	2.12	20	23.2	105		75--125

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Workgroup: WG148826 (04-NOV-16 Echo, FedWay Diss) Run ID: R215121

MB:WG148826-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG148826-2 MB:WG148826-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.3	102		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.7	99		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.5	97		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115

LD:WG148826-3 L66453-3 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1.9	1.9			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	16.4	16.2	1		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:WG148826-4 L66453-3 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1.9	20	22.3	102		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	16.4	20	36.4	100		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	98		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	95		75--125

Workgroup: WG148827 (04-NOV-16 Echo, FedWay) Run ID: R215123

MB:WG148827-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG148827-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG148827-2 MB:WG148827-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	31.6	96		85--115

SB:WG148827-2 MB:WG148827-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4840	97		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4680	94		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	20.5	103		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	102		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.8	99		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115

LD:WG148827-3 L66385-8 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.18	7.07	2		0--20

LD:WG148827-3 L66385-8 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	353	349	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	2290	2260	2		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	2.41	2.45	2		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	19.3	18.9	2		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.29	0.29			0--20

MS:WG148827-4 L66385-8 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.18	33.1	39.3	97		75--125

MS:WG148827-4 L66385-8 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	353	5000	5240	98		75--125
Calcium, Total, ICP-MS	50	50	ug/L	2290	5000	7080	96		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	2.41	20	22	98		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	19.3	20	38.6	97		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.3	97		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.29	20	20	98		75--125

Workgroup: WG148971 (SWD, Federal Way Diss) Run ID: R215184

MB:WG148971-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Sodium, Dissolved, ICP-MS	100	100	ug/L		<MDL
Magnesium, Dissolved, ICP-M	50	50	ug/L		<MDL
Potassium, Dissolved, ICP-MS	100	500	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
Iron, Dissolved, ICP-MS	10	50	ug/L		<MDL
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L		<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG148971-2 MB:WG148971-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD

(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4690	94		85--115
Magnesium, Dissolved, ICP-M	50	50	ug/L	<MDL	5000	4680	94		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	4600	92		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4420	88		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.6	93		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.3	92		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4530	91		85--115
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.8	94		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.5	98		85--115
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.4	97		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.3	97		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.7	99		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.5	98		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.7	93		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.3	96		85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	18.8	94		85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	19.1	95		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	95		85--115

LD:WG148971-3 L66550-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	4810	4850	1		0--20
Magnesium, Dissolved, ICP-M	50	50	ug/L	3470	3470	0		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	679	664	2		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	14100	14000	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.27	0.27			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.23	0.24			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	236	235	0		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	3.23	3.18	2		0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	0.45			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	0.05	0.051			0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	1.34	1.33	1		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:WG148971-4 L66550-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.4	97		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	4810	5000	9670	97		75--125
Magnesium, Dissolved, ICP-M	50	50	ug/L	3470	5000	8270	96		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	679	5000	5210	91		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	14100	5000	18800	94		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.27	20	19.3	95		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.23	20	18.4	91		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4440	89		75--125
Manganese, Dissolved, ICP-M	0.1	0.5	ug/L	236	20	254		4xRul	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.3	86		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	3.23	20	23.2	100		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.1	100		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.8	99		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	20	20.4	99		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	104		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19	95		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.05	20	18.5	92		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.1	96		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	1.34	20	20.1	94		75--125
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.6	93		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	93		75--125

Workgroup: WG149168 (Ecco LK, Elliot West Diss) Run ID: R215362

MB:WG149168-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG149168-2 MB:WG149168-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.4	107		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.9	99		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.6	98		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115

LD:WG149168-3 L66498-19 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	3.86	3.92	1		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	14.8	15.1	2		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	0.12	0.12			0--20

MS:WG149168-4 L66498-19 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	3.86	20	25.8	109		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	14.8	20	34.8	100		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.8	99		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.12	20	21.1	105		75--125

Workgroup: WG149178 (digested diss) Run ID: R215363

MB:WG149178-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG149178-2 MB:WG149178-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.3	107		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.9	104		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115

Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101	85--115

LD:WG149178-3 L66499-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	4.03	4.1	2		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	25.8	25.3	2		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	0.17	0.17			0--20

MS:WG149178-4 L66499-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	4.03	20	25.7	108		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	25.8	20	46.1	101		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.17	20	21.1	105		75--125

Workgroup: WG150180 (14-FEB-17 Echo_Fed Storms) Run ID: R216722

MB:WG150180-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG150180-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG150180-2 MB:WG150180-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	31.8	96		85--115

SB:WG150180-2 MB:WG150180-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD

(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4960	99		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4570	91		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	21.1	106		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	21.6	108		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.1	96		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		85--115

LD:WG150180-3 L66937-2 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	15.7	15.6	1		0--20

LD:WG150180-3 L66937-2 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	1430	1410	2		0--20
Calcium, Total, ICP-MS	50	50	ug/L	3930	3920	0		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	2.67	2.63	2		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	3.63	3.71	2		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.2	0.19			0--20

MS:WG150180-4 L66937-2 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	15.7	33.1	46.8	94		75--125

MS:WG150180-4 L66937-2 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	1430	5000	6240	96		75--125
Calcium, Total, ICP-MS	50	50	ug/L	3930	5000	8460	91		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	2.67	20	22.2	98		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	3.63	20	22.6	95		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.1	90		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.2	20	19.4	96		75--125

Workgroup: WG150217 (Fed Way) Run ID: R216609

MB:WG150217-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG150217-2 MB:WG150217-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.1	106		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.8	104		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.5	102		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.1	106		85--115

LD:WG150217-3 L66937-3 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1.7	1.7			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	21.7	21.6	0		0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.07	0.07			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG150217-4 L66937-3 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	1.7	20	22.6	105		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	21.7	20	42.4	104		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.07	20	21	105		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.4	107		75--125

Workgroup: WG150358 (21-FEB-17 Echo,SWD, Int) Run ID: R216876

MB:WG150358-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG150358-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A 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	2	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
Iron, Total, ICP-MS	10	50	ug/L		<MDL
Manganese, Total, ICP-MS	0.1	0.5	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	0.1	0.5	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
Tin, Total, ICP-MS	0.5	1.5	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:WG150358-2 MB:WG150358-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	32.4	98		85--115

SB:WG150358-2 MB:WG150358-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5020	100		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5020	100		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	19.7	98		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	5280	106		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4680	94		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.2	96		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.2	101		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	5300	106		85--115

Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96	85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100	85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	103	85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	21.1	106	85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	22.7	113	85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100	85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	105	85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.1	100	85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.3	97	85--115
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	18.9	94	85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.2	96	85--115
Barium, Total, ICP-MS	0.5	0.5	ug/L	<MDL	20	19	95	85--115
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20.3	102	85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99	85--115

LD:WG150358-3 L66908-3 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	108	109	1		0--20

LD:WG150358-3 L66908-3 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	6960	6950	0		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	15000	15100	1		0--20
Aluminum, Total, ICP-MS	2	10	ug/L	111	113	2		0--20
Potassium, Total, ICP-MS	100	500	ug/L	2010	2040	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	18400	18500	1		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.27	1.35	6		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.85	0.87			0--20
Iron, Total, ICP-MS	10	50	ug/L	828	825	0		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	440	443	1		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.22	0.22			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.71	1.74	2		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	0.71	0.69			0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.85	0.86			0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	3.55	3.72	5		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
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	<MDL			0--20

Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Total, ICP-MS	0.5	0.5	ug/L	5.9	6.04	2		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	0.44	0.44			0--20

MS:WG150358-4 L66908-3 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	108	33.1	135	81		75--125

MS:WG150358-4 L66908-3 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	16.7	84		75--125
Sodium, Total, ICP-MS	100	100	ug/L	6960	5000	11000	81		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	15000	5000	19000	79		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	111	20	128		4xRul	75--125
Potassium, Total, ICP-MS	100	500	ug/L	2010	5000	7270	105		75--125
Calcium, Total, ICP-MS	50	50	ug/L	18400	5000	22600	84		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.27	20	22.5	106		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.85	20	21.8	105		75--125
Iron, Total, ICP-MS	10	50	ug/L	828	5000	6330	110		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	440	20	461		4xRul	75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.22	20	17.4	86		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.71	20	22.4	104		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	0.71	20	22.5	109		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.85	20	16.9	80		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	3.55	20	24	102		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	18.8	94		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.8	99		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.5	88		75--125
Tin, Total, ICP-MS	0.5	1.5	ug/L	<MDL	20	17.7	89		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19	95		75--125
Barium, Total, ICP-MS	0.5	0.5	ug/L	5.9	20	24.9	95		75--125
Thallium, Total, ICP-MS	0.1	0.2	ug/L	<MDL	20	20	100		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.44	20	19.8	97		75--125

Workgroup: WG150452 (27-FEB-17 FedWay, Echo) Run ID: R217105

MB:WG150452-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG150452-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Magnesium, Total, ICP-MS	50	50	ug/L		<MDL
Calcium, Total, ICP-MS	50	50	ug/L		<MDL
Copper, Total, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG150452-2 MB:WG150452-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	34.8	105		85--115

SB:WG150452-2 MB:WG150452-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5440	109		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4980	100		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	20.1	100		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.9	104		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	99		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	100		85--115

LD:WG150452-3 L67069-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.47	7.57	1		0--20

LD:WG150452-3 L67069-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	430	441	3		0--20
Calcium, Total, ICP-MS	50	50	ug/L	2280	2310	1		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	3.55	3.65	3		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	34.4	34.9	1		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	1.52	1.53	0		0--20

MS:WG150452-4 L67069-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.47	33.1	40.7	100		75--125

MS:WG150452-4 L67069-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	430	5000	5560	103		75--125
Calcium, Total, ICP-MS	50	50	ug/L	2280	5000	7120	97		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	3.55	20	23.2	98		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	34.4	20	53	93		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.4	97		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	1.52	20	21.3	99		75--125

Workgroup: WG150558 (Echo Lk, Fed Way Diss) Run ID: R217032

MB:WG150558-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL
Chromium, Dissolved, ICP-MS	0.2	1	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	0.1	0.5	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
Barium, Dissolved, ICP-MS	0.5	0.5	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:WG150558-2 MB:WG150558-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.7	93		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.8	94		85--115

Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	19.4	97	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	18.7	94	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.1	95	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.3	96	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.2	96	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.8	94	85--115
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	<MDL	20	18.5	93	85--115
Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.8	94	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	94	85--115

LD:WG150558-3 L66913-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421185-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.58	0.59			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.944	0.934	1		0--20
Copper, Dissolved, ICP-MS	0.2	2	ug/L	7.72	7.75	0		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	44.3	44.2	0		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	1.76	1.78	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	0.74	0.73			0--20
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	7.69	7.65	0		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	0.733	0.732	0		0--20

MS:WG150558-4 L66913-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421185-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.6	93		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.58	20	19	92		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.944	20	19.5	93		75--125
Copper, Dissolved, ICP-MS	0.2	2	ug/L	7.72	20	27	96		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	44.3	20	62.7	92		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	1.76	20	21.2	97		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.3	97		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.2	96		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.8	94		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	0.74	20	19.2	92		75--125
Barium, Dissolved, ICP-MS	0.5	0.5	ug/L	7.69	20	25.9	91		75--125

Thallium, Dissolved, ICP-MS	0.1	0.2	ug/L	<MDL	20	18.7	93	75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.733	20	19.4	93	75--125

Workgroup: WG150726 (SWD, Echo LK, Fed Way) Run ID: R217293

MB:WG150726-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG150726-2 MB:WG150726-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	21.6	108		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.6	103		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.8	104		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	107		85--115

LD:WG150726-3 L67140-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	6.47	6.49	0		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	16.4	16.3	0		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:WG150726-4 L67140-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	6.47	20	27.9	107		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	16.4	20	36.8	102		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.8	104		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	107		75--125

Workgroup: WG151091 (05-APR-17 Fed Way Diss) Run ID: R217760

MB:WG151091-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD

(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Copper, Dissolved, ICP-MS	0.2	2	ug/L		<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L		<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L		<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L		<MDL

SB:WG151091-2 MB:WG151091-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	<MDL	20	20.1	100		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20	100		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.1	96		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115

LD:WG151091-3 L67335-6 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	2.8	2.78	1		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	29.2	29.1	0		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	0.16	0.16			0--20

MS:WG151091-4 L67335-6 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Copper, Dissolved, ICP-MS	0.2	2	ug/L	2.8	20	22.9	101		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	29.2	20	49.4	101		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.4	97		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.16	20	20.4	101		75--125

Workgroup: WG151216 (12-APR-17 FedWay, Echo Lk) Run ID: R217793

MB:WG151216-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

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

MB:WG151216-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual

Magnesium, Total, ICP-MS	50	50	ug/L	<MDL
Calcium, Total, ICP-MS	50	50	ug/L	<MDL
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL

SB:WG151216-2 MB:WG151216-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	33.9	103		85--115

SB:WG151216-2 MB:WG151216-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5280	106		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4880	98		85--115
Copper, Total, ICP-MS	0.2	2	ug/L	<MDL	20	20.4	102		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.7	103		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	100		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.1	105		85--115

LD:WG151216-3 L67499-7 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	59	58.9	0		0--20

LD:WG151216-3 L67499-7 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	6330	6370	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	13200	13100	1		0--20
Copper, Total, ICP-MS	0.2	2	ug/L	2.71	2.7	0		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	18.3	18.2	0		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.677	0.679	0		0--20

MS:WG151216-4 L67499-7 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	59	33.1	89.4	92		75--125

MS:WG151216-4 L67499-7 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Magnesium, Total, ICP-MS	50	50	ug/L	6330	5000	11000	94		75--125
Calcium, Total, ICP-MS	50	50	ug/L	13200	5000	17600	89		75--125
Copper, Total, ICP-MS	0.2	2	ug/L	2.71	20	22.4	99		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	18.3	20	36.9	93		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.2	96		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.677	20	21.2	103		75--125

Workgroup: WG143425 (dl#431 wtph-dx) Run ID: R208564

MB:WG143425-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG143425-2 MB:WG143425-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.742	74		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.852	85		50--150

LD:WG143425-3 L64308-8 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421196-170 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40

LD:WG143425-4 L64308-11 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421196-170 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40

	2-Fluorobiphenyl	Pentacosane
Surrogate:		
(Lab Limits)	50--150	50--150

L64251-1	71	96
L64308-1	73	99
L64308-3	65	93
L64308-5	78	95
L64308-6	82	98
L64308-7	83	94
L64308-8	77	98
L64308-9	86	98
L64308-10	77	98
L64308-11	87	99
L64319-1	81	98
L64379-1	73	98
L64379-3	83	97
WG143425-1	31 *	99
WG143425-2	62	98
WG143425-3	65	99
WG143425-4	88	99

Workgroup: WG143498 (bl#373 pah-sim) Run ID: R208729

MB:WG143498-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG143498-2 MB:WG143498-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.04	41		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.13	45		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.26	50		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.19	47		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.4	56		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.45	58		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.35	54		54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.06	82		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.74	70		54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	1.93	77		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	1.97	79		44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	5.63	75		50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	1.93	77		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.91	76		33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	1.93	77		34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	1.87	75		29--134

MSD:WG143498-4 MS:WG143498-3 L64308-9 Matrix: GRND WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421196-170 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueVal	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.1	47		40--160	2.36	1.17	50		6		0--40
Naphthalene	0.0047	0.0236	ug/L	<MDL	2.36	0.762	32		24--85	2.36	0.95	40		22		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.51	64		51--103	2.36	1.34	57		12		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.47	62		44--94	2.36	1.31	56		11		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.73	73		54--113	2.36	1.48	63		15		0--40
Phenanthrene	0.0094	0.0472	ug/L	<MDL	2.36	1.7	72		57--108	2.36	1.47	62		15		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.58	67		50--119	2.36	1.37	58		15		0--40
Fluoranthene	0.0094	0.0472	ug/L	<MDL	2.36	2.2	93		58--115	2.36	1.98	84		10		0--40
Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.97	84		51--142	2.36	1.8	76		9		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.03	86		62--117	2.36	1.86	79		9		0--40
Chrysene	0.0094	0.0472	ug/L	<MDL	2.36	2.03	86		39--115	2.36	1.85	78		9		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	<MDL	7.08	5.67	80		45--120	7.08	5.16	73		10		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.97	84		38--134	2.36	1.8	76		9		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.94	82		38--130	2.36	1.79	76		8		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.93	82		25--138	2.36	1.78	76		8		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	<MDL	2.36	1.89	80		25--122	2.36	1.73	73		9		0--40

	2-Fluorobiphenyl	d14-Terphenyl
Surrogate:		

(Lab Limits)	33--96	63--125
L64308-1	61	86
L64308-3	51	76
L64308-4	51	75
L64308-5	53	85
L64308-6	61	92
L64308-7	52	68
L64308-8	41	72
L64308-9	57	79
L64308-10	52	81
L64308-11	53	84
L64379-2	59	72
L64379-4	59	82
L64379-6	70	82
L64379-8	50	76
WG143498-1	52	79
WG143498-2	50	80
WG143498-3	79	92
WG143498-4	62	82

Workgroup: WG144149 (bl#380 pah-sim) Run ID: R209456

MB:WG144149-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

SBD:WG144149-3 SB:WG144149-2 MB:WG144149-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValu	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.35	54		40--160	2.5	1.37	55		1		0--40
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.32	53		15--93	2.5	1.37	55		4		0--40
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.55	62		43--111	2.5	1.53	61		1		0--40
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.47	59		37--99	2.5	1.48	59		1		0--40
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.56	62		54--104	2.5	1.66	66		6		0--40
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.66	66		54--107	2.5	1.81	72		9		0--40
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.67	67		54--121	2.5	1.82	73		9		0--40
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.11	84		63--115	2.5	2.28	91		8		0--40
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.06	82		54--136	2.5	2.21	88		7		0--40
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.19	88		65--117	2.5	2.33	93		6		0--40
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.3	92		44--114	2.5	2.46	98		7		0--40
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	6.68	89		50--121	7.5	7.03	94		5		0--40
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.13	85		45--133	2.5	2.3	92		8		0--40
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.1	84		33--152	2.5	2.19	88		4		0--40
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.04	81		34--140	2.5	2.17	87		6		0--40
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.19	88		29--134	2.5	2.34	94		7		0--40

MS:WG144149-4 L64648-1 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	0.011	2.36	0.969	41		40--160
Naphthalene	0.0047	0.0236	ug/L	0.014	2.36	0.95	40		24--85
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.2	51		51--103
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.26	54		44--94
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.51	64		54--113
Phenanthrene	0.0094	0.0472	ug/L	0.0479	2.36	1.7	70		57--108
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.63	69		50--119
Fluoranthene	0.0094	0.0472	ug/L	0.0956	2.36	2.08	84		58--115
Pyrene	0.0094	0.0472	ug/L	0.133	2.36	2.16	86		51--142
Benzo(a)anthracene	0.0094	0.0472	ug/L	0.029	2.36	2.07	87		62--117
Chrysene	0.0094	0.0472	ug/L	0.0608	2.36	2.22	91		39--115
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.0933	7.08	6.42	89		45--120
Benzo(a)pyrene	0.0094	0.0472	ug/L	0.032	2.36	2	84		38--134
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	0.014	2.36	1.63	69		38--130
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.58	67		25--138
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.024	2.36	1.91	80		25--122

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L64648-1	60	95
L64648-3	38	85
L64648-5	58	98
L64648-7	37	90
L64648-9	56	103
WG144149-1	59	106
WG144149-2	46	93
WG144149-3	56	97
WG144149-4	63	90

Workgroup: WG144205 (dl#436 wtph-dx) Run ID: R209553

MB:WG144205-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG144205-2 MB:WG144205-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.76	76		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.896	90		50--150

LD:WG144205-3 L64597-1 Matrix: OTHR WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:423639-001 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.194	0.194	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.194	0.194	mg/L	<MDL	<MDL			0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L64597-1	70	99
L64598-1	82	101

L64648-2	62	100
L64648-4	70	101
L64648-6	72	100
L64648-8	77	101
L64648-10	74	102
WG144205-1	66	100
WG144205-2	100	104
WG144205-3	72	102

Workgroup: WG144726 (PAHSIM BL#388) Run ID: R210160

MB:WG144726-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SBD:WG144726-3 SB:WG144726-2 MB:WG144726-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValu	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.57	63		40--160	2.5	1.48	59		6		0--40
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.55	62		15--93	2.5	1.44	58		8		0--40
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.77	71		43--111	2.5	1.64	65		8		0--40
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.65	66		37--99	2.5	1.53	61		8		0--40
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.83	73		54--104	2.5	1.68	67		9		0--40
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	2.09	84		54--107	2.5	1.97	79		6		0--40
Anthracene	0.01	0.05	ug/L	<MDL	2.5	2.05	82		54--121	2.5	1.92	77		6		0--40
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.23	89		63--115	2.5	2.17	87		3		0--40

Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.26	91	54--136	2.5	2.22	89	2	0--40
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.32	93	65--117	2.5	2.35	94	1	0--40
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.5	100	44--114	2.5	2.57	103	3	0--40
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	7.11	95	50--121	7.5	7.27	97	2	0--40
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.29	92	45--133	2.5	2.33	93	2	0--40
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.41	97	33--152	2.5	2.45	98	1	0--40
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.69	108	34--140	2.5	2.77	111	3	0--40
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.16	87	29--134	2.5	2.22	89	3	0--40

MS:WG144726-4 L64921-13 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.024	0.119	ug/L	<MDL	2.43	1.79	74		40--160
Naphthalene	0.024	0.119	ug/L	<MDL	2.43	1.68	69		24--85
Acenaphthylene	0.024	0.119	ug/L	<MDL	2.43	1.92	79		51--103
Acenaphthene	0.024	0.119	ug/L	<MDL	2.43	1.91	79		44--94
Fluorene	0.048	0.238	ug/L	<MDL	2.43	2.19	90		54--113
Phenanthrene	0.048	0.238	ug/L	0.051	2.43	2.45	99		57--108
Anthracene	0.048	0.238	ug/L	<MDL	2.43	2.2	91		50--119
Fluoranthene	0.048	0.238	ug/L	0.089	2.43	2.55	101		58--115
Pyrene	0.048	0.238	ug/L	0.13	2.43	2.7	106		51--142
Benzo(a)anthracene	0.048	0.238	ug/L	<MDL	2.43	2.55	105		62--117
Chrysene	0.048	0.238	ug/L	<MDL	2.43	2.73	112		39--115
Benzo(b,j,k)fluoranthene	0.048	0.238	ug/L	0.074	7.28	7.99	109		45--120
Benzo(a)pyrene	0.048	0.238	ug/L	<MDL	2.43	2.49	103		38--134
Indeno(1,2,3-Cd)Pyrene	0.048	0.238	ug/L	<MDL	2.43	1.92	79		38--130
Dibenzo(a,h)anthracene	0.048	0.238	ug/L	<MDL	2.43	2.07	85		25--138
Benzo(g,h,i)perylene	0.048	0.238	ug/L	<MDL	2.43	1.67	69		25--122

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L64921-1	76	115
L64921-3	63	96
L64921-9	86	109
L64921-11	49	101
L64921-13	85	108
L64921-15	72	97
WG144726-1	60	100
WG144726-2	76	97

WG144726-3	69	99
WG144726-4	83	108

Workgroup: WG144921 (bl#392 pah-sim) Run ID: R210363

MB:WG144921-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L	0.0072	<RDL,B
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG144921-2 MB:WG144921-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.64	66		40--160
Naphthalene	0.005	0.025	ug/L	0.0072	2.5	1.72	68		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.72	69		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.64	65		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.72	69		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	2.08	83		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.92	77		54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.34	94		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.28	91		54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.48	99		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.75	110		44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	7.5	100		50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.44	98		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.75	110		33--152

Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	3.16	126	34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.53	101	29--134

MSD:WG144921-4 MS:WG144921-3 L65007-1 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-240 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueVal	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.17	50		40--160	2.36	0.938	40		22		0--40
Naphthalene	0.0047	0.0236	ug/L	0.0072	2.36	1.12	47		24--85	2.36	0.893	38		22		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.48	63		51--103	2.36	1.32	56		11		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.44	61		44--94	2.36	1.25	53		14		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.62	69		54--113	2.36	1.42	60		14		0--40
Phenanthrene	0.0094	0.0472	ug/L	<MDL	2.36	1.94	82		57--108	2.36	1.77	75		9		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.73	73		50--119	2.36	1.58	67		9		0--40
Fluoranthene	0.0094	0.0472	ug/L	<MDL	2.36	2.08	88		58--115	2.36	2.11	90		2		0--40
Pyrene	0.0094	0.0472	ug/L	0.011	2.36	2.04	86		51--142	2.36	2.08	88		2		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.14	91		62--117	2.36	2.22	94		4		0--40
Chrysene	0.0094	0.0472	ug/L	<MDL	2.36	2.32	98		39--115	2.36	2.39	101		3		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	<MDL	7.08	6.48	92		45--120	7.08	6.73	95		4		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.11	90		38--134	2.36	2.18	93		3		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.2	93		38--130	2.36	2.19	93		1		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.51	106		25--138	2.36	2.5	106		1		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	<MDL	2.36	2	85		25--122	2.36	1.96	83		2		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L64999-1	47	72
L64999-3	43	69
L64999-5	42	70
L64999-7	35	70
L64999-9	53	90
L64999-11	42	70
L64999-13	55	83
L64999-15	50	71
L64999-17	39	69
L65007-1	43	68
L65007-2	46	69
L65007-3	40	65
L65007-4	61	82
L65007-5	41	89

L65007-6	44	64
L65007-7	41	74
L65007-8	40	66
WG144921-1	59	77
WG144921-2	47	75
WG144921-3	52	68
WG144921-4	45	70

Workgroup: WG144946 (Dx DL#442) Run ID: R210465

MB:WG144946-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG144946-2 MB:WG144946-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.817	82		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.998	100		50--150

LD:WG144946-3 L64999-6 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	0.905	0.946	4		0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L64999-2	78	109
L64999-4	79	105
L64999-6	76	106
L64999-8	79	103
L64999-10	82	107
L64999-12	85	106
L64999-14	84	107
L64999-16	85	110
L64999-18	81	106

WG144946-1	89	109
WG144946-2	101	107
WG144946-3	75	108

Workgroup: WG147964 (WTPH-Dx DL#451) Run ID: R214052

MB:WG147964-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG147964-2 MB:WG147964-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.788	79		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.14	114		50--150

LD:WG147964-3 L66123-4 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421196-130 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66123-4	74	103
L66175-2	90	105
L66175-4	90	102
WG147964-1	86	102
WG147964-2	92	109
WG147964-3	88	110

Workgroup: WG147966 (PAH-SIM BL#419) Run ID: R214000

MB:WG147966-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL

Naphthalene	0.005	0.025	ug/L	<MDL
Acenaphthylene	0.005	0.025	ug/L	<MDL
Acenaphthene	0.005	0.025	ug/L	<MDL
Fluorene	0.01	0.05	ug/L	<MDL
Phenanthrene	0.01	0.05	ug/L	<MDL
Anthracene	0.01	0.05	ug/L	<MDL
Fluoranthene	0.01	0.05	ug/L	<MDL
Pyrene	0.01	0.05	ug/L	<MDL
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL
Chrysene	0.01	0.05	ug/L	<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL

SB:WG147966-2 MB:WG147966-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.22	49		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.51	61		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.65	66		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.89	75		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.41	56		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.81	72		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.94	78		54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.7	108		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.66	107		54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.47	99		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.66	106		44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	8.1	108		50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.77	111		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	3.6	144		33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	3.23	129		34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.77	111		29--134

MSD:WG147966-4 MS:WG147966-3 L66175-1 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.33	56		40--160	2.63	1.38	53		4		0--40
Naphthalene	0.0047	0.0236	ug/L	0.007	2.36	1.29	55		24--85	2.63	1.18	45		9		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.68	71		51--103	2.63	1.78	68		5		0--40

Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	2.1	89	44--94	2.63	1.73	66	20	0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	2.01	85	54--113	2.63	2.11	80	5	0--40
Phenanthrene	0.0094	0.0472	ug/L	0.022	2.36	1.86	78	57--108	2.63	1.94	73	4	0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.69	72	50--119	2.63	1.77	67	5	0--40
Fluoranthene	0.0094	0.0472	ug/L	0.03	2.36	2.12	88	58--115	2.63	2.19	82	3	0--40
Pyrene	0.0094	0.0472	ug/L	0.046	2.36	2.64	110	51--142	2.63	2.69	100	2	0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.3	97	62--117	2.63	2.38	90	3	0--40
Chrysene	0.0094	0.0472	ug/L	0.03	2.36	2.59	109	39--115	2.63	2.61	98	1	0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.019	7.08	7.46	105	45--120	7.89	7.66	97	3	0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.48	105	38--134	2.63	2.55	97	3	0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.72	115	38--130	2.63	2.8	106	3	0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.47	105	25--138	2.63	2.53	96	2	0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.014	2.36	1.97	83	25--122	2.63	2	76	2	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66175-1	69	77
L66175-3	65	72
WG147966-1	60	71
WG147966-2	57	72
WG147966-3	67	78
WG147966-4	64	69

Workgroup: WG148302 (PAH-SIM bl#426) Run ID: R214401

MB:WG148302-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL

Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL

SBD:WG148302-3 SB:WG148302-2 MB:WG148302-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueVal	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.27	51		40--160	2.5	1.5	60		17		0--40
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.31	52		15--93	2.5	1.52	61		15		0--40
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.55	62		43--111	2.5	1.57	63		1		0--40
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.71	68		37--99	2.5	1.74	69		2		0--40
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.33	53	*	54--104	2.5	1.27	51	*	5		0--40
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.73	69		54--107	2.5	1.71	68		2		0--40
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.88	75		54--121	2.5	1.89	76		1		0--40
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.29	92		63--115	2.5	2.28	91		1		0--40
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.37	95		54--136	2.5	2.36	94		0		0--40
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.22	89		65--117	2.5	2.22	89		0		0--40
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.54	102		44--114	2.5	2.53	101		1		0--40
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	7.08	94		50--121	7.5	7.07	94		0		0--40
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.48	99		45--133	2.5	2.48	99		0		0--40
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	3.2	128		33--152	2.5	3.24	130		1		0--40
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.84	114		34--140	2.5	2.85	114		1		0--40
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.48	99		29--134	2.5	2.5	100		1		0--40

MS:WG148302-4 L66285-1 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.56	66		40--160
Naphthalene	0.0047	0.0236	ug/L	0.007	2.36	1.43	60		24--85
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.71	73		51--103
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.66	71		44--94
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.87	79		54--113
Phenanthrene	0.0094	0.0472	ug/L	0.012	2.36	1.94	82		57--108
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.8	76		50--119
Fluoranthene	0.0094	0.0472	ug/L	0.013	2.36	2.07	87		58--115
Pyrene	0.0094	0.0472	ug/L	0.02	2.36	2.45	103		51--142
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.33	99		62--117
Chrysene	0.0094	0.0472	ug/L	0.011	2.36	2.57	109		39--115
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.012	7.08	7.51	106		45--120
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.59	110		38--134

Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	3.27	139	*	38--130
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.88	122		25--138
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	<MDL	2.36	2.54	108		25--122

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66285-1	50	69
L66285-3	54	65
WG148302-1	52	72
WG148302-2	53	67
WG148302-3	54	68
WG148302-4	63	75

Workgroup: WG148456 (Dx DL#452) Run ID: R214952

MB:WG148456-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG148456-2 MB:WG148456-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.551	55		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.97	97		50--150

LD:WG148456-3 L66384-4 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.192	0.192	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.192	0.192	mg/L	0.7	0.634	10		0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66327-1	84	105

L66382-10	81	113
L66382-12	77	113
L66382-18	77	102
L66382-20	81	105
L66384-2	74	105
L66384-4	71	105
WG148456-1	87	110
WG148456-2	87	102
WG148456-3	76	105

Workgroup: WG148458 (PAH-SIM bl#430) Run ID: R214553

MB:WG148458-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG148458-2 MB:WG148458-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.41	57		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.53	61		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.72	69		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.85	74		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.45	58		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.85	74		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.99	80		54--121

Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.45	98	63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.58	103	54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.43	97	65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.76	110	44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	7.55	101	50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.67	107	45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	3.46	139	33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	3.12	125	34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.67	107	29--134

MSD:WG148458-4 MS:WG148458-3 L66384-3 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.43	61		40--160	2.36	1.36	58		5		0--40
Naphthalene	0.0047	0.0236	ug/L	0.0075	2.36	1.24	52		24--85	2.36	1.15	48		8		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.78	76		51--103	2.36	1.65	70		8		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.73	73		44--94	2.36	1.59	67		9		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.95	83		54--113	2.36	1.82	77		7		0--40
Phenanthrene	0.0094	0.0472	ug/L	0.012	2.36	1.91	80		57--108	2.36	1.86	78		3		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.78	75		50--119	2.36	1.73	73		3		0--40
Fluoranthene	0.0094	0.0472	ug/L	0.017	2.36	2.02	85		58--115	2.36	1.98	83		2		0--40
Pyrene	0.0094	0.0472	ug/L	0.033	2.36	2.39	100		51--142	2.36	2.35	98		2		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	0.01	2.36	2.23	94		62--117	2.36	2.22	93		1		0--40
Chrysene	0.0094	0.0472	ug/L	0.016	2.36	2.47	104		39--115	2.36	2.44	103		1		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.014	7.08	6.97	98		45--120	7.08	6.92	98		1		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.43	103		38--134	2.36	2.4	102		1		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	3.03	129		38--130	2.36	2.98	126		2		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.75	116		25--138	2.36	2.7	114		2		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.014	2.36	2.35	99		25--122	2.36	2.3	97		2		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66382-9	60	69
L66382-11	41	67
L66382-17	45	73
L66382-19	48	71
L66384-1	43	69
L66384-3	41	74
WG148458-1	55	70

WG148458-2	50	72
WG148458-3	64	72
WG148458-4	61	70

Workgroup: WG148595 (dl#453 wtph-dx) Run ID: R214957

MB:WG148595-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG148595-2 MB:WG148595-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.655	66		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.03	103		50--150

LD:WG148595-3 L66368-1 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421196-170 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40

LD:WG148595-4 L66435-2 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	0.352	0.406	14		0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66368-1	87	103
L66368-2	81	109
L66368-3	81	109
L66368-5	91	107
L66368-6	88	108
L66368-7	88	105
L66368-8	89	106

L66368-9	84	109
L66368-10	85	109
L66368-11	75	108
L66435-2	75	105
L66435-4	89	113
WG148595-1	88	106
WG148595-2	98	109
WG148595-3	91	107
WG148595-4	85	109

Workgroup: WG148652 (bl#434 pah-sim) Run ID: R215206

MB:WG148652-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG148652-2 MB:WG148652-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.46	59		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.58	63		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.66	66		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.48	59		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.45	58		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.79	72		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.76	70		54--121

Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.68	107		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.73	109		54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.72	109		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	3.03	121	*	44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	9.14	122	*	50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.93	117		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.63	105		33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.47	99		34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	1.75	70		29--134

MSD:WG148652-4 MS:WG148652-3 L66435-3 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0048	0.0238	ug/L	<MDL	2.38	1.85	78		40--160	2.4	1.47	61		23		0--40
Naphthalene	0.0048	0.0238	ug/L	0.008	2.38	1.5	63		24--85	2.4	1.41	58		7		0--40
Acenaphthylene	0.0048	0.0238	ug/L	<MDL	2.38	1.79	75		51--103	2.4	1.52	63		17		0--40
Acenaphthene	0.0048	0.0238	ug/L	<MDL	2.38	1.71	72		44--94	2.4	1.41	59		19		0--40
Fluorene	0.0095	0.0476	ug/L	<MDL	2.38	1.96	82		54--113	2.4	1.66	69		17		0--40
Phenanthrene	0.0095	0.0476	ug/L	0.017	2.38	1.98	82		57--108	2.4	1.73	71		13		0--40
Anthracene	0.0095	0.0476	ug/L	<MDL	2.38	1.78	75		50--119	2.4	1.67	70		6		0--40
Fluoranthene	0.0095	0.0476	ug/L	0.025	2.38	2.38	99		58--115	2.4	2.41	99		1		0--40
Pyrene	0.0095	0.0476	ug/L	0.04	2.38	2.91	120		51--142	2.4	2.9	119		0		0--40
Benzo(a)anthracene	0.0095	0.0476	ug/L	0.011	2.38	2.64	110		62--117	2.4	2.69	111		2		0--40
Chrysene	0.0095	0.0476	ug/L	0.026	2.38	2.89	120	*	39--115	2.4	2.94	121	*	2		0--40
Benzo(b,j,k)fluoranthene	0.0095	0.0476	ug/L	0.033	7.14	8.65	121	*	45--120	7.21	8.62	119		0		0--40
Benzo(a)pyrene	0.0095	0.0476	ug/L	<MDL	2.38	2.8	118		38--134	2.4	2.86	119		2		0--40
Indeno(1,2,3-Cd)Pyrene	0.0095	0.0476	ug/L	<MDL	2.38	2.59	109		38--130	2.4	2.5	104		3		0--40
Dibenzo(a,h)anthracene	0.0095	0.0476	ug/L	<MDL	2.38	2.42	102		25--138	2.4	2.34	98		3		0--40
Benzo(g,h,i)perylene	0.0095	0.0476	ug/L	0.012	2.38	1.69	70		25--122	2.4	1.68	70		0		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66435-1	48	87
L66435-3	49	83
L66453-1	41	74
L66453-2	43	74
L66453-3	39	76
L66453-4	62	77
L66453-5	57	83

L66453-6	50	79
L66453-7	59	75
L66453-8	53	76
WG148652-1	63	84
WG148652-2	56	86
WG148652-3	65	88
WG148652-4	61	85

Workgroup: WG148678 (PAH-SIM bl#435) Run ID: R214954

MB:WG148678-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG148678-2 MB:WG148678-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.74	70		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.82	73		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.94	78		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.81	72		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.88	75		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	2.06	82		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	2.04	82		54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.82	113		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.8	112		54--136

Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.73	109		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.9	116	*	44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	8.59	114		50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.96	118		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	3.44	138		33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	3.09	124		34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.55	102		29--134

MSD:WG148678-4 MS:WG148678-3 L66499-3 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-250 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	0.017	2.36	1.45	61		40--160	2.36	1.59	67		10		0--40
Naphthalene	0.0047	0.0236	ug/L	0.0254	2.36	1.31	54		24--85	2.36	1.47	61		11		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.83	78		51--103	2.36	1.78	75		3		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.77	75		44--94	2.36	1.71	72		4		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	2.14	91		54--113	2.36	1.97	84		8		0--40
Phenanthrene	0.0094	0.0472	ug/L	0.028	2.36	2.06	86		57--108	2.36	1.95	81		6		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.88	80		50--119	2.36	1.76	75		7		0--40
Fluoranthene	0.0094	0.0472	ug/L	0.038	2.36	2.28	95		58--115	2.36	2.14	89		7		0--40
Pyrene	0.0094	0.0472	ug/L	0.0598	2.36	2.76	115		51--142	2.36	2.62	109		5		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	0.015	2.36	2.65	112		62--117	2.36	2.48	105		6		0--40
Chrysene	0.0094	0.0472	ug/L	0.035	2.36	2.84	119	*	39--115	2.36	2.73	114		4		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.037	7.08	8.18	115		45--120	7.08	7.68	108		6		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	0.015	2.36	2.83	119		38--134	2.36	2.65	112		7		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	0.011	2.36	3.28	139	*	38--130	2.36	2.98	126		10		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.98	126		25--138	2.36	2.71	115		9		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.02	2.36	2.4	101		25--122	2.36	2.15	90		11		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66498-1	58	81
L66498-3	45	72
L66498-5	55	80
L66498-7	50	77
L66498-9	65	80
L66498-11	57	74
L66498-13	49	77
L66498-15	50	74
L66498-17	64	80

L66498-19	50	82
L66498-22	56	80
L66499-1	63	86
L66499-3	62	79
WG148678-1	66	81
WG148678-2	70	82
WG148678-3	72	87
WG148678-4	68	79

Workgroup: WG148679 (WTPH-Dx DL#454) Run ID: R214971

MB:WG148679-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG148679-2 MB:WG148679-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.682	68		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.07	107		50--150

LD:WG148679-3 L66498-2 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	0.55	0.6	9		0--40

LD:WG148679-4 L66499-2 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	0.508	0.531	4		0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66498-2	83	109
L66498-4	77	112

L66498-6	78	109
L66498-8	88	118
L66498-10	84	111
L66498-12	89	116
L66498-18	89	115
L66498-20	95	116
L66498-23	86	113
L66499-2	88	115
L66499-4	84	113
WG148679-1	93	115
WG148679-2	96	115
WG148679-3	87	116
WG148679-4	86	114

Workgroup: WG149842 (Dx DL#456) Run ID: R216282

MB:WG149842-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SB:WG149842-2 MB:WG149842-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.753	75		50--150
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.07	107		50--150

LD:WG149842-3 L66938-14 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-250 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.189	0.189	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.189	0.189	mg/L	1.48	1.49	1		0--40

LD:WG149842-4 L66910-2 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421874-715 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66910-1	88	109
L66910-2	88	106
L66938-2	83	109
L66938-4	81	108
L66938-6	80	130
L66938-8	78	105
L66938-10	78	114
L66938-12	83	106
L66938-14	83	106
L66938-16	85	106
L66938-18	88	113
L66938-20	89	111
L66938-23	86	110
WG149842-1	89	107
WG149842-2	98	107
WG149842-3	85	105
WG149842-4	82	105

Workgroup: WG149895 (PAH-SIM BL#453) Run ID: R216534

MB:WG149895-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL

Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL

SB:WG149895-2 MB:WG149895-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.38	55		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.4	56		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.66	67		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.6	64		37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.77	71		54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.92	77		54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.8	72		54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.22	89		63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.13	85		54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.19	87		65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.21	88		44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	7.1	95		50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.11	85		45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.32	93		33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.31	92		34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.31	93		29--134

MSD:WG149895-4 MS:WG149895-3 L66937-5 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-240 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	0.043	2.36	1.48	61		40--160	2.36	1.43	59		3		0--40
Naphthalene	0.0047	0.0236	ug/L	0.0563	2.36	1.32	53		24--85	2.36	1.27	51		4		0--40
Acenaphthylene	0.0047	0.0236	ug/L	0.0099	2.36	1.68	71		51--103	2.36	1.76	74		4		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.77	75		44--94	2.36	1.81	77		2		0--40
Fluorene	0.0094	0.0472	ug/L	0.012	2.36	2.43	103		54--113	2.36	2.44	103		0		0--40
Phenanthrene	0.0094	0.0472	ug/L	0.0684	2.36	2.19	90		57--108	2.36	2.12	87		3		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.97	83		50--119	2.36	1.9	81		3		0--40
Fluoranthene	0.0094	0.0472	ug/L	0.0831	2.36	2.11	86		58--115	2.36	2.04	83		3		0--40
Pyrene	0.0094	0.0472	ug/L	0.125	2.36	2.19	88		51--142	2.36	2.09	83		5		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	0.018	2.36	2.12	89		62--117	2.36	2.03	85		4		0--40
Chrysene	0.0094	0.0472	ug/L	0.0665	2.36	2.18	90		39--115	2.36	2.08	86		5		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.0667	7.08	6.58	92		45--120	7.08	6.3	88		4		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	0.024	2.36	2.02	85		38--134	2.36	1.94	81		4		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	0.019	2.36	1.98	83		38--130	2.36	1.76	74		11		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.98	84		25--138	2.36	1.78	75		11		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.0492	2.36	1.91	79		25--122	2.36	1.66	68		14		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L66937-1	53	91
L66937-2	55	96
L66937-3	57	99
L66937-4	83	102
L66937-5	64	107
L66937-6	70	106
L66937-7	56	103
L66937-8	52	100
L66938-1	83	103
L66938-3	59	101
L66938-5	74	103
L66938-7	54	96
L66938-9	93	106
L66938-11	67	100
L66938-13	72	102
L66938-15	69	98
L66938-17	91	99
L66938-19	84	95
L66938-22	84	101
L66963-1	85	95
WG149895-1	73	100
WG149895-2	66	101
WG149895-3	83	101
WG149895-4	85	97

Workgroup: WG150220 (dl#457 wtph-dx) Run ID: R216935

MB:WG150220-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SBD:WG150220-3 SB:WG150220-2 MB:WG150220-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueVal	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit

Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.851	85	50--150	1	0.753	75	12	0--40
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.03	103	50--150	1	1.06	106	3	0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L66936-1	85	106
L67070-2	84	120
L67070-4	80	103
L67070-6	83	106
L67070-8	85	107
L67070-10	90	112
L67070-12	83	108
L67070-27	83	105
WG150220-1	85	102
WG150220-2	109	108
WG150220-3	97	103

Workgroup: WG150221 (bl#462 pah-sim) Run ID: R216893

MB:WG150221-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

LIMSView QC Report for SAM Echo Lake Stormwater Treatment Study - Data Validation

SBD:WG150221-3 SB:WG150221-2 MB:WG150221-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValu	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.42	57		40--160	2.5	1.44	58		1		0--40
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.43	57		15--93	2.5	1.43	57		0		0--40
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.74	70		43--111	2.5	1.69	68		3		0--40
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.7	68		37--99	2.5	1.67	67		2		0--40
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.83	73		54--104	2.5	1.78	71		3		0--40
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.89	76		54--107	2.5	1.88	75		0		0--40
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.97	79		54--121	2.5	1.95	78		1		0--40
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.06	82		63--115	2.5	2.1	84		2		0--40
Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.97	79		54--136	2.5	2.02	81		2		0--40
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	1.99	80		65--117	2.5	2.06	82		4		0--40
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.03	81		44--114	2.5	2.1	84		3		0--40
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	6.3	84		50--121	7.5	6.49	87		3		0--40
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2	80		45--133	2.5	2.06	82		3		0--40
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.1	84		33--152	2.5	2.17	87		3		0--40
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.1	84		34--140	2.5	2.18	87		4		0--40
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.08	83		29--134	2.5	2.16	86		4		0--40

MS:WG150221-4 L67069-1 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-240 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	0.0077	2.36	0.997	42		40--160
Naphthalene	0.0047	0.0236	ug/L	0.014	2.36	0.901	38		24--85
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.33	56		51--103
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.38	59		44--94
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.88	80		54--113
Phenanthrene	0.0094	0.0472	ug/L	0.015	2.36	1.87	79		57--108
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.74	74		50--119
Fluoranthene	0.0094	0.0472	ug/L	0.015	2.36	1.87	79		58--115
Pyrene	0.0094	0.0472	ug/L	0.022	2.36	1.88	79		51--142
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.87	79		62--117
Chrysene	0.0094	0.0472	ug/L	<MDL	2.36	1.93	82		39--115
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	0.011	7.08	5.91	83		45--120
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.86	79		38--134
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.93	82		38--130
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.92	81		25--138
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	0.012	2.36	1.94	82		25--122

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L67069-1	55	90
L67069-2	54	87
L67069-3	53	85
L67069-4	61	89
L67069-5	59	91
L67069-6	53	85
L67069-7	51	84
L67069-8	53	89
L67070-1	78	95
L67070-3	55	91
L67070-5	82	97
L67070-7	57	86
L67070-9	83	98
L67070-11	72	94
L67070-26	66	91
WG150221-1	79	92
WG150221-2	70	91
WG150221-3	69	95
WG150221-4	67	90

Workgroup: WG150368 (Dx DL#458) Run ID: R216992

MB:WG150368-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diesel Range (>C12-C24)	0.2	0.2	mg/L		<MDL
Lube Oil Range (>C24)	0.2	0.2	mg/L		<MDL

SBD:WG150368-3 SB:WG150368-2 MB:WG150368-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueVal	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.603	60		50--150	1	0.619	62		3		0--40
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.04	104		50--150	1	1.08	108		4		0--40

Surrogate:	2-Fluorobiphenyl	Pentacosane
(Lab Limits)	50--150	50--150
L67140-2	87	113
L67140-4	81	105
L67140-6	88	113
L67140-8	83	110
WG150368-1	85	106
WG150368-2	95	107
WG150368-3	99	109

Workgroup: WG150370 (PAH-SIM BL#468) Run ID: R216867

MB:WG150370-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG150370-2 MB:WG150370-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.44	58		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.42	57		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.64	66		43--111
Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.63	65		37--99

Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.87	75	54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.93	77	54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	2.1	84	54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.3	92	63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.96	79	54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.07	83	65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.11	84	44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	6.67	89	50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	2.1	84	45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	2.2	88	33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.22	89	34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	2.19	88	29--134

MSD:WG150370-4 MS:WG150370-3 L67141-4 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-240 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.45	62		40--160	2.36	1.48	63		2		0--40
Naphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.4	59		24--85	2.36	1.44	61		3		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.55	66		51--103	2.36	1.55	66		0		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.56	66		44--94	2.36	1.55	66		0		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.93	82		54--113	2.36	1.97	84		2		0--40
Phenanthrene	0.0094	0.0472	ug/L	<MDL	2.36	1.86	79		57--108	2.36	1.88	80		1		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.79	76		50--119	2.36	1.82	77		1		0--40
Fluoranthene	0.0094	0.0472	ug/L	<MDL	2.36	2.01	85		58--115	2.36	2.05	87		2		0--40
Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2	85		51--142	2.36	1.98	84		1		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.03	86		62--117	2.36	2.01	85		1		0--40
Chrysene	0.0094	0.0472	ug/L	<MDL	2.36	2.02	86		39--115	2.36	2.02	86		0		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	<MDL	7.08	6.34	90		45--120	7.08	6.29	89		1		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.04	86		38--134	2.36	2.01	85		1		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	2.15	91		38--130	2.36	2.1	89		2		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.16	92		25--138	2.36	2.12	90		2		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	<MDL	2.36	2.12	90		25--122	2.36	2.08	88		2		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L67140-1	87	105
L67140-3	64	97
L67140-5	87	108
L67140-7	59	98

L67141-1	54	100
L67141-2	45	98
L67141-3	57	97
L67141-4	76	98
L67141-5	82	99
L67141-6	55	94
L67141-7	56	97
L67141-8	66	96
L67141-17	70	97
WG150370-1	63	98
WG150370-2	79	102
WG150370-3	81	106
WG150370-4	79	106

Workgroup: WG151046 (bl#484 pah-sim) Run ID: R217631

MB:WG151046-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
2-Methylnaphthalene	0.005	0.025	ug/L		<MDL
Naphthalene	0.005	0.025	ug/L		<MDL
Acenaphthylene	0.005	0.025	ug/L		<MDL
Acenaphthene	0.005	0.025	ug/L		<MDL
Fluorene	0.01	0.05	ug/L		<MDL
Phenanthrene	0.01	0.05	ug/L		<MDL
Anthracene	0.01	0.05	ug/L		<MDL
Fluoranthene	0.01	0.05	ug/L		<MDL
Pyrene	0.01	0.05	ug/L		<MDL
Benzo(a)anthracene	0.01	0.05	ug/L		<MDL
Chrysene	0.01	0.05	ug/L		<MDL
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L		<MDL
Benzo(a)pyrene	0.01	0.05	ug/L		<MDL
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L		<MDL
Dibenzo(a,h)anthracene	0.01	0.05	ug/L		<MDL
Benzo(g,h,i)perylene	0.01	0.05	ug/L		<MDL

SB:WG151046-2 MB:WG151046-1 Matrix: BLANK WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
2-Methylnaphthalene	0.005	0.025	ug/L	<MDL	2.5	1.58	63		40--160
Naphthalene	0.005	0.025	ug/L	<MDL	2.5	1.43	57		15--93
Acenaphthylene	0.005	0.025	ug/L	<MDL	2.5	1.41	56		43--111

Acenaphthene	0.005	0.025	ug/L	<MDL	2.5	1.58	63	37--99
Fluorene	0.01	0.05	ug/L	<MDL	2.5	1.6	64	54--104
Phenanthrene	0.01	0.05	ug/L	<MDL	2.5	1.64	65	54--107
Anthracene	0.01	0.05	ug/L	<MDL	2.5	1.64	66	54--121
Fluoranthene	0.01	0.05	ug/L	<MDL	2.5	2.07	83	63--115
Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.88	75	54--136
Benzo(a)anthracene	0.01	0.05	ug/L	<MDL	2.5	1.83	73	65--117
Chrysene	0.01	0.05	ug/L	<MDL	2.5	2.11	84	44--114
Benzo(b,j,k)fluoranthene	0.01	0.05	ug/L	<MDL	7.5	5.72	76	50--121
Benzo(a)pyrene	0.01	0.05	ug/L	<MDL	2.5	1.86	75	45--133
Indeno(1,2,3-Cd)Pyrene	0.01	0.05	ug/L	<MDL	2.5	1.92	77	33--152
Dibenzo(a,h)anthracene	0.01	0.05	ug/L	<MDL	2.5	2.13	85	34--140
Benzo(g,h,i)perylene	0.01	0.05	ug/L	<MDL	2.5	1.85	74	29--134

MSD:WG151046-4 MS:WG151046-3 L67443-4 Matrix: STORM WTR Listtype:ORPAH-SIM Method:SW846 3520C*SW846 8270D SIM Project:421879-240 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValu	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
2-Methylnaphthalene	0.0047	0.0236	ug/L	<MDL	2.36	1.25	53		40--160	2.36	1.15	49		8		0--40
Naphthalene	0.0047	0.0236	ug/L	<MDL	2.36	0.957	41		24--85	2.36	0.897	38		6		0--40
Acenaphthylene	0.0047	0.0236	ug/L	<MDL	2.36	1.07	45	*	51--103	2.36	1.07	45	*	1		0--40
Acenaphthene	0.0047	0.0236	ug/L	<MDL	2.36	1.2	51		44--94	2.36	1.22	52		2		0--40
Fluorene	0.0094	0.0472	ug/L	<MDL	2.36	1.36	58		54--113	2.36	1.42	60		4		0--40
Phenanthrene	0.0094	0.0472	ug/L	<MDL	2.36	1.49	63		57--108	2.36	1.49	63		0		0--40
Anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.4	59		50--119	2.36	1.4	59		0		0--40
Fluoranthene	0.0094	0.0472	ug/L	<MDL	2.36	1.81	77		58--115	2.36	1.76	74		3		0--40
Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.79	76		51--142	2.36	1.74	74		3		0--40
Benzo(a)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	1.81	77		62--117	2.36	1.76	74		3		0--40
Chrysene	0.0094	0.0472	ug/L	<MDL	2.36	1.99	85		39--115	2.36	1.96	83		2		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0472	ug/L	<MDL	7.08	5.51	78		45--120	7.08	5.32	75		3		0--40
Benzo(a)pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.8	76		38--134	2.36	1.77	75		2		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0472	ug/L	<MDL	2.36	1.85	78		38--130	2.36	1.83	78		1		0--40
Dibenzo(a,h)anthracene	0.0094	0.0472	ug/L	<MDL	2.36	2.05	87		25--138	2.36	2.02	86		1		0--40
Benzo(g,h,i)perylene	0.0094	0.0472	ug/L	<MDL	2.36	1.79	76		25--122	2.36	1.75	74		2		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	33--96	63--125
L67413-1	31 *	82
L67443-1	30 *	74
L67443-2	28 *	75

L67443-3	32 *		77
L67443-4	29 *		75
L67443-5		36	74
L67443-6		33	73
L67443-7	30 *		75
WG151046-1		56	77
WG151046-2		56	75
WG151046-3		46	74
WG151046-4		48	71

Workgroup: WG154875 (Shoreline-Echo Lake Stormwater Monitorin) Run ID: R222183

PC:WG154875-1 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Escherichia coli			CFU/100ml		PASS

NC:WG154875-2 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Escherichia coli			CFU/100ml		PASS

BF:WG154875-3 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

AF:WG154875-4 Matrix: BLANK WTR Listtype:MCMODEC-MF Method:SM9213D/3B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Escherichia coli		1	CFU/100ml		<MDL,PASS

==========

If the following parameters are reported, values in the RPD column are actually Absolute Differences:

- pH, Field
- Salinity, Field
- Sample Depth
- Sample Temperature, Field

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Appendix G3:
PCB Data Validation

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

King County Environmental Laboratory
322 W. Ewing Street
Seattle WA 98119
ATTN: Mr. Fritz Grothkopp

September 9, 2016

SUBJECT: LDW Shoreline-Echo Lake SW Eff Monitoring, Data Validation

Dear Mr. Grothkopp,

Enclosed is the final validation report for the fraction listed below. This SDG was received on August 18, 2016. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #36925:

SDG #	**Fraction**
PR161861	Polychlorinated Biphenyls as Congeners

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin-RSMP Effectiveness Study, June 2015
- US Environmental Protection Agency Region 10 SOP for the Validation of Polychlorinated Biphenyl Data, Revision 1.0, December 8, 1995

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Operations Manager/Senior Chemist

579 pages-SF

Attachment 1

Level III EDD

LDC #36925 (King County - Seattle WA / LDW Shoreline-Echo Lake SW Eff Monitoring)

Project #421879-250

LDC	SDG#	DATE REC'D	(3) DATE DUE	PCB Cong. (1668C)																															
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	PR161861	08/18/16	09/09/16	20	0																														
Total	T/SC			20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

L:\King County\Duwamish\Shorline-Echo Lake\36925ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: LDW Shoreline-Echo Lake SW Eff Monitoring

LDC Report Date: September 7, 2016

Parameters: Polychlorinated Biphenyls as Congeners

Validation Level: Level III

Laboratory: Pacific Rim Laboratories, Inc.

Sample Delivery Group (SDG): PR161861

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
L64379-2	PR161861	Water	12/08/15
L64379-4	PR161862	Water	12/08/15
L64648-1	PR161863	Water	01/21/16
L64648-3	PR161864	Water	01/21/16
L64648-5	PR161865	Water	01/21/16
L64648-7	PR161866	Water	01/21/16
L64648-9	PR161867	Water	01/21/16
L64921-1	PR161868	Water	03/01/16
L64921-3	PR161869	Water	03/01/16
L64921-9	PR161870	Water	03/01/16
L64921-11	PR161871	Water	03/01/16
L64999-1	PR161872	Water	03/09/16
L64999-3	PR161873	Water	03/09/16
L64999-5	PR161874	Water	03/09/16
L64999-7	PR161875	Water	03/09/16
L64999-9	PR161876	Water	03/09/16
L64999-11	PR161877	Water	03/09/16
L64999-13	PR161878	Water	03/09/16
L64999-15	PR161879	Water	03/09/16
L64999-17	PR161880	Water	03/09/16
L64921-9DUP	PR161870DUP	Water	03/01/16
L64999-17DUP	PR161880DUP	Water	03/09/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin-RSMP Effectiveness Study (June 2015) and US Environmental Protection Agency (EPA) Region 10 SOP for the Validation of Polychlorinated Biphenyl (PCB) Data (Revision 1.0, December 8, 1995). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) as Congeners by Environmental Protection Agency (EPA) Method 1668C

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

- J1 Blank Contamination: Indicates possible high bias and/or false positives.
- J2 Calibration Range exceeded: Indicates possible low bias.
- J3 Holding times not met: Indicates low bias for most analytes.
- J4 Other QC parameters outside control limits: bias not readily determined.
- J5 Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
- J6 Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required frequency.

The static resolving power was at least 10,000 (10% valley definition).

III. Initial Calibration and Initial Calibration Verification

A five point initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration results were within the QC limits for unlabeled compounds and labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
MBFS07131605	06/28/16	PCB-002 Monochlorobiphenyls	21.5 pg/L 21.5 pg/L	L64999-1 L64999-3 L64999-5 L64999-7 L64999-9 L64999-11 L64999-13 L64999-15 L64999-17 L64999-17DUP

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
MBFS07111608	06/26/16	PCB-011 PCB-194 Dichlorobiphenyls Octachlorobiphenyls	41.4 pg/L 0.49 pg/L 41.4 pg/L 0.5 pg/L	L64379-2 L64379-4 L64648-1 L64648-3 L64648-5 L64648-7 L64648-9 L64921-1 L64921-3 L64921-9 L64921-11 L64921-9DUP

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L64999-17	Monochlorobiphenyls	6.7 pg/L	6.7J pg/L
L64999-17DUP	Monochlorobiphenyls	6.8 pg/L	6.8J pg/L
L64379-2	PCB-011 Dichlorobiphenyls	37.3 pg/L 37.3 pg/L	37.3U pg/L 37.3J pg/L
L64379-4	PCB-011 Dichlorobiphenyls	35.2 pg/L 35.2 pg/L	35.2U pg/L 35.2J pg/L
L64648-1	PCB-011 Dichlorobiphenyls	45.6 pg/L 67.8 pg/L	45.6U pg/L 67.8J pg/L
L64648-5	PCB-011 Dichlorobiphenyls	36 pg/L 46 pg/L	36U pg/L 46J pg/L
L64921-1	PCB-011 Dichlorobiphenyls	135 pg/L 135 pg/L	135U pg/L 135J pg/L

Laboratory blank results flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC) are considered not detected.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Internal Standards

All internal standard recoveries (%R) were within QC limits.

XI. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG PR161861	All compounds flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC).	U	A

Raw data were not reviewed for Level III validation.

XII. Target Compound Identification

Raw data were not reviewed for Level III validation.

XIII. System Performance

Raw data were not reviewed for Level III validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results reported by the laboratory as EMPCs, data were qualified as not detected in twenty samples.

Due to laboratory blank contamination, data were qualified as not detected or estimated in seven samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

LDW Shoreline-Echo Lake SW Eff Monitoring
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG PR161861

Sample	Compound	Flag	A or P	Reason
L64379-2 L64379-4 L64648-1 L64648-3 L64648-5 L64648-7 L64648-9 L64921-1 L64921-3 L64921-9 L64921-11 L64999-1 L64999-3 L64999-5 L64999-7 L64999-9 L64999-11 L64999-13 L64999-15 L64999-17	All compounds flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC).	U	A	Compound quantitation (EMPC)

LDW Shoreline-Echo Lake SW Eff Monitoring
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG PR161861

Sample	Compound	Modified Final Concentration	A or P
L64999-17	Monochlorobiphenyls	6.7J pg/L	A
L64999-17DUP	Monochlorobiphenyls	6.8J pg/L	A
L64379-2	PCB-011 Dichlorobiphenyls	37.3U pg/L 37.3J pg/L	A
L64379-4	PCB-011 Dichlorobiphenyls	35.2U pg/L 35.2J pg/L	A
L64648-1	PCB-011 Dichlorobiphenyls	45.6U pg/L 67.8J pg/L	A
L64648-5	PCB-011 Dichlorobiphenyls	36U pg/L 46J pg/L	A
L64921-1	PCB-011 Dichlorobiphenyls	135U pg/L 135J pg/L	A

LDC #: 36925A31

SDG #: PR161861

Laboratory: Pacific Rim Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 8/25/16

Page: 1 of 2

Reviewer: Q

2nd Reviewer: A

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration/~~IV~~	A, N	RSD < 20/35% (tab unlab/Labeled)
IV.	Continuing calibration	A	QC limits
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates ~~/Dup~~	N/A	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
X.	Internal standards	A	
XI.	Compound quantitation RL/LOQ/LODs	SW	N or NJ – EMPC
XII.	Target compound identification	N	
XIII.	System performance	N	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	L64379-2	PR161861	Water	12/08/15
2	L64379-4	PR161862	Water	12/08/15
3	L64648-1	PR161863	Water	01/21/16
4	L64648-3	PR161864	Water	01/21/16
5	L64648-5	PR161865	Water	01/21/16
6	L64648-7	PR161866	Water	01/21/16
7	L64648-9	PR161867	Water	01/21/16
8	L64921-1	PR161868	Water	03/01/16
9	L64921-3	PR161869	Water	03/01/16
10	L64921-9	PR161870	Water	03/01/16
11	L64921-11	PR161871	Water	03/01/16
12	L64999-1	PR161872	Water	03/09/16
13	L64999-3	PR161873	Water	03/09/16
14	L64999-5	PR161874	Water	03/09/16
15	L64999-7	PR161875	Water	03/09/16

LDC #: 36925A31

SDG #: PR161861

Laboratory: Pacific Rim Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 8/25/16

Page: 2 of 2

Reviewer: Q

2nd Reviewer: A

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668C)

	Client ID	Lab ID	Matrix	Date
16	L64999-9	PR161876	Water	03/09/16
17	L64999-11	PR161877	Water	03/09/16
18	L64999-13	PR161878	Water	03/09/16
19	L64999-15	PR161879	Water	03/09/16
20	L64999-17	PR161880	Water	03/09/16
21	L64921-9DUP	PR161870DUP	Water	03/01/16
22	L64999-17DUP	PR161880DUP	Water	03/09/16
23				
24				
25				
26				
27				

Notes:

LDC #: 36925A31

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Blank extraction date: 6/28/16 **Blank analysis date:** 7/13/16
Conc. units: pg/L **Associated samples:** 12 - 20, 22 Qualify U

Compound	Blank ID	Sample Identification									
	MBFS07131605	5x	20	22							
PCB-002	21.5	107.5									
Monochlorobiphenyls	21.5	107.5	6.7J	6.8J							

Laboratory blank results flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC) are considered not detected.

All contaminants within five times the blank concentration were qualified as not detected, "U".

Privileged and Confidential

LDC #: 36925A31

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: R
2nd Reviewer: AC

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Blank extraction date: 6/26/16 **Blank analysis date:** 7/11/16
Conc. units: pg/L **Associated samples:** 1-11, 21 Qualify U

Compound	Blank ID	Sample Identification										
	MBFS07111608	5x	1	2	3	5	8					
PCB-011	41.4	207	37.3	35.2	45.6	36	135					
PCB-194	0.49	2.45										
Dichlorobiphenyls	41.4	207	37.3J	35.2J	67.8J	46J	135J					
Octachlorobiphenyls	0.5	2.5										

Laboratory blank results flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC) are considered not detected.

All contaminants within five times the blank concentration were qualified as not detected, "U".

Privileged and Confidential

LDC #: 36925

EDD POPULATION COMPLETENESS WORKSHEET

Date: 9/9/16
Page: 1 of 1
2nd Reviewer: [illegible]

The LDC job number listed above was entered by JL.

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	-10% or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	—	
IIb.	- Reason Codes used? If so, note which codes	Y	LDC
IIc.	-Additional Information (QC Level, Validator, Date, Validated Y/N, etc.)	—	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (i.e. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (i.e. J)?	Y	
IIIc.	- If reason codes used, do all qualified results have reason code field populated?	Y	
IIId.	-Does the detect flag require changing for blank qualifiers? If so, are all U results marked ND?	—	
IIIe.	- Do blank concentrations in report match EDD, where data was qualified due to blank?	Y	
IIIf.	- Were any results rejected for overall assessment? If so, were results changed to nonreportable?	—	
IIIg.	- Is the readme complete? If applicable, were edits or discrepancies listed in the readme?	Y	

Notes: _____

The zip file provided contains two files:

File	Format	Description	
1) Readme_Shoreline_090916.docx	MS Word 2007	A "Readme" file (this document).	
	MS Excel 2007	SDG	LDC#
2) EDD Shoreline-Echo Lake SW Eff Monitoring 421879-250 - PR161861-1880.xlsx		PR161861	36925A

No discrepancies were observed between the hardcopy data packages and the electronic data deliverables during EDD population of validation qualifiers. A 100% verification of the EDD was not performed.

Please contact Stella Cuenco at (760) 827-1100 if you have any questions regarding this electronic data submittal.

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

King County Environmental Laboratory
322 W. Ewing Street
Seattle WA 98119
ATTN: Mr. Fritz Grothkopp

May 5, 2017

SUBJECT: LDW Shoreline-Echo Lake SW Eff Monitoring, Data Validation

Dear Mr. Grothkopp,

Enclosed is the final validation report for the fraction listed below. This SDG was received on August 18, 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #38487:

SDG #	**Fraction**
PR164565	Polychlorinated Biphenyls as Congeners

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin-RSMP Effectiveness Study, June 2015
- US Environmental Protection Agency Region 10 SOP for the Validation of Polychlorinated Biphenyl Data, Revision 1.0, December 8, 1995

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Operations Manager/Senior Chemist

649 pages-SF

Attachment 1

Level III EDD

LDC #38487 (King County - Seattle WA / LDW Shoreline-Echo Lake SW Eff Monitoring)

Project #421879-250

LDC	SDG#	DATE REC'D	(3) DATE DUE	PCB Cong. (1668C)																																	
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	PR164565	04/18/17	05/09/17	18	0																																
Total	T/SC			18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

L:\King County\Duwamish\Shoreline-Echo Lake\38487ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: LDW Shoreline-Echo Lake SW Eff Monitoring

LDC Report Date: May 5, 2017

Parameters: Polychlorinated Biphenyls as Congeners

Validation Level: Level III

Laboratory: Pacific Rim Laboratories, Inc.

Sample Delivery Group (SDG): PR164565

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
L66175-1	PR164565	Water	09/17/16
L66175-3	PR164566	Water	09/17/16
L66285-1	PR164567	Water	10/06/16
L66285-3	PR164568	Water	10/09/16
L66382-9	PR164569	Water	10/13/16
L66382-11	PR164570	Water	10/13/16
L66382-17	PR164571	Water	10/13/16
L66382-19	PR164572	Water	10/13/16
L66384-1	PR164573	Water	10/13/16
L66384-3	PR164574	Water	10/13/16
L66435-1	PR164575	Water	10/19/16
L66435-3	PR164576	Water	10/19/16
L66498-9	PR164598	Water	10/26/16
L66498-11	PR164599	Water	10/26/16
L66498-13	PR164600	Water	10/26/16
L66498-15	PR164601	Water	10/26/16
L66498-17	PR164602	Water	10/26/16
L66498-19	PR164603	Water	10/26/16
L66285-3DUP	PR164568DUP	Water	10/09/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin-RSMP Effectiveness Study (June 2015) and US Environmental Protection Agency (EPA) Region 10 SOP for the Validation of Polychlorinated Biphenyl (PCB) Data (Revision 1.0, December 8, 1995). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) as Congeners by Environmental Protection Agency (EPA) Method 1668C

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

- J1 Blank Contamination: Indicates possible high bias and/or false positives.
- J2 Calibration Range exceeded: Indicates possible low bias.
- J3 Holding times not met: Indicates low bias for most analytes.
- J4 Other QC parameters outside control limits: bias not readily determined.
- J5 Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
- J6 Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

The chain-of-custodies were reviewed for documentation of temperatures. Although the cooler temperature was reported at 9.5°C upon receipt by the laboratory, no data was qualified based on the cooler temperature since the temperature was below the validation criteria of 10°C.

All technical holding time requirements were met.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required frequency.

The static resolving power was at least 10,000 (10% valley definition).

III. Initial Calibration and Initial Calibration Verification

A five point initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration results were within the QC limits for unlabeled compounds and labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
MBPC170001B	01/04/17	PCB-003	1.58 pg/L	L66175-1
		PCB-005/008	7.07 pg/L	L66175-3
		PCB-011	46 pg/L	L66285-1
		PCB-018	8.67 pg/L	L66285-3
		PCB-017	3.9 pg/L	L66382-9
		PCB-031	7.71 pg/L	L66382-11
		PCB-028	8.18 pg/L	L66382-17
		PCB-020/033	3.39 pg/L	L66382-19
		PCB-022	2.6 pg/L	L66384-1
		PCB-052/069	10.3 pg/L	L66384-3
		PCB-159	1.4 pg/L	L66435-1
		PCB-194	18.4 pg/L	L66435-3
		Monochlorobiphenyls	1.6 pg/L	L66285-3DUP
		Dichlorobiphenyls	53.1 pg/L	
		Trichlorobiphenyls	34.5 pg/L	
		Tetrachlorobiphenyls	10.3 pg/L	
		Hexachlorobiphenyls	1.4 pg/L	
		Octachlorobiphenyls	18.4 pg/L	
MBPC170012B	01/10/17	PCB-005/008	6.1 pg/L	L66498-9
		PCB-011	34.5 pg/L	L66498-11
		PCB-018	9.87 pg/L	L66498-13
		PCB-031	5.29 pg/L	L66498-15
		PCB-028	5.07 pg/L	L66498-17
		PCB-020/033	3.25 pg/L	L66498-19
		PCB-022	2.54 pg/L	
		PCB-052/069	6.17 pg/L	
		PCB-047/048	4.15 pg/L	
		PCB-044	5.01 pg/L	
		PCB-070	4.8 pg/L	
		PCB-093/098/095	7.45 pg/L	
		PCB-101	7.77 pg/L	
		PCB-118	2.08 pg/L	
		PCB-139/149	6.34 pg/L	
		PCB-153	2.99 pg/L	
		PCB-138	5.69 pg/L	
		PCB-156	1.98 pg/L	
		PCB-182/187	6.36 pg/L	
		PCB-180	37 pg/L	
		PCB-201	1.84 pg/L	
		PCB-199	8.78 pg/L	
		PCB-203	7.14 pg/L	
		PCB-194	6.56 pg/L	
		PCB-205	2.27 pg/L	
		PCB-209	6.97 pg/L	
		Dichlorobiphenyls	40.6 pg/L	
		Trichlorobiphenyls	26 pg/L	
		Tetrachlorobiphenyls	20.1 pg/L	
		Pentachlorobiphenyls	17.3 pg/L	
		Hexachlorobiphenyls	17 pg/L	
		Heptachlorobiphenyls	43.4 pg/L	
		Octachlorobiphenyls	26.6 pg/L	
		Decachlorobiphenyl	7 pg/L	

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L66175-1	PCB-011	184 pg/L	184U pg/L
	PCB-031	27.4 pg/L	27.4U pg/L
	PCB-028	27 pg/L	27U pg/L
	PCB-052/069	39.8 pg/L	39.8U pg/L
	Dichlorobiphenyls	184 pg/L	184U pg/L
	Trichlorobiphenyls	65.3 pg/L	65.3J pg/L
	Octachlorobiphenyls	78.6 pg/L	78.6J pg/L
L66175-3	PCB-011	131 pg/L	131U pg/L
	PCB-031	38.2 pg/L	38.2U pg/L
	PCB-028	25.4 pg/L	25.4U pg/L
	PCB-022	8.62 pg/L	8.62U pg/L
	PCB-052/069	41 pg/L	41U pg/L
	PCB-194	52.5 pg/L	52.5U pg/L
	Dichlorobiphenyls	131 pg/L	131U pg/L
	Trichlorobiphenyls	125 pg/L	125J pg/L
L66285-1	PCB-003	4.52 pg/L	4.52U pg/L
	PCB-005/008	18.3 pg/L	18.3U pg/L
	PCB-011	91.4 pg/L	91.4U pg/L
	PCB-018	9.48 pg/L	9.48U pg/L
	PCB-031	16.6 pg/L	16.6U pg/L
	PCB-028	15.9 pg/L	15.9U pg/L
	PCB-020/033	9.47 pg/L	9.47U pg/L
	PCB-052/069	27.6 pg/L	27.6U pg/L
	PCB-194	31 pg/L	31U pg/L
	Dichlorobiphenyls	115 pg/L	115J pg/L
	Trichlorobiphenyls	67.8 pg/L	67.8J pg/L
L66285-3	PCB-011	65.2 pg/L	65.2U pg/L
	PCB-031	8.73 pg/L	8.73U pg/L
	PCB-028	9.23 pg/L	9.23U pg/L
	PCB-052/069	25 pg/L	25U pg/L
	Dichlorobiphenyls	65.2 pg/L	65.2U pg/L
	Trichlorobiphenyls	18 pg/L	18U pg/L
L66285-3DUP	PCB-011	53.9 pg/L	53.9U pg/L
	PCB-031	12.3 pg/L	12.3U pg/L
	Dichlorobiphenyls	53.9 pg/L	53.9U pg/L
	Trichlorobiphenyls	18.4 pg/L	18.4J pg/L
L66382-9	PCB-011	133 pg/L	133U pg/L
	PCB-031	13.3 pg/L	13.3U pg/L
	PCB-028	20.9 pg/L	20.9U pg/L
	PCB-020/033	12.3 pg/L	12.3U pg/L
	PCB-052/069	47 pg/L	47U pg/L
	PCB-194	46.5 pg/L	46.5U pg/L
	Dichlorobiphenyls	133 pg/L	133U pg/L
	Trichlorobiphenyls	46.5 pg/L	46.5U pg/L
L66382-11	PCB-018	20.6 pg/L	20.6U pg/L
	PCB-020/033	2.57 pg/L	2.57U pg/L
	PCB-052/069	10 pg/L	10U pg/L
	PCB-194	91.3 pg/L	91.3U pg/L
	Trichlorobiphenyls	29.7 pg/L	29.7J pg/L
	Tetrachlorobiphenyls	17.8 pg/L	17.8J pg/L
	Octachlorobiphenyls	91.3 pg/L	91.3U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L66382-17	PCB-003	4.73 pg/L	4.73U pg/L
	PCB-011	151 pg/L	151U pg/L
	PCB-018	4.14 pg/L	4.14U pg/L
	PCB-031	14.4 pg/L	14.4U pg/L
	PCB-028	14.7 pg/L	14.7U pg/L
	PCB-020/033	10 pg/L	10U pg/L
	PCB-022	7.88 pg/L	7.88U pg/L
	PCB-052/069	29.3 pg/L	29.3U pg/L
	PCB-194	38.3 pg/L	38.3U pg/L
	Monochlorobiphenyls	4.7 pg/L	4.7U pg/L
	Dichlorobiphenyls	151 pg/L	151U pg/L
	Trichlorobiphenyls	63.5 pg/L	63.5J pg/L
L66382-19	PCB-018	33.8 pg/L	33.8U pg/L
	Trichlorobiphenyls	33.8 pg/L	33.8U pg/L
L66384-1	PCB-011	77.9 pg/L	77.9U pg/L
	PCB-031	10.3 pg/L	10.3U pg/L
	PCB-028	10.4 pg/L	10.4U pg/L
	PCB-020/033	5.28 pg/L	5.28U pg/L
	PCB-194	38.9 pg/L	38.9U pg/L
	Monochlorobiphenyls	3.1 pg/L	3.1J pg/L
	Dichlorobiphenyls	77.9 pg/L	77.9U pg/L
	Trichlorobiphenyls	36.7 pg/L	36.7J pg/L
L66384-3	PCB-011	69 pg/L	69U pg/L
	PCB-018	22.8 pg/L	22.8U pg/L
	PCB-031	8.75 pg/L	8.75U pg/L
	PCB-028	14.3 pg/L	14.3U pg/L
	PCB-052/069	28.7 pg/L	28.7U pg/L
	PCB-194	39.2 pg/L	39.2U pg/L
	Dichlorobiphenyls	69 pg/L	69U pg/L
	Trichlorobiphenyls	45.9 pg/L	45.9U pg/L
L66435-1	PCB-011	88.1 pg/L	88.1U pg/L
	PCB-018	11.1 pg/L	11.1U pg/L
	PCB-031	9.64 pg/L	9.64U pg/L
	PCB-028	14 pg/L	14U pg/L
	PCB-052/069	31.1 pg/L	31.1U pg/L
	PCB-194	40.4 pg/L	40.4U pg/L
	Dichlorobiphenyls	88.1 pg/L	88.1U pg/L
	Trichlorobiphenyls	34.7 pg/L	34.7U pg/L
L66435-3	PCB-011	42.2 pg/L	42.2U pg/L
	PCB-031	10.5 pg/L	10.5U pg/L
	PCB-028	12.9 pg/L	12.9U pg/L
	PCB-020/033	4.82 pg/L	4.82U pg/L
	PCB-052/069	32.6 pg/L	32.6U pg/L
	PCB-194	36.9 pg/L	36.9U pg/L
	Dichlorobiphenyls	42.2 pg/L	42.2U pg/L
	Trichlorobiphenyls	29.9 pg/L	29.9J pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L66498-9	PCB-005/008	9.51 pg/L	9.51U pg/L
	PCB-011	117 pg/L	117U pg/L
	PCB-018	25.6 pg/L	25.6U pg/L
	PCB-031	10.8 pg/L	10.8U pg/L
	PCB-028	13.1 pg/L	13.1U pg/L
	PCB-020/033	5.64 pg/L	5.64U pg/L
	PCB-022	4.41 pg/L	4.41U pg/L
	PCB-180	155 pg/L	155U pg/L
	PCB-199	34 pg/L	34U pg/L
	PCB-203	25.5 pg/L	25.5U pg/L
	PCB-194	11.1 pg/L	11.1U pg/L
	PCB-205	6.81 pg/L	6.81U pg/L
	PCB-209	12.6 pg/L	12.6U pg/L
	Dichlorobiphenyls	134 pg/L	134J pg/L
	Trichlorobiphenyls	90.3 pg/L	90.3J pg/L
	Octachlorobiphenyls	100 pg/L	100J pg/L
	Decachlorobiphenyl	12.6 pg/L	12.6U pg/L
L66498-11	PCB-011	38.1 pg/L	38.1U pg/L
	PCB-018	16.1 pg/L	16.1U pg/L
	PCB-031	2.95 pg/L	2.95U pg/L
	PCB-028	3.6 pg/L	3.6U pg/L
	PCB-052/069	7.38 pg/L	7.38U pg/L
	PCB-047/048	14.8 pg/L	14.8U pg/L
	PCB-044	7.31 pg/L	7.31U pg/L
	PCB-070	7.46 pg/L	7.46U pg/L
	PCB-180	166 pg/L	166U pg/L
	PCB-199	33.2 pg/L	33.2U pg/L
	PCB-203	17.1 pg/L	17.1U pg/L
	PCB-194	10.9 pg/L	10.9U pg/L
	PCB-205	5.25 pg/L	5.25U pg/L
	PCB-209	6.71 pg/L	6.71U pg/L
	Dichlorobiphenyls	41.6 pg/L	41.6J pg/L
	Trichlorobiphenyls	28.6 pg/L	28.6J pg/L
	Tetrachlorobiphenyls	42 pg/L	42J pg/L
	Octachlorobiphenyls	80.5 pg/L	80.5J pg/L
	Decachlorobiphenyl	6.7 pg/L	6.7U pg/L
L66498-13	PCB-011	73.3 pg/L	73.3U pg/L
	PCB-031	7.59 pg/L	7.59U pg/L
	PCB-028	8.1 pg/L	8.1U pg/L
	PCB-052/069	24.7 pg/L	24.7U pg/L
	PCB-194	27.2 pg/L	27.2U pg/L
	PCB-209	23 pg/L	23U pg/L
	Dichlorobiphenyls	73.3 pg/L	73.3U pg/L
	Trichlorobiphenyls	15.7 pg/L	15.7U pg/L
	Decachlorobiphenyl	23 pg/L	23U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L66498-15	PCB-005/008	10.9 pg/L	10.9U pg/L
	PCB-011	35.7 pg/L	35.7U pg/L
	PCB-031	4.01 pg/L	4.01U pg/L
	PCB-028	4.94 pg/L	4.94U pg/L
	PCB-022	2.37 pg/L	2.37U pg/L
	PCB-052/069	13 pg/L	13U pg/L
	PCB-070	6.75 pg/L	6.75U pg/L
	PCB-101	38.1 pg/L	38.1U pg/L
	PCB-138	27 pg/L	27U pg/L
	PCB-156	7.24 pg/L	7.24U pg/L
	PCB-203	19.4 pg/L	19.4U pg/L
	PCB-194	22.2 pg/L	22.2U pg/L
	PCB-209	19.2 pg/L	19.2U pg/L
	Dichlorobiphenyls	46.6 pg/L	46.6U pg/L
	Trichlorobiphenyls	11.3 pg/L	11.3U pg/L
	Tetrachlorobiphenyls	30.3 pg/L	30.3J pg/L
	Hexachlorobiphenyls	80.8 pg/L	80.8J pg/L
	Octachlorobiphenyls	96.1 pg/L	96.1J pg/L
	Decachlorobiphenyl	19.2 pg/L	19.2U pg/L
L66498-17	PCB-005/008	4.09 pg/L	4.09U pg/L
	PCB-011	69.8 pg/L	69.8U pg/L
	PCB-018	9.09 pg/L	9.09U pg/L
	PCB-031	9.08 pg/L	9.08U pg/L
	PCB-028	8.19 pg/L	8.19U pg/L
	PCB-020/033	4.53 pg/L	4.53U pg/L
	PCB-022	6.66 pg/L	6.66U pg/L
	PCB-047/048	8.62 pg/L	8.62U pg/L
	PCB-180	173 pg/L	173U pg/L
	PCB-199	33.4 pg/L	33.4U pg/L
	PCB-209	13.7 pg/L	13.7U pg/L
	Dichlorobiphenyls	76.8 pg/L	76.8J pg/L
	Trichlorobiphenyls	58.2 pg/L	58.2J pg/L
	Heptachlorobiphenyls	189 pg/L	189J pg/L
	Octachlorobiphenyls	115 pg/L	115J pg/L
	Decachlorobiphenyl	13.7 pg/L	13.7U pg/L
L66498-19	PCB-005/008	11 pg/L	11U pg/L
	PCB-011	73.1 pg/L	73.1U pg/L
	PCB-018	11.4 pg/L	11.4U pg/L
	PCB-031	14.3 pg/L	14.3U pg/L
	PCB-028	9.48 pg/L	9.48U pg/L
	PCB-020/033	6.24 pg/L	6.24U pg/L
	PCB-022	5.22 pg/L	5.22U pg/L
	PCB-047/048	7.7 pg/L	7.7U pg/L
	PCB-156	8.5 pg/L	8.5U pg/L
	PCB-182/187	22.5 pg/L	22.5U pg/L
	PCB-180	173 pg/L	173U pg/L
	PCB-199	19.3 pg/L	19.3U pg/L
	PCB-203	29.3 pg/L	29.3U pg/L
	PCB-209	8.52 pg/L	8.52U pg/L
	Dichlorobiphenyls	89.9 pg/L	89.9J pg/L
	Trichlorobiphenyls	53.3 pg/L	53.3J pg/L
	Octachlorobiphenyls	111 pg/L	111J pg/L
	Decachlorobiphenyl	8.5 pg/L	8.5U pg/L

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Internal Standards

All internal standard recoveries (%R) were within QC limits.

XI. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
L66175-1 L66175-3 L66285-1 L66285-3 L66382-9 L66382-11 L66382-17 L66382-19 L66384-1 L66435-3 L66498-9 L66498-11 L66498-13 L66498-15 L66285-3DUP	All compounds flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC).	U	A

Raw data were not reviewed for Level III validation.

XII. Target Compound Identification

Raw data were not reviewed for Level III validation.

XIII. System Performance

Raw data were not reviewed for Level III validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results reported by the laboratory as EMPCs, data were qualified as not detected in nineteen samples.

Due to laboratory blank contamination, data were qualified as not detected or estimated in nineteen samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

LDW Shoreline-Echo Lake SW Eff Monitoring
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG PR164565

Sample	Compound	Flag	A or P	Reason
L66175-1 L66175-3 L66285-1 L66285-3 L66382-9 L66382-11 L66382-17 L66382-19 L66384-1 L66435-3 L66498-9 L66498-11 L66498-13 L66498-15 L66285-3DUP	All compounds flagged "N" or "NJ" by the laboratory as estimated maximum possible concentration (EMPC).	U	A	Compound quantitation (EMPC)

LDW Shoreline-Echo Lake SW Eff Monitoring
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG PR164565

Sample	Compound	Modified Final Concentration	A or P
L66175-1	PCB-011 PCB-031 PCB-028 PCB-052/069 Dichlorobiphenyls Trichlorobiphenyls Octachlorobiphenyls	184U pg/L 27.4U pg/L 27U pg/L 39.8U pg/L 184U pg/L 65.3J pg/L 78.6J pg/L	A
L66175-3	PCB-011 PCB-031 PCB-028 PCB-022 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	131U pg/L 38.2U pg/L 25.4U pg/L 8.62U pg/L 41U pg/L 52.5U pg/L 131U pg/L 125J pg/L	A
L66285-1	PCB-003 PCB-005/008 PCB-011 PCB-018 PCB-031 PCB-028 PCB-020/033 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	4.52U pg/L 18.3U pg/L 91.4U pg/L 9.48U pg/L 16.6U pg/L 15.9U pg/L 9.47U pg/L 27.6U pg/L 31U pg/L 115J pg/L 67.8J pg/L	A

Sample	Compound	Modified Final Concentration	A or P
L66285-3	PCB-011 PCB-031 PCB-028 PCB-052/069 Dichlorobiphenyls Trichlorobiphenyls	65.2U pg/L 8.73U pg/L 9.23U pg/L 25U pg/L 65.2U pg/L 18U pg/L	A
L66285-3DUP	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	53.9U pg/L 12.3U pg/L 53.9U pg/L 18.4J pg/L	A
L66382-9	PCB-011 PCB-031 PCB-028 PCB-020/033 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	133U pg/L 13.3U pg/L 20.9U pg/L 12.3U pg/L 47U pg/L 46.5U pg/L 133U pg/L 46.5U pg/L	A
L66382-11	PCB-018 PCB-020/033 PCB-052/069 PCB-194 Trichlorobiphenyls Tetrachlorobiphenyls Octachlorobiphenyls	20.6U pg/L 2.57U pg/L 10U pg/L 91.3U pg/L 29.7J pg/L 17.8J pg/L 91.3U pg/L	A
L66382-17	PCB-003 PCB-011 PCB-018 PCB-031 PCB-028 PCB-020/033 PCB-022 PCB-052/069 PCB-194 Monochlorobiphenyls Dichlorobiphenyls Trichlorobiphenyls	4.73U pg/L 151U pg/L 4.14U pg/L 14.4U pg/L 14.7U pg/L 10U pg/L 7.88U pg/L 29.3U pg/L 38.3U pg/L 4.7U pg/L 151U pg/L 63.5J pg/L	A
L66382-19	PCB-018 Trichlorobiphenyls	33.8U pg/L 33.8U pg/L	A
L66384-1	PCB-011 PCB-031 PCB-028 PCB-020/033 PCB-194 Monochlorobiphenyls Dichlorobiphenyls Trichlorobiphenyls	77.9U pg/L 10.3U pg/L 10.4U pg/L 5.28U pg/L 38.9U pg/L 3.1J pg/L 77.9U pg/L 36.7J pg/L	A

Sample	Compound	Modified Final Concentration	A or P
L66384-3	PCB-011 PCB-018 PCB-031 PCB-028 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	69U pg/L 22.8U pg/L 8.75U pg/L 14.3U pg/L 28.7U pg/L 39.2U pg/L 69U pg/L 45.9U pg/L	A
L66435-1	PCB-011 PCB-018 PCB-031 PCB-028 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	88.1U pg/L 11.1U pg/L 9.64U pg/L 14U pg/L 31.1U pg/L 40.4U pg/L 88.1U pg/L 34.7U pg/L	A
L66435-3	PCB-011 PCB-031 PCB-028 PCB-020/033 PCB-052/069 PCB-194 Dichlorobiphenyls Trichlorobiphenyls	42.2U pg/L 10.5U pg/L 12.9U pg/L 4.82U pg/L 32.6U pg/L 36.9U pg/L 42.2U pg/L 29.9J pg/L	A
L66498-9	PCB-005/008 PCB-011 PCB-018 PCB-031 PCB-028 PCB-020/033 PCB-022 PCB-180 PCB-199 PCB-203 PCB-194 PCB-205 PCB-209 Dichlorobiphenyls Trichlorobiphenyls Octachlorobiphenyls Decachlorobiphenyl	9.51U pg/L 117U pg/L 25.6U pg/L 10.8U pg/L 13.1U pg/L 5.64U pg/L 4.41U pg/L 155U pg/L 34U pg/L 25.5U pg/L 11.1U pg/L 6.81U pg/L 12.6U pg/L 134J pg/L 90.3J pg/L 100J pg/L 12.6U pg/L	A

Sample	Compound	Modified Final Concentration	A or P
L66498-11	PCB-011	38.1U pg/L	A
	PCB-018	16.1U pg/L	
	PCB-031	2.95U pg/L	
	PCB-028	3.6U pg/L	
	PCB-052/069	7.38U pg/L	
	PCB-047/048	14.8U pg/L	
	PCB-044	7.31U pg/L	
	PCB-070	7.46U pg/L	
	PCB-180	166U pg/L	
	PCB-199	33.2U pg/L	
	PCB-203	17.1U pg/L	
	PCB-194	10.9U pg/L	
	PCB-205	5.25U pg/L	
	PCB-209	6.71U pg/L	
	Dichlorobiphenyls	41.6J pg/L	
	Trichlorobiphenyls	28.6J pg/L	
	Tetrachlorobiphenyls	42J pg/L	
	Octachlorobiphenyls	80.5J pg/L	
	Decachlorobiphenyl	6.7U pg/L	
L66498-13	PCB-011	73.3U pg/L	A
	PCB-031	7.59U pg/L	
	PCB-028	8.1U pg/L	
	PCB-052/069	24.7U pg/L	
	PCB-194	27.2U pg/L	
	PCB-209	23U pg/L	
	Dichlorobiphenyls	73.3U pg/L	
	Trichlorobiphenyls	15.7U pg/L	
	Decachlorobiphenyl	23U pg/L	
L66498-15	PCB-005/008	10.9U pg/L	A
	PCB-011	35.7U pg/L	
	PCB-031	4.01U pg/L	
	PCB-028	4.94U pg/L	
	PCB-022	2.37U pg/L	
	PCB-052/069	13U pg/L	
	PCB-070	6.75U pg/L	
	PCB-101	38.1U pg/L	
	PCB-138	27U pg/L	
	PCB-156	7.24U pg/L	
	PCB-203	19.4U pg/L	
	PCB-194	22.2U pg/L	
	PCB-209	19.2U pg/L	
	Dichlorobiphenyls	46.6U pg/L	
	Trichlorobiphenyls	11.3U pg/L	
	Tetrachlorobiphenyls	30.3J pg/L	
	Hexachlorobiphenyls	80.8J pg/L	
	Octachlorobiphenyls	96.1J pg/L	
	Decachlorobiphenyl	19.2U pg/L	

Sample	Compound	Modified Final Concentration	A or P
L66498-17	PCB-005/008	4.09U pg/L	A
	PCB-011	69.8U pg/L	
	PCB-018	9.09U pg/L	
	PCB-031	9.08U pg/L	
	PCB-028	8.19U pg/L	
	PCB-020/033	4.53U pg/L	
	PCB-022	6.66U pg/L	
	PCB-047/048	8.62U pg/L	
	PCB-180	173U pg/L	
	PCB-199	33.4U pg/L	
	PCB-209	13.7U pg/L	
	Dichlorobiphenyls	76.8J pg/L	
	Trichlorobiphenyls	58.2J pg/L	
	Heptachlorobiphenyls	189J pg/L	
	Octachlorobiphenyls	115J pg/L	
	Decachlorobiphenyl	13.7U pg/L	
L66498-19	PCB-005/008	11U pg/L	A
	PCB-011	73.1U pg/L	
	PCB-018	11.4U pg/L	
	PCB-031	14.3U pg/L	
	PCB-028	9.48U pg/L	
	PCB-020/033	6.24U pg/L	
	PCB-022	5.22U pg/L	
	PCB-047/048	7.7U pg/L	
	PCB-156	8.5U pg/L	
	PCB-182/187	22.5U pg/L	
	PCB-180	173U pg/L	
	PCB-199	19.3U pg/L	
	PCB-203	29.3U pg/L	
	PCB-209	8.52U pg/L	
	Dichlorobiphenyls	89.9J pg/L	
	Trichlorobiphenyls	53.3J pg/L	
	Octachlorobiphenyls	111J pg/L	
	Decachlorobiphenyl	8.5U pg/L	

LDC #: 38487A31

SDG #: PR164565

Laboratory: Pacific Rim Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 4/28/17

Page: 1 of 2

Reviewer: 2

2nd Reviewer: Q

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	SW, A	cooler temp 9.5°C (text)
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A	RSD ≤ 20/35
IV.	Continuing calibration	A	QC limits
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates/DUP	N/A	<5x RL
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	N	
X.	Internal standards	A	
XI.	Compound quantitation RL/LOQ/LODs	SW	
XII.	Target compound identification	N	
XIII.	System performance	N	
XIV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	L66175-1	PR164565	Water	09/17/16
2	L66175-3	PR164566	Water	09/17/16
3	L66289-1	PR164567	Water	10/06/16
4	L66289-3	PR164568	Water	10/09/16
5	L66382-9	PR164569	Water	10/13/16
6	L66382-11	PR164570	Water	10/13/16
7	L66382-17	PR164571	Water	10/13/16
8	L66382-19	PR164572	Water	10/13/16
9	L66384-1	PR164573	Water	10/13/16
10	L66384-3	PR164574	Water	10/13/16
11	L66435-1	PR164575	Water	10/19/16
12	L66435-3	PR164576	Water	10/19/16
13	L66498-9	PR164598	Water	10/26/16
14	L66498-11	PR164599	Water	10/26/16
15	L66498-13	PR164600	Water	10/26/16

LDC #: 38487A31

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 4/28/17

SDG #: PR164565

Page: 2 of 2

Laboratory: Pacific Rim Laboratories, Inc.

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668C)

	Client ID	Lab ID	Matrix	Date
16 2	L66498-15	PR164601	Water	10/26/16
17 2	L66498-17	PR164602	Water	10/26/16
18 2	L66498-19	PR164603	Water	10/26/16
19	L66289-3DUP	PR164568DUP	Water	10/09/16
20				
21				
22				
23				
24				

Notes:

LDC #: 38487A31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Blank extraction date: 01/04/17 **Blank analysis date:** 03/09/17
Conc. units: pg/L **Associated samples:** 1-12,19 Qualify U

Compound	Blank ID	Sample Identification									
	MBPC170001B	5x	1	2	3	4	19	5	6	7	8
PCB-003	1.58	7.9			4.52					4.73	
PCB-005/008	7.07	35.35			18.3						
PCB-011	46	230	184	131	91.4	65.2	53.9	133		151	
PCB-018	8.67	43.35			9.48				20.6	4.14	33.8
PCB-017	3.9	19.5									
PCB-031	7.71	38.55	27.4	38.2	16.6	8.73	12.3	13.3		14.4	
PCB-028	8.18	40.9	27	25.4	15.9	9.23		20.9		14.7	
PCB-020/033	3.39	16.95			9.47			12.3	2.57	10	
PCB-022	2.6	13		8.62						7.88	
PCB-052/069	10.3	51.5	39.8	41	27.6	25		47	10	29.3	
PCB-159	1.4	7									
PCB-194	18.4	92		52.5	31			46.5	91.3	38.3	
Monochlorobiphenyls	1.6	8								4.7	
Dichlorobiphenyls	53.1	265.5	184	131	115/J	65.2	53.9	133		151	
Trichlorobiphenyls	34.5	172.5	65.3/J	125/J	67.8/J	18	18.4/J	46.5	29.7/J	63.5/J	33.8
Tetrachlorobiphenyls	10.3	51.5							17.8/J		
Hexachlorobiphenyls	1.4	7									
Octachlorobiphenyls	18.4	92	78.6/J						91.3		

LDC #: 38487A31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Compound	Blank ID	Sample Identification									
	MBPC170001B	5x	9	10	11	12					
PCB-003	1.58	7.9									
PCB-005/008	7.07	35.35									
PCB-011	46	230	77.9	69	88.1	42.2					
PCB-018	8.67	43.35		22.8	11.1						
PCB-017	3.9	19.5									
PCB-031	7.71	38.55	10.3	8.75	9.64	10.5					
PCB-028	8.18	40.9	10.4	14.3	14	12.9					
PCB-020/033	3.39	16.95	5.28			4.82					
PCB-022	2.6	13									
PCB-052/069	10.3	51.5		28.7	31.1	32.6					
PCB-159	1.4	7									
PCB-194	18.4	92	38.9	39.2	40.4	36.9					
Monochlorobiphenyls	1.6	8	3.1/J								
Dichlorobiphenyls	53.1	265.5	77.9	69	88.1	42.2					
Trichlorobiphenyls	34.5	172.5	36.7/J	45.9	34.7	29.9/J					
Tetrachlorobiphenyls	10.3	51.5									
Hexachlorobiphenyls	1.4	7									
Octachlorobiphenyls	18.4	92									

Laboratory blank results flagged "NJ" by the laboratory as estimated maximum possible concentration (EMPC) are considered not detected.

All contaminants within five times the blank concentration were qualified as not detected, "U".

LDC #: 38487A31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: M
2nd Reviewer: R

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Blank extraction date: 01/10/17 **Blank analysis date:** 03/17/17
Conc. units: pg/L **Associated samples:** 13-18 Qualify U

Compound	Blank ID	Sample Identification									
	MBPC170012B	5x	13	14	15	16	17	18			
PCB-005/008	6.1	30.5	9.51			10.9	4.09	11			
PCB-011	34.5	172.5	117	38.1	73.3	35.7	69.8	73.1			
PCB-018	9.87	49.35	25.6	16.1			9.09	11.4			
PCB-031	5.29	26.45	10.8	2.95	7.59	4.01	9.08	14.3			
PCB-028	5.07	25.35	13.1	3.6	8.1	4.94	8.19	9.48			
PCB-020/033	3.25	16.25	5.64				4.53	6.24			
PCB-022	2.54	12.7	4.41			2.37	6.66	5.22			
PCB-052/069	6.17	30.85		7.38	24.7	13					
PCB-047/048	4.15	20.75		14.8			8.62	7.7			
PCB-044	5.01	25.05		7.31							
PCB-070	4.8	24		7.46		6.75					
PCB-093/098/095	7.45	37.25									
PCB-101	7.77	38.85				38.1					
PCB-118	2.08	10.4									
PCB-139/149	6.34	31.7									
PCB-153	2.99	14.95									
PCB-138	5.69	28.45				27					
PCB-156	1.98	9.9				7.24		8.5			
PCB-182/187	6.36	31.8						22.5			
PCB-180	37	185	155	166			173	173			
PCB-201	1.84	9.2									
PCB-199	8.78	43.9	34	33.2			33.4	19.3			
PCB-203	7.14	35.7	25.5	17.1		19.4		29.3			

LDC #: 38487A31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Compound	Blank ID	Sample Identification									
	MBPC170012B	5x	13	14	15	16	17	18			
PCB-194	6.56	32.8	11.1	10.9	27.2	22.2					
PCB-205	2.27	11.35	6.81	5.25							
PCB-209	6.97	34.85	12.6	6.71	23	19.2	13.7	8.52			
Dichlorobiphenyls	40.6	203	134/J	41.6/J	73.3	46.6	76.8/J	89.9/J			
Trichlorobiphenyls	26	130	90.3/J	28.6/J	15.7	11.3	58.2/J	53.3/J			
Tetrachlorobiphenyls	20.1	100.5		42/J		30.3/J					
Pentachlorobiphenyls	17.3	86.5									
Hexachlorobiphenyls	17	85				80.8/J					
Heptachlorobiphenyls	43.4	217					189/J				
Octachlorobiphenyls	26.6	133	100/J	80.5/J		96.1/J	115/J	111/J			
Decachlorobiphenyl	7	35	12.6/U	6.7/U	23/U	19.2/U	13.7/U	8.5/U			

LDC #: 38487A31

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Samples ~~Compound~~	Finding	Associated Samples	Qualifications
		1-9, 12-16, 19	Results flagged N		N/A
			or NJ as EMPC		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 38487

EDD POPULATION COMPLETENESS WORKSHEET

Date: 5/4/17
Page: 1 of 1
2nd Reviewer: BA

The LDC job number listed above was entered by CD

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	- 10% or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	N	
IIb.	- Reason Codes used? If so, note which codes.	Y	UDC
IIc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	N	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	Y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	Y	
IIId.	-Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	N/NA	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	Y	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	N/NA	
IIIg.	-Are there any discrepancies between the data packet and the EDD?	N	

Notes: *see discrepancy sheet

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

King County Environmental Laboratory
322 W. Ewing Street
Seattle WA 98119
ATTN: Mr. Fritz Grothkopp

September 21, 2017

SUBJECT: Revised LDW Shoreline-Echo Lake SWE #2, Data Validation

Dear Mr. Grothkopp,

Enclosed is the revised validation report for the fraction listed below. This SDG was received on May 18, 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #38726:

SDG #	**Fraction**
PR171233	Polychlorinated Biphenyls as Congeners

Revision: Added U qualifier to PCB-031 for sample L66938-19 due to blank contamination.

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Operations Manager/Senior Chemist

352 pages-SF

Attachment 1

Level III EDD

LDC #38726 (King County - Seattle WA / LDW Shoreline-Echo Lake SWE #2)

Project #421879-250

LDC	SDG#	DATE REC'D	(3) DATE DUE	PCB Cong. (1668C)																																	
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	PR171233	05/18/17	06/09/17	11	0																																
Total	T/SC			11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

L:\King County\Duwamish\Shoreline-Echo Lake\38726ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: LDW Shoreline-Echo Lake SWE #2

LDC Report Date: September 21, 2017

Parameters: Polychlorinated Biphenyls as Congeners

Validation Level: Level III

Laboratory: Pacific Rim Laboratories, Inc.

Sample Delivery Group (SDG): PR171233

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
L66938-5	PR171233	Water	01/18/17
L66938-7	PR171234	Water	01/18/17
L66938-13	PR171235	Water	01/18/17
L66938-15	PR171236	Water	01/18/17
L66938-17	PR171237	Water	01/18/17
L66938-19	PR171238	Water	01/18/17
L67070-5	PR171239	Water	02/09/17
L67070-7	PR171240	Water	02/09/17
L67413-1	PR171241	Water	03/29/17
L67413-3	PR171242	Water	03/29/17
L67413-4	PR171243	Water	03/29/17
L66938-7DUP	PR171234DUP	Water	01/18/17

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Quality Assurance Project Plan for Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin-RSMP Effectiveness Study (June 2015) and US Environmental Protection Agency (EPA) Region 10 SOP for the Validation of Polychlorinated Biphenyl (PCB) Data (Revision 1.0, December 8, 1995). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Polychlorinated Biphenyls (PCBs) as Congeners by Environmental Protection Agency (EPA) Method 1668C

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

- J1 Blank Contamination: Indicates possible high bias and/or false positives.
- J2 Calibration Range exceeded: Indicates possible low bias.
- J3 Holding times not met: Indicates low bias for most analytes.
- J4 Other QC parameters outside control limits: bias not readily determined.
- J5 Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
- J6 Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

The chain-of-custodies were reviewed for documentation of temperatures. Although the cooler temperature was reported at 7.6°C upon receipt by the laboratory, no data was qualified based on the cooler temperature since the temperature was below the validation criteria of 10°C.

All technical holding time requirements were met.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required frequency.

The static resolving power was at least 10,000 (10% valley definition).

III. Initial Calibration

A five point initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration results were within the QC limits for unlabeled compounds and labeled compounds.

The ion abundance ratios for all compounds were within validation criteria.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
MBPC170234B	04/11/17	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	58.9 pg/L 4.15 pg/L 58.9 pg/L 4.2 pg/L	All samples in SDG PR171233

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L66938-7	PCB-011 Dichlorobiphenyls	52.9 pg/L 52.9 pg/L	52.9U pg/L 52.9U pg/L
L66938-7DUP	PCB-011 Dichlorobiphenyls	42.7 pg/L 42.7 pg/L	42.7U pg/L 42.7U pg/L
L66938-15	PCB-011 Dichlorobiphenyls	77.2 pg/L 77.2 pg/L	77.2U pg/L 77.2U pg/L
L66938-19	PCB-011 PCB-031 Dichlorobiphenyls	53.4 pg/L 4.11 pg/L 53.4 pg/L	53.4U pg/L 4.11U pg/L 53.4U pg/L
L67070-5	PCB-011 Dichlorobiphenyls	235 pg/L 279 pg/L	235U pg/L 279J pg/L
L67070-7	PCB-011 Dichlorobiphenyls	22.7 pg/L 22.7 pg/L	22.7U pg/L 22.7U pg/L
L67413-1	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	21.3 pg/L 3.66 pg/L 21.3 pg/L 11.2 pg/L	21.3U pg/L 3.66U pg/L 21.3U pg/L 11.2J pg/L
L67413-3	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	25 pg/L 3.1 pg/L 25 pg/L 6.3 pg/L	25U pg/L 3.1U pg/L 25U pg/L 6.3J pg/L
L67413-4	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	22.2 pg/L 0.94 pg/L 22.2 pg/L 8 pg/L	22.2U pg/L 0.94U pg/L 22.2U pg/L 8J pg/L

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates/Duplicate Sample Analysis

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
PC170235S	PCB-074	140.8 (60-135)	L66938-13 L66938-17 L66938-19 L67070-5	J (all detects)	P
PC170235S	PCB-074	140.8 (60-135)	L66938-5 L66938-7 L66938-15 L67070-7 L67413-1 L67413-3 L67413-4 L66938-7DUP	NA	-
PC170235S	PCB-110	179.4 (60-135)	L66938-5 L66938-13 L66938-15 L66938-17 L66938-19 L67070-5 L67070-7 L66938-7DUP	J (all detects)	P
PC170235S	PCB-110	179.4 (60-135)	L66938-7 L67413-1 L67413-3 L67413-4	NA	-

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Internal Standards

All internal standard recoveries (%R) were within QC limits.

XI. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG PR171233	All compounds flagged “N” or “NJ” by the laboratory as estimated maximum possible concentration (EMPC).	U	A

Raw data were not reviewed for Level III validation.

XII. Target Compound Identification

Raw data were not reviewed for Level III validation.

XIII. System Performance

Raw data were not reviewed for Level III validation.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to LCS %R and results reported by the laboratory as EMPCs, data were qualified as estimated in twelve samples.

Due to laboratory blank contamination, data were qualified as not detected or estimated in nine samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

LDW Shoreline-Echo Lake SWE #2
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG PR171233

Sample	Compound	Flag	A or P	Reason
L66938-13 L66938-17 L66938-19 L67070-5	PCB-074	J (all detects)	P	Laboratory control samples (%R)
L66938-5 L66938-13 L66938-15 L66938-17 L66938-19 L67070-5 L67070-7 L66938-7DUP	PCB-110	J (all detects)	P	Laboratory control samples (%R)
L66938-5 L66938-7 L66938-13 L66938-15 L66938-17 L66938-19 L67070-5 L67070-7 L67413-1 L67413-3 L67413-4 L66938-7DUP	All compounds flagged “N” or “NJ” by the laboratory as estimated maximum possible concentration (EMPC).	U	A	Compound quantitation (EMPC)

LDW Shoreline-Echo Lake SWE #2
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG PR171233

Sample	Compound	Modified Final Concentration	A or P
L66938-7	PCB-011 Dichlorobiphenyls	52.9U pg/L 52.9U pg/L	A
L66938-7DUP	PCB-011 Dichlorobiphenyls	42.7U pg/L 42.7U pg/L	A
L66938-15	PCB-011 Dichlorobiphenyls	77.2U pg/L 77.2U pg/L	A
L66938-19	PCB-011 PCB-031 Dichlorobiphenyls	53.4U pg/L 4.11U pg/L 53.4U pg/L	A
L67070-5	PCB-011 Dichlorobiphenyls	235U pg/L 279J pg/L	A

Sample	Compound	Modified Final Concentration	A or P
L67070-7	PCB-011 Dichlorobiphenyls	22.7U pg/L 22.7U pg/L	A
L67413-1	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	21.3U pg/L 3.66U pg/L 21.3U pg/L 11.2J pg/L	A
L67413-3	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	25U pg/L 3.1U pg/L 25U pg/L 6.3J pg/L	A
L67413-4	PCB-011 PCB-031 Dichlorobiphenyls Trichlorobiphenyls	22.2U pg/L 0.94U pg/L 22.2U pg/L 8J pg/L	A

LDC #: 38726A31

SDG #: PR171233

Laboratory: Pacific Rim Laboratories, Inc.

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 5/26/17

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	SW, A	cooler temp 7.6°C (text)
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration/~~ICV~~	A	RSD ≤ 20/35
IV.	Continuing calibration	A	QC limits
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Matrix spike/Matrix spike duplicates /DUP	N/A	<5XRL
VIII.	Laboratory control samples	SW	LCS
IX.	Field duplicates	N	
X.	Internal standards	A	
XI.	Compound quantitation RL/LOQ/LODs	SW	
XII.	Target compound identification	N	
XIII.	System performance	N	
XIV.	Overall assessment of data	A	

Note:
A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank
SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	L66938-5	PR171233	Water	01/18/17
2	L66938-7	PR171234	Water	01/18/17
3	L66938-13	PR171235	Water	01/18/17
4	L66938-15	PR171236	Water	01/18/17
5	L66938-17	PR171237	Water	01/18/17
6	L66938-19	PR171238	Water	01/18/17
7	L67070-5	PR171239	Water	02/09/17
8	L67070-7	PR171240	Water	02/09/17
9	L67413-1	PR171241	Water	03/29/17
10	L67413-3	PR171242	Water	03/29/17
11	L67413-4	PR171243	Water	03/29/17
12	L66938-7DUP	PR171234DUP	Water	01/18/17
13				
14				
15	MB			

LDC #: 38726A31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: SC
2nd Reviewer: PG

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Blank extraction date: 04/11/17 **Blank analysis date:** 04/21/17
Conc. units: pg/L **Associated samples:** All Qualify U

Compound	Blank ID	Sample Identification									
	MBPC170234B	5x	2	12	4	6	7	8	9	10	11
PCB-011	58.9	294.5	52.9	42.7	77.2	53.4	235	22.7	21.3	25	22.2
PCB-031	4.15	20.75				4.11			3.66	3.1	0.94
Dichlorobiphenyls	58.9	294.5	52.9	42.7	77.2	53.4	279/J	22.7	21.3	25	22.2
Trichlorobiphenyls	4.2	21							11.2/J	6.3/J	8/J

Laboratory blank results flagged “NJ” by the laboratory as estimated maximum possible concentration (EMPC) are considered not detected.

All contaminants within five times the blank concentration were qualified as not detected, "U".

LDC #: 38726A31

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Was a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	Lab ID/Reference	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		PC170235S	PCB-074	140.8 (60-135)	( )	( )	All (3, 5-7 dets)	J dets/P
			↓ 110	179.4 (↓)	( )	( )	(1, 3-8, 12 dets)	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 38726A31

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
			Results flagged "N" or "NJ" as EMPC	All	U/A

Comments: See sample calculation verification worksheet for recalculations

LDC #: 38726

EDD POPULATION COMPLETENESS WORKSHEET

Date: 5/31
Page: 1 of 1
2nd Reviewer: [illegible]

The LDC job number listed above was entered by JE.

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	- 10% or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	—	
IIb.	- Reason Codes used? If so, note which codes.	Y	LDC
IIc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	—	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	Y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	Y	
IIId.	-Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	+	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	Y	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	+	
IIIg.	-Are there any discrepancies between the data packet and the EDD?	N	

Notes: *see discrepancy sheet

Appendix H:
Detailed Results

Contents:

Section H1 – Detailed Data Summary (Tables and Figures)

Section H2 – Toxicity Test Results

Section H3 – Relationships between Parameters

Section H4 – Storm Conditions

Section H5 – PCB Patterns for Individual BMPs

Section H6 – Echo Lake Monitoring Summary

This page intentionally left blank.

APPENDIX H1 – DETAILED DATA SUMMARY

This section presents a detailed summary of the data used to prepare the report. Presented first are tables of summary statistics (i.e., minimum, maximum, mean, and median) for each parameter and sampling location (i.e., bioretention planter boxes (BPBs), the Filterra® (FLT), and detention tank system (DTS). Figures summarizing results for each parameter are presented below these tables.

Table H1-1. Summary of validated results for conventional parameters and bacteria* for each site.

		BPB1 In	BPB1 Out	BPB2 In	BPB2 Out	BPB3 In	BPB3 Out	BPB4 In	BPB4 Out	FLT In	FLT Out	DTS In	DTS Out
TSS (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	39.6	5.10	40.3	0.50 J	31.1	0.70 J	17.3	10.9	31.6	8.32	18.4	15.4
	Max	223	23.4	165	3.9	273	7.68	99.2	26.3	264	37.9	36.4	37.8
	Mean	106	15.0	82.7	1.58 J	120	2.81 J	NC	NC	95.5	18.8	26.5	23.3
	Median	76.1	15.7	56.9	1.3 J	73.2	2.0 J	NC	NC	60.7	16.9	24.7	22.9
TOC (mg/L)	FOD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 of 5
	Min	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.33
	Max	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.6
	Mean	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.9
	Median	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.03
DOC (mg/L)	FOD	4 of 4	4 of 4	3 of 3	3 of 3	3 of 3	3 of 3	1 of 1	1 of 1	1 of 1	1 of 1	NA	5 of 5
	Min	1.09	2.04	1.58	2.36	0.66 J	3.97	NC	NC	NC	NC	NA	3.48
	Max	2.89	4.65	2.08	4.80	3.42	9.18	1.03	5.58	5.52	8.72	NA	16.5
	Mean	2.35	3.19	1.79	3.71	2.06 J	6.36	NC	NC	NC	NC	NA	6.92
	Median	2.70	3.03	1.70	3.97	2.09	5.92	NC	NC	NC	NC	NA	4.68
Bact (CFU)*	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	4 of 4	4 of 4
	Min	14 J	4 J	10 J	13 J	19 J	16 J	16 J	30 J	44 J	5 J	90 J	200 J
	Max	290 J	150 J	150 J	290 J	690 J	190 J	180 J	160 J	540 J	420 J	1,400 J	910 J
	Mean	136 J	69 J	83 J	96 J	214 J	110 J	98 J	95 J	213 J	130 J	678 J	595 J
	Median	123 J	64 J	110 J	43 J	150 J	97 J	98 J	95 J	150 J	73 J	610 J	635 J

* The bacteria summary includes both fecal coliform and *Escherichia coli* estimated results (See Appendix G for details) units are colony forming units (CFU) per 100-mL.
TSS – total suspended solids; TOC – total organic carbon; DOC – dissolved organic carbon; FOD – frequency of detection;
NA – not analyzed, with the exception of TOC where one sample was analyzed at each site; NC – not calculated due to low sample number; J – estimated value

Table H1-2. Summary of validated results for nutrients for each site.

		BPB1 In	BPB1 Out	BPB2 In	BPB2 Out	BPB3 In	BPB3 Out	BPB4 In	BPB4 Out	FLT In	FLT Out	DTS In	DTS Out
TP (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	0.0700	0.132	0.0656	0.357	0.0603	0.124	0.0381	0.0753	0.0680	0.0409	0.129	0.115
	Max	0.242	0.287	0.184	0.487	0.299	0.689	0.107	0.143	0.342	0.0933	0.281	0.259
	Mean	0.126	0.201	0.102	0.402	0.137	0.330	NC	NC	0.141	0.0586	0.175	0.170
	Median	0.103	0.186	0.0750	0.387	0.0960	0.204	NC	NC	0.101	0.0464	0.153	0.157
TN (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	0.324	0.302	0.484	0.313	0.446	0.472	0.356	0.260	0.432	0.211	0.754	0.804
	Max	1.31	1.20	1.14	1.11	1.67	2.05	0.630	0.499	2.31	1.35	2.30	2.28
	Mean	0.763	0.577	0.848	0.736	0.818	0.903	NC	NC	0.934	0.499	1.20	1.17
	Median	0.680	0.495	0.813	0.794	0.698	0.702	NC	NC	0.713	0.308	0.928	0.825
OP (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	2.18 J	97.0 J	2.0 J	298 J	2.0 J	96.1 J	4.73 J	43.1 J	3.24 J	8.8 J	52.7 J	49.6 J
	Max	16.5 J	218 J	10.6 J	415 J	14.2 J	639 J	5.02 J	83.1 J	27.9 J	27.9 J	109 J	114 J
	Mean	8.02 J	148 J	6.54 J	345 J	5.99 J	281 J	NC	NC	17.3 J	16 J	74.1 J	74.7 J
	Median	5.54 J	135 J	5.7 J	343 J	3.63 J	175 J	NC	NC	22.4 J	15 J	66.4 J	67.5 J
NH3 (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	4 of 5	5 of 5	5 of 5
	Min	0.0651	0.0054 J	0.193	0.0023 J	0.0537	0.0034 J	0.145	0.0175	0.0146	0.0020 U	0.0522	0.0373
	Max	0.324	0.116	0.455	0.0195	0.385	0.0174	0.188	0.0226	0.435	0.0599	0.403	0.456
	Mean	0.147	0.0252 J	0.346	0.0070 J	0.134	0.0068 J	NC	NC	0.117	0.0143 J	0.183	0.204
	Median	0.116	0.0140 J	0.381	0.0038 J	0.0867	0.0051 J	NC	NC	0.0422	0.0030 J	0.155	0.187
NO32 (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	0.031 J	0.0884	0.0478	0.115	0.018 J	0.238	0.024 J	0.025 J	0.036 J	0.039 J	0.108	0.104
	Max	0.124	0.508	0.0882	0.600	0.139	1.26	0.029 J	0.0578	0.186	0.553	0.429	0.487
	Mean	0.0693 J	0.216	0.0728	0.369	0.0752 J	0.426	NC	NC	0.0907 J	0.159 J	0.259	0.239
	Median	0.0691	0.182	0.0758	0.396	0.0702	0.301	NC	NC	0.0676	0.0540	0.182	0.165

TP – total phosphorus; TN – total nitrogen; OP – orthophosphate phosphorus; NH3 – ammonia nitrogen; NO32 – nitrate/nitrite nitrogen;
FOD – frequency of detection; NC – not calculated due to low sample number; J – estimated value

Table H1-3. Summary of validated results for hardness and total metals for each site.

		BPB1 In	BPB1 Out	BPB2 In	BPB2 Out	BPB3 In	BPB3 Out	BPB4 In	BPB4 Out	FLT In	FLT Out	DTS In	DTS Out
Hard (mg CaCO3/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	8.99	10.1	11.2	5.08	10.2	7.27	7.36	19.6	13.9	9.14	11.5	11.9
	Max	27.9	31.0	26.8	25.3	30.5	116	16.4	38.2	38.6	18.2	25.3	26.9
	Mean	18.5	15.3	17.3	17.4	19.2	28.2	NC	NC	22.1	13.2	18.1	17.1
	Median	18.3	13.7	18.0	19.3	15.4	16.1	NC	NC	19.5	11.6	14.4	15.3
Tot Cd (µg/L)	FOD	8 of 8	8 of 8	7 of 7	0 of 7	6 of 7	1 of 7	1 of 2	0 of 2	5 5	0 of 5	5 of 5	4 of 5
	Min	0.055 J	0.050 U	0.053 J	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.053 J	0.050 U	0.054 J	0.050 U
	Max	0.19 J	0.10 J	0.15 J	0.050 U	0.23 J	0.070 J	0.091 J	0.050 U	0.25 J	0.050 U	0.10 J	0.094 J
	Mean	0.11 J	0.069 J	0.086 J	NC	0.12 J	NC	NC	NC	0.11 J	NC	0.066 J	0.066 J
	Median	0.11 J	0.067 J	0.064 J	NC	0.10 J	NC	NC	NC	0.078 J	NC	0.059 J	0.056 J
Tot Cu (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	16.7	3.39	15.2	2.24	15.2	3.26	7.69	5.17	15.8	6.28	9.75	9.72
	Max	60.1	9.99	39.2	5.73	68.9	10.2	22.4	7.84	72.0	19.8	27.1	24.3
	Mean	33.3	5.77	24.2	3.91	34.7	5.99	NC	NC	29.7	10.1	14.6	14.1
	Median	31.5	5.28	19.0	4.12	29.7	5.70	NC	NC	17.2	7.60	11.2	12.9
Tot Pb (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	3.84	1.30	3.84	0.21 J	2.93	0.30 J	1.48	1.73	3.77	1.21	1.97	1.72
	Max	19.1	4.66	13.0	0.579	22.5	0.985	6.49	2.25	29.5	3.49	3.25	3.64
	Mean	9.91	3.00	6.63	0.35 J	10.3	0.689 J	NC	NC	11.6	2.14	2.56	2.43
	Median	8.00	2.89	4.61	0.26 J	6.90	0.719	NC	NC	7.25	1.75	2.57	2.20
Tot Zn (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	56.4	10.3	66.2	3.33	54.7	4.56	29.4	11.3	67.2	20.4	69.5	62.8
	Max	268	30.7	186	7.78	328	13.9	106	18.2	395	52.3	137	123
	Mean	133	16.7	101	5.69	143	8.80	NC	NC	149	33.3	90.4	84.6
	Median	120	15.7	80.0	5.91	112	8.07	NC	NC	93.5	30.0	75.0	75.4

Hard – hardness; Tot Cd – total cadmium; Tot Cu – total copper; Tot Pb – total lead; Tot Zn – total zinc;
FOD – frequency of detection; NC – not calculated due to low sample number or FOD; J – estimated value; U – non-detect value

Table H1-4. Summary of validated results for dissolved metals for each site.

		BPB1 In	BPB1 Out	BPB2 In	BPB2 Out	BPB3 In	BPB3 Out	BPB4 In	BPB4 Out	FLT In	FLT Out	DTS In	DTS Out
Dis Cd (µg/L)	FOD	0 of 8	1 of 8	0 of 7	0 of 7	0 of 7	0 of 7	0 of 2	0 of 2	0 of 5	0 of 5	0 of 5	0 of 5
	Min	NC	0.050 U	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Max	0.050 U	0.22 J	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
	Mean	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Median	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Dis Cu (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	2.16	1.7 J	1.7 J	1.6 J	1.1 J	2.68	2.0 J	3.11	1.8 J	3.82	4.00 J	4.23 J
	Max	6.47	4.82	5.85	4.77	7.93	6.20	2.03	5.94	12.9	16.3	14.9 J	13.6 J
	Mean	4.04	2.81 J	3.40 J	3.13 J	4.32 J	4.39	NC	NC	5.57 J	6.39	7.24 J	7.10 J
	Median	4.35	2.52	3.12	3.08	4.04	4.66	NC	NC	4.41	3.97	5.84 J	5.82 J
Dis Pb (µg/L)	FOD	5 of 8	6 of 8	3 of 7	1 of 7	3 of 7	6 of 7	0 of 2	2 of 2	3 of 5	3 of 5	5 of 5	5 of 5
	Min	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.17 J	0.22 J
	Max	0.15 J	0.21 J	0.12 J	0.10 U	0.24 J	0.28 J	0.10 U	0.31 J	0.17 J	0.33 J	0.31 J	0.34 J
	Mean	0.12 J	0.14 J	0.11 J	0.10 U	0.13 J	0.14 J	NC	NC	0.13 J	0.16 J	0.24 J	0.28 J
	Median	0.11 J	0.12 J	0.10 U	0.10 U	0.10 U	0.13 J	NC	NC	0.10 U	0.12 J	0.25 J	0.28 J
Dis Zn (µg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	5 of 5	5 of 5	5 of 5	5 of 5
	Min	7.83	2.3 J	9.98	1.3 J	5.58	2.1 J	7.62	4.30	5.87	8.12	25.8 J	24.9 J
	Max	19.8	6.81	14.1	3.07	25.2	5.36	9.47	10.5	23.6	28.8	68.0 J	67.6 J
	Mean	13.6	4.60 J	11.9	2.4 J	12.9	3.35 J	NC	NC	11.3	15.0	47.1 J	47.1 J
	Median	14.0	4.52	11.8	2.55	11.6	2.80	NC	NC	7.08	11.9	40.9 J	42.6 J

Dis Cd – dissolved cadmium; Dis Cu – dissolved copper; Dis Pb – dissolved lead; Dis Zn – dissolved zinc;
FOD – frequency of detection; NC – not calculated due to low sample number or FOD; J – estimated value; U – non-detect value

Table H1-5. Summary of validated results for organic contaminants for each site.

		BPB1 In		BPB1 Out		BPB2 In		BPB2 Out		BPB3 In		BPB3 Out		BPB4 In		BPB4 Out		FLT In		FLT Out		DTS In		DTS Out	
Dx-D (mg/L)	FOD	3 of	7	7 of	7	2 of	5	0 of	5	3 of	6	0 of	6	0 of	1	0 of	1	1 of	4	0 of	4	0 of	4	0 of	4
	Min	0.189	U	NC		0.189		NC		0.189	U	0.189		NC		NC		0.189	U	NC		NC		NC	
	Max	0.532		0.189	U	0.454		0.189	U	0.369		0.190		0.189	U	0.190	U	0.344		0.189	U	0.194	U	0.192	U
	Mean	0.279	J	NC		0.272		NC		0.264	J	0.189		NC		NC		NC		NC		NC		NC	
	Median	0.189	U	NC		0.189		NC		0.239	J	0.189		NC		NC		NC		NC		NC		NC	
Dx-LO (mg/L)	FOD	7 of	7	3 of	7	5 of	5	1 of	5	6 of	6	1 of	6	1 of	1	0 of	1	4 of	4	2 of	4	4 of	4	4 of	4
	Min	0.550		0.19	U	0.862		0.19	U	0.637		0.19	U	1.48		NC		0.529		0.19	U	0.352		0.352	
	Max	4.50		0.405		2.62		0.203		3.45		0.249		1.48		0.19	U	2.96		0.397		0.903		1.14	
	Mean	2.01		0.231	J	1.52		NC		2.07		NC		NC		NC		1.30		NC		0.589		0.692	
	Median	1.15		0.19	U	0.905		NC		2.14		NC		NC		NC		0.850		NC		0.551		0.638	
PAHs (µg/L)	FOD	8 of	8	6 of	8	6 of	6	0 of	6	7 of	7	1 of	7	2 of	2	2 of	2	5 of	5	4 of	5	5 of	5	5 of	5
	Min	0.544	J	0.0094	U	0.523	J	NC		0.446	J	0.0094	U	0.289	J	0.0048	J	0.337	J	0.0094	U	0.0750	J	0.0718	J
	Max	2.33	J	0.106	J	1.52	J	0.0094	U	2.28	J	0.0256	J	1.16	J	0.0064	J	2.05	J	0.134	J	0.287	J	0.301	J
	Mean	1.08	J	0.0311	J	0.918	J	NC		1.16	J	NC		NC		NC		0.987	J	0.0563	J	0.172	J	0.156	J
	Median	0.894	J	0.0218	J	0.710	J	NC		0.959	J	NC		NC		NC		0.733	J	0.0422	J	0.168	J	0.124	J
PCBs (ng/L)	FOD	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4	4 of	4
	Min	0.945	J	0.100	J	1.10	J	0.00590	J	1.26	J	0.0124	J	1.52	J	0.149	J	0.957	J	0.0693	J	1.20	J	1.23	J
	Max	5.27	J	0.745	J	4.14	J	0.129	J	2.89	J	1.32	J	3.93	J	0.527	J	13.5	J	1.03	J	2.90	J	2.12	J
	Mean	2.49	J	0.307	J	2.83	J	0.0455	J	1.91	J	0.400	J	NC		NC		4.53	J	0.568	J	1.75	J	1.64	J
	Median	1.88	J	0.191	J	3.03	J	0.0234	J	1.75	J	0.133	J	NC		NC		1.85	J	0.587	J	1.45	J	1.62	J

Dx-D – diesel-range hydrocarbons; Dx-LO – lube oil-range hydrocarbons; PAHs – total polycyclic aromatic hydrocarbons; PCBs – total polychlorinated biphenyls; FOD – frequency of detection; NC – not calculated due to low sample number or FOD; J – estimated value; U – non-detect value

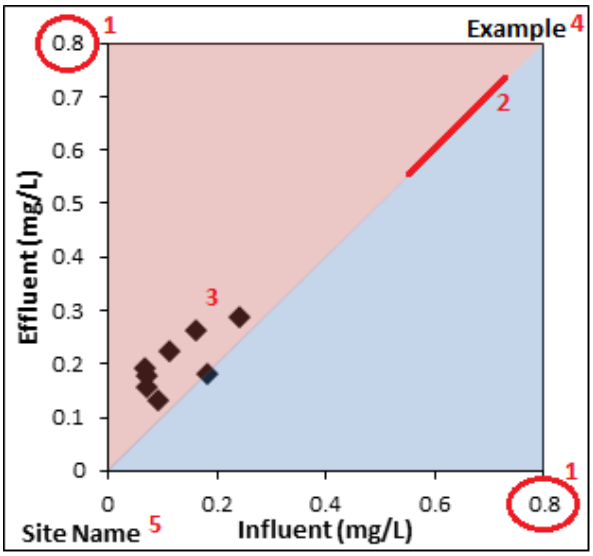
Table H1-6. Summary of validated results for organic contaminants for each site.

		BPB1 In	BPB1 Out	BPB2 In	BPB2 Out	BPB3 In	BPB3 Out	BPB4 In	BPB4 Out	FLT In	FLT Out	DTS In	DTS Out
Cond (umhos/cm)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	4 of 4	5 of 5	4 of 4	4 of 4
	Min	15.0 J	25.1 J	23.3 J	29.2 J	25.5 J	34.2 J	15.1 J	40.8 J	28.4 J	30.0 J	33.3 J	31.7 J
	Max	119 J	273 J	102 J	287 J	170 J	949 J	360 J	355 J	122 J	470 J	122 J	132 J
	Mean	53.9 J	82.4 J	52.8 J	106 J	65.8 J	203 J	NC	NC	55.0 J	127 J	74.4 J	70.4 J
	Median	35.9 J	42.0 J	38.1 J	64.9 J	43.7 J	56.6 J	NC	NC	34.7 J	45.0 J	71.1 J	58.9 J
Temp (°C)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	4 of 4	5 of 5	4 of 4	4 of 4
	Min	5.3 J	4.0 J	5.6 J	3.8 J	5.3 J	4.8 J	6.5 J	5.6 J	5.3 J	5.2 J	11.7 J	11.7
	Max	11.3 J	11.3	12.6 J	12.1	12.5 J	13.0 J	11.2	11.4	13.0 J	12.9 J	17.1 J	17.4 J
	Mean	8.8 J	8.1 J	9.2 J	8.2 J	9.0 J	8.7 J	NC	NC	9.7 J	9.8 J	13.4 J	13.5 J
	Median	9.0 J	8.1 J	9.0	8.3 J	9.2 J	8.4 J	NC	NC	10.3 J	9.8 J	12.4 J	12.4 J
pH (pH units)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	4 of 4	5 of 5	4 of 4	4 of 4
	Min	7.02 J	6.86 J	7.38 J	6.56	6.89 J	6.18 J	5.95 J	6.07 J	7.44 J	7.08 J	7.16 J	7.08 J
	Max	7.61	7.35 J	7.60 J	7.47 J	7.57 J	7.03	7.40	7.22	7.76 J	7.63 J	7.24	7.29
	Mean	7.37 J	7.12 J	7.46 J	6.90 J	7.30 J	6.54 J	NC	NC	7.63 J	7.29 J	7.21 J	7.19 J
	Median	7.38 J	7.19 J	7.46	6.86 J	7.34 J	6.44 J	NC	NC	7.66 J	7.24	7.22 J	7.19 J
DO (mg/L)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	4 of 4	5 of 5	4 of 4	4 of 4
	Min	10.0 J	10.3	10.2 J	10.0 J	10.2 J	7.5 J	10.6	10.0	10.2 J	9.2 J	8.9 J	8.2 J
	Max	12.0 J	12.1 J	12.1 J	12.8 J	12.0 J	11.1 J	11.5 J	11.9 J	12.3 J	11.5 J	10.6 J	10.6 J
	Mean	11.0 J	11.1 J	11.1 J	11.0 J	11.0 J	10.0 J	NC	NC	11.1 J	10.3 J	10.0 J	9.9 J
	Median	11.1 J	11.1 J	11.2 J	10.8 J	10.8 J	10.4 J	NC	NC	10.9 J	10.3 J	10.3 J	10.4 J
Turb (NTU)	FOD	8 of 8	8 of 8	7 of 7	7 of 7	7 of 7	7 of 7	2 of 2	2 of 2	4 of 4	5 of 5	4 of 4	4 of 4
	Min	21.1	11.2 J	37.4 J	4.8 J	27.8 J	4.4 J	21.1	46.2	24.4 J	18.0	12.7 J	12.2 J
	Max	225 J	49.6 J	125 J	11.7 J	222 J	13.9 J	71.8 J	48.3 J	144 J	75.0 J	30.8 J	43.3 J
	Mean	107 J	25.4 J	66.1 J	7.2 J	103 J	9.5 J	NC	NC	61.9 J	37.1 J	18.8 J	23.0 J
	Median	87.8 J	22.6 J	45.7 J	6.7 J	92.1 J	10.0	NC	NC	39.6 J	30.1 J	15.8 J	18.3 J

Cond – conductivity; Temp – temperature; DO – dissolved oxygen; Turb - turbidity;
FOD – frequency of detection; NC – not calculated due to low sample number; J – estimated value

The following pages include figures summarizing results for the BPBs and Filterra for each parameter, including field measurements. Each page includes five figures that summarize results for a single parameter, including four scatter plots of influent and effluent concentrations (one for each site) and a box plot displaying the distribution of results for each site. The example figures below provide explanations for the two figure types.

Scatter Plot Explanation:



These figures plot effluent versus influent concentrations for each sampling event at a given site.

1 – The x and y scales are the same for all scatter plots of the same parameter, unless the axis labels are in red. Red labels indicate abnormally low or high concentrations compared to the other sites.

2 – The middle line between the red and blue shading represents no change between influent and effluent concentrations, or a 1 to 1 ratio.

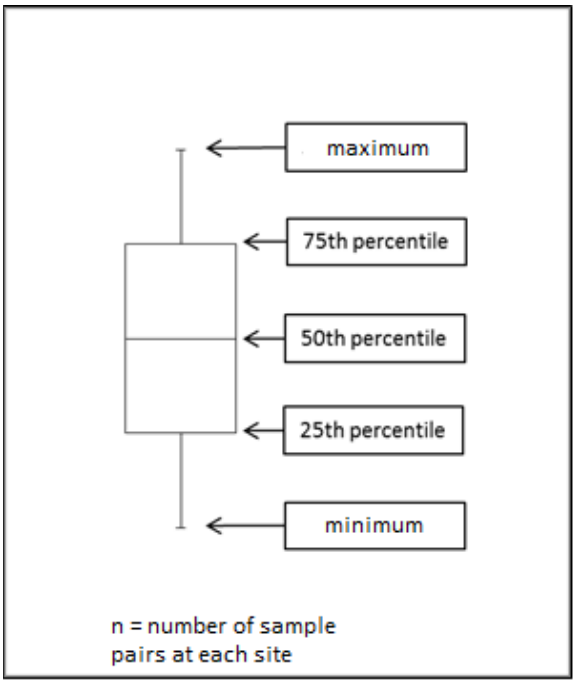
3 – Data points in the red shading illustrate sampling events where concentrations were higher in the effluent than the influent (> 1 to 1 ratio). Data points in the blue shading illustrate sampling events where concentrations were lower in the effluent than the influent (< 1 to 1 ratio).

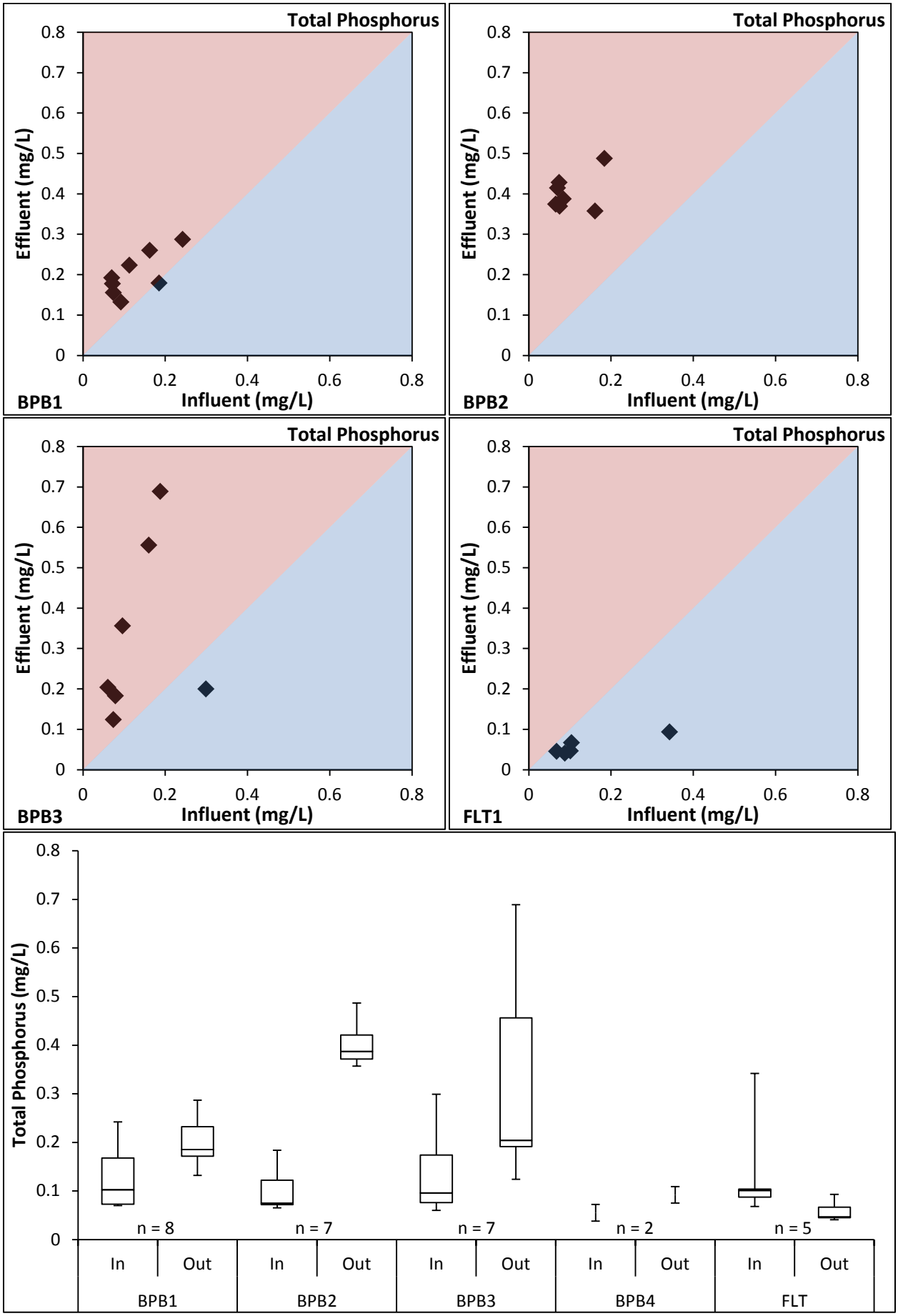
4 – Name of parameter

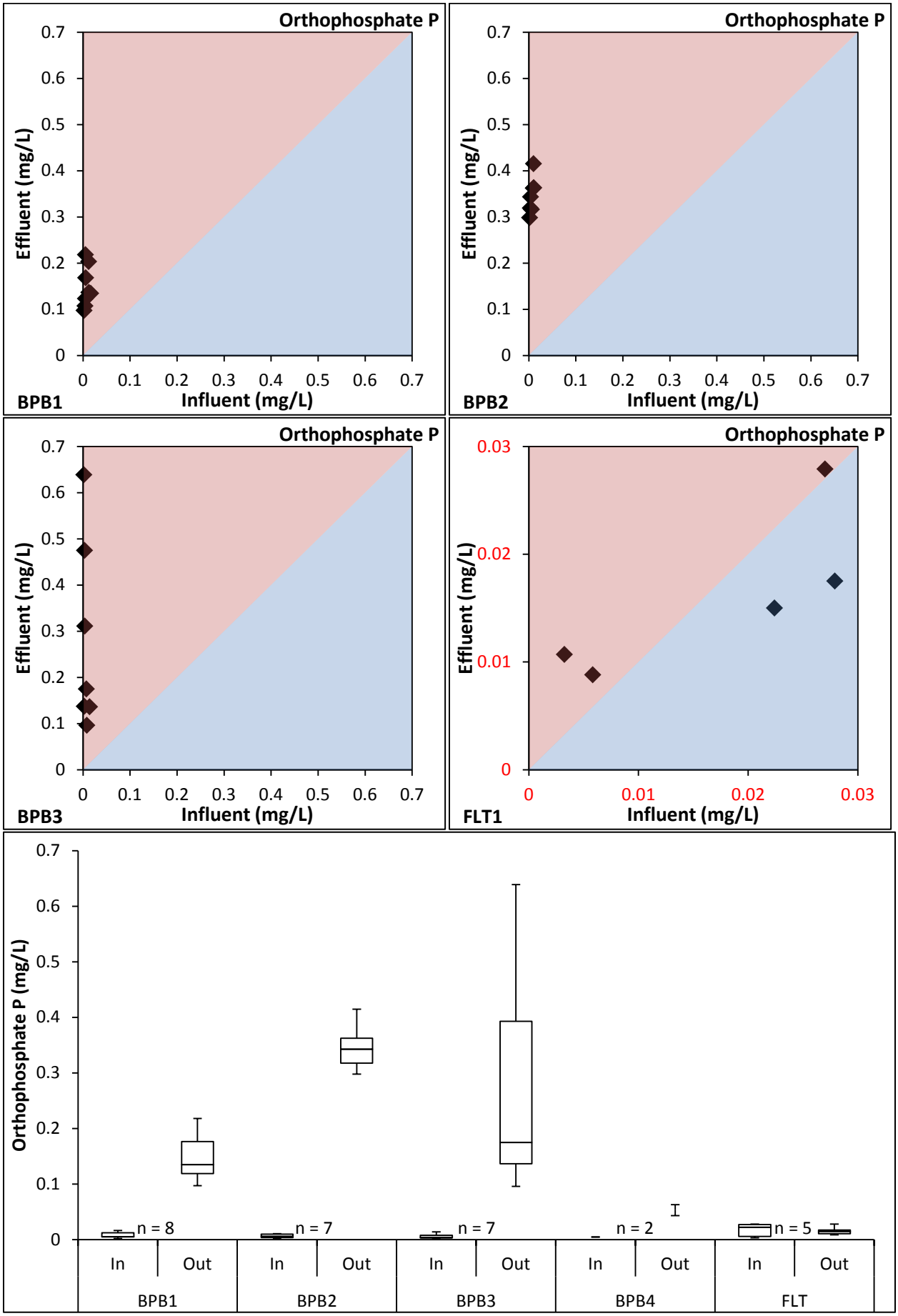
5 – Site name

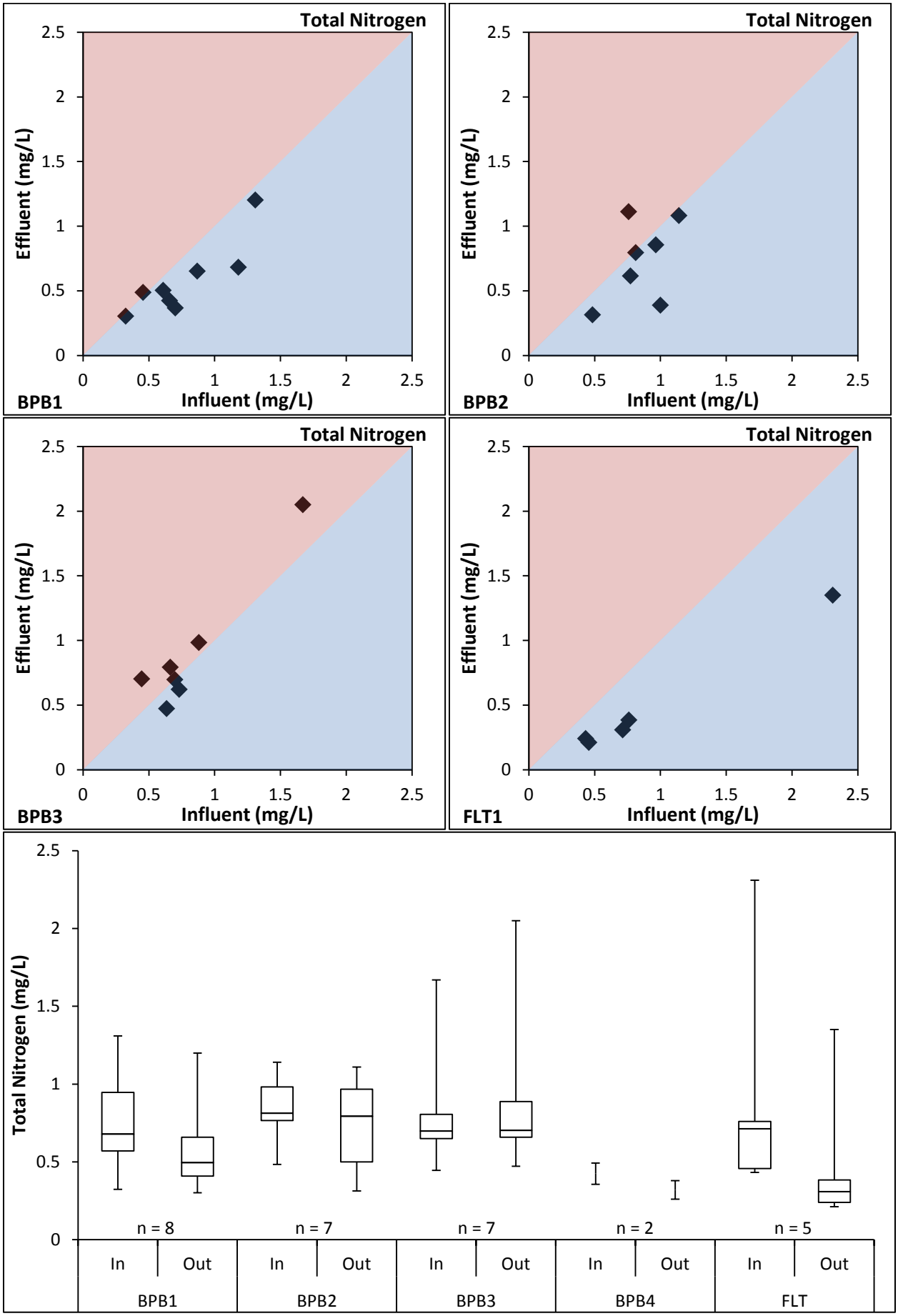
** Figures with several non-detect results include red lines indicating the method detection limit.*

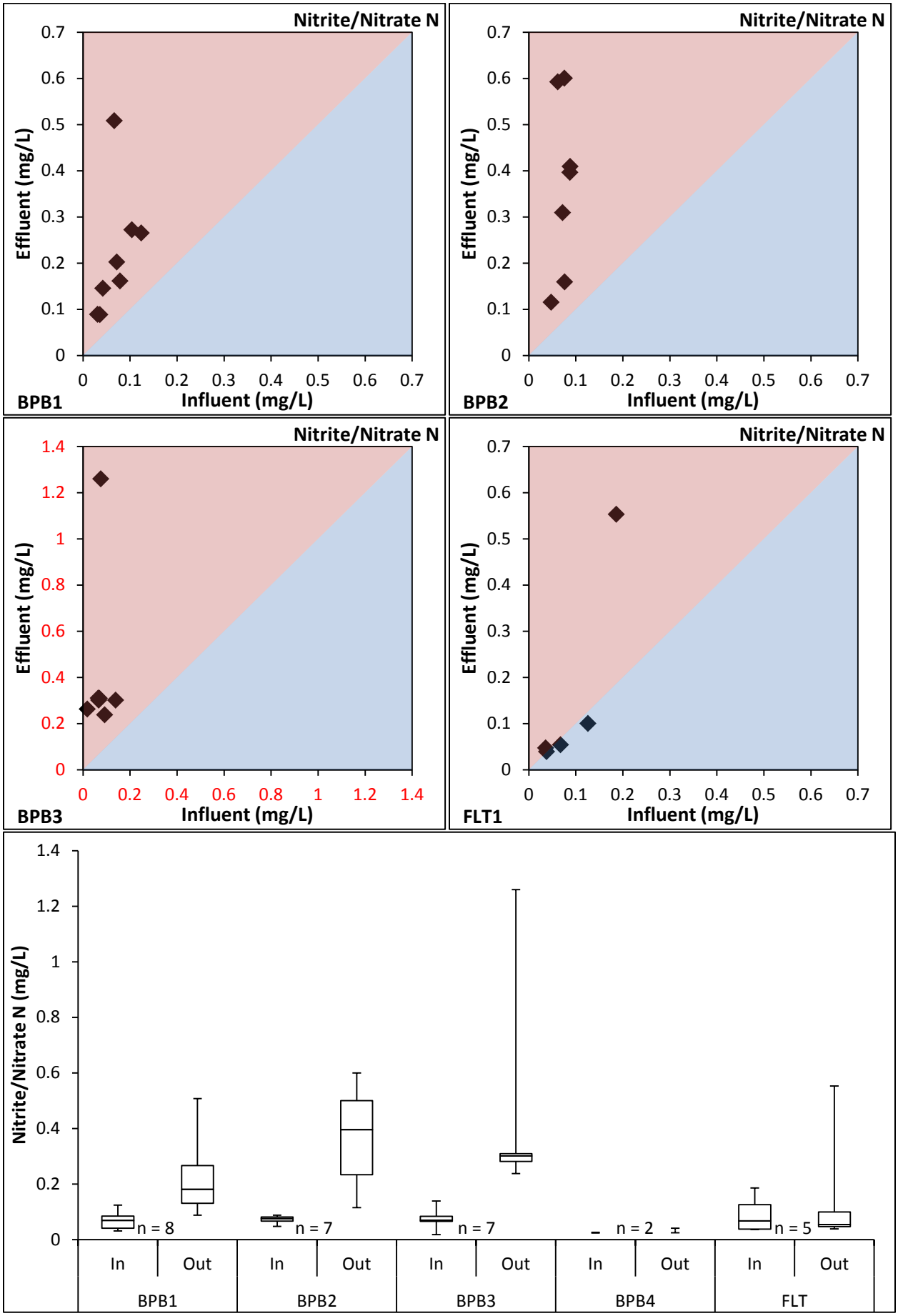
Box Plot Explanation:

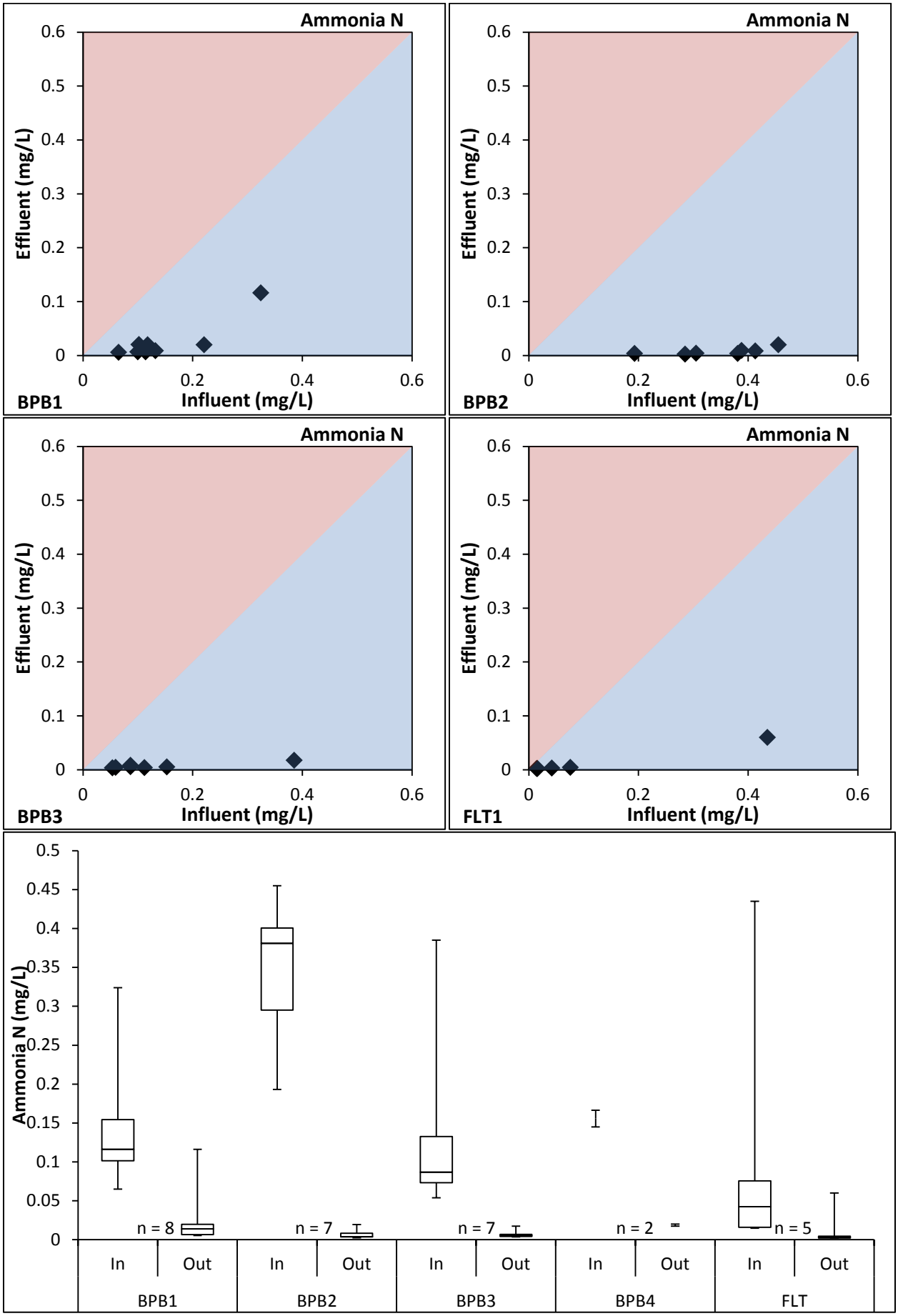


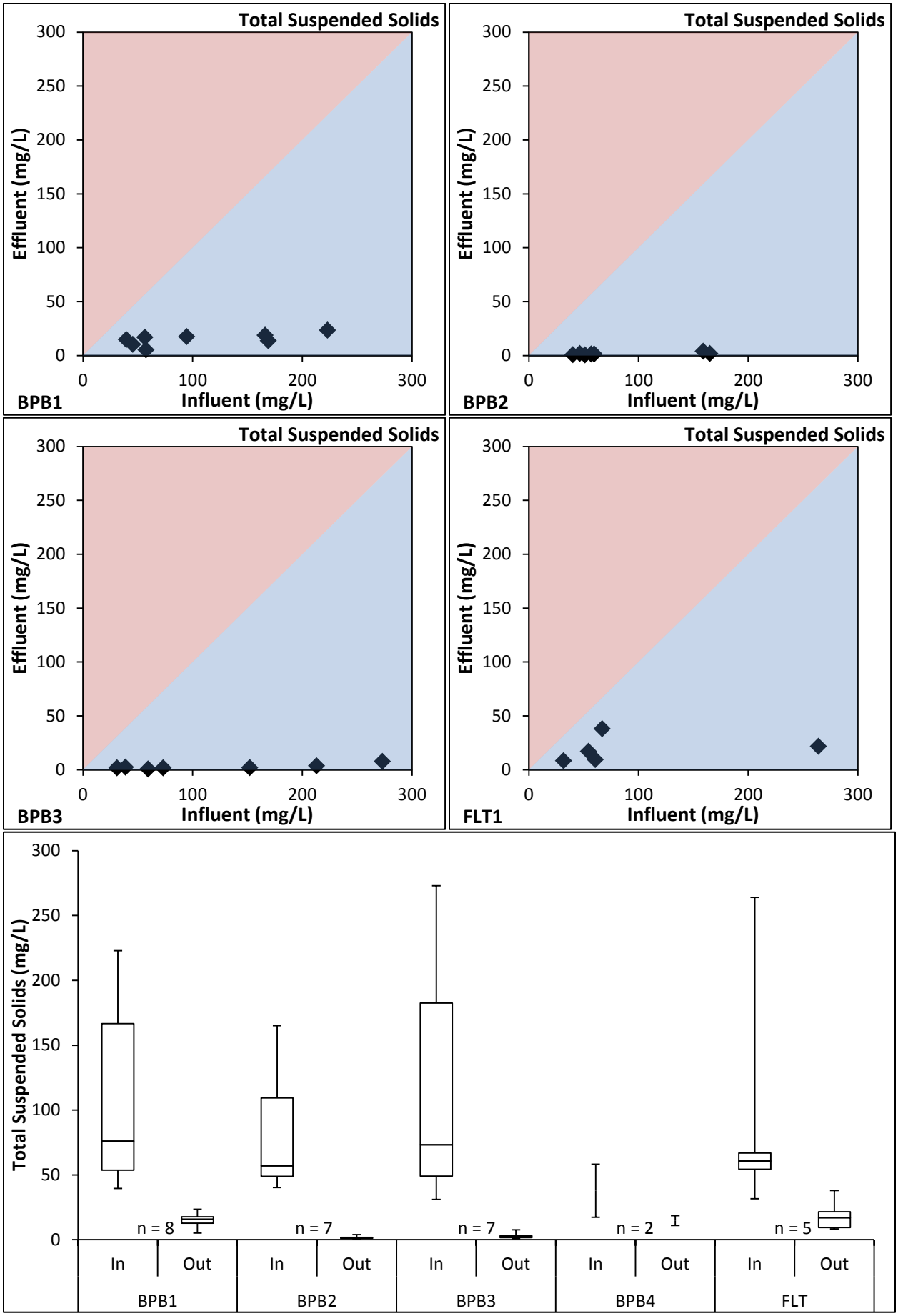

Total Phosphorus
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Total Phosphorus (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

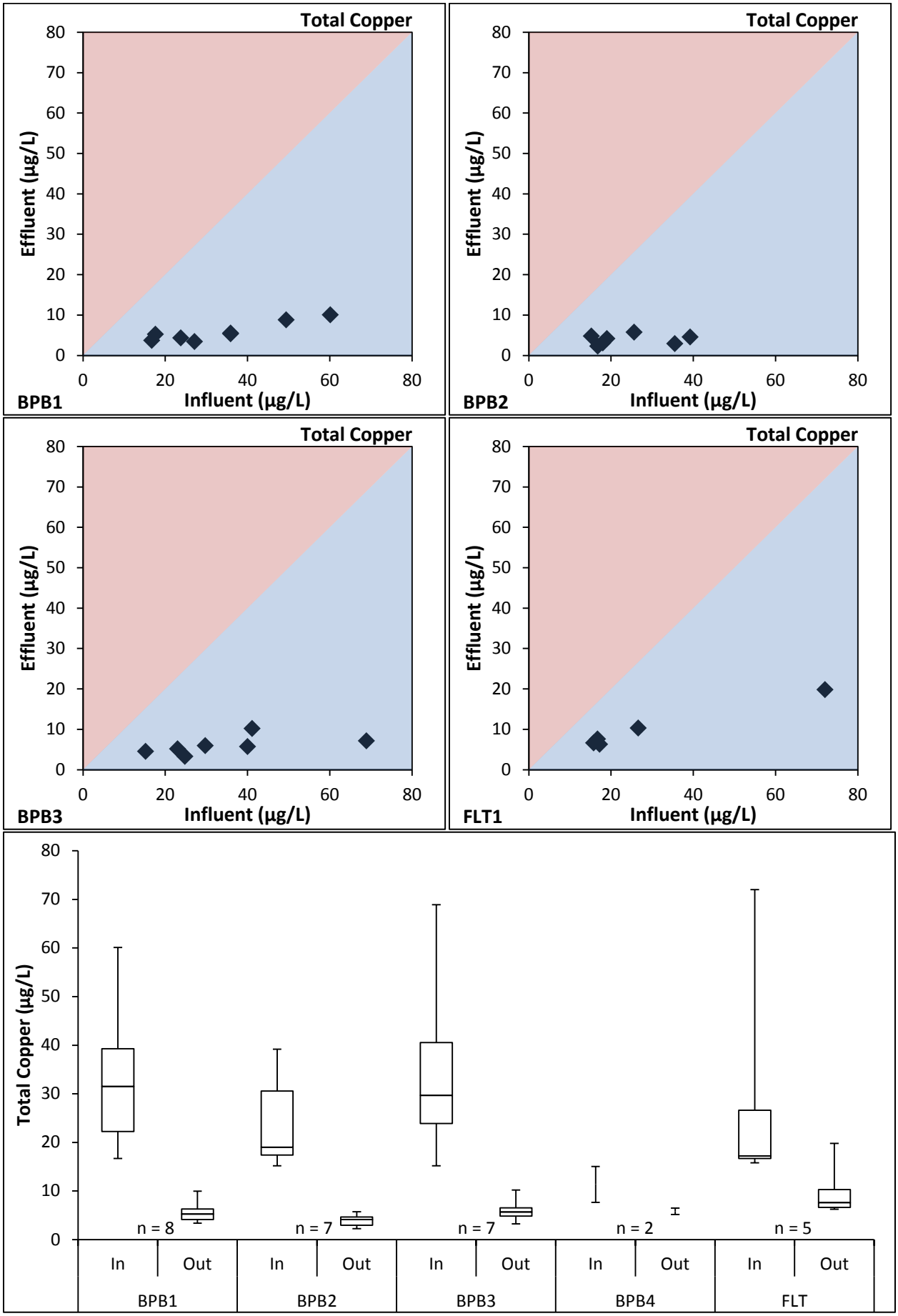

Orthophosphate P
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Orthophosphate P (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

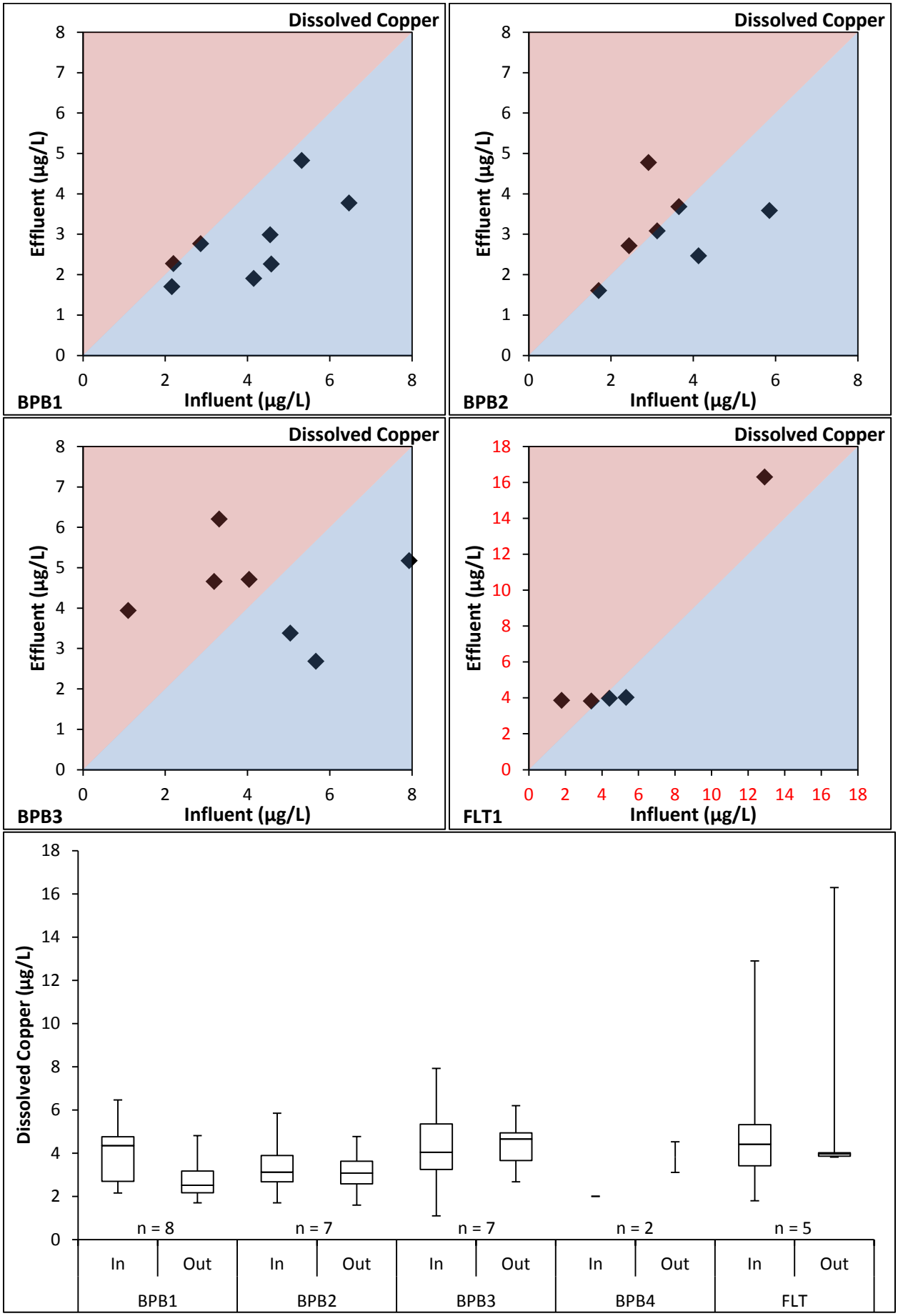

Total Nitrogen
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Total Nitrogen (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

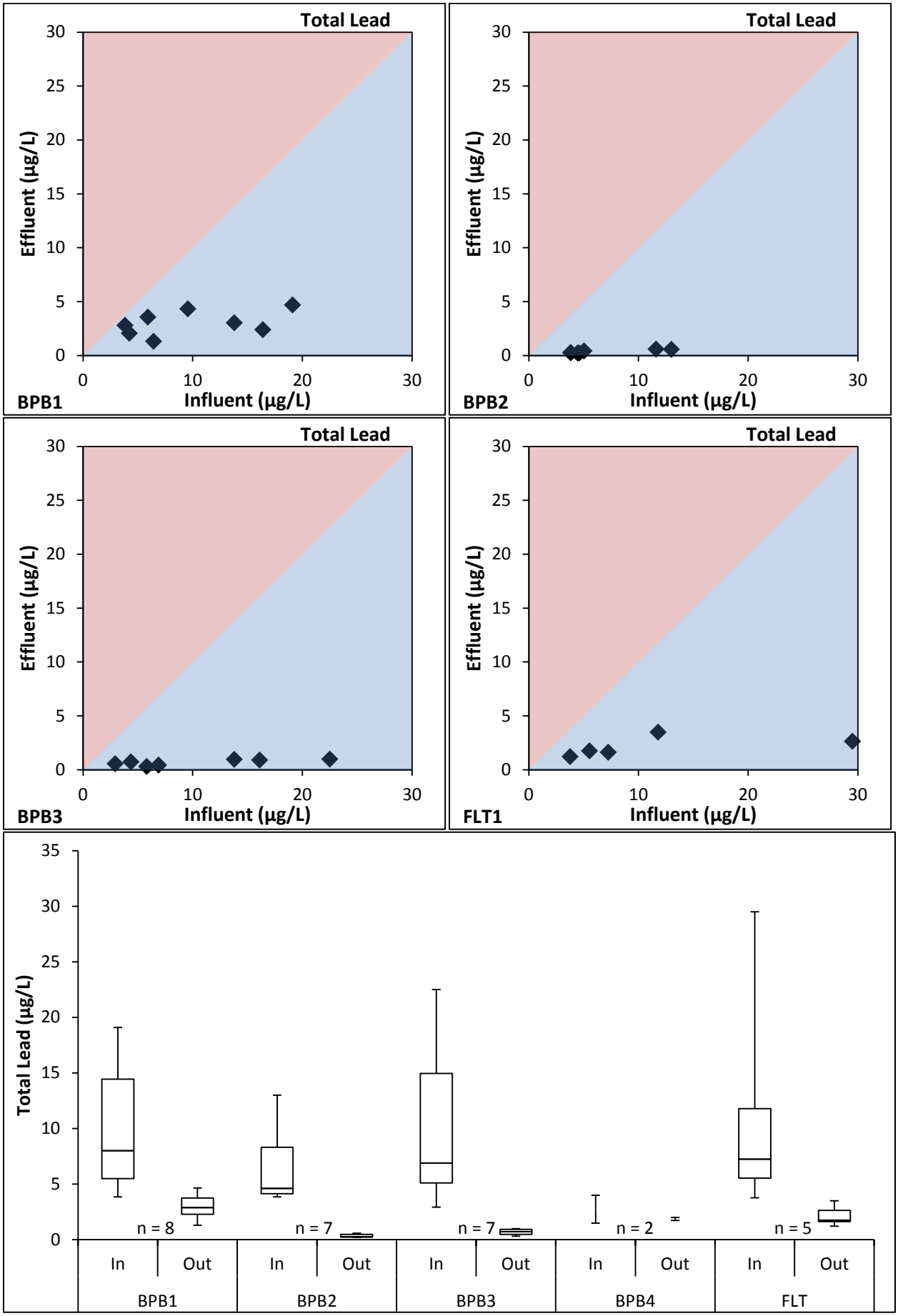

Nitrite/Nitrate N
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Nitrite/Nitrate N (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

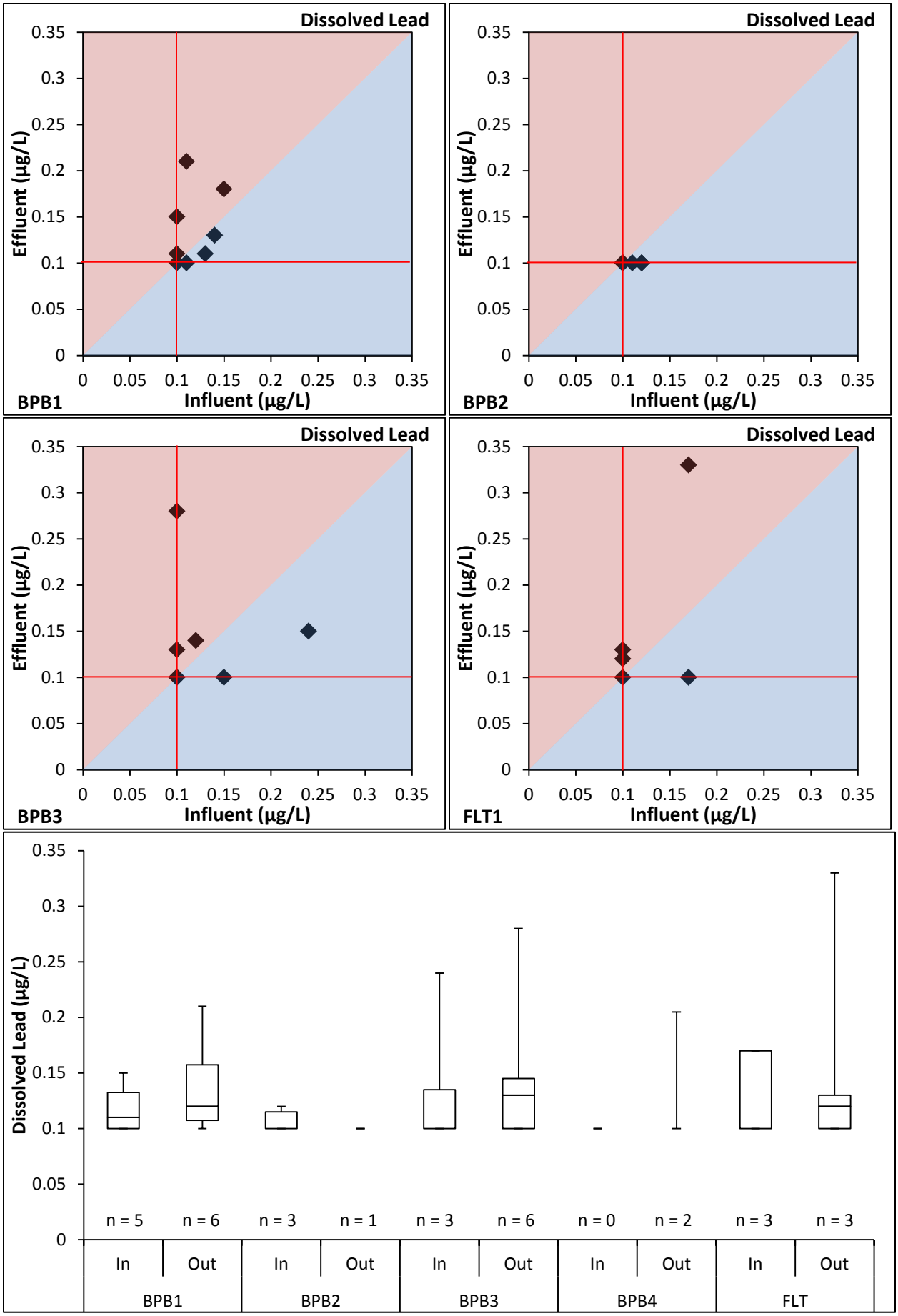

Ammonia N
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Ammonia N (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

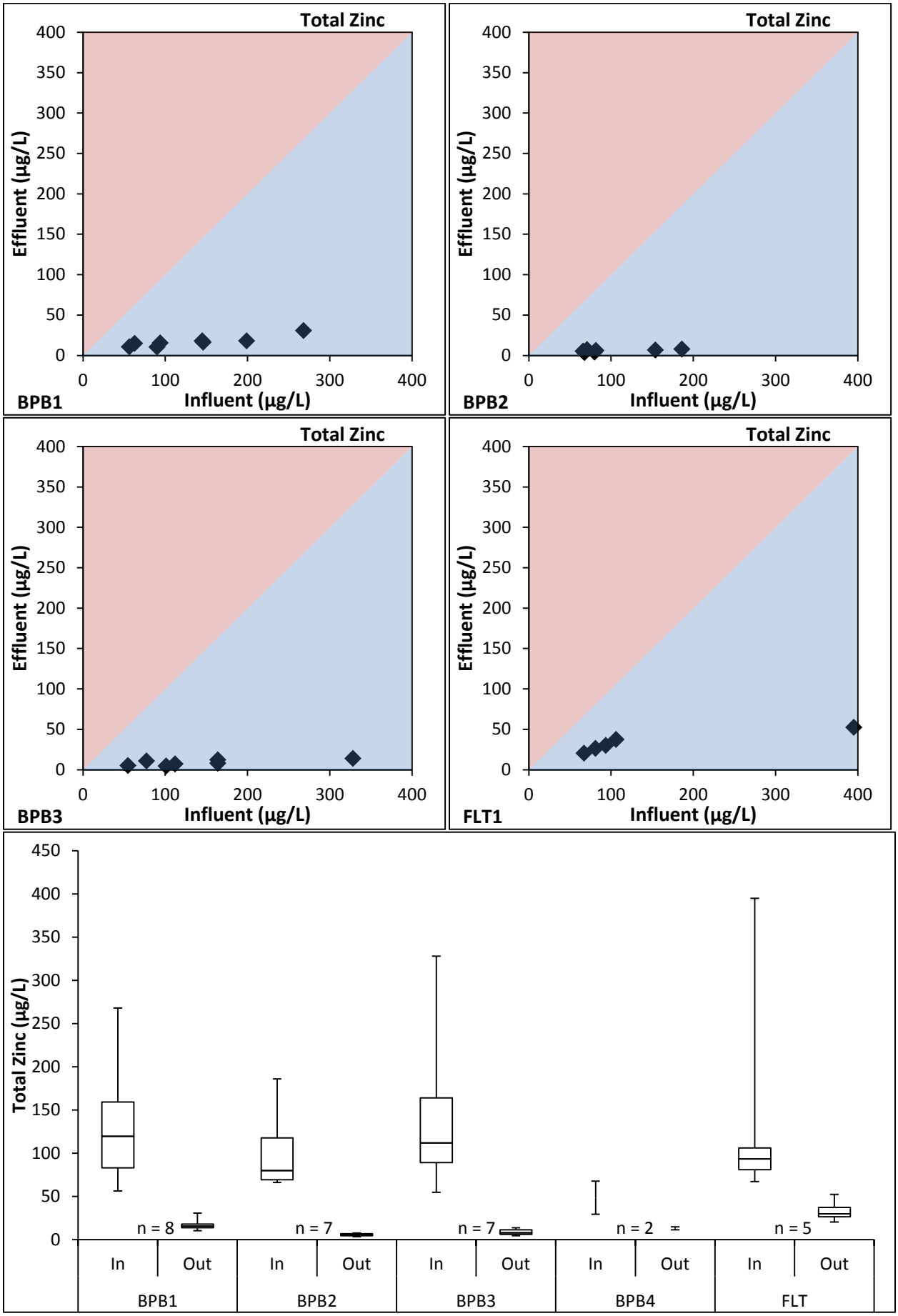

Total Suspended Solids
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
FLT1
Total Suspended Solids (mg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

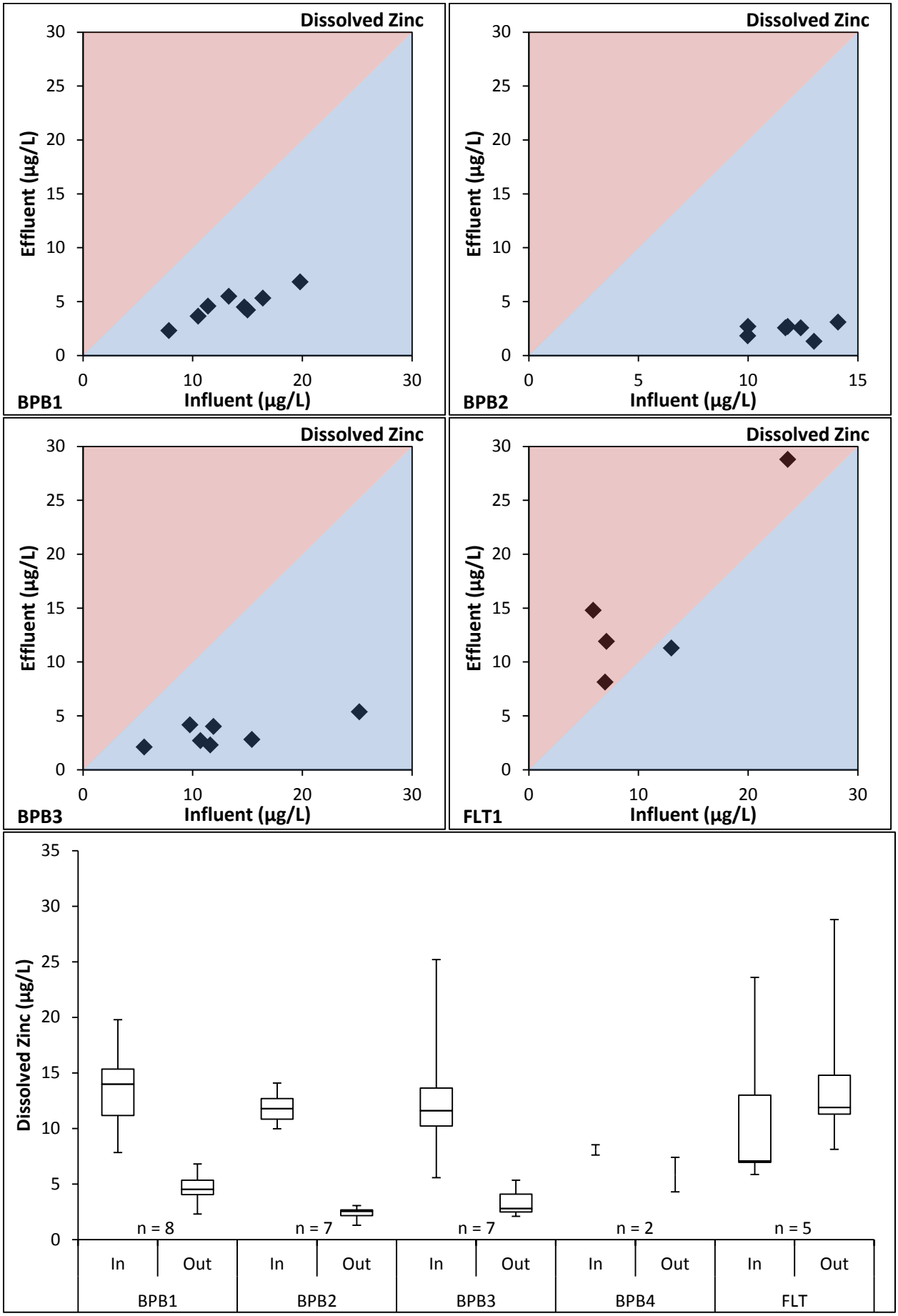

Total Copper
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
Total Copper (µg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

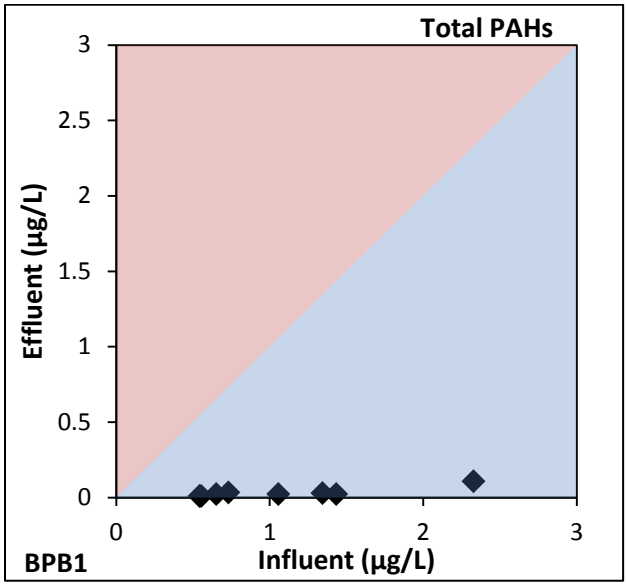

Dissolved Copper
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
Dissolved Copper (µg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

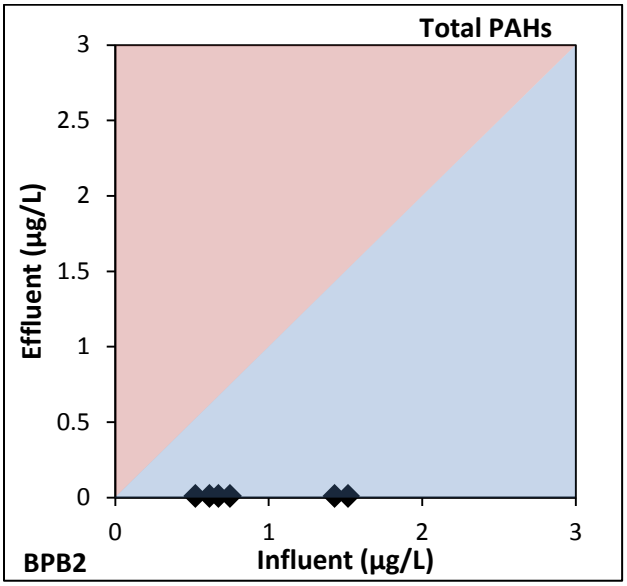

Total Lead
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
Total Lead (µg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

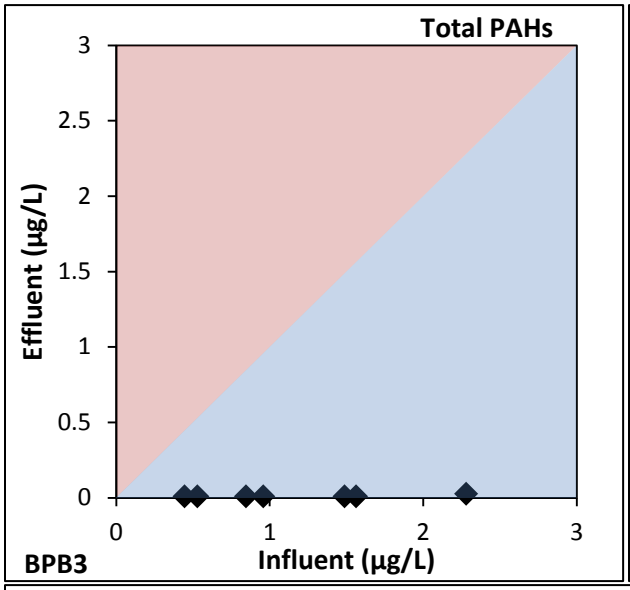

Dissolved Lead
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
Dissolved Lead (µg/L)
n = 5
n = 6
n = 3
n = 1
n = 3
n = 6
n = 0
n = 2
n = 3
n = 3
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

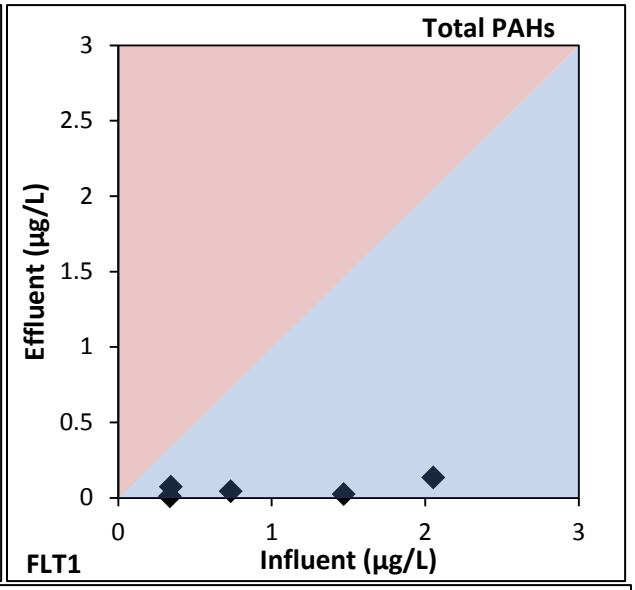

Total Zinc
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
Total Zinc (µg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

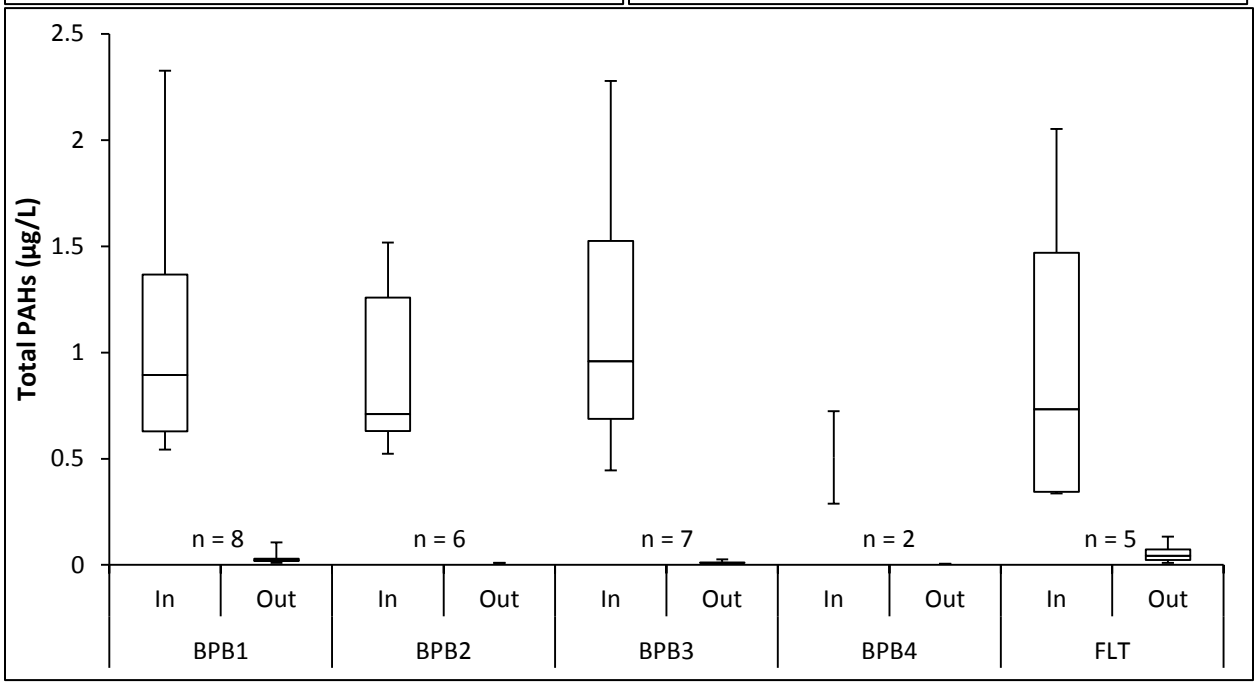

Dissolved Zinc
Effluent (µg/L)
Influent (µg/L)
BPB1
BPB2
BPB3
FLT1
Dissolved Zinc (µg/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

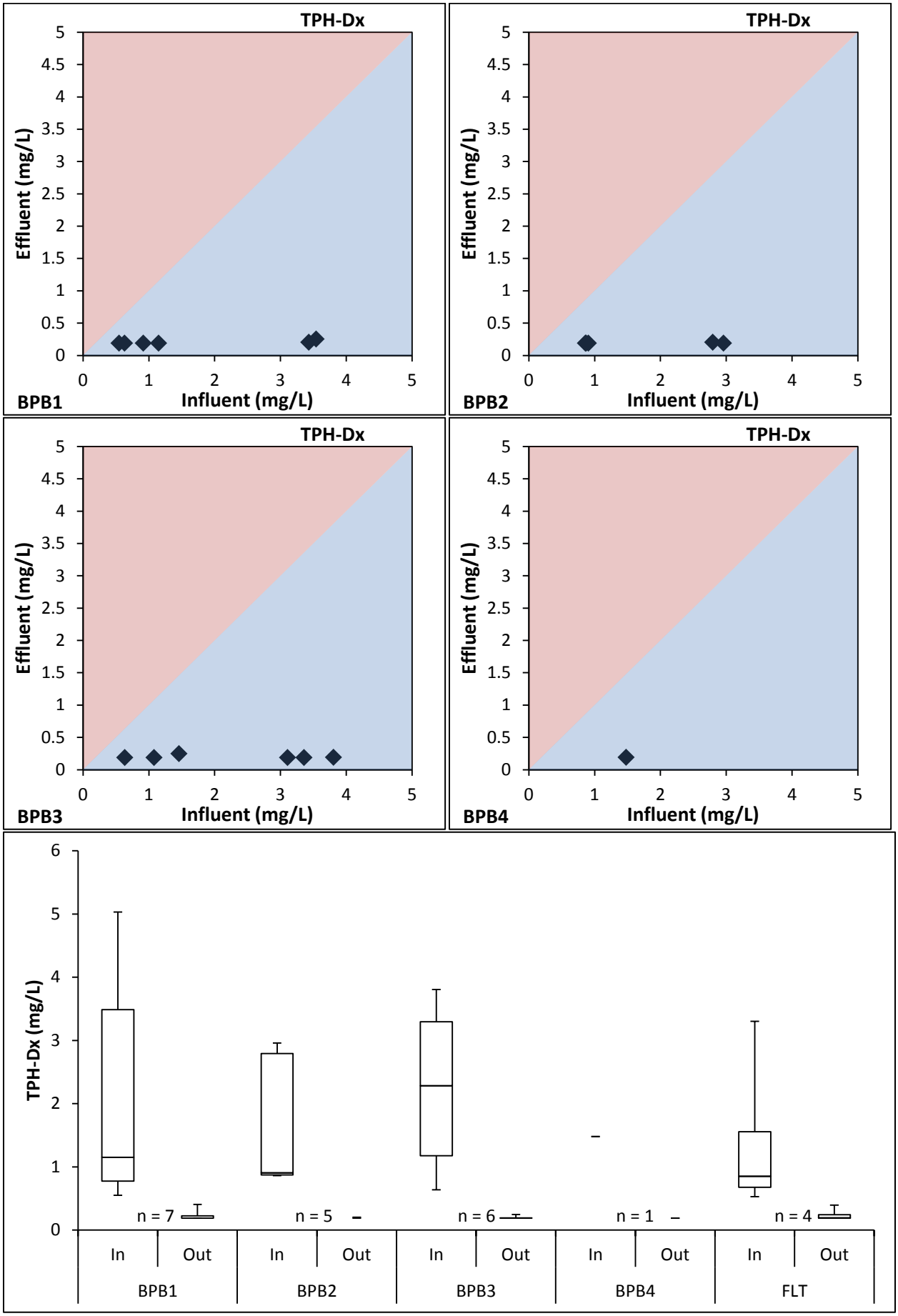

Total PAHs
Effluent (µg/L)
Influent (µg/L)
BPB1

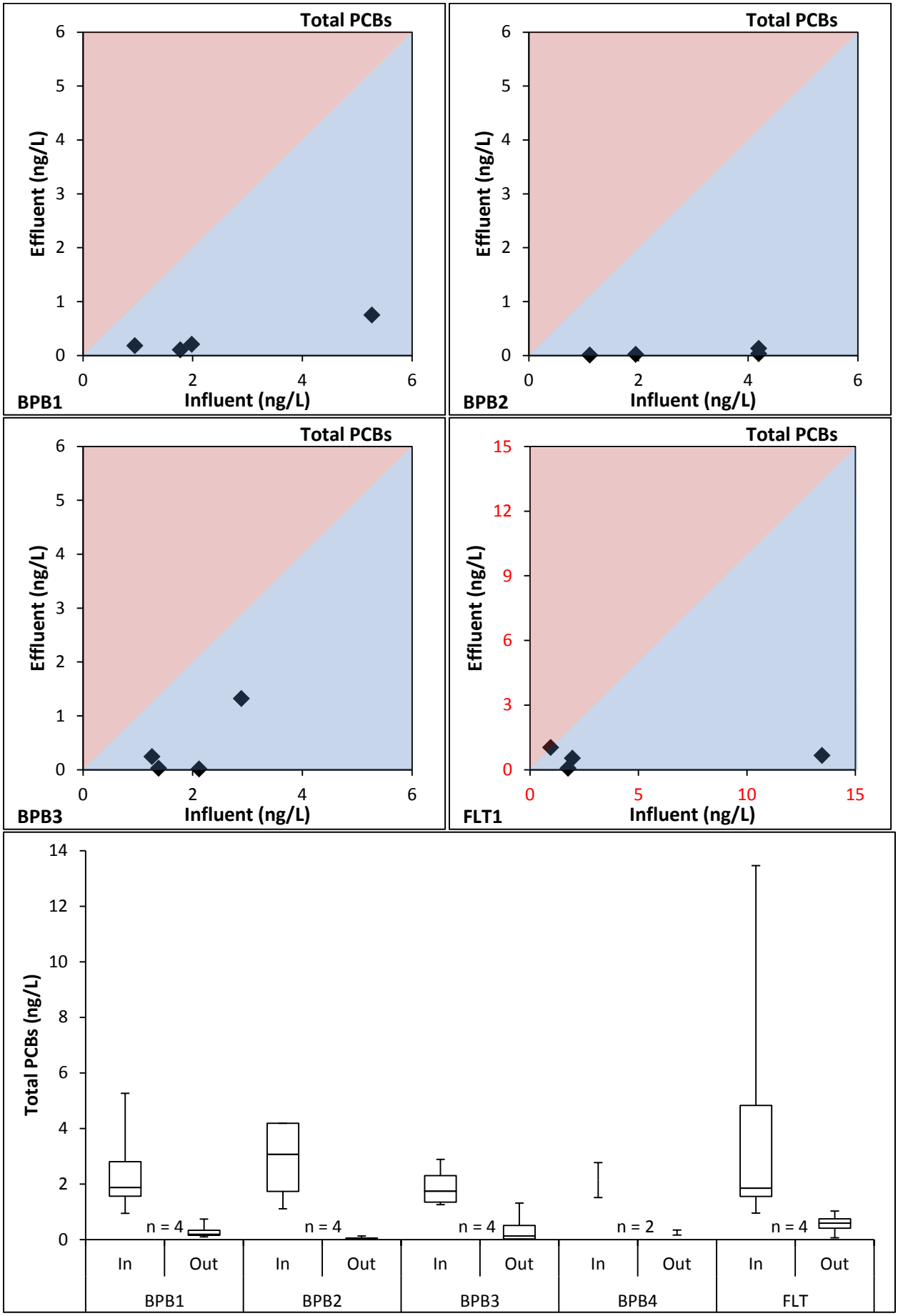

Total PAHs
Effluent (µg/L)
Influent (µg/L)
BPB2

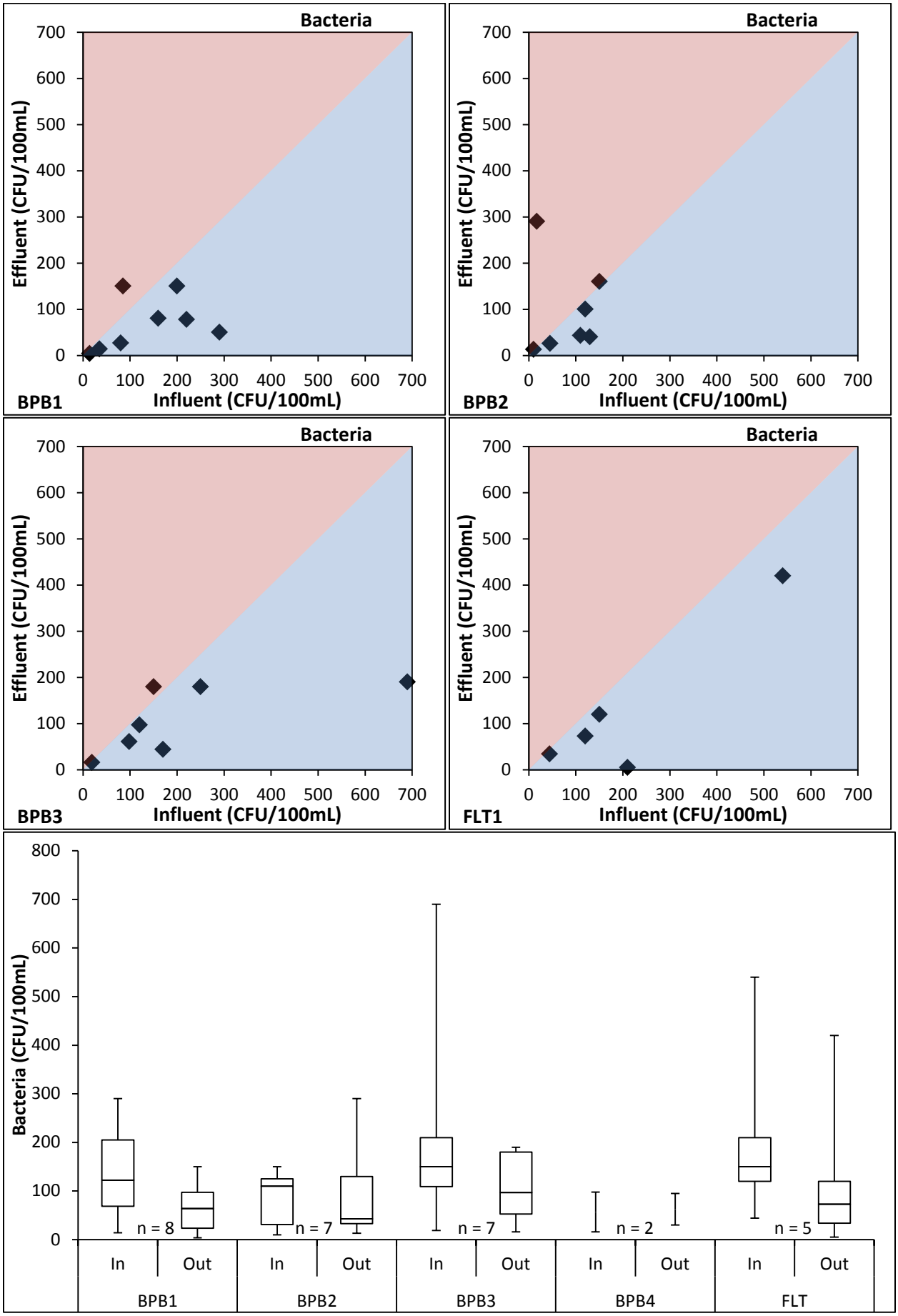

Total PAHs
Effluent (µg/L)
Influent (µg/L)
BPB3

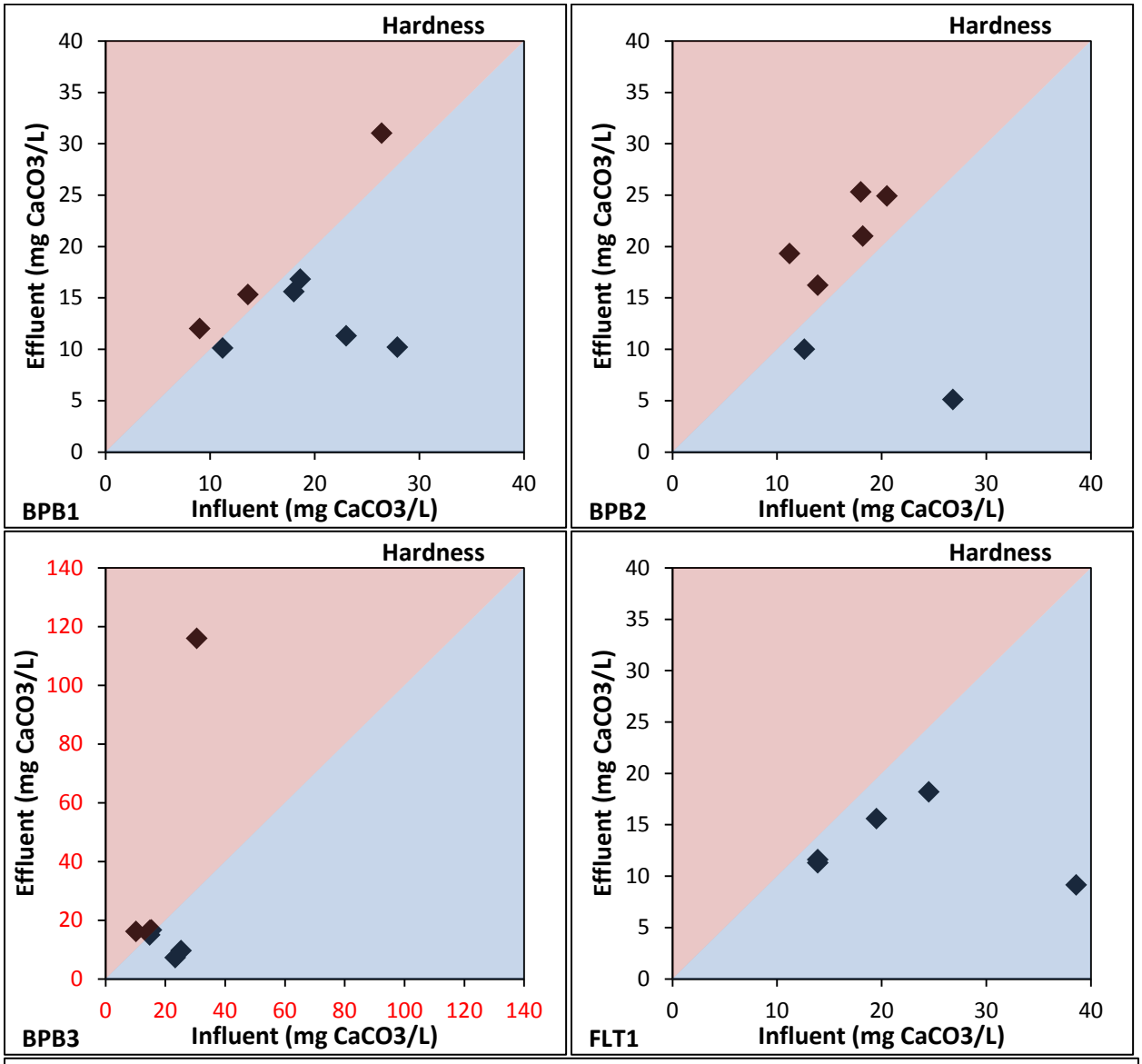

Total PAHs
Effluent (µg/L)
Influent (µg/L)
FLT1

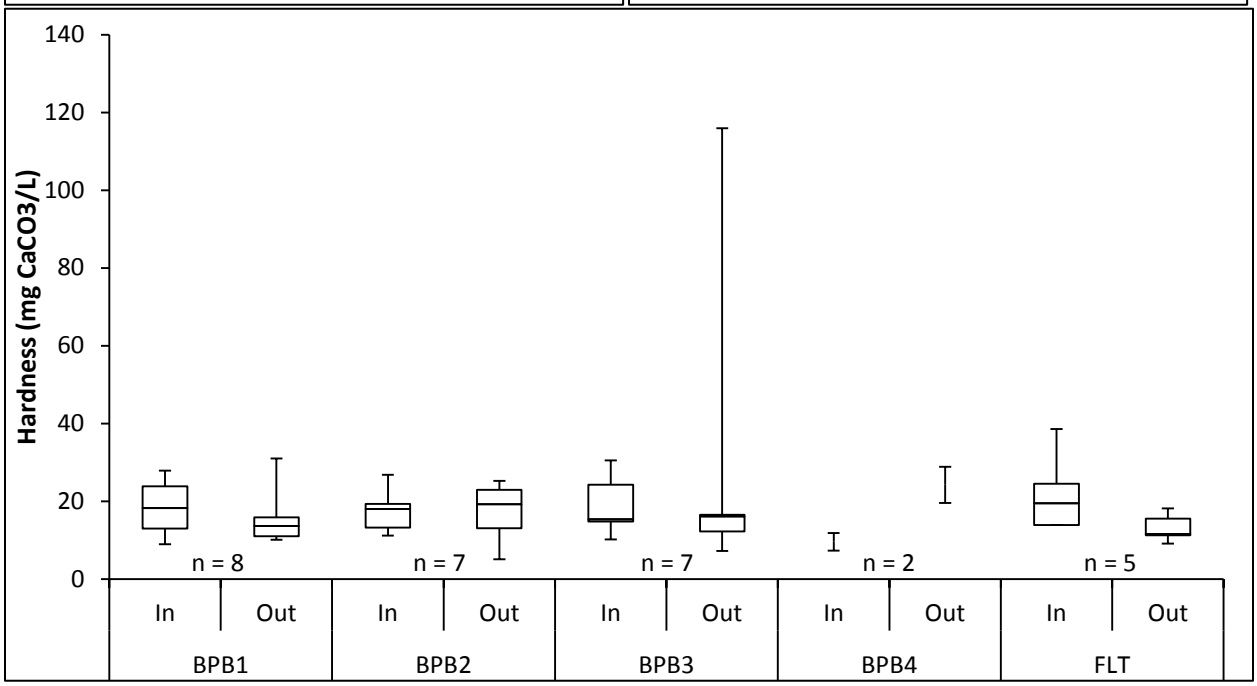

Total PAHs (µg/L)
n = 8
n = 6
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

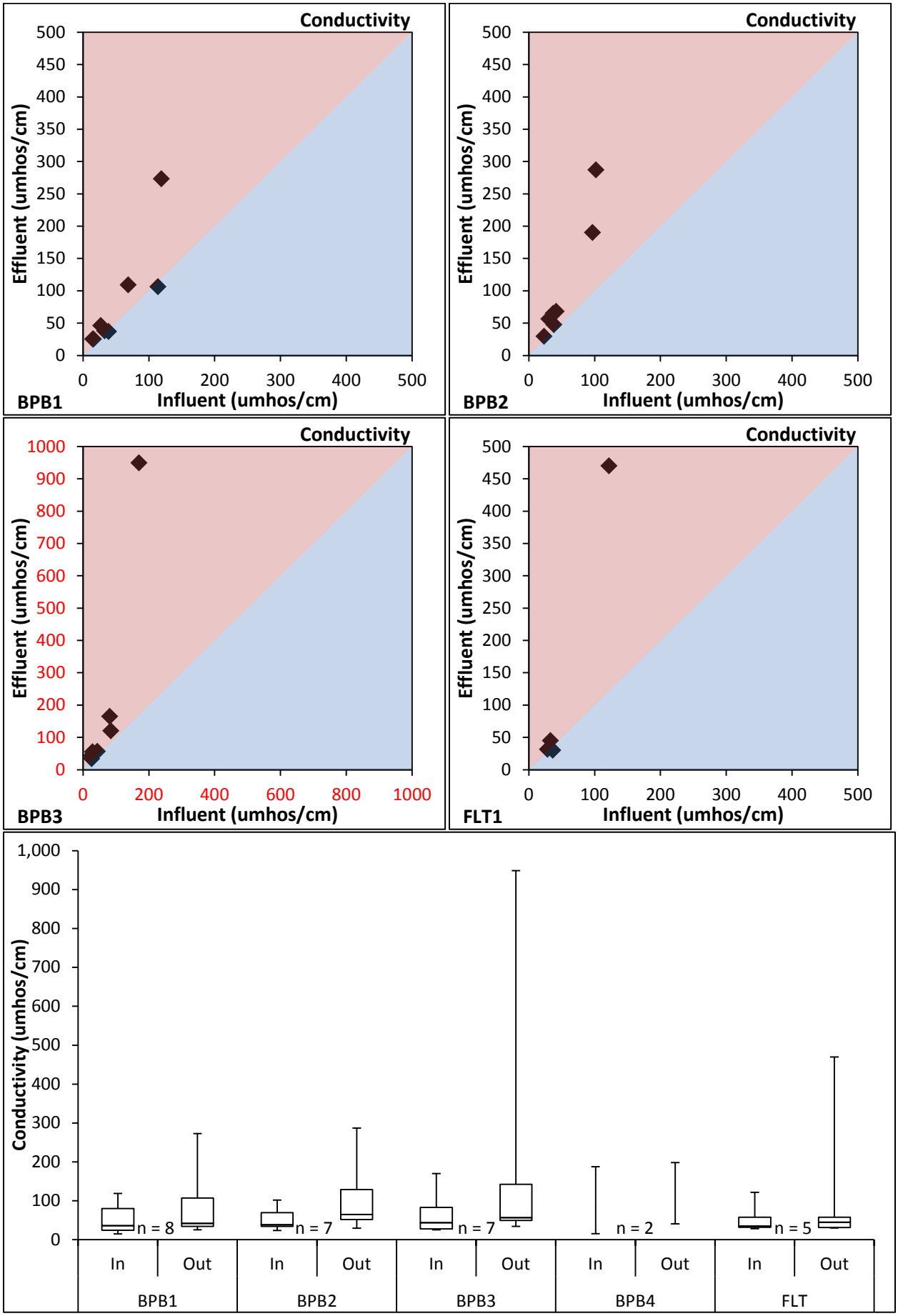

TPH-Dx
Effluent (mg/L)
Influent (mg/L)
BPB1
BPB2
BPB3
BPB4
TPH-Dx (mg/L)
n = 7
n = 5
n = 6
n = 1
n = 4
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

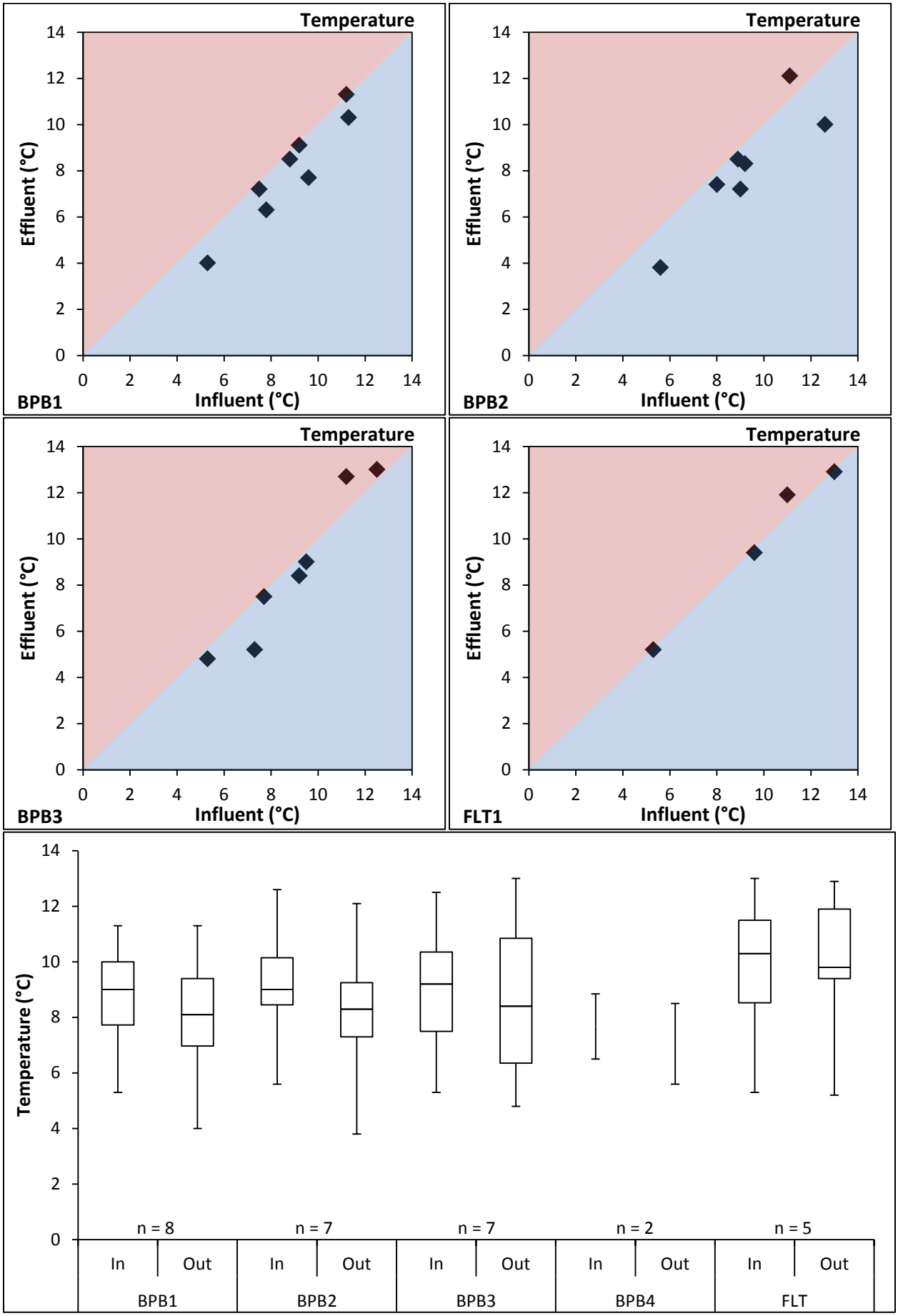

Total PCBs
Effluent (ng/L)
Influent (ng/L)
BPB1
BPB2
BPB3
FLT1
Total PCBs (ng/L)
n = 4
n = 4
n = 4
n = 2
n = 4
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

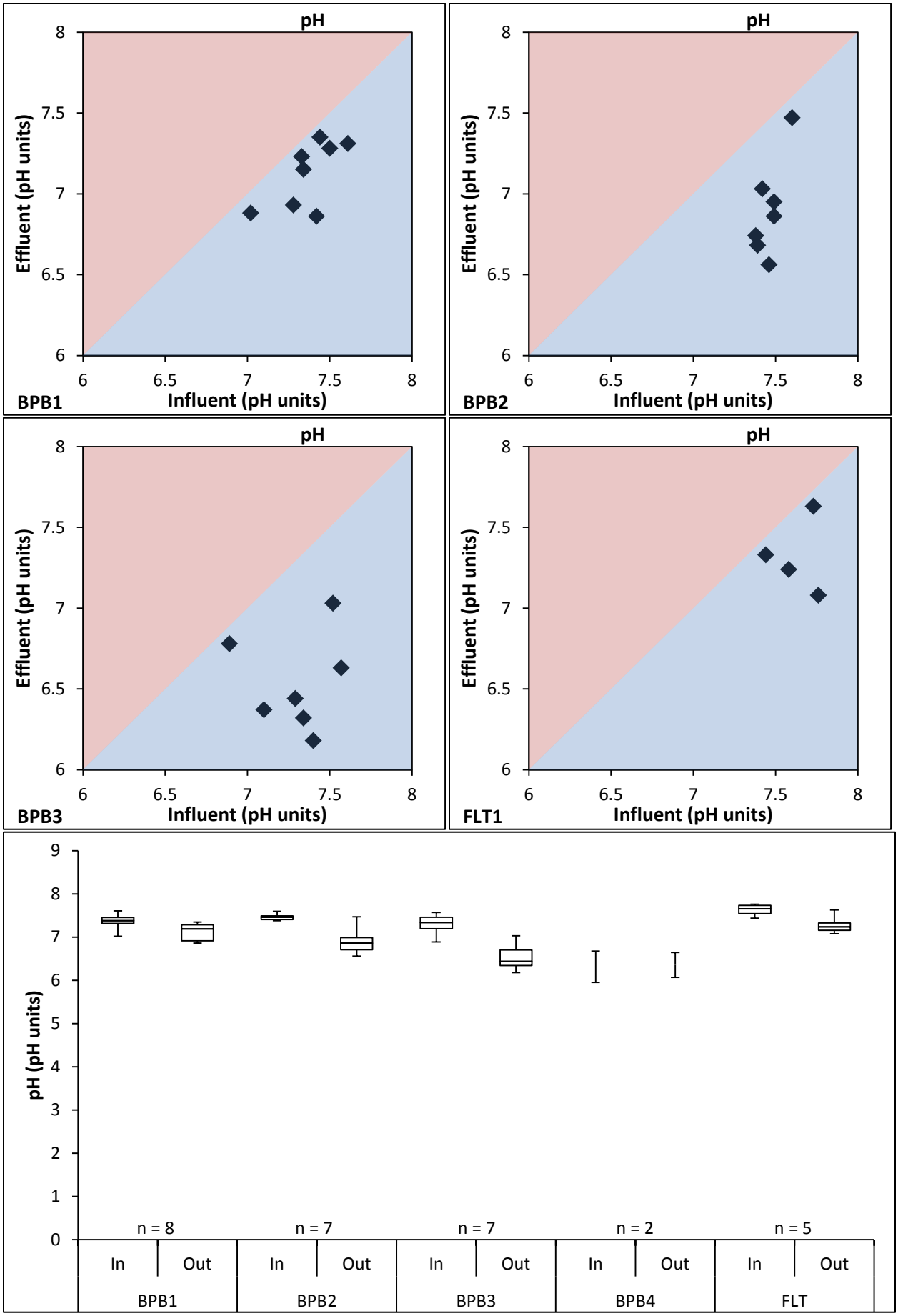

Bacteria
Effluent (CFU/100mL)
Influent (CFU/100mL)
BPB1
BPB2
BPB3
FLT1
Bacteria (CFU/100mL)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT


Hardness
Effluent (mg CaCO3/L)
Influent (mg CaCO3/L)
BPB1
BPB2
BPB3
FLT1


Hardness (mg CaCO3/L)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT


Conductivity
Effluent (umhos/cm)
Influent (umhos/cm)
BPB1
BPB2
BPB3
FLT1
Conductivity (umhos/cm)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT


Temperature
Effluent (°C)
Influent (°C)
BPB1
BPB2
BPB3
FLT1
Temperature (°C)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT


pH
Effluent (pH units)
Influent (pH units)
BPB1
BPB2
BPB3
FLT1
pH (pH units)
n = 8
n = 7
n = 7
n = 2
n = 5
In
Out
BPB1
BPB2
BPB3
BPB4
FLT

APPENDIX H2 – TOXICITY TEST RESULTS

Toxicity tests using *Daphnia pulex* (48-hour acute test) and *Ceriodaphnia dubia* (7-day chronic test) were conducted on samples from four storm events at BPB1. No acute toxicity was observed in the *D. pulex* tests. Three of the four influent samples were toxic to *C. dubia*, with greatest toxicity observed for the sample with highest contaminant concentrations (1/17/17). Dilution series were run for two events, but these exposures did not result in toxicity. Appendix F3 includes full toxicity reports. Table H2-1 summarizes the toxicity results and notable water quality parameters.

Table H2-1. Summary of toxicity test results and water quality parameters.

Storm Event	Sample Type	*Daphnia pulex*	*Ceriodaphnia dubia*		Hardness	Alkalinity	TSS	Dissolved Copper	Dissolved Zinc	Total PAHs
		Mean % Survival	Mean % Survival	Mean Reproduction	(mg $CaCO_3$/L)	(mg $CaCO_3$/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
1/21/16	Standard Control	100	90	34.2	104	80.4	--	--	--	--
	Influent	95	50*	23.8*	11.2	7.93	45.4	2.16	10.5	0.555 J
	Effluent	95	80	30.6	10.1	10.3	10.2	1.7 J	3.63	0.0094 U
3/9/16	Standard Control	100	100	17.4	36.9	36.1	--	--	--	--
	Influent	85	100	19.2	10.9	8.09	56.4	4.58	13.3	0.732 J
	Effluent	100	90	21.4	10.5	10.5	16.8	2.26	5.48	0.0319 J
10/26/16	Standard Control	100	100	32.8	41.9	37.9	--	--	--	--
	Low Hard. Control	100	100	33.9	10.8	9.87	--	--	--	--
	Influent	100	60*†	19.5*†	8.99	--	39.6	2.86	11.4	0.653 J
	Effluent	100	100	33.2	12.0	--	14.6	2.76	4.56	0.0210 J
1/17/17	Standard Control	95	100	35.4	36.2	100	--	--	--	--
	Low Hard. Control	--	100	31.0	9.49	9.1	--	--	--	--
	Influent	100	0*†	0*†	26.4	--	223	5.32	19.8	2.33 J
	Effluent	100	90	37.9	31.0	--	23.4	4.82	6.81	0.106 J

* Statistically significant reduction in survival or reproduction compared to control response ($p < 0.05$; Appendix E describes statistical methods).
† Statistically significant reduction in survival or reproduction in the inlet response compared to outlet response ($p<0.05$; Appendix E).
-- – not analyzed; J – estimated value; U – non-detect value;
Low hardness controls were utilized, because the low hardness in project samples was not adjusted and could potentially impact survival.

APPENDIX H3 – RELATIONSHIPS BETWEEN PARAMETERS

Understanding the relationships between parameters can provide better insight into how the BMPs are affecting water quality and the conditions under which they will be most effective. For example, conventional parameters like organic carbon and suspended solids can affect removal efficiencies for some pollutants. This section explores the relationships between parameters using linear regressions and visual observations for the data collected at the BPBs installed in 2012 (i.e., BPB1, BPB2, and BPB3). When patterns were similar across these three sites, the results are summarized as a combined dataset. Data from BPB4, the Filterra and the DTS are not included in this section due to limited sample size.

Metals

Metals can be present in stormwater in a variety of forms, which can affect how well they are removed by bioretention and their toxicity. Dissolved metals includes freely dissolved metal ions and metals associated with particulates less than 0.45µm, including dissolved organic carbon (DOC). Total metals includes all dissolved metals and metals as particulates greater 0.45µm. Bioretention provides an effective physical filter for particulate metals; however, removal efficiency of dissolved metals depends more on chemical interactions, such as the metal's affinity for the media compared to the metal's affinity for DOC in the stormwater. This can vary with different metals and under different conditions including pH and amount of time stormwater is retained in the BMP.

Copper

The BPBs effectively reduced total copper (Section 2.1 of main report). The evidence suggests removal was achieved primarily through physical filtration of particulates. There was a strong relationship between total copper and TSS in the influent, but not in effluent where the majority of copper was present in the dissolved form (Figures H3-1 and H3-2).

Dissolved copper influent concentrations were not significantly reduced in the effluent. Dissolved copper was strongly related to DOC in the influent and moderately related to DOC in the effluent (Figure H3-3). Dissolved copper has a particularly high affinity to DOC compared to other stormwater metals, such as zinc (Kaschl et al. 2002, Li and Davis 2008, McBride et al. 1997, Silvertooth 2014,). Previous research has shown this strong relationship between dissolved copper and DOC in stormwater can prevent dissolved copper from binding with bioretention media, thus affecting treatment effectiveness (King County 2014, Li and Davis 2008, Silvertooth 2014, Zhou and Wong 2001). The relationships discussed in this section corroborate these findings.

Zinc

In contrast to copper, the BPBs efficiently reduced both total and dissolved zinc (Section 2.1 of the main report). There was a strong relationship between total zinc and TSS in the influent and the effluent (Figures H3-4), and the majority of total zinc was present in the particulate fraction in both influent and effluent (H3-5). Dissolved zinc was strongly related to DOC in the influent, but not related to DOC in the effluent (Figure H3-6). These data suggest that while dissolved zinc may have been associated with DOC in the influent, the association was not strong enough to prevent dissolved zinc from binding with the BPB media.

Cadmium and Lead

Data for cadmium and lead were limited due to infrequent detections, particularly in the effluent. Total cadmium and lead were strongly related to TSS in the influent, as was total lead in the effluent (Figures H3-7 and H3-8).

DOC

Concentrations of DOC tended to be higher in effluent compared to influent (e.g., average influent 2.09 mg/L, average effluent 4.29 mg/L). However, no statistical tests were conducted with DOC results, because this analyte was added partway through the study, resulting in a lower sample size at each individual site. Due to the lack of flow data, it was not possible to determine whether the observed concentration increase was due to an increase in DOC mass, or a decrease in stormwater volume (volume changes discussed in Section 2.1 of the main report). An increase of DOC mass is possible if the media is introducing DOC to the treated stormwater (Li and Davis 2009). If this is the case, the media could also release any OC-bound contaminants from the media, such as copper and hydrophobic organic contaminants; however, results of this study do not suggest this occurred at the BPBs or Filterra.

Nutrients

Total phosphorus and nitrogen were strongly related to TSS in the influent, but were not related to TSS in the effluent (Figures H3-9 and H3-10). This is likely due to export of dissolved nutrients from the media, particularly for phosphorus. For example, phosphorus concentrations were higher in effluent than the influent. Orthophosphate phosphorus comprised an average of 7% of the influent total phosphorus, but an average of 80% of the effluent total phosphorus (Figure H3-11).

Organic Contaminants

The organic contaminants analyzed in this study were lube-oil-/diesel-range petroleum hydrocarbons (TPH-Dx), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). These compounds are fairly hydrophobic indicating they have low solubility in water and are generally associated with suspended solids and organic matter. There was a moderate to strong relationship between influent concentrations of organic contaminants and TSS (Figures H3-12 through H3-14). Relationships between effluent concentrations could only be assessed for total PCBs due to low frequency of detection of the other organic contaminants, but no relationship was observed (Figure H3-14). Total organic carbon (TOC) was not analyzed in most samples; therefore, the relationship between organic contaminants and TOC could not be assessed.

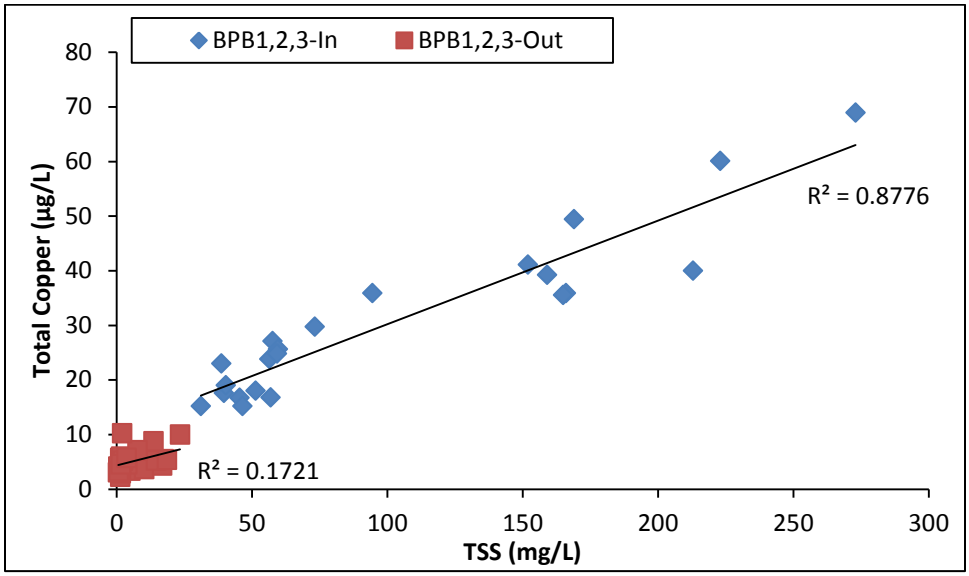


Figure H3-1. Total Copper Versus TSS for the 2012 BPBs Influent and Effluent

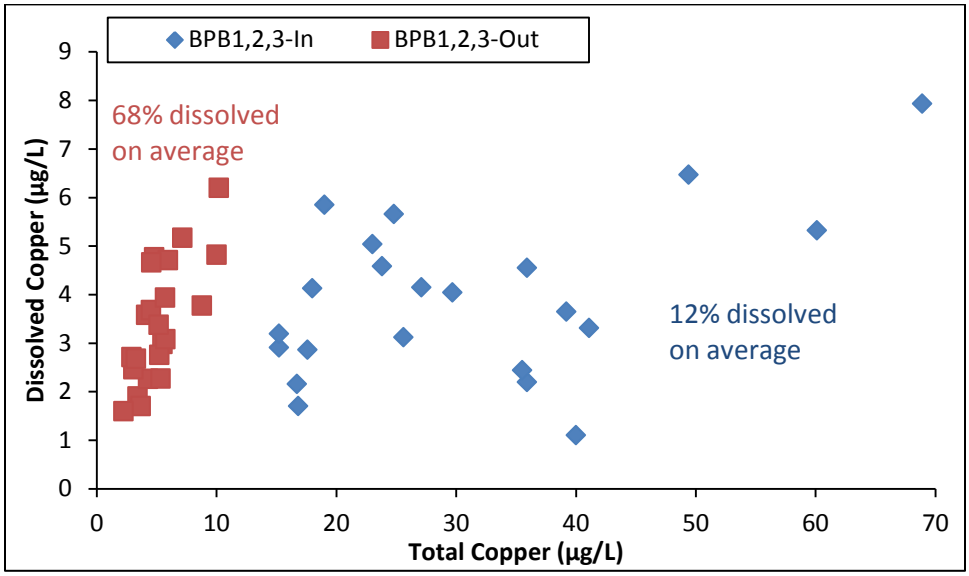


Figure H3-2. Dissolved Versus Total Copper for the 2012 BPBs Influent and Effluent

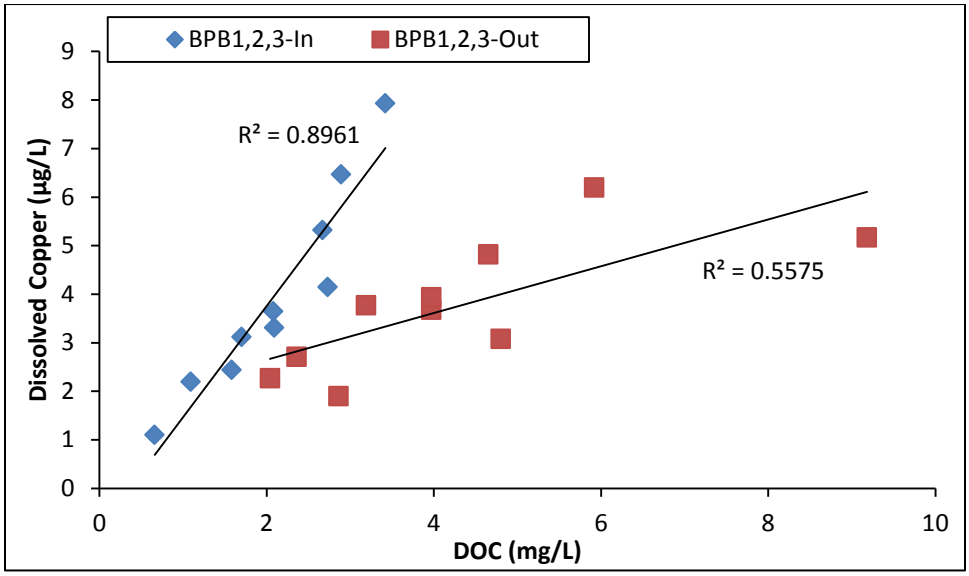


Figure H3-3. Dissolved Copper Versus DOC for the 2012 BPBs Influent and Effluent

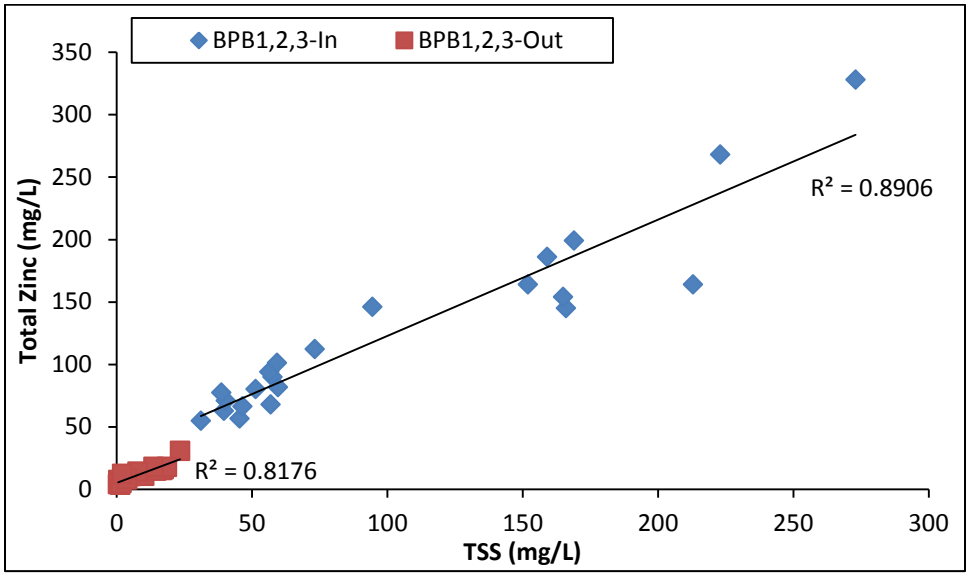


Figure H3-4. Total Zinc Versus TSS for the 2012 BPBs Influent and Effluent

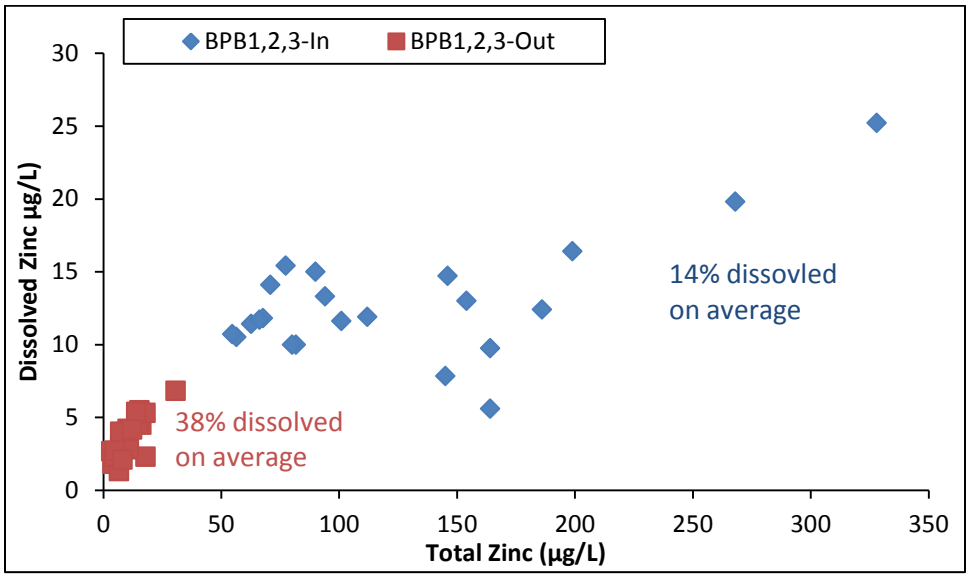


Figure H3-5. Dissolved Versus Total Zinc for the 2012 BPBs Influent and Effluent

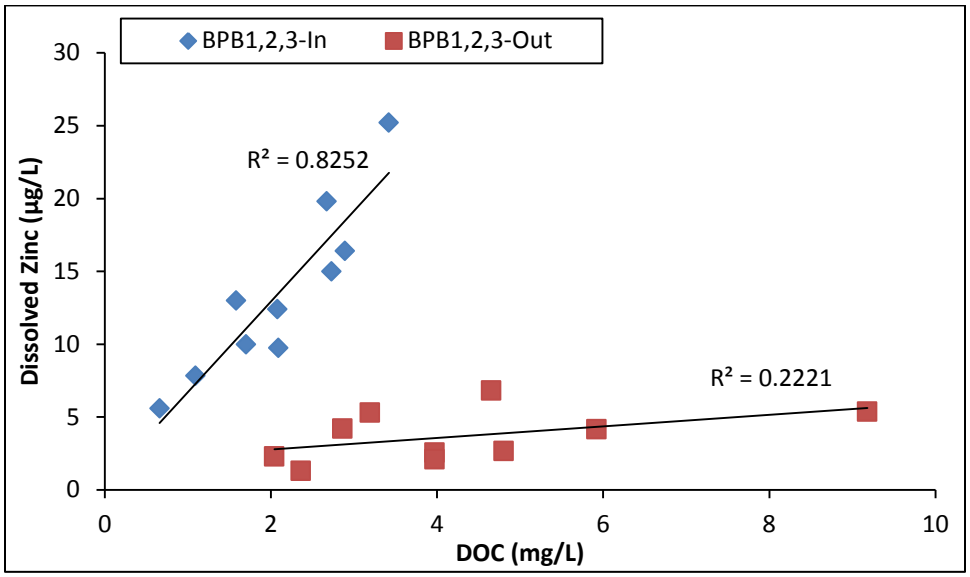


Figure H3-6. Dissolved Zinc Versus DOC for the 2012 BPBs Influent and Effluent

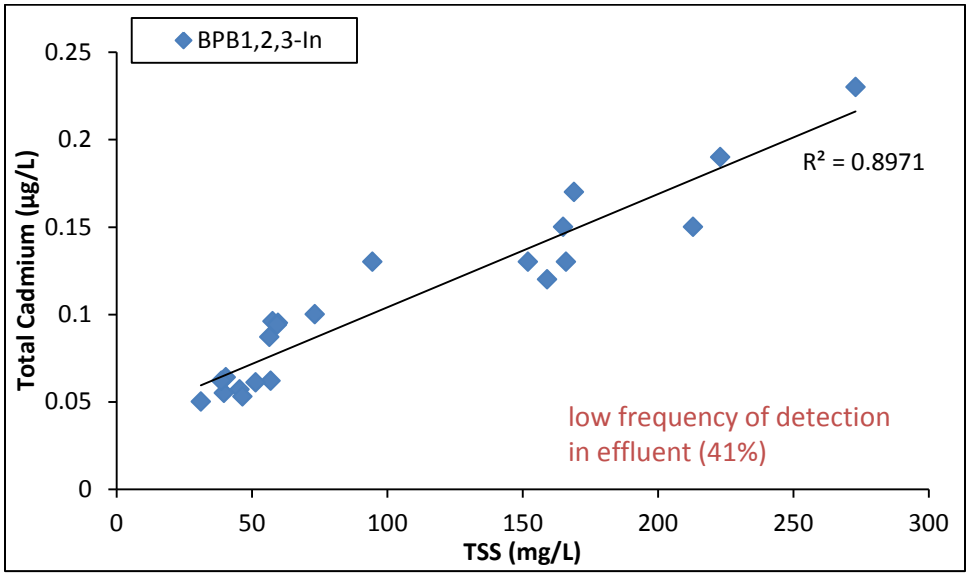


Figure H3-7. Total Cadmium Versus TSS for the 2012 BPBs Influent

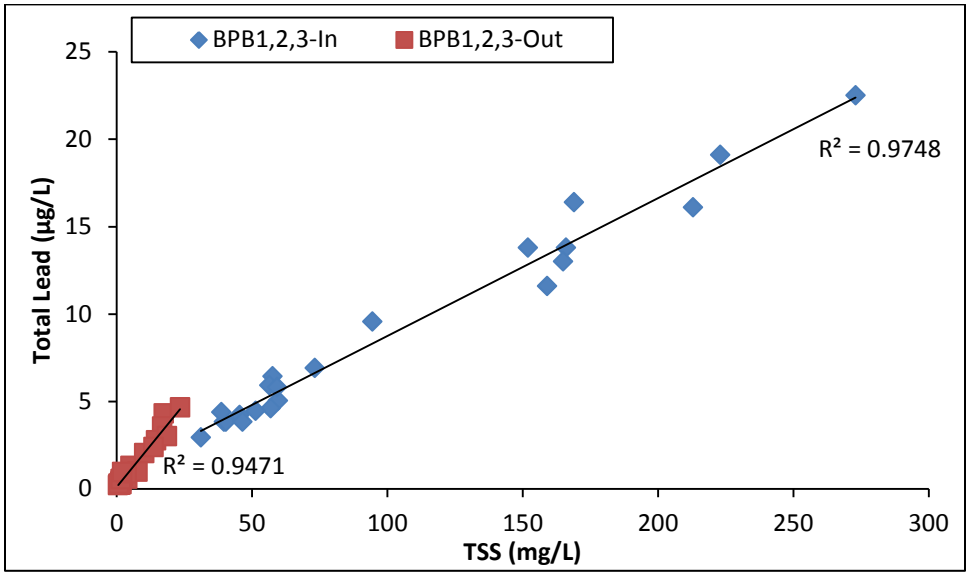


Figure H3-8. Total Lead Versus TSS for the 2012 BPBs Influent and Effluent

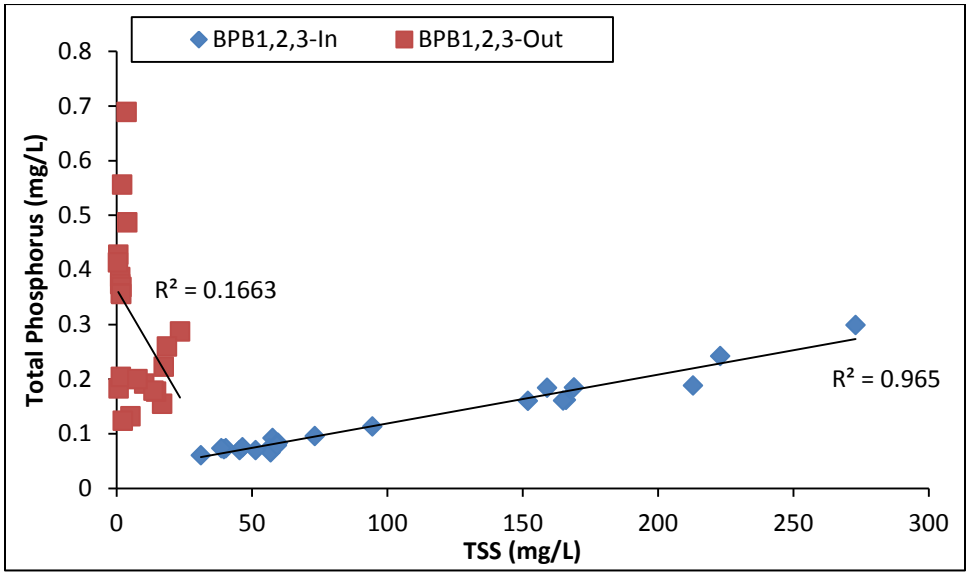


Figure H3-9. Total Phosphorus Versus TSS for the 2012 BPBs Influent and Effluent

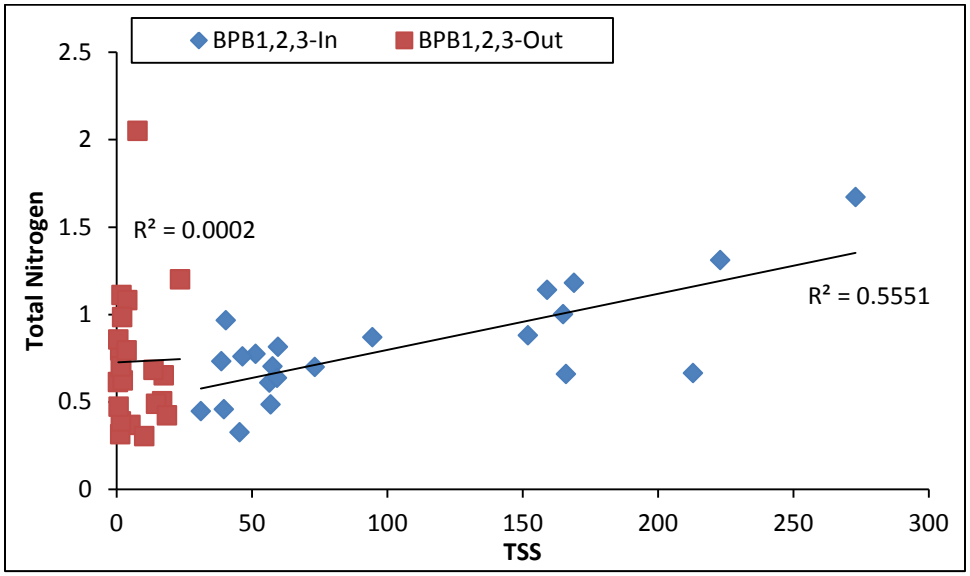


Figure H3-10. Total Nitrogen Versus TSS for the 2012 BPBs Influent and Effluent

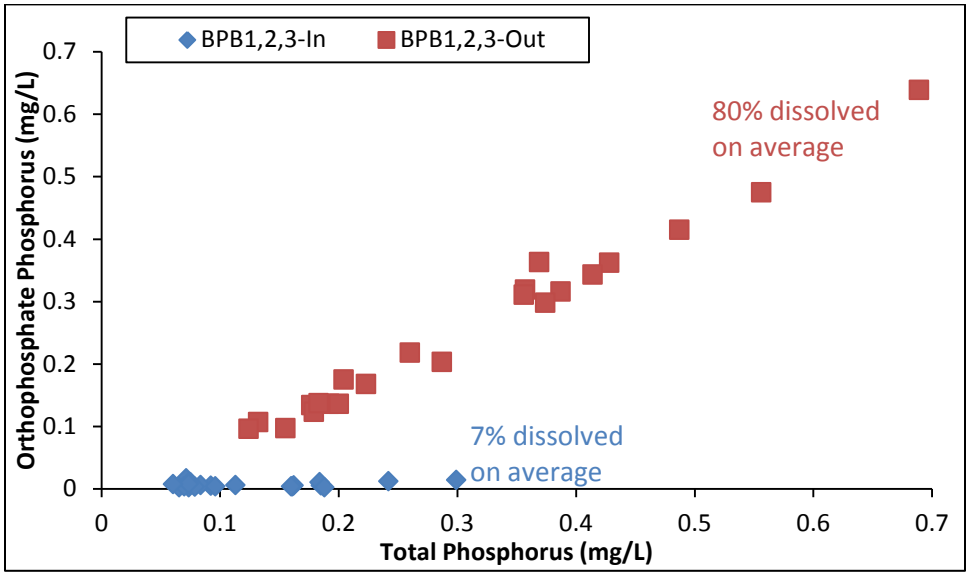


Figure H3-11. Dissolved Versus Total Phosphorus for the 2012 BPBs Influent and Effluent

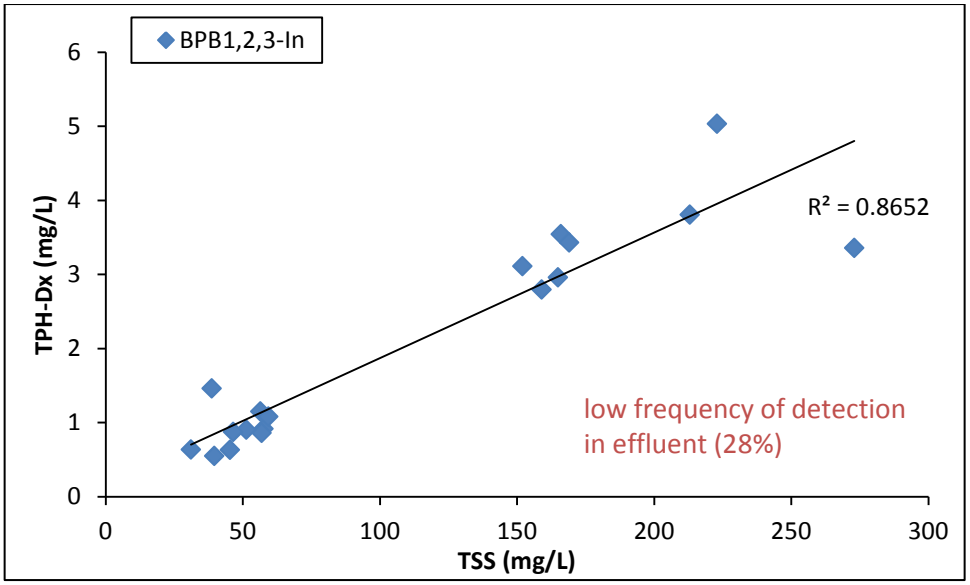


Figure H3-12. Petroleum Hydrocarbons Versus TSS for the 2012 BPBs Influent

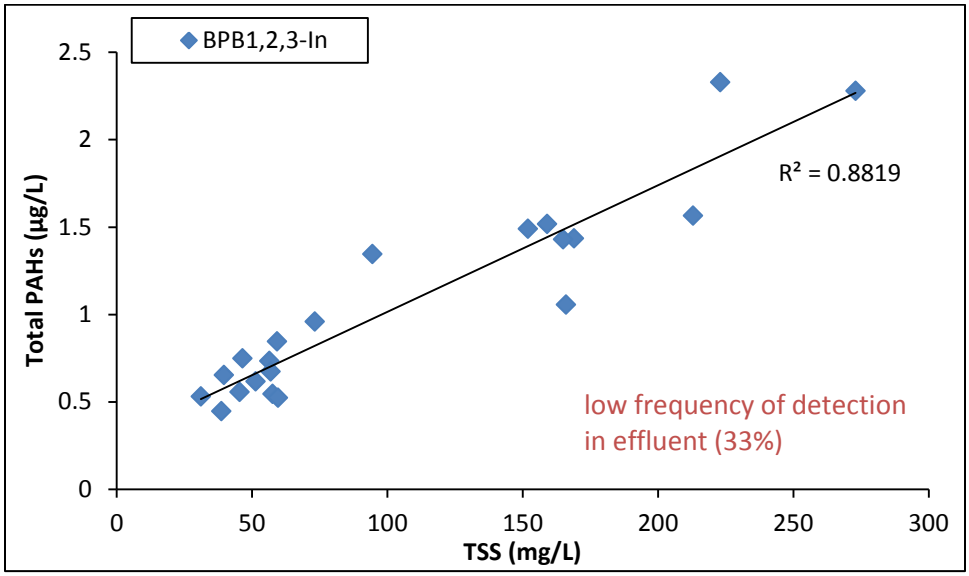


Figure H3-13. Total PAHs Versus TSS for the 2012 BPBs Influent

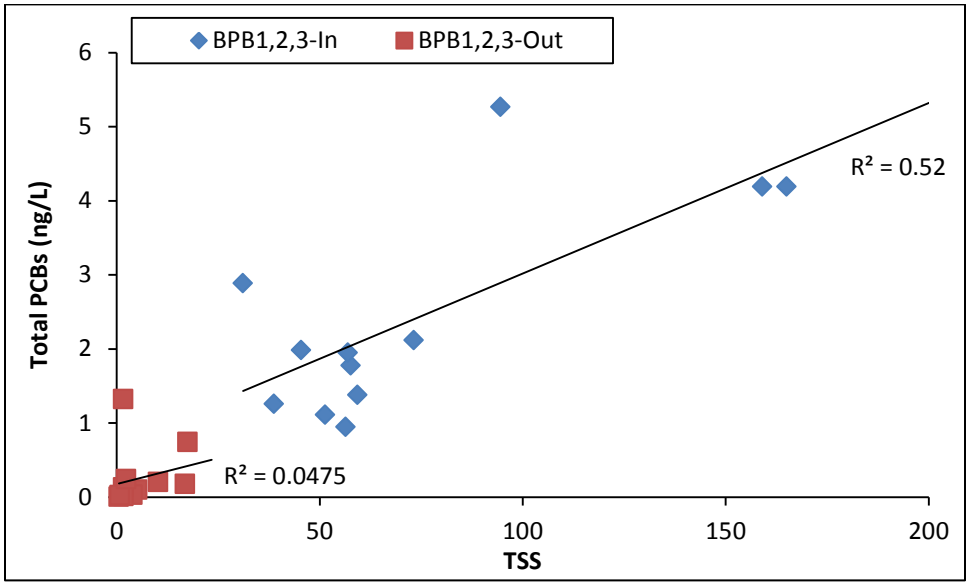
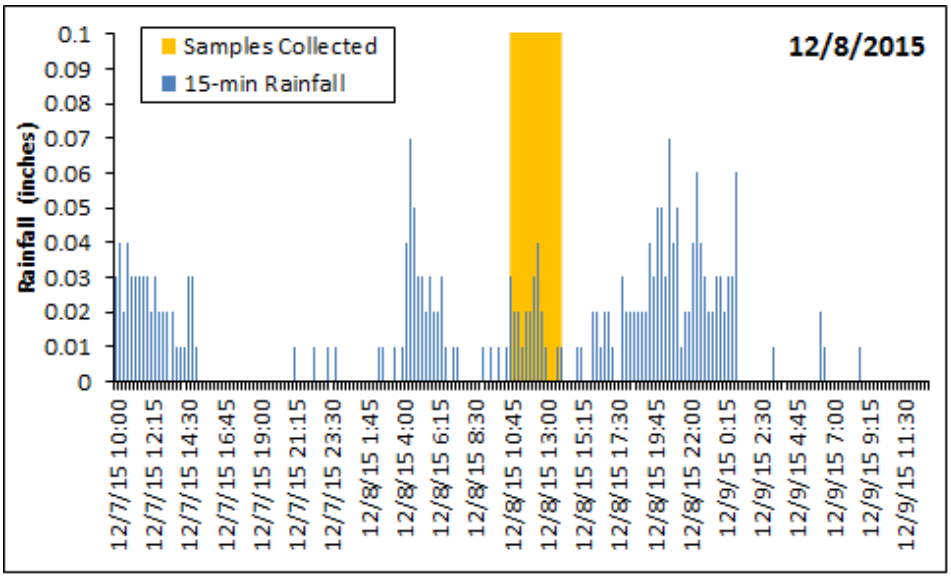


Figure H3-14. Total PCBs Versus TSS for the 2012 BPBs Influent and Effluent

APPENDIX H4 – STORM CONDITIONS

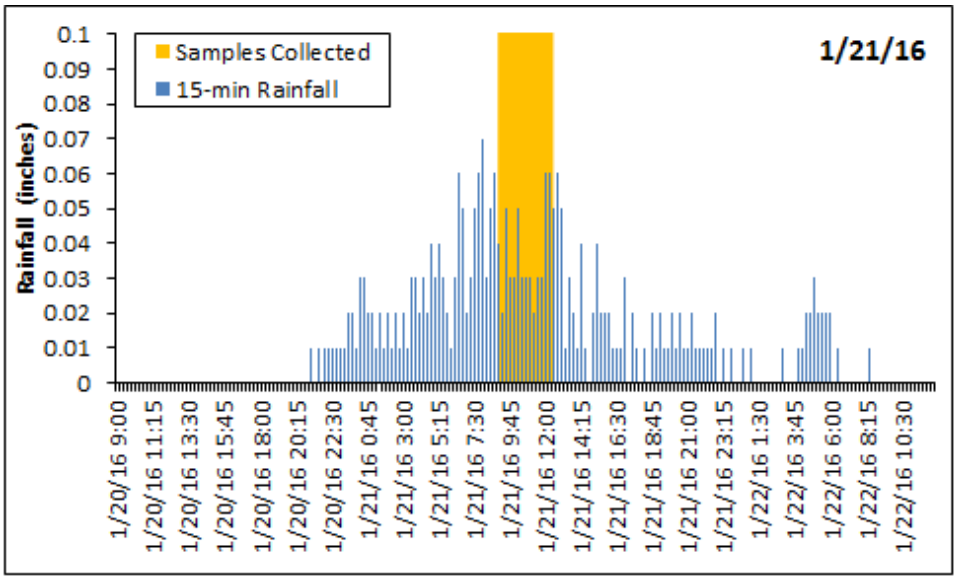
Samples could only be collected from the BPBs during relatively intense rainfall (i.e., generally >0.03 inches/15-minutes). Due to storm intensity requirements, along with daylight constraints for field safety, sampling timespans were often shorter than specified in the Quality Assurance Project Plan (QAPP; King County 2015a) resulting in sample collection from a fairly narrow range of storm conditions. The following figures present rainfall for each sampling event, as well conditions about 24 hours before and after the sampling event. The yellow bar highlights when BPB and Filterra samples were collected. Storm conditions on January 17, 2017 were notably different and are discussed below.



Notes:

- BPB1 and BPB2 sampled. Not ready for sampling at other sites.
- ~0.24 inches total rain during sampling

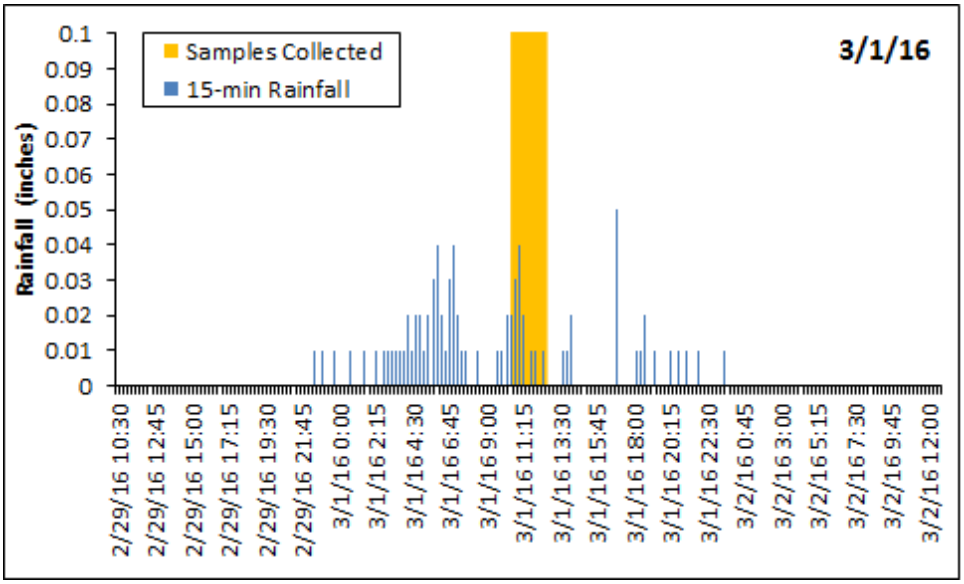
Table H4-1. Rainfall around the 12/8/15 sampling event.



Notes:

- BPB1 and BPB2 sampled. Not ready for sampling at other sites.
- ~0.56 inches total rain during sampling

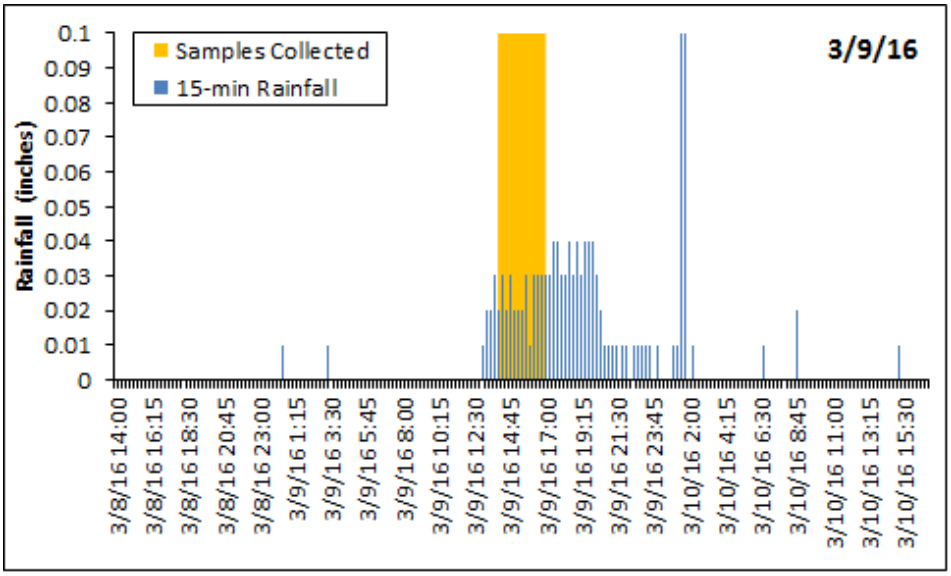
Table H4-2. Rainfall around the 1/21/16 sampling event.



Notes:

- BPB1, BPB2, BPB3, and Filterra sampled.
- ~0.14 inches total rain during sampling

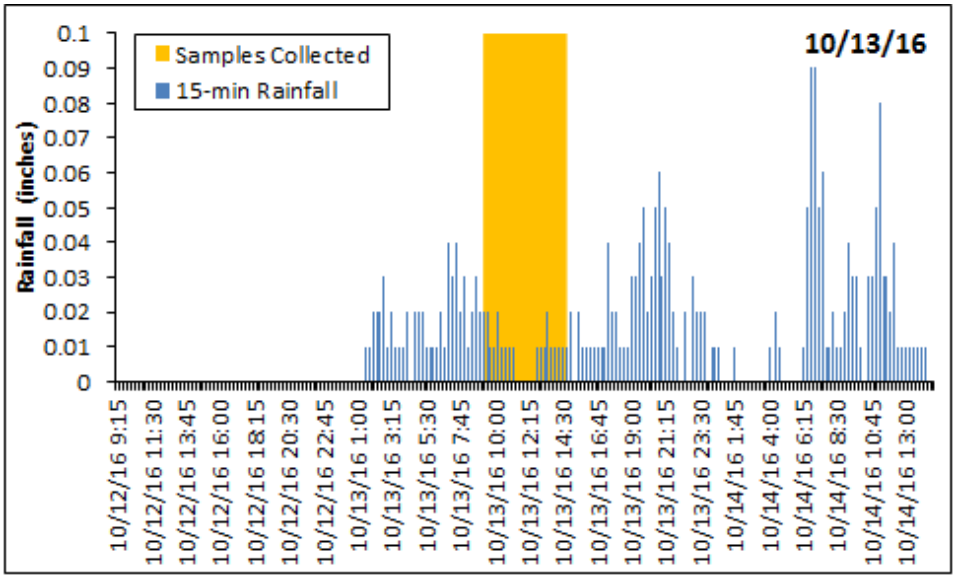
Table H4-3. Rainfall around the 3/1/16 sampling event.



Notes:

- BPB1, BPB2, BPB3, and Filterra sampled.
- ~0.32 inches total rain during sampling

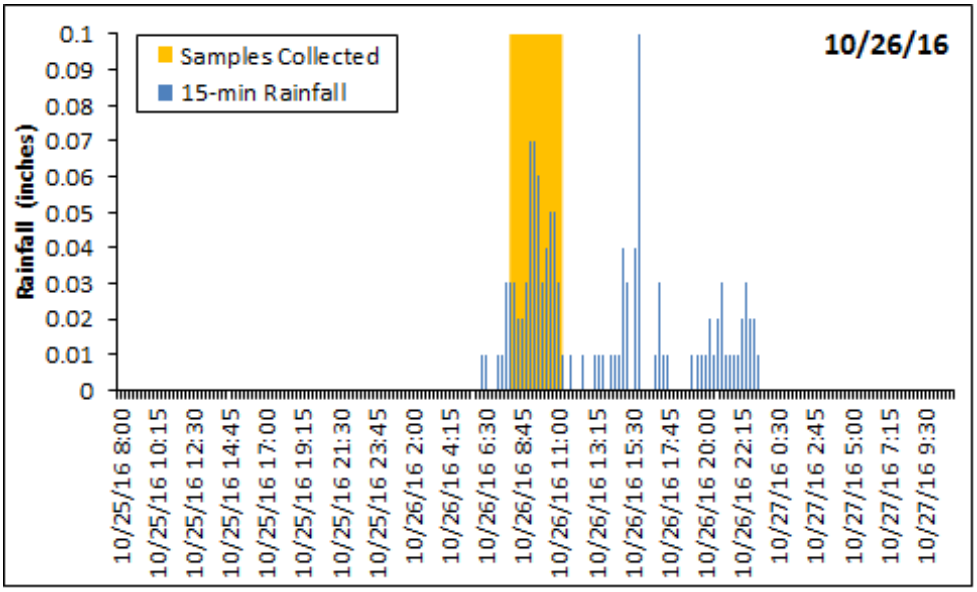
Table H4-4. Rainfall around the 3/9/16 sampling event.



Notes:

- Only BPB3 and Filterra could be sampled due to low rain intensity.
- ~0.22 inches total rain during sampling

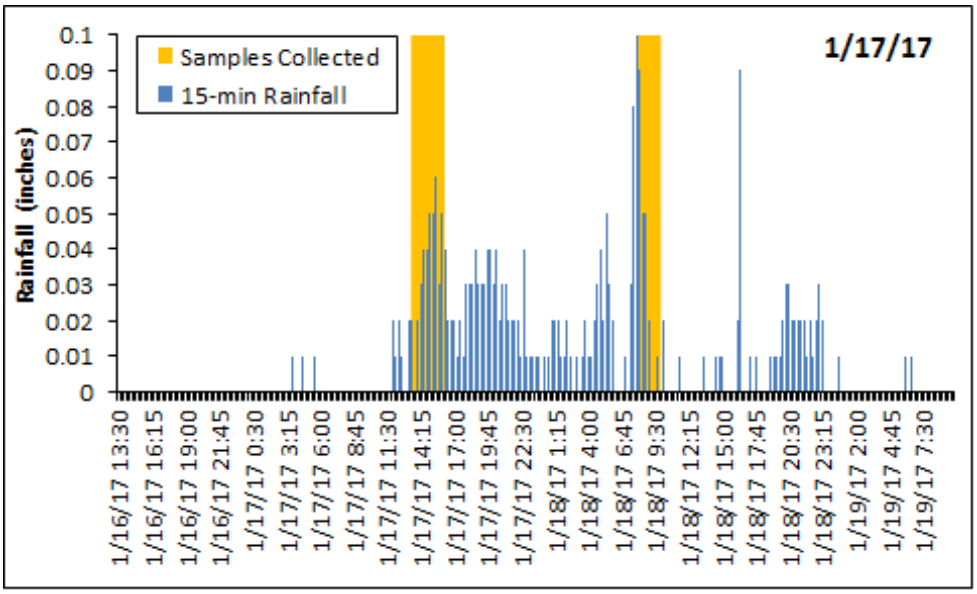
Table H4-5. Rainfall around the 10/13/16 sampling event.



Notes:

- BPB1, BPB2, BPB3, BPB4, and Filterra sampled.
- ~0.54 inches total rain during sampling

Table H4-6. Rainfall around the 10/26/16 sampling event.



Notes:

First attempt:

- BPB1, BPB2, BPB3, and Filterra sampled. No effluent flow at BPB4.
- ~0.36 inches total rain

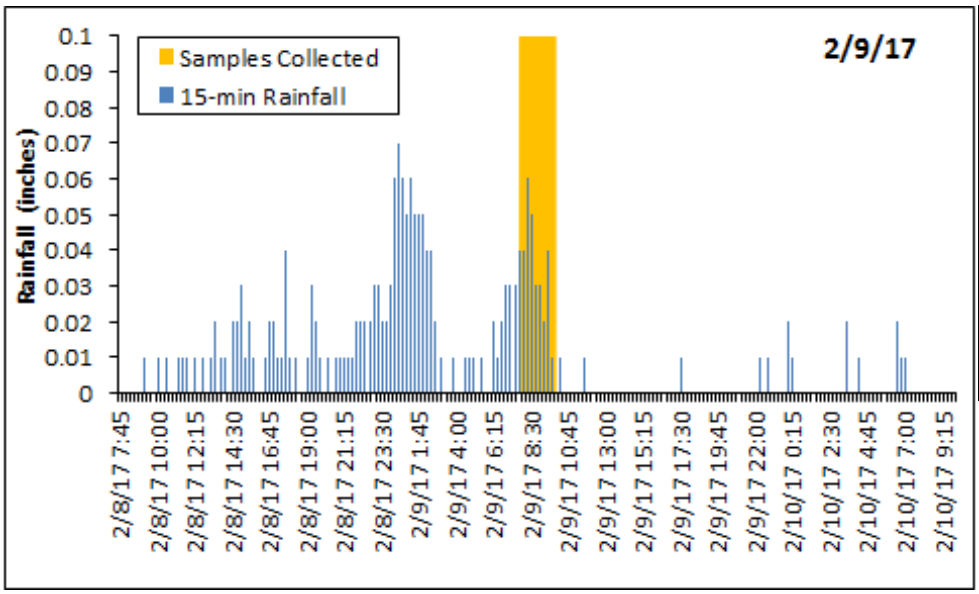
Second attempt:

- BPB4 sampled.
- ~0.32 inches total rain

Table H4-7. Rainfall around the 1/17/17 sampling event.

Notable sampling event – January 17, 2017:

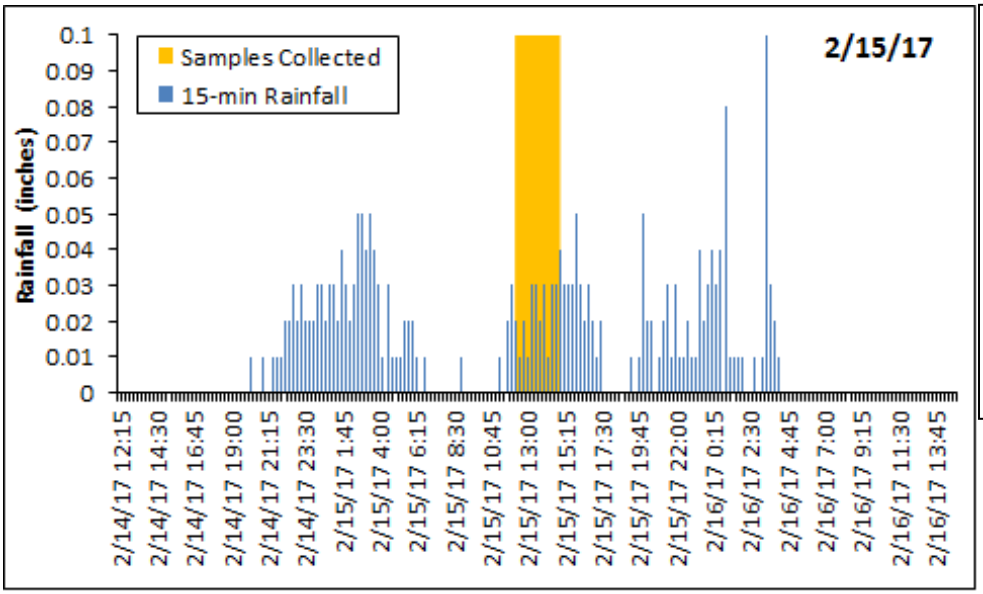
This sampling event occurred during a rain event that followed over two weeks of almost no rain and freezing temperatures. The City of Shoreline had applied salt and Calcium Chloride with Boost to the icy streets. It is likely that the samples contained these de-icing agents. Conductivity was particularly high during this event with influent measurements between 102 and 360 umhos/cm and effluent measurements between 273 and 949 umhos/cm. Some of the highest influent and effluent contaminant concentrations were also observed during this event. However, treatment effectiveness remained comparable to other events based on percent reduction of contaminant concentrations.



Notes:

- BPB1, BPB2, and BPB3 sampled. Filterra flooded, no effluent at BPB4.
- ~0.32 inches total rain during sampling

Table H4-8. Rainfall around the 2/9/17 sampling event.



Notes:

- BPB1 and BPB3 sampled. Filterra flooded, no effluent at BPB2 and BPB4.
- ~0.28 inches total rain during sampling

Table H4-9. Rainfall around the 2/15/17 sampling event.

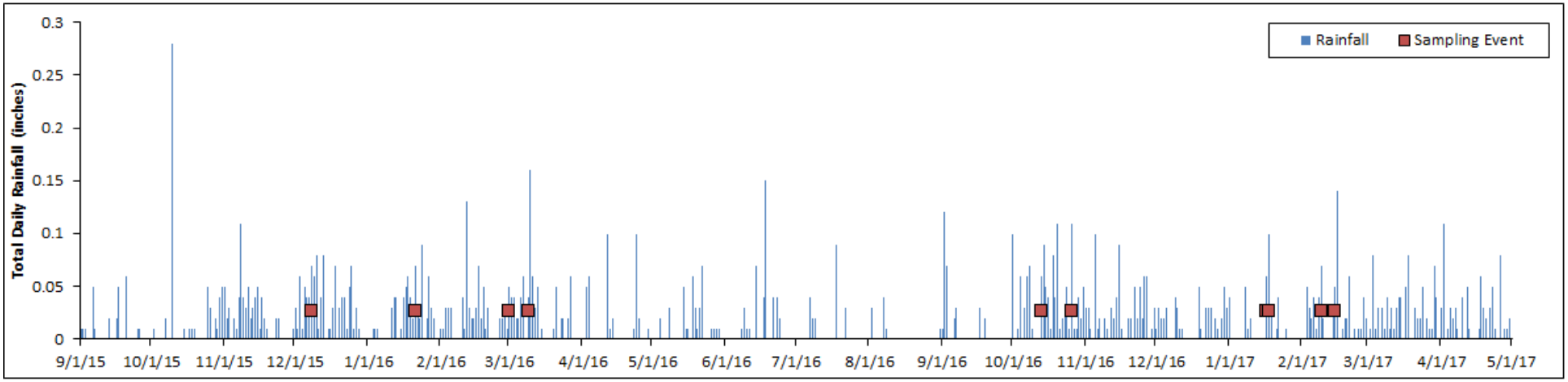


Table H4-10. Rainfall and BPB/Filterra sampling events over the entire project.

APPENDIX H5 – PCB PATTERNS FOR INDIVIDUAL BMPS

There was a dramatic decrease in PCB concentrations between influent and effluent at the individual BMPs. On average, homolog patterns were fairly similar between sites. The penta-PCBs were the most prevalent homolog, representing about one third of the total, followed by hexa-PCBs, at about one quarter of the total (Figure H5-1). Congeners 110 (penta-PCB), 138 (hexa-PCB), and 180 (hepta-PCB) were most frequently detected at greater than 10% of the total PCB concentration in influent samples. PCB-11 was a notable influence for some influent samples collected on 3/9/2016 and 1/17/2017.

Homolog patterns in the effluent were more variable between sites, but this was likely due to lower overall concentrations (i.e., relatively small differences in concentration will represent relatively large differences in percentages).

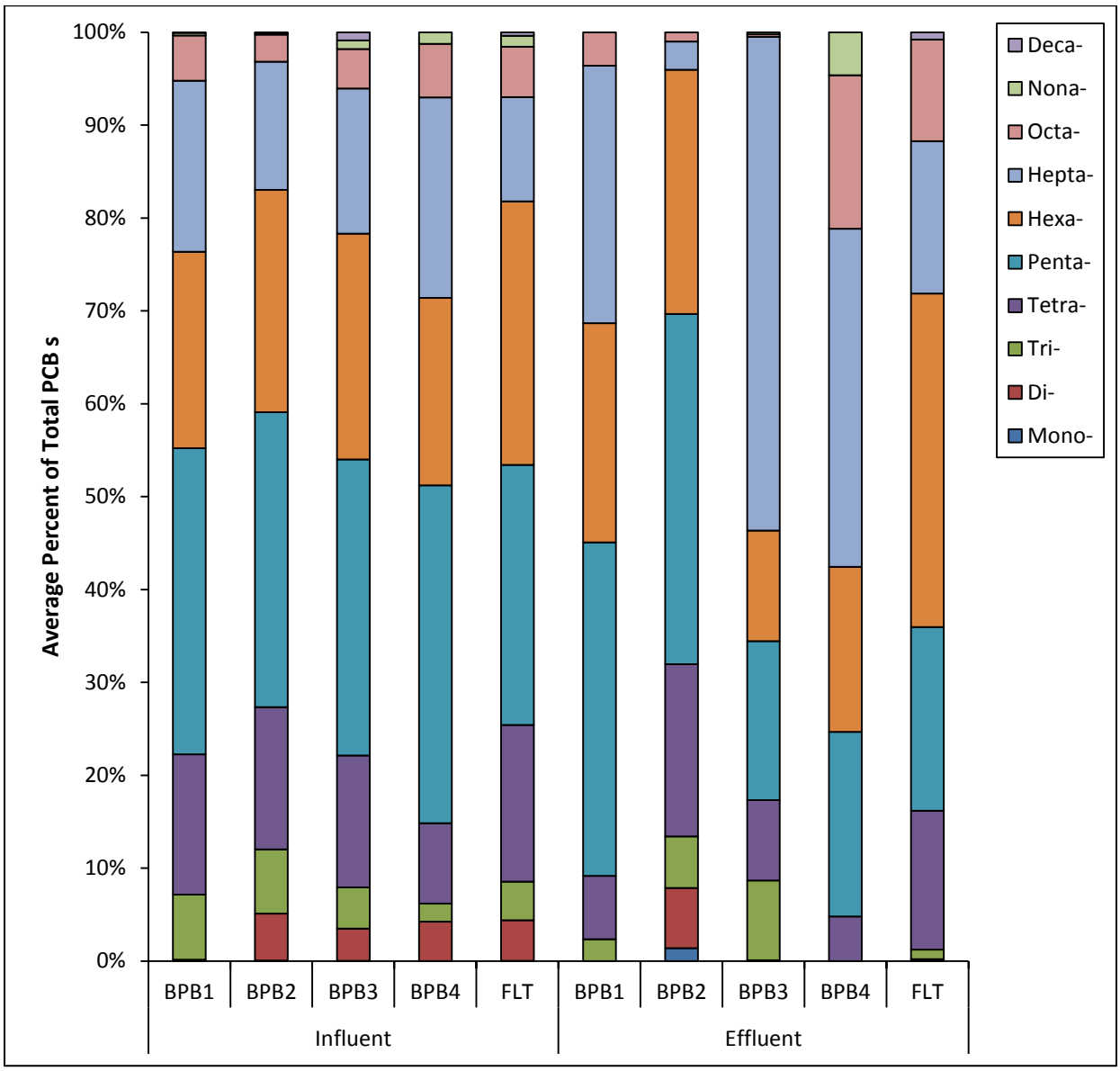


Figure H5-1. Homolog Patterns – Average Percent of Total PCB Concentrations

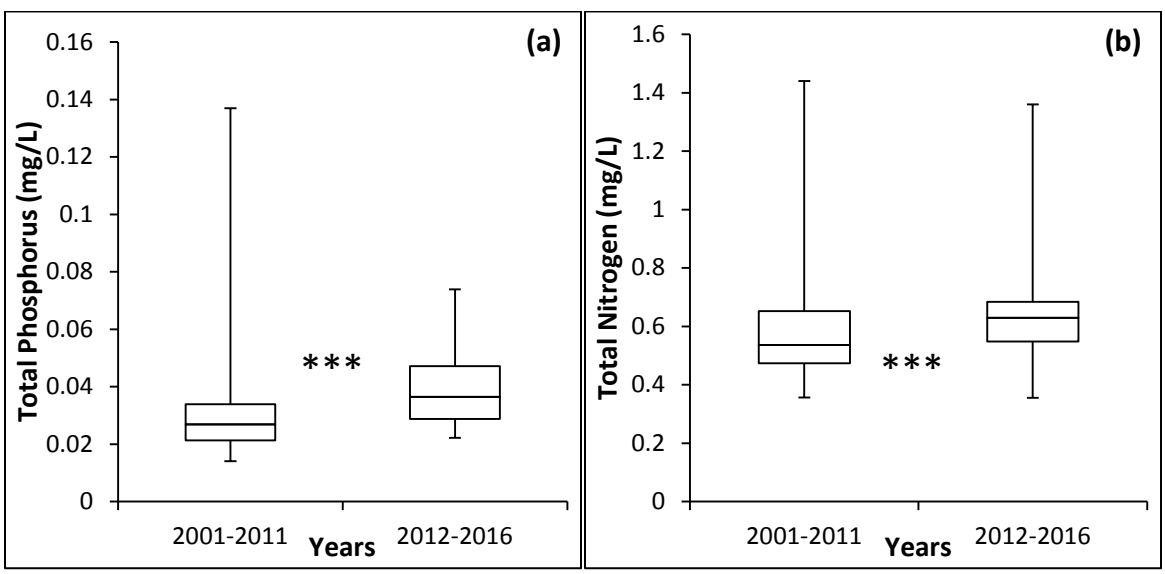
APPENDIX H6 – ECHO LAKE MONITORING SUMMARY

The City of Shoreline and King County's Small Lakes Monitoring Program have been monitoring Echo Lake water quality since 2001[1]. Bi-weekly water quality samples are collected from May through October at a mid-lake sampling station (one-meter depth). In addition, water samples at this location are collected twice a year from multiple depths to assess conditions in the full water column profile.

As part of King County's Swimming Beach Monitoring Program, water samples are also collected at one location near Echo Lake Park. Since 2004[2] weekly samples have been collected from May through September and analyzed for fecal coliform by the King County Environmental Laboratory.

Details about sampling and analytical methods are available in a technical memorandum produced as part of this project (King County 2015b). The memorandum summarized water quality data gathered at Echo Lake prior to construction of stormwater retrofits in the basin (2001-2011). This section builds on that summary to compare pre- and post-retrofit water quality in the lake and briefly explores potential causal factors for observed conditions.

Median surface concentrations of total phosphorus and nitrogen (one-meter depth) were compared between pre- and post-retrofit years to determine if nutrient levels in the lake had noticeably shifted since the retrofit. This exercise does not assume the retrofit caused any observed shift, instead it provides a starting point for the exploration. Mann-Whitney Rank Sum Tests showed statistically significant differences between median concentrations from 2001-2011 and 2012-2016 ($p<0.001$). However, as shown in Figures H6-1a and b, concentration ranges overlapped between the two timeframes.



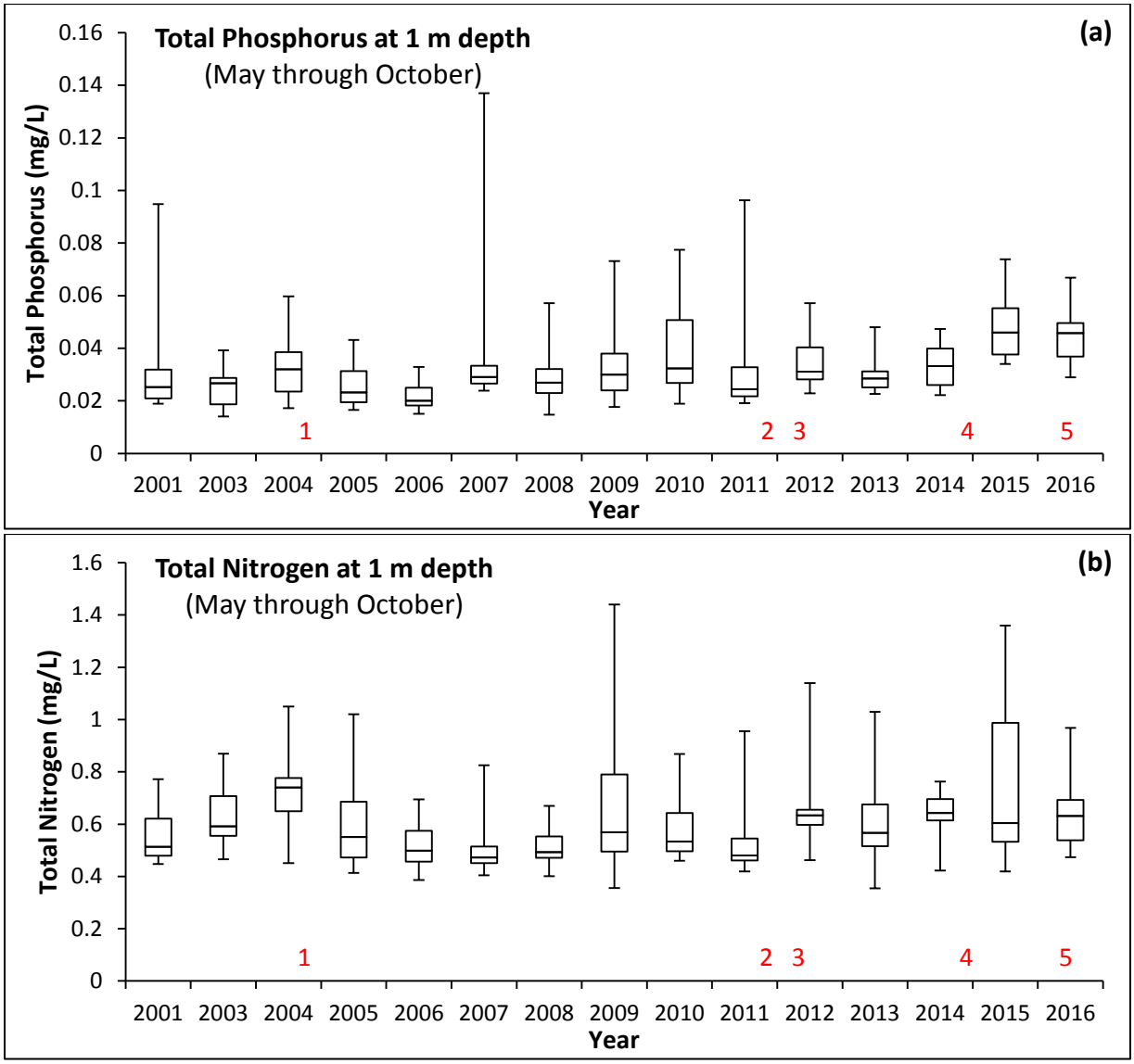
*** = Statistically significant differences between medians ($p<0.001$).

Figure H6-1. Distribution of Surface Water Quality Results from May through October for 2001-2011 and 2012-2016: (a) Total Phosphorus, (b) Total Nitrogen

[1] No water quality results are available from 2002.

[2] Bacteria sampling in 2014 was conducted only in May and June. Data from 2014 are not included in the comparisons, so that the full range of months are represented evenly across the years included in this analysis.

Figures H6-2a and b present the distribution of results for each year, which illustrates the intra-year variability and trends over time. These figures also include a timeline of known stormwater system activities in the basin. This timeline does not suggest major water quality changes corresponding with retrofit activities, although the highest minimum and median values for total phosphorus were observed in 2015 and 2016, respectively. These higher than average levels in 2015/2016 may be driving the statistical differences described above.



Stormwater System Activities:	
1) 2004-2005	source of nutrients and copper identified in basin, worked with business to mitigate
2) End of 2011:	detention tank system online for southern half of basin
3) June 2012:	treatment online in southern half of basin
4) End of 2014:	detention tank system online for northern half of basin
5) Mid-2016:	treatment online for northern half of basin

Figure H6-2. Distribution of Surface Water Quality Results from May through October for each Year, with a Timeline of Stormwater System Activities: (a) Total Phosphorus, (b) Total Nitrogen

The summers of 2015 and 2016 were unusually warm and dry, and small lakes around King County were highly impacted by algal blooms, which could contribute to higher surface phosphorus levels through retention of nutrients in algal biomass. The regional spike in algal blooms during these summers may indicate larger climatic differences in 2015 and 2016, rather than shifts due to unique landuse or stormwater system changes in the Echo Lake basin. Temperature may be an indirect, but influential, factor for abnormal phosphorus levels, but it is probably not the main driver influencing long-term phosphorus trends. Parsing out climatic influences versus local land use changes is outside the scope of this project and would require additional information (e.g., phytoplankton community assemblage, analysis of lakes throughout the region).

Lake sediment is likely an important source of phosphorus to the lake's water column. Echo Lake is stratified in the summer (i.e., a strong density gradient preventing mixing between surface and deep waters). Due to depleted dissolved oxygen at depth, the reducing conditions can cause phosphorus release from the sediment, which is seen through increasing phosphorus concentrations at depth in the summer (Figure H6-3). Insufficient data are available to accurately characterize the loading of phosphorus from stormwater or internal cycling. To do so, lake inflow and outflow data and a greater temporal resolution of total phosphorus in the lake's deep waters would be necessary.

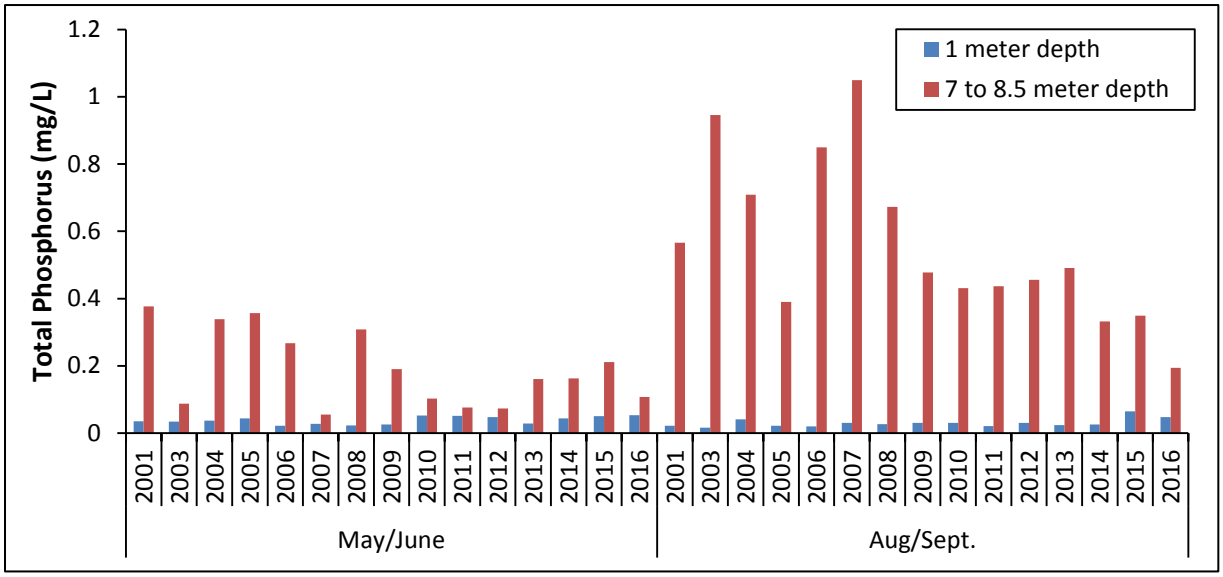
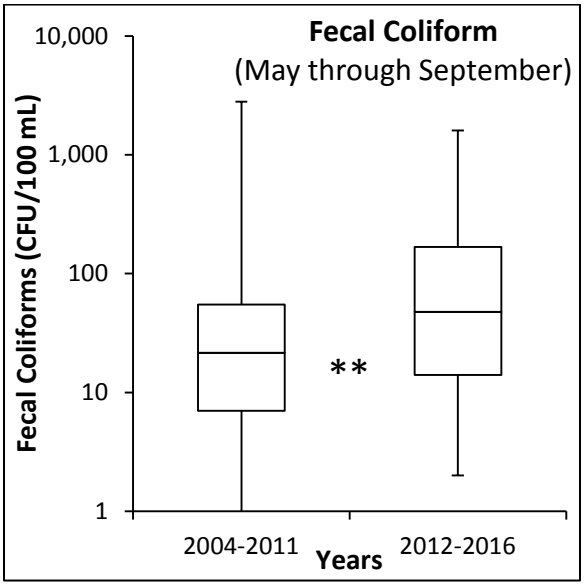


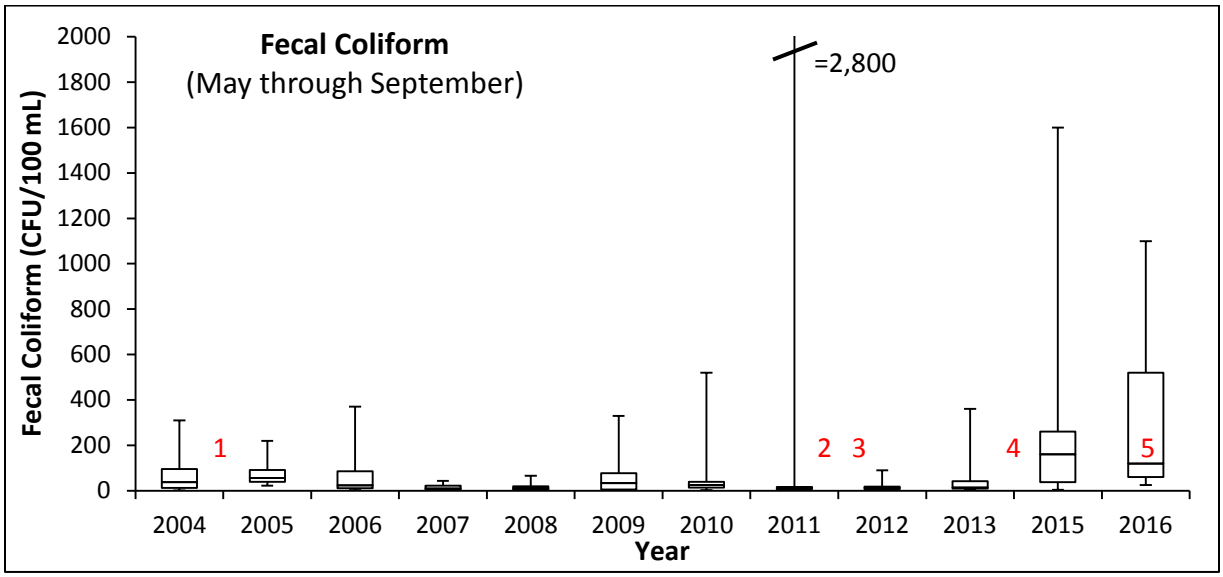
Figure H6-3. Comparison of Total Phosphorus Concentrations at Surface and at Depth for Early and Late Summer Sampling Events

Fecal coliform results were also statistically compared between pre- and post-retrofit years. The median colony forming units (CFU) in May through September were higher for 2012-2016 compared to 2004-2011 based on a Mann-Whitney Rank Sum Test (Figure H6-4). In comparing distribution of data for each year, it is clear that 2015 and 2016 stand out as years with higher fecal coliform CFUs (Figure H6-5). In fact, the Echo Lake swimming beach was closed for six weeks in August and September 2015 (no closures occurred in 2016). Warmer than usual summer temperatures may have contributed to more swimmers with less "flushing" of the swimming beach areas due to dry weather. As with regional algal bloom patterns, this may be due to a regional cause, such as unusually hot and dry weather, rather than a landuse or stormwater system change that would be unique to the Echo Lake basin.



** = Statistically significant differences between medians (p=0.003).

Figure H6-4. Distribution of Fecal Coliform Results from May through September for 2004-2011 and 2012-2016



Stormwater System Activities:	
1) 2004-2005	source of nutrients and copper identified in basin, worked with business to mitigate
2) End of 2011:	detention tank system online for southern half of basin
3) June 2012:	treatment online in southern half of basin
4) End of 2014:	detention tank system online for northern half of basin
5) Mid-2016:	treatment online for northern half of basin

Figure H6-5. Distribution of Fecal Coliform Results from May through September for each Year, with a Timeline of Stormwater System Activities

Overall, Echo Lake water quality does not appear to be dramatically affected by stormwater retrofits in the basin. Phosphorus levels appear to be increasing slightly over time, with 2015 and 2016 experiencing abnormally high phosphorus and fecal coliform levels. These do not appear to be correlated to specific stormwater system changes in the basin.

Appendix H References

Kaschl, A., V. Romheld, and Y. Chen. 2002. The influence of soluble organic matter from municipal solid waste compost on trace metal leaching in calcareous soils. Sci. of the Total Environ. 291:45-57.

King County. 2014. Metals Release Related to Compost Use in Bioretention Technologies: Summary of Preliminary Literature Review. Prepared by Jenée Colton, Carly Greyell, Richard Jack and Deb Lester, Water and Land Resources Division. Seattle, Washington.

King County. 2015a. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

King County. 2015b. Echo Lake Historical Data Technical Memorandum: 2001-2011 Water Quality Monitoring Results. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

Li, H. and A.P. Davis. 2008. Heavy metal capture and accumulation in bioretention media. Environ. Sci. and Tech. 42: 5247-5253.

Li, H. and A.P Davis. 2009. Water quality improvement through reductions of pollutant loads using bioretention. Jnl. of Environ. Eng. 135:567-576.

McBride, M.B., B.K. Richards, T. Steenhuis, J.J. Russo, and S. Sauve. 1997. Mobility and solubility of toxic metals and nutrients in soil fifteen years after sludge application. Soil Science. 162(7):487-500.

Silvertooth, J. 2014. Evaluation of copper removal from stormwater runoff using compost and Apatite II. M.S. Thesis. Oregon State University, Corvallis, OR.

Zhou, L.X. and J.W.C Wong. 2001. Effect of dissolved organic matter from sludge and sludge compost on soil copper sorption. Jnl. of Environ. Qual. 30:878-883.

Appendix I:
Summary of Flow Monitoring

This page intentionally left blank.

APPENDIX I – SUMMARY OF FLOW MONITORING

The project that was first proposed to the Regional Stormwater Monitoring Program (RSMP), now Stormwater Action Monitoring (SAM), did not include monitoring flow at the detention tank system (DTS). However, input from Washington State Stormwater Permitees during the RSMP Effectiveness Study Workshops showed there was interest in evaluating the flow control benefits and additional water quality benefits provided by the DTS. This appendix summarizes the progression of flow monitoring for the project, and the reasons it was finally dropped from the project scope.

Before the sampling portion of the project began, flow was monitored at the main inlet and outlet of the DTS. Detailed procedures are included in the Quality Assurance Project Plan (QAPP; King County 2015). Initially, bubblers were installed at both locations, but preliminary flow data suggested there were issues with how the instruments were calculating flow. The calculated total volumes were much greater at the inlet than the outlet, whereas they should be relatively comparable given the DTS design. The first step was to verify that the variables used to calculate flow from the bubbler data were correct. The field team verified that the inputs to the Manning equation were correct, including investigating whether the slope of the pipes given on the as-builts matched those measured in the field. Small corrections after this investigation did not explain the large discrepancy between the inlet and outlet.

After further observation, the field team realized some storms created conditions where flow monitoring was not possible with the proposed equipment. For example, bubblers cannot account for flow in a submerged pipe, which would occur at the inlet pipe during moderate storms. Additionally, moderate storms were creating violent, sporadic surging of water from the flow control structure into the outlet pipe. This condition resulted in inadequate pressure being applied to the bubbler line. Installing an area velocity meter (11/10/2015) solved the monitoring issue at the inlet pipe, but monitoring the turbulent conditions at the outlet pipe could not be resolved within the original project scope. Flow monitoring was discontinued at the outlet at the end of 2015, and evaluating the flow control benefits of the DTS was dropped from the project objectives. Flow monitoring at the DTS inlet continued periodically until January 2017.

Due to inconsistent monitoring and the issues outlined above, the report does not include any analysis of flow. All preliminary flow data for the project were included in sampling and analysis (Task 2) deliverables and are posted on the Washington State Department of Ecology website (http://www.ecy.wa.gov/programs/wq/stormwater/municipal/rsmp/effective.html), or are available upon request.

Appendix I References

King County. 2015. Quality Assurance Project Plan For Monitoring Stormwater Retrofit in the Echo Lake Drainage Basin – RSMP Effectiveness Study. Prepared by Carly Greyell, Water and Land Resources Division. Seattle, Washington.

Appendix J: Annotated Summary of Maintenance Requirements and Actions

This page intentionally left blank.

APPENDIX J –MAINTENANCE ACTIONS

As described in Section 2.3 of the main report, maintenance issues were impeding treatment at the bioretention planter boxes (BPBs) and Filterra® at various points of the study. The following provides a log of the maintenance performed at the site by City of Shoreline contracts (Table J-1). Despite these efforts, the BPB inlets (i.e., curb cuts to roadway) were frequently blocked. The project field crew frequently cleared the inlets to the BPB. They estimated curb cuts would need to be cleared as frequently as every other week at the height of the storm season to maintain their function.

It was unclear how street sweeping affected these maintenance needs. The field crew observed that sweeping would sometimes clear the BPB curb cuts, and other times block them more completely. This could be due to a several variables, including the distance of the sweeper from curb, the amount of debris on the roadway, and the time elapsed since the last curb cut cleaning.

Additionally, the Filterra were draining at the beginning of this project. The media was replaced in September 2015. By the end of the project sampling period in March 2017 the media again needed to be replaced. It is likely that the Filterra were plugged by sediment build up at the surface of the media.

Table J-1. Maintenance completed through City of Shoreline based on annual inspection results.

Study ID	City Asset ID	Maintenance Type	Date Completed
BPB1	BR-20	Cleared Inlet	3/31/2015
BPB1	BR-20	Cleared Inlet	1/20/2017
BPB2	BR-13	Cleared Inlet	3/31/2015
BPB2	BR-13	Cleared Inlet	1/20/2017
BPB3	BR-10	Cleared Inlet	3/31/2015
BPB3	BR-10	Cleared Inlet	1/20/2017
FLT1	FA7	Cleared Inlet	9/15/2015
FLT1	FA7	Replaced Media	9/15/2015
FLT1	FA7	Replaced Mulch	9/22/2015
FLT1	FA7	Cleared Inlet	8/19/2016
FLT1	FA7	Replaced Mulch	1/20/2017
FLT1	FA7	Cleared Inlet	1/20/2017

Additional Maintenance Provided through City of Shoreline:

- Street sweeping is conducted on a monthly schedule. This was consistent throughout the study period.
- Contractor was tasked with clearing inlets at BMP assets on monthly schedule throughout the year; however, this was not consistently done.

Figure J-1. Debris blocking curb cuts at BPB1 inlet (January 21, 2016).

Figure J-2. Clearing debris blocking curb cuts at BPB1 inlet (December 3, 2015).

Figure J-3. Sediment at the top of Filterra media (April 4, 2014).

Figure J-3. Sparse vegetation and yellowed trees at BPB2 - this did not appear to affect performance (October 26, 2016).