Appendix A
King County Stormwater Monitoring S8.D QAPP

Addendum for the

Quality Assurance Project Plan For King County Stormwater Monitoring Under the NPDES Phase 1 Municipal Permit WAR04-4501 (Issued February 2007)

Addendum October 2012

King County

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This addendum updates the schedule and due dates of deliverables documented in King County's Quality Assurance Project Plan for sampling under the phase 1 NPDES municipal stormwater permit. No other changes have been made to the November 2010 plan update.

The following tables indicate the updated schedule for permit-related activities for stormwater monitoring.

Table 1. Collaboratively Developed Monitoring Program Schedule Overview.

Activity	Anticipated Date of Initiation	Anticipated Date of Annual Completion	Deliverable	Deliverable Due Date
Sediment Sampling	6-15-12	9-30-12	Stormwater Monitoring Report*	3-31-13
Wet-weather storm events	10-1-11	12-31-11	Stormwater Monitoring Report*	3-31-13
Dry-weather storm events	6-15-12	9-30-12	Stormwater Monitoring Report*	3-31-13
Wet-weather storm events	10-1-2012	3-15-12	Stormwater Monitoring Report*	3-31-14

Wet season extends from October 1 each year until April 30 each year and Dry season extends from May 1 each year through September 30 each year.

RY=Reporting year.

*Submitted with Annual Report.

Quality Assurance Project Plan For King County Stormwater Monitoring Under the NPDES Phase 1 Municipal Permit WAR04-4501 (Issued February 2007)

Updated November 2010

King County

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Quality Assurance Project Plan for King County Stormwater Monitoring Under the NPDES Municipal Phase 1 Permit WAR04-4501(Issued February 2007) Updated February 2010

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King County
Department of
Natural Resources and Parks
Water and Land Resources Division

Record of Changes		
Section Changed	**Date**	**Description**
2.3	Nov 2010	Updated sediment sampling methods description
Table 2	Nov 2010	Updated schedule of due dates
Figure 1	Nov 2010	Added drainage basin to figure
6.1	Nov 2010	Updated rain gauge descriptions
Table 5	Nov 2010	Updated rain gauge locations
6.3	Nov 2010	Updated sample and handling procedures for grab samples
6.9	Nov 2010	Updated methods description for collecting sediment samples
Table 10	Nov 2010	Sediment Holding times and storage conditions updated to current practices
Table 14	Nov 2010	Sediment Analytical Methods: total mercury method corrected to EPA 7471B
Table 32	Nov 2010	Laboratory Qualifiers: SH added B2 and B3 added KL qualifier changed to JL (KL was a typo)
Tables 2, 3, 12, 13	Nov 2010	Revised required reporting limits to match app 9 of permit
Table 9	Nov 2010	Removed Trip and Temp blanks, added field filtration blank for metals
Table 24	Nov 2010	Added table of surrogate recoveries for BNA analyses on water samples
Table 22, 23	Nov 2010	Removed un-necessary compounds from the list
Table 28, 29	Nov 2010	Revised surrogate control limits

Table 32	Nov 2010	Added missing table of QC limits for microbiology analysis
9.4	Nov 2010	Updated loading calculations to reflect Ecology's loading calculation SOP published in 2009

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APPROVALS

Dean Wilson King County Date
Monitoring Program Manager

Colin Elliott King County Date
Environmental Laboratory Quality Assurance Officer

Certification

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.

Distribution List

Rachael McCrae Washington Department of Ecology

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1.0. BACKGROUND

The Washington State Phase I Municipal Stormwater Permit (Phase I Permit) applies to all entities in Washington State required to have permit coverage under current (Phase I) U.S. Environmental Protection Agency (EPA) stormwater regulations, which includes cities and unincorporated portions of counties whose populations exceed 100,000. The Washington State Phase I permittees include:

- King County
- Pierce County
- Snohomish County
- Clark County
- City of Seattle
- City of Tacoma

Under the 2007 Phase I Permit, two Phase I Secondary Permittees are required to conduct Stormwater Monitoring in accordance with S8.D (Ecology, 2007):

- Port of Seattle
- Port of Tacoma

Stormwater runoff discharges are not continuous, and storm events in themselves can be unpredictable. These discharges are intermittent and weather-dependent in nature (i.e., rainfall amount, duration, intensity, etc.). There is a wide range of pollutants and concentrations in stormwater runoff from one storm event to another. Municipal stormwater discharges are not centrally located but consists of large numbers of outfalls where stormwater is being discharged throughout an entire city (hundreds or even thousands of outfalls within a city are typical). Conventional end-of-pipe treatment options such as treatment plants are difficult to apply to the hundreds/thousands of stormwater discharges.

Three basic control strategies exist for stormwater. First, prevent pollutants from coming into contact with stormwater by using source control best management practices (BMPs). Second, apply treatment BMPs prior to discharge to surface or ground waters to reduce pollutants in the discharge. Third, control the flow rate of stormwater through flow control BMPs

The complexity inherent in stormwater discharges and the difficulty of controlling such discharges means that it will take many years for full implementation that adequately mitigates or prevents their adverse environmental impacts.

The primary goals of the monitoring program described in S8.D of the Phase I Permit is to characterize stormwater runoff based on landuse type and to detect trends from these same landuses in stormwater quality and quantity over time. This information will be used to inform King County's stormwater management program.

Areas in King County have been selected to represent high density residential, low density residential, and commercial land uses. This QAPP describes the process for data collection from these sites. Samples will be collected from these sites so that a calculation of average concentrations during a sampled storm for a specified parameter list can be made (event mean concentrations). Combining this with hydraulic data will yield pollutant loadings. Collecting this data for many storms during the year may allow characterization of the stormwater quality and quantity from these three different landuse types. Collecting this data at these same locations using the same methods for many years may enable the detection of changes in water quality and quantity over time.

Stormwater at each selected site will be monitored in the following ways, as required in S8.D of the Phase I NPDES Permit:

- Continuous flow monitoring (for the first year) and during all sampled storm events
- Flow weighted-composite sampling for chemical analyses
- Grab sampling for limited chemical analyses
- Toxicity testing of seasonal first-flush stormwater
- Sediment sampling for chemical analyses

2.0. PROJECT DESCRIPTION

The sampling design for stormwater monitoring under S8.D contains three primary components that will be conducted at each monitoring site through the remainder of the Phase I Permit cycle:

- Stormwater Sampling
- Toxicity Testing
- Sediment Sampling

2.1 Stormwater Sampling

Stormwater samples will be collected from three different landuse types: commercial, high density residential, and low density residential. To capture the average chemical concentrations (event mean concentration) of a sampled storm, flow-weighted composite samples will be collected. Flow-weighted composite samples are collected from the entire duration of a storm and are proportional to the stormwater flow at the sampling site (i.e. if the stormwater volume increases then the amount of sample collected increases proportionally). To better characterize stormwater quality and quantity over a range of seasons and conditions, up to 11 qualifying storms will be sampled per year. A goal of 60% to 80% of the stormwater samples will be collected during the wet season each year (October 1 to April 30), and 20% to 40% will be collected during the dry season (May 1 to September 30). King County will target 67% of the qualifying storms up to 11 qualifying storms.

Grab samples will be collected for parameters that are not suitable for flow-weight composite samples (e.g. TPH, bacteria) (For further information on grab sampling see SOP NPDES-DS-2000).

Continuous flow data will be collected at each selected site during storm events for one year to establish rainfall and runoff relationships at each stormwater monitoring sites (For further information on flow metering see SOP NPDES-CM-1000).

2.2 Toxicity Sampling

In addition to chemical analysis of stormwater, the toxicity of stormwater will be tested once per year. Toxicity samples will also be collected using composite sampling equipment at each stormwater monitoring site (For further information on composite sampling equipment see SOP NPDES-CM-2000). An attempt will be made to collect the toxicity sample during the seasonal first flush. The seasonal first flush storm is defined as a storm during August or September with a one week dry antecedent period. If no storm can be sampled in August or September, a storm in October with no required antecedent dry period will be sampled. Ecology requires a good faith effort to collect a sample during this time for toxicity sampling. If two attempts are made but fail, then no further toxicity testing is required that year.

The stormwater sample for toxicity testing will also include chemical analyses on the same sample or synoptically collected stormwater sample. The purpose of the chemical analysis for toxicity testing is to measure the concentration of toxic substances that could cause toxicity in stormwater.

2.3 Sediment Sampling

Sediments will be collected at each stormwater monitoring site using a PVC core tube and stainless-steel spatula (KCEL SOP #237 v0) or if access is constricted, an Eckman sediment grab sampler or similar. Collected sediments will be analyzed annually for parameters that have shown to be associated with stormwater discharges.

3.0. ORGANIZATION AND SCHEDULE

Table 1. Project Team.

Name/phone number	Responsibility	Organization
Dean Wilson 206-296-8252	Project Manager	King County WLRD, Science
Dave Funke 206-296-8066	Engineer	King County WLRD, Science
Jim Crawford 206-296-8276	Engineer	King County Roads
Fritz Grothkopp 206-684-2327	Laboratory Project Manager	King County Environmental Lab
Colin Elliott 206-684-2343	Quality Assurance Officer	King County Environmental Lab
Diane McElhany 206-684-2304	Metals Laboratory Supervisor	King County Environmental Lab
Brian Prosch 206-684-2331	Conventionals Laboratory Supervisor	King County Environmental Lab
Eric Thompson 206-684-2340	Microbiology Laboratory Supervisor	King County Environmental Lab
Jeff Droker 206-684-2309	Environmental Lab Scientist	King County Environmental Lab
Fran Sweeney 206-684-2358	Aquatic Toxicology Supervisor	King County Environmental Lab

The following tables indicate the *approximate* implementation schedule for permit-related activities for stormwater monitoring.

Table 2. Collaboratively Developed Monitoring Program Schedule Overview.

Activity	Anticipated Date of Initiation	Anticipated Date of Annual Completion	Deliverable	Deliverable Due Date
Continuous Flow Recording of Storm Events	10-1-08	9-30-09	Establish a baseline rainfall/runoff relationship	Not reported to Ecology
Monitoring program will	8-15-09		Implementation of	

begin			Monitoring Program	
Dry-weather storm events	8-15-09	9-30-09	Stormwater Monitoring Report*	3/31/11
Wet-weather storm events	10-1-09	4-30-10	Stormwater Monitoring Report*	3/31/11
Dry-weather storm events	5-1-10	9-30-10	Stormwater Monitoring Report*	3/31/11
Sediment Sampling	8-16-09	9-30-10	Stormwater Monitoring Report*	3/31/11

Collaboratively Developed Monitoring Programs for Remaining Reporting Years: 2009, 2010, and 2011				
Activity	**Anticipated Date of Initiation**	**Anticipated Date of Annual Completion**	**Deliverable**	**Deliverable Due Date**
Toxicity Sampling (First flush event)	8-1-11	9-30-11	Stormwater Monitoring Report*	3/31/12
Wet-weather storm events	10-1-10	4-30-11	Stormwater Monitoring Report*	3/31/12
Dry-weather storm events	5-1-11	9-30-11	Stormwater Monitoring Report*	3/31/12
Sediment Sampling	10-1-10	9-30-11	Stormwater Monitoring Report*	3/31/12

Wet season extends from October 1 each year until April 30 each year and Dry season extends from May 1 each year through September 30 each year.

RY=Reporting year.

*Submitted with Annual Report.

4.0. QUALITY OBJECTIVES

4.1 Precision, Accuracy and Bias

Precision, accuracy and bias for analytical chemistry and microbiology may be measured by one or more of the following quality assurance/quality control (QA/QC) procedures:

- Collection and analysis of field replicate samples (field replicates should show a relative percent difference of less than 150 percent).
- Collection of a field blank (results should be <MDL for all appropriate parameters)
- Analysis of various laboratory QC samples such as method blanks, matrix spikes, certified reference materials, and laboratory duplicates or triplicates.

4.1.1 Representativeness

Samples are to be collected in such a manner as to minimize potential contamination and other types of degradation in the chemical and physical composition of the water. This can be achieved by following guidelines for sampler decontamination, sample acceptability criteria, sample processing, observing proper hold-times, preservation, storage and preparation of samples.

4.1.2 Completeness

Sampling according to project sampling criteria along with adherence to standardized sampling and testing protocols outlined in this QAPP, will aid in providing a complete set of data for this project. The goal for completeness is 100%. The samples from each event should produce greater than 90% acceptable chemical and biological data under the QC conditions described elsewhere in this QAPP. However, hold-time limitations for fecal coliform may have an adverse effect on completeness.

4.1.3 Comparability

Comparability is addressed through use of standard techniques to collect and analyze representative samples, along with standardized data verification and reporting procedures described below in this QAPP. Changes or updates to analytical methods and sampling techniques midway into the project must be tested, validated, and shown to be equivalent to existing methods. This validation must be approved by the project manager and QA officers before being implemented.

4.2 Reporting Limits

Table 3. Analytical Method Reporting Limits for Water Matrix Parameters

Parameter	Required Reporting Limit
Total suspended solids	1.0 mg/L
Turbidity	±0.2 NTU
Conductivity	±1 umhos/cm
Chloride	0.2 mg/L
BOD5	2.0 mg/L
Particle size distribution	NA
pH	0.2 units
Hardness as CaCO3	1.0 mg/L
Methylene Blue Active Substances (MBAS)	0.025 mg/L
Fecal coliform	2 min., 2E6 max cfu/100mls
Total phosphorus	0.01 mg P/L
Orthophosphate Phosphorus	0.01 mg P/L
Total kjeldahl nitrogen	0.5 mg/L
Nitrate-nitrite Nitrogen	0.01 mg/L
Total recoverable zinc	5.0 µg/L
Dissolved zinc	1.0 µg/L
Total recoverable lead	0.1 µg/L
Dissolved lead	0.1 µg/L
Total recoverable copper	0.1 µg/L
Dissolved copper	0.1 µg/L
Total recoverable cadmium	0.2 µg/L
Dissolved cadmium	0.1 µg/L
Total mercury	0.1 µg/L
Dissolved mercury	0.1 µg/L

Parameter	Required Reporting Limit
PAHs	0.1 µg/L
Phthalates	1.0 µg/L
Herbicides	0.01 – 1.0 µg/L
Pesticides, Nitrogen	0.01 – 1.0 µg/L
Pesticides, Organophosphorus	0.01 – 1.0 µg/L
Semi-Volatile Petroleum Products (NWTPH-Dx)	0.25 - 0.50 mg/L
TPH (NWTPH-Gx)	0.25 mg/L

King County Environmental Laboratory detection limit for total and dissolved copper is 0.4 ug/L, total and dissolved lead is 0.1 ug/L, and dissolved and total cadmium is 0.05 ug/L using EPA method 200.8 without using a "clean hands/dirty hands" method based on EPA 1669 sample collection for ultra low trace metals. This type of field sampling methodology is not suitable for use with automatic sampling devices. Therefore, this slightly higher detection limits will be used for this project.

Table 4. Analytical Method Reporting Limits for Sediment Sampling Parameters

Parameter	Required Reporting Limit
Grain size	NA
Total solids	NA
Total organic carbon	0.1%
Total recoverable zinc	5.0 mg/Kg wet
Total recoverable lead	0.1 mg/Kg wet
Total mercury	0.1 mg/kg wet
Total recoverable copper	0.1 mg/Kg wet
Total recoverable cadmium	0.1 mg/Kg wet
PAHs	70 µg/Kg dry
Phthalates	70 µg/Kg dry
Phenolics	70 µg/Kg dry

PCBs	80 µg/Kg dry
Pentachlorophenol	1.0 µg/Kg wet
Diazinon	50 µg/Kg wet
Chloropyrifos	25 µg/Kg wet
Malathion	25 µg/Kg wet

5.0. SAMPLING DESIGN

5.1 Site Descriptions

Monitoring sites draining a specific land use type were selected based on a number of factors. An attempt was made to locate sites both outside of incorporated areas and outside of the potential annexation areas identified in King County. Rational for these criteria include sampling stormwater within King County's jurisdiction and potentially sampling a site where the jurisdiction of the sampling location may change within the projected timeframe of the long-term monitoring project. Other factors included logistics, such as proximity to where sampling crews are based (reduce hold-time violations, transit time, costs etc), proximity of power for sample refrigeration, access, etc.

5.1.1 Commercial Site

King County will monitor a commercial site in Fall City along highway 202, which is waterfront along the Snoqualmie River, and along the Preston-Fall City road. Businesses along both highway 202 and Preston-Fall City road comprise a commercial area that include a gas station, taverns, restaurants, and various other small shops. The catch-basin storm drain system drains areas along both highway 202 and the Preston-Fall City road. Both sections of the stormdrain system connect at a catch basin, which will serve as the monitoring location near the corner of highway 202 and the Preston-Fall City road. Stormwater from this system drains from the bottom of the catch basin/monitoring location and flows under highway 202 and flows directly to the Snoqualmie River. This site was selected as it included several different types of businesses and is an older development with even a few of the structures built in the 1920s. This site is intended to represent older commercial development that has a stormdrain system without mitigation BMPs or stormwater treatment of any kind.

The catch basin/monitoring location does not store water during a storm nor does it provide any water quality treatment or attenuation. Autosampler intake tubing will be installed into the catch basin/monitoring location so that when stormwater from both arms of the storm drain system mixes in the catch basin/monitoring location, the autosampler will draw sample water from these combined flows thereby obtaining a sample representative of the larger commercial area.

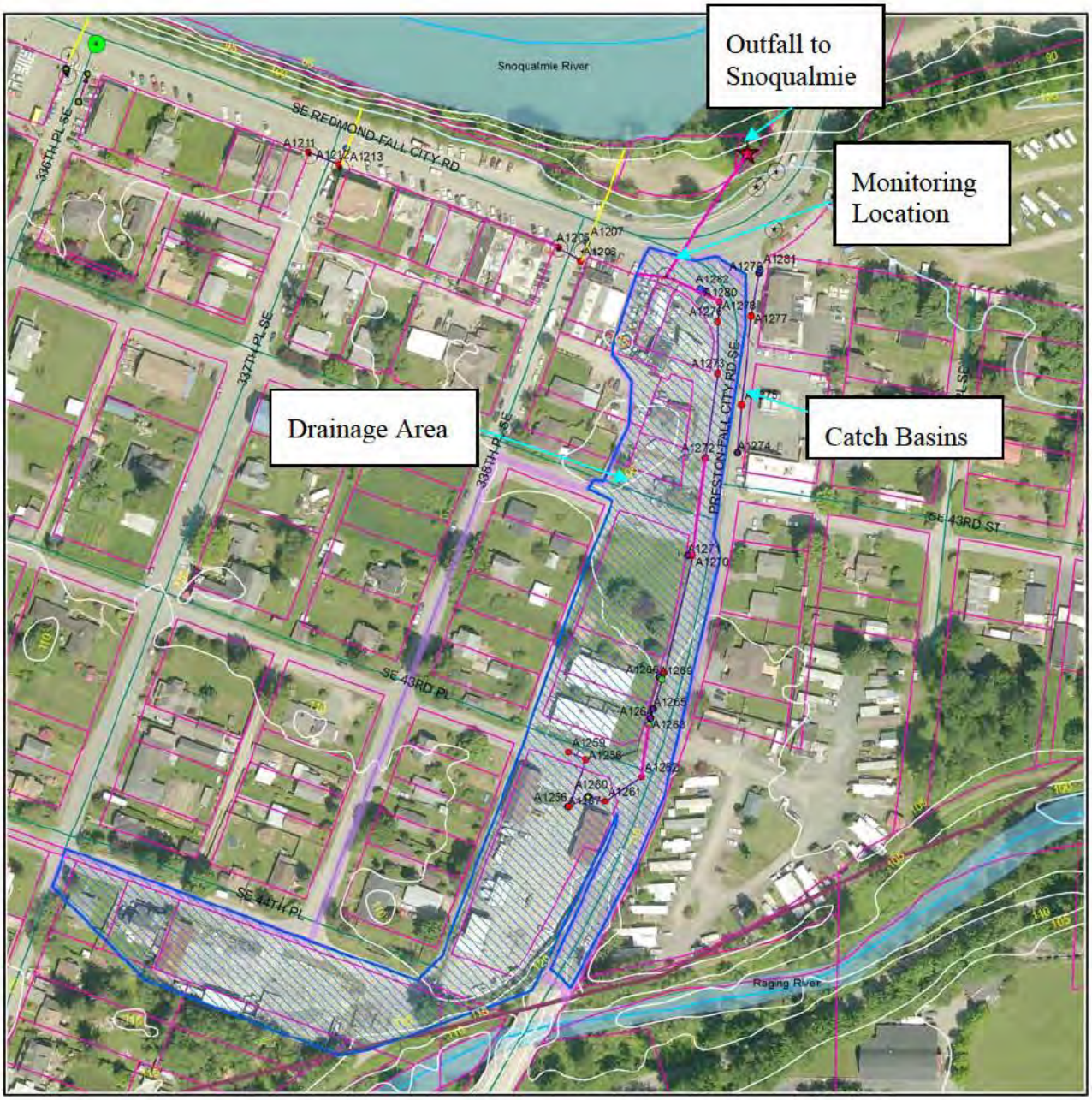

Figure 1. Fall City Commercial Monitoring Area.

5.1.2 High Density Residential

King County will monitor a high-density residential area also in Fall City. High density for this study is defined as four houses per acre or more. The neighborhood is accessed by 335th place SE and 44th Lane. Density in the monitoring area is approximately four houses to an acre. The stormdrain system serving the neighborhood is a curb and catchbasin system that flows into an

infiltration vault. The neighborhood was developed in the early 1970s and street, drainage, and house construction are all typical of this time period. The drainage basin is approximately $5^{1/4}$ acres consisting of 21 single family houses and is approximately 50 percent impervious. The monitoring location will be set up to collect stormwater immediately prior to flowing into the infiltration vault.

Figure 2. Fall City High Density Residential Monitoring Area

5.1.3 Low Density Residential

King County will monitor a low density residential neighborhood near Renton. Low density for this study is defined as one house per 1 to 5 acres. The site is characterized by open ditches bisected by residential driveways and connected with 12 inch culverts following the east shoulder of 148th Avenue SE north from SR900 and drain to May Creek. The watershed for this section of ditch is dominated by rural residential properties on the east side of 148th Ave SE and collects runoff from this busy county road. The monitoring site is at the Southwest corner of the lot at 10222 148th Avenue SE. Flow will be measured either by installing a weir into existing culverts or placing trapezoidal flumes in the ditch. Monitoring stations will be established within King County road right-of-way on the east side of the ditch. A raingage will be located at the BMP site; a permanent gage is located at the King County Roads Renton Maintenance Facility.

This monitoring location is also being used for the upstream/downstream ditch-retrofit monitoring for the NPDES required program effectiveness monitoring. The monitoring location for the low-density residential stormwater characterization (S8.D) is upstream of the ditch retrofit installation.

This street is located fairly close to the King County Renton Maintenance Facility. The site has a high traffic volume and narrow shoulders on the ditch side of the road. Right-of-way space between the east side of the ditch and private property line will allow for site access away from the road shoulder. Shoulder parking is available on the west side of the road. Lack of sidewalks may limit opportunities for vandalism at this site.

Figure 3. Low Density Residential Monitoring Area.

Table 5. Monitoring Site Characteristics.

	Monitoring Site Name		
Site Characteristics	**Commercial**	**High Density Residential**	**Low Density Residential**
Location	Fall City	Fall City	Near Renton
Drainage Area (acres)	5 acres	$5^{1/4}$ acres	42.7 acres
% Commercial	80	0	0
% Low Density Residential	0	0	100
% High Density Residential	20	100	0
% Impervious Area	80	50	17
Rain Gauge Location (State Plane NAD83)	1,378,430E 208,006N	1,378,430E 208,006N	1,308,856E 178,651N

5.2 Qualifying Storm Event Criteria for Stormwater Sampling

Samples will be collected and reported based on water year. The water year is defined as October 1st through September 30th each year. An attempt will be made to collect rainfall and runoff data for a year prior to the sample program beginning in August of 2009. Storm criteria for the wet season (October 1 through April 30) are: rainfall volume is at least 0.2 inches with no maximum, no maximum or minimum duration, antecedent dry period is less than or equal to .02 inch of rain in the previous 24 hours, and the inter-event dry period is 6 hours. Storm criteria for the dry season (May 1 through September 30) are: rainfall volume is at least 0.2 inches with no maximum, no maximum or minimum duration, antecedent dry period is less than or equal to 0.02 inch of rain in the previous 72 hours, and the inter-event dry period is 6 hours. Storm event criteria are summarized in Table 6.

Table 6. Storm Criteria for Stormwater Sampling.

	Wet Season	**Dry Season**
Seasonal Period	October 1 through April 30	May 1 through September 30
Minimum Amount of Rainfall	0.20 min. no fixed max.	0.20 min. no fixed max.

Rainfall Duration	No fixed min. or max.	No fixed min. or max.
Antecedent Dry Period	< or equal to 0.02 rain in previous 24-hours	< or equal to 0.02 rain in previous 72-hours
Inter-event Dry Period	6 hours	6 hours

5.3 Parameters for Stormwater Sampling

Flow-weighted composite samples will be analyzed for the following parameters:

- BOD5
- Hardness
- TSS
- Turbidity
- Conductivity
- Chloride
- Orthophosphate phosphorus
- Total phosphorus
- Nitrate/nitrite
- Total kjeldahl nitrogen
- Phthalates
- Polycyclic aromatic hydrocarbons (PAHs)
- Methlyene Blue Active Substances (MBAS)
- Metals (total and dissolved zinc, copper, cadmium and lead). Mercury is required for commercial and industrial land uses only.
- Pesticides including: 2,4-D, MCPP, Triclopyr, Diazinon, Malathion, Chlorpyrifos, Dichlobenil, Prometon and Pentachlorophenol

Grab samples will be analyzed for the following parameters:

- Fecal coliform
- Semi-Volatile Petroleum Products (NWTPH-Dx)and Volatile Petroleum Products (NWTPH-Gx)

If the volume of stormwater sample collected from a qualifying storm is insufficient to allow analysis for all parameters required in the permit, samples will be analyzed for as many parameters as possible in the following priority order:

Table 7. Summary of Parameter Types Analyzed by Land Use

All Land Use Types	Industrial/Commercial	Residential
TSS	PAHs	Nutrients
Conductivity	Phthalates	Pesticides

MBAS	Pesticides	PAHs
Metals	Nutrients	Phthalates
Hardness	BOD5	BOD5
	Chlorides	Chlorides

If insufficient volume exists to run the next highest priority pollutant, that analysis should be bypassed and analyses run on lower priority pollutants in accordance with the remaining priority order to the extent possible.

5.4 Parameters for Chemical Analysis associated with Toxicity Sampling

The following parameters will be analyzed in a stormwater sample collected for the purposes of toxicity testing:

- TSS
- Chloride
- Hardness
- MBAS
- Metals including total and dissolved copper, zinc, cadmium and lead (mercury in commercial or industrial land use areas only)
- PAHs
- Phthalates
- Pesticides including: 2,4-D, MCPP, Triclopyr, Diazinon, Malathion, Chlorpyrifos, Dichlobenil, Prometon and Pentachlorophenol

5.5 Parameters for Chemical Analysis in Sediment Samples

The following parameters will be analyzed for in sediments:

- Total solids (% solids)
- Grain size
- Total organic carbon
- PAHs
- Phthalates
- Phenolics
- PCBs*
- Pesticides (diazinon, chloropyrifos, malathion, pentachlorophenol)
- Metals (total copper, zinc, cadmium, lead and mercury*)

*For monitoring sites representing industrial and commercial land uses only.

The following table provides a list of parameters to analyze in order of priority from the top if insufficient volume is collected to analyze all required parameters.

Table 8. Parameter Analysis Priority

All Land Use Types	Industrial/Commercial	Residential
*Grain size	PAHs	Pesticides
Total organic carbon	Phthalates	PAHs
Metals	Phenolics	Phthalates
	PCBs	Phenolics
	Pesticides	

*If enough sample is available for all parameters, use grain size method in Appendix 9, otherwise characterize grain size qualitatively

6.0. SAMPLING PROCEDURES

6.1 Stormwater Monitoring Equipment and Installation

Composite water quality samples will be collected using ISCO autosamplers equipped with 15-liter glass, or suitable fluorinated plastic sample carboys. Autosamplers will be installed at monitoring sites in locked housings or utility boxes. When a storm is predicted to arrive that will rain enough to meet storm criteria, autosamplers will be set to automatically trigger by flow monitoring equipment when flow begins. A target amount of 15 liters of stormwater will be collected over the course of each sampled storm. The total time of collection will not exceed 24 hours. The end of the compositing period will be considered the start of the holding time period for the composite samples. (For further information on autosamplers see SOP NPDES-CM-2000)

A flow velocity meter will be installed for continuous flow data recording for as much as one year and for each stormwater event thereafter. Continuous flow recordings of storm events will be conducted for one year to establish rainfall/runoff relationships at each stormwater monitoring site. This data will provide information necessary for programming the sampler by using the estimates of runoff through the outfall. (For further information on flow metering see SOP NPDES-CM-1000)

One rain gauge will be installed at the high density residential monitoring site in Fall City. For the rural residential site, a rain gauge will be installed near the rural monitoring site. A permanent rain gauge, installed at the King County Roads Facility in Renton, will also be used.

Composite sampling equipment and containers will be set up to minimize contamination of the sample for metals analysis. The composite sample containers will be fitted with a cap designed to prevent contamination of the sample during the sampling process. The sample will remain capped until a standard cap is fitted onto the carboy for transportation to the laboratory.

For equipment installation into manholes or other confined spaces, confined space entry training and certification will be completed prior to sampling.

Equipment installation includes, but is not limited to:

- Installing sampler tubing in outfall pipe
- Installing mounting rings for sampler tubing and flow/velocity meter probe
- Installing a suspension harness to hang sampler in manhole
- Installing a liquid level actuator or telemetry equipment
- Installing any other necessary sampler equipment into/onto sampler (bottles, flow meter)

During equipment installation, the sampler and the flow meter will be programmed and tested. If flow is not available for a test run, a test run may be scheduled later to ensure the equipment is working properly. During sampler programming, field staff will be trained (if needed) to calibrate and program the equipment.

6.2 Stormwater Monitoring Sampling Deployment

6.2.1 Monitor Forecast

Sampling staff will monitor the weather forecast Sampling staff should document the forecast for each event. This documentation will show due diligence for the decisions to deploy, not to deploy or to set sampler program based on the predicted rainfall amount. When antecedent conditions have been or will be met and the forecast is for a qualifying storm, the sampling staff will deploy for the upcoming event. Staff will use weather forecast information to program the composite samplers.

6.2.2 Composite Sampler Deployment

Once the decision is made to deploy, field staff will complete the following:

- Program each site's sampler for the upcoming event.
- Gather all materials for deployment which may include; decontaminated containers, bases, batteries and ice.
- Proceed to sampling sites
- Prepare sampler for event which may include; replacing battery, rinsing tubing, placement of container(s), placement of ice, programming sampler.
- Verify flow measurement and actual depth and velocity if possible.

Field staff will wear powder-free nitrile gloves for safe handling to prevent cross contamination of samples. Either ice or refrigerated samplers will be used to keep sample temperature within Ecology's guidelines (WQ-R-95-80 or most up to date).

Sampling staff should continue to monitor the targeted storm event throughout the event. If a storm is larger than expected, field staff may have to replace bottles with empty bottles to capture the entire storm event or until 24 hours passes.

6.3 Sample Collection and Handling Procedures

As soon as possible after the event ends, sampling staff will retrieve the samples. Once at site, staff will review flow data to confirm that stormwater runoff has subsided or sampling occurred for a maximum of twenty-four hours. If storm flow is still present and it has been less than 24 hours, the sampling program will continue. Once stormwater runoff has subsided based on flow monitoring or visual observation, or the sampler has sampled for 24 hours, the container(s) will be removed, capped and placed on ice.

Grab samples will be collected during qualifying storms for total petroleum hydrocarbon and fecal coliform bacteria. Composite samples are not appropriate for these parameters due to their tendency to adhere to sampling equipment or change in concentration after a short period. (For further information on grab sampling see SOP NPDES-DS-2000). Also, pH and temperature data will be collected in the field during qualifying storms. (SOP NPDES-FS-1000). However, if the timing of a storm event requires the collection of grab samples in unsafe conditions, such as when it's dark, or that the initiation of bacteria samples occur outside the lab's normal working hours, then the grab samples can be collected during another qualifying storm event. King County will target eleven grab sampling events per year.

Once samples are collected, field staff will download flow rate and rainfall data, ensure the samplers are cooled, and determine hydrograph conditions. Precipitation data will be collected from a rain gauge located within the drainage area of each stormwater monitoring site.

Sampling staff will review the following information to determine if the sample is representative of the runoff event and the rain event meets storm criteria:

- Rainfall hydrograph (to determine if rainfall amount met storm criteria, e.g. 0.2 inches)
- Hydrograph (to determine if samples were collected during at least 75% of the storm, or 75% of the first 24 hours of the storm)

Once the storm event is determined to meet criteria, samples should be placed on ice with proper chain of custody forms. Field splitting will be conducted in the field as soon as the auto-sampler has finished collecting the composite sample. The composite sample will then be transferred into the appropriate laboratory sample containers. This will be done by continuously agitating the sample in the 15-liter glass carboy while transferring sample aliquots to the appropriate laboratory containers using a Teflon siphon tube. Each sample container will be filled to the appropriate level from the autosampler carboy. This procedure will ensure a representative sample from the carboy in each laboratory sample container. Once the sample has been split, both the dissolved metals sample and the orthophosphorus sample will be filtered. Dissolved metals samples will be drawn through a cleaned Nalgene 500 ml filtration apparatuses with 0.45 micron filters using a peristaltic pump. Orthophosphorus will be filtered using a 0.45 micron syringe filter.

If the sample collection crew is unable to split the composite sample and filter the appropriate sub-samples immediately, the composite sample will be stored on ice and transported back to the King County Environmental Laboratory for splitting and filtration. Appropriate hold-time violation flags will be added to the data. During evenings, weekends, and other "off hours" when a sample is collected, access to the King County Environmental Laboratory for login, sample splitting, filtration steps, refrigeration and other necessary preservation will be maintained.

During sample preparation, all field quality assurance (QA)/quality control (QC) samples (duplicates, equipment blanks, trip blanks, hold times) that require analysis should be recorded in field notebooks, on chain-of-custody forms and placed on ice in the same cooler with stormwater samples for laboratory delivery.

6.4 Field Data and COC Forms

During sample collection, field data forms and/or field notebooks should be used to document data collection procedures. Ecology recommends developing data forms and attaching a sample to your QAPP. Field data forms can include the following information:

- Field staff present (on-site)
- Weather conditions
- Date and time of site arrival
- Time of Sample collection/sample distribution into bottles w/preservative
- Equipment calibration performed and results of calibrations
- Bottle configuration
- Time of download of data
- Number of samples collected
- Any problems that occur in the field
- Signature of field staff project manager
- Number of days of preceding dry conditions
- Rainfall amount in inches of the storm event from when sampling begins

Chain-of-custody (COC) forms should be used to accompany samples being transported from the site. These forms are typically provided by the laboratory and can include the following information:

- Sample time and date
- Preservatives used
- Name of sampler
- Analytical test method requested
- Parameter to be analyzed
- Field Quality Assurance/Quality Control samples collect such as duplicates, trip blanks, temperature blanks, etc.
- Coordination with bottle labels

6.5 Decontamination Procedures

Once samples are collected, all re-usable equipment should be decontaminated with wash and rinse water. EPA approved detergents and de-ionized water (ASTM I or II) should be used to provide efficient decontamination of equipment. Equipment blanks will be analyzed to check for possible cross contamination between sampling events. The amount of equipment blanks collected is optional, based on data quality objectives established earlier in this document. Proper personal protective equipment (new powder-free gloves) should be worn during sampling activities and during decontamination processes. (for more information on decontamination procedures see KCEL SOPs 06-05-002-001 and 07-04-001-002).

6.6 Collection of QA/QC Samples

The table below provides a list of blanks that will be collected in the field to meet QAPP objectives:

Table 9. Quality Control Sample Summary.

Blank Type	Frequency of Collection	Collection Procedure
Equipment Blank	Twice per year at each site	Run ASTM Type I or II de-ionized water through equipment after decontamination and collect samples in the appropriate container with preservative for a full analysis of all parameters collected during a sampled storm event. Place immediately on ice.
Dissolved Metals field filtration blank	Every event	Carry R.O. water to field and filter through field equipment during sample collection.
ORTHOP field filtration blank	Every event	Carry R.O. water to field and filter through field equipment during sample collection.

6.7 Periodic Preventative Maintenance

Periodic preventative maintenance of equipment can occur between storm events to ensure equipment is operating properly. Signs of vandalism, rusting equipment, equipment failure or other maintenance issues will be documented in field notebooks or on field data forms. Any significant changes in site conditions that will affect sampling should be revised in the QAPP.

6.8 Additional Toxicity Testing Sample Collection Procedures

Toxicity samples will be collected from each stormwater monitoring site during the first flush storm event occurring between August 1st and September 30th. If by the end of September no qualifying storm was sampled, one last attempt will be made to collect a toxicity sample in October. Additional composite sample volume can be collected by deploying an additional sampler and carboy setup at each monitoring location.

Field decisions are crucial for toxicity sampling. In order to catch the first flush, storm forecasting models will be used to notify the permittee of incoming storms. The permittee must then notify the toxicity laboratory approximately 2 days prior to the date of the forecasted storm event. If gametes/eggs are available and a forecasted storm meets required storm event criteria, field staff will be deployed to collect samples. If gametes/eggs are not available, field staff is not required to deploy, and should be recorded in the Annual Stormwater Monitoring Report. The holding time for gametes/eggs at the laboratory is 2 days and the holding time for the toxicity water sample is 36 hours. Contact the WET Coordinator (rmar461@ecy.wa.gov or 360-407-

6445) for conditional acceptance if the holding time is between 36 and 72 hours. Holding times in excess of 72 hours will not be accepted.

6.9 Sediment Collection

Sediments will be collected at each stormwater monitoring site using a PVC core tube and stainless-steel spatula (KCEL SOP #237v0) or if access is constricted, an Eckman sediment grab sampler or similar. At the high density residential site, sediment will be collected from the street catch basin that flows into the infiltration basin. At the rural residential site, sediments will be collected from sampling location at the Southwest corner of the lot at 10222 148th Avenue SE. Core tubes will be pushed down into sediment and a spatula will be inserted under the core tube to hold sediment while the core tube is lifted out of the sediment. Sediments from the core tubes will be emptied into pre-cleaned stainless-steel bowls, one for each monitoring site. Once enough has been collected, sediments in the bowls will be composited and then transferred to appropriately labeled sample jars, using pre-cleaned stainless-steel spoons. The sample jars will then be placed on ice and delivered to the laboratory.

At the commercial site in Fall City, sediments will be collected from in the catch basin/monitoring location with an Eckman sediment grab sampler. The sampler will be lowered into the catch basin by a rope. The sampler will be triggered by a messenger and then the sampler will be retrieved. Once the sampler is retrieved, it will be emptied into a pre-cleaned stainless-steel bowl. Once enough has been collected, sediments in the bowls will be composited and then transferred to appropriately labeled sample jars, using pre-cleaned stainless-steel spoons. The sample jars will then be placed on ice and delivered to the laboratory.

6.10 Additional Resources or References to Assist with this Section

6.10.1 For Weather Forecasting

1. Federal Register, EPA 40 CFR Part 136 July 2007 and March 2007.
2. King 5 Doppler: http://www.king5.com/weather/doppler/indexrad.html?http://www.king5.com/live/weather_image/K5-340mileAnim-640x480.gif&Title=340%20Mile%20Range
3. UW Atmospheric Science: http://www.atmos.washington.edu/~ovens/loops/wxloop.cgi?mm5d1_pcp3+///3
4. NOAA QPF: http://www.wrh.noaa.gov/forecasts/graphical/sectors/sewWeek.php?page=3&element=QPF
5. COLA: http://wxmaps.org/pix/meteograms.html
6. East Pacific IR Loop: http://www.wrh.noaa.gov/sew/ir4kmP.php

7.0. MEASUREMENT PROCEDURES

7.1 Sample Volume, Containers and Hold Time

The table below includes stormwater sample volume, container type, holding time and preservative needed for each required parameter.

Table 10. Stormwater sample volume, container types, holding time and preservation requirements.

Parameter	Recommended Quantity	Container	Holding Time	Preservation
Stormwater Monitoring Samples – All Water Matrices				
Total suspended solids (TSS)	1000 mL	1000 mL CWM HDPE	7 days	Refrigerate at <6°C
Turbidity (TURB)	500 mL	500mL CWM HDPE (Collect together with COND)	2 days	Refrigerate at <6°C
Conductivity (COND)	500 mL	500 mL CWM HDPE (Collect together with TURB)	28 days	Refrigerate at <6°C
Chloride	125 mL	125 mL CNM HDPE	28 days	Refrigerate at <6°C
Biochemical Oxygen Demand (BOD5)	2L	2L CWM HDPE	2 days	Refrigerate at <6°C
Methylene Blue Active Substances (MBAS)	250 mL	1-L Amber glass	48 hours	Refrigerate at <6°C
Total phosphorus	250 mL	250mL CWM HDPE	28 days	Freeze at -18°C
Orthophosphate Phosphorus (ORTHOP)	60 mL	60 mL CWM HDPE (Collect together with NO23)	Field filter within 15 minutes of collection, then 14 days frozen	Freeze at -18°C
Total Kjeldahl Nitrogen (TKN)	250 mL	250 mL CWM HDPE	28 days	H_2SO_4 to pH<2 within 15 minutes of collection, then refrigerate at <6°C
Nitrate-nitrite Nitrogen (NO23)	60 mL	60 mL CWM HDPE (Collect together with ORTHOP)	Filter within one day, then 14 days frozen	Freeze at -18°C

Parameter	Recommended Quantity	Container	Holding Time	Preservation
Dissolved Metals (copper, zinc, cadmium, lead)	250 mL	Acid washed 500 mL HDPE	6 months	Field Filter within 15 minutes; then HNO_3 to pH<2 at lab
Dissolved Mercury	500 mL	Acid washed 500 mL HDPE bottle	28 days	Field Filter within 15 minutes; then HNO_3 to pH<2 at lab
Total Mercury	500 ml	Acid washed 500 mL HDPE bottle	28 days	HNO_3 to pH<2
Total Metals (copper, zinc, cadmium, lead)	250 mL	Acid washed 500 mL HDPE bottle	6 months	HNO_3 to pH<2
Hardness (CaCO3) (may be included in Total Metals bottle)	250 ml	Acid washed 500 mL HDPE bottle	6 months	HNO_3 to pH<2
PAH, Phthalate and, pentachlorophenol	4 X 1 liters	1 liter amber glass jar	7 days	pH tested adjusted 6 to 9 within 15 min. of sampling. Store at 4 degrees C
Herbicides: 2,4-D, MCPP, triclopyr,	2 X 1 liters	1 liter amber glass jar	7 days	Store at 4 degrees C
Pesticides: Nitrogen, organophosphate, and/or chlorinated includes:, diazinon, malathion, Chlorpyrifos dichlobenil, prometon	4 X 1 liters	1 liter amber glass jar	7 days	pH tested adjusted 5 to 9 within 15 min. of sampling. Store at 4 degrees C
Fecal coliform	500 mL	500 mL polypropylene autoclaved bottle	6+2 hours	If chlorine is expected in the sample, then request thiosulfate preservative
Semi-Volatile Petroleum Products (NWTPH-Dx)	1 L	100 mL amber glass bottle with Teflon-lined cap (volume affects reporting limit)	7 days (14 days if pH adjusted to 2 with 1:1 HCl)	Refrigerate all samples at 4ºC (for 14 day hold time adjust pH to 2 with 1:1 HCl)
Total petroleum hydrocarbons – NWTPH-Gx	120 mL + 40 mL	(3) 40-mL vials w/ septum	7 days	none

Parameter	Recommended Quantity	Container	Holding Time	Preservation
Sediment Samples -All Soil Matrices				
Total solids (% solids)	60 g	4 oz. CWM PP or glass (Collect together with TOC)	14 days, 6 months if frozen	Freeze at -18°C
Grain Size	300g	16 oz. CWM PP or glass*	6 months	Refrigerate at 4°C
Total organic carbon (TOC)	25g	4 oz. CWM PP or glass (Collect together with TOTS)	14 days, 6 months if frozen	Freeze at -18°C
Total metals: Copper, zinc, cadmium, lead	fill jar	4 oz. PP jar	6 months, 2 years if frozen	Refrigerate at 4°C
Mercury (can be combined with Total Metals jar)	fill jar	4 oz. PP jar	28 days	Freeze at -18°C
PAH, Phthalates, Phenolics and Pentachlorophenol	250g	8 oz glass jar	14 days, 1 year if frozen	Refrigerate at 4°Ce
PCBs	250g	8 oz. glass jar	14 days, 1 year if frozen	Refrigerate at 4°C
Pesticides: Nitrogen, organophosphate, and/or chlorinated includes: diazinon, malathion, chlorpyrifos	250g	8 oz glass jar	14 days, 1 year if frozen	Refrigerate at 4°C

* A second 16 oz. container should be collected for PSD QC (1 per 20 samples).

7.2 Stormwater Sample Volumes

Sample volume requirements can also vary from laboratory to laboratory. Additionally, some parameters can be combined into one sample volume, reducing the need to collect individual samples for each parameter. The following table includes parameters to be monitored with estimated volumes.

Parameter/Specific Analyte		Volume in Liters
Herbicides: 2,4-D, MCPP and Triclopyr		2
Insecticides: Diazinon, Malathion, Chloropyrifos, Dichlobenil, and Prometon Fungicides: Pentachlorophenol		4
Phthalates and PAHs		4
Total Mercury		0.500
Dissolved Mercury		0.500
Total Metals: Copper, Zinc, Cadmium, Lead		0.250
Hardness (may be included in Total Metals Bottle unless a different sample)		0.250
Dissolved Metals: Copper, Zinc, Cadmium, Lead		0.250
TSS		1
Turbidity and Conductivity		0.5
Chloride		0.1
BOD5		2
Total Phosphorus		0.25
Orthophosphate Phosphorus		0.06
NO23		0.06
MBAS***		0.50
TKN		0.25
	Total Composite Sample Volume Needed	~15 L
Grab Samples	Semi-Volatile Petroleum Products (NWTPH-Dx)	1L
	TPH – NWTPH-Gx	120 mL+ 40 mL
	Fecal coliform	250 mL

7.3 Sediment Sample Volumes

The following table lists the estimated sediment volume needed to analyze the required parameters in the permit.

Table 11. Sediment sample volume requirements.

Parameter/Specific Analyte – Sediment Sampling	Volume in Ounces
Grain Size	16.0
Total Metals	4.0
Total organic carbon and total solids	4.0
PAHs, phthalates, PCBs, Herbicides, Pesticides	32.0 oz.
Phenolics	3.5 oz.
Total in ounces	63.5 oz

The Ecology-designed catch basin inserts can hold a maximum of 34 ounces of sediment. The amount of sediment typically collected in a single sediment sampler ranges from 2 ounces to as much as 10 ounces depending on sedimentation in the storm flow. To obtain the required volume, more than one sediment samplers may have to be installed at one location or other equipment used.

7.4 Analytical Methods and Reporting Limits

The analytical methods selected for this project must correspond with those provided in Appendix 9 of the Phase I permit and in the addition guidance *Alternative Laboratory Methods Approved by Ecology for Use under the Phase I Municipal Stormwater Permit*. Alternative analytical methods not listed in the above references may be used with prior approval by Ecology. Appendix 9 of the Phase I Permit requires the following reporting limits to be met:

Table 12. Analytical Method Reporting Limits for Water Matrix Parameters

Parameter	Reporting Limit Target
Total suspended solids	1.0 mg/L
Turbidity	±0.2 NTU

Parameter	Reporting Limit Target
Conductivity	±1 umhos/cm
Chloride	0.2 mg/L
BOD5	2.0 mg/L
pH	0.2 units.
Hardness as CaCO3	1.0 mg/L
Methylene Blue Activating Substances (MBAS)	0.025 mg/L
Fecal coliform	2 min., 2E6 max cfu/100mls
Total phosphorus	0.01 mg P/L
Orthophosphate	0.01 mg P/L
Total kjeldahl nitrogen	0.5 mg/L
Nitrate-nitrite	0.01 mg/L
Total recoverable zinc	5.0 µg/L
Dissolved zinc	1.0 µg/L
Total recoverable lead	0.1 µg/L
Dissolved lead	0.1 µg/L
Total recoverable copper *	0.1 µg/L
Dissolved copper *	0.1 µg/L
Total recoverable cadmium	0.2 µg/L
Dissolved cadmium	0.1 µg/L
Total mercury	0.1 µg/L
Dissolved mercury	0.1 µg/L
PAHs	0.1 µg/L
Phthalates	1.0 µg/L
Herbicides	0.01 – 1.0 µg/L

Parameter	Reporting Limit Target
Pesticides, Nitrogen	0.01 – 1.0 µg/L
Pesticides, Organophosphorus	0.01 – 1.0 µg/L
Semi-Volatile Petroleum Products (NWTPH-Dx)	0.25 - 0.50 mg/L
TPH (NWTPH-Gx)	0.25 mg/L

* King County Environmental Laboratory detection limit for total and dissolved copper is 0.4 ug/L using EPA method 200.8 without using a "clean hands/dirty hands" method based on EPA 1669 sample collection for ultra low trace metals. Automated samplers are not suitable for ultra-low detection limits. Therefore, this slightly higher detection limits will be used for this project.

Table 13. Analytical Method Reporting Limits for Sediment Sampling Parameters

Parameter	Reporting Limit Target
Grain size	NA
Total solids	NA
Total organic carbon	0.1%
Total recoverable zinc	5.0 mg/Kg
Total recoverable lead	0.1 mg/Kg
Total mercury	0.1 mg/kg
Total recoverable copper	0.1 mg/Kg
Total recoverable cadmium	0.1 mg/Kg
PAHs	70 µg/Kg dry
Phthalates	70 µg/Kg dry
Phenolics	70 µg/Kg dry
PCBs	80 µg/Kg dry
Pentachlorophenol	1 µg/kg wet
Diazinon	50 µg/kg wet
Chloropyrifos	25 µg/kg wet

Malathion	25 µg/kg wet

7.5 Methods Table

The following analytical methods will be used for stormwater monitoring chemical analysis:

Parameter	Method	Method Detection Limit	Reporting Detection Limit
Total suspended solids	SM2540D	0.5 mg/L	1.0 mg/L
Turbidity	SM2130B	0.2 NTU	0.5 NTU
Conductivity	SM2510B	1 umhos/cm	5 umhos/cm
Chloride	SM4110B	0.05 mg/L	0.1 mg/L
BOD_5	SM5210B	2 mg/L	2 mg/L
pH	SM4500-H-B	NA	NA
Hardness as $CaCO_3$	EPA 200.8/SM2340B.ED19	0.066 (mg $CaCO_3$/L)	0.33 (mg $CaCO_3$/L)
Methylene Blue Activating Substances (MBAS)	SM5540C	0.025 mg/L	0.025 mg/L
Fecal coliform	SM9222D[1]	1 cfu/100mls	1 min., 1E6 max cfu/100mls
Total phosphorus	SM4500-P-B,F	0.005 mg/L	0.01 mg /L
Orthophosphate Phosphorus	SM4500-P-F	0.002 mg/L	0.005 mg /L
Total Kjeldahl Nitrogen	EPA 351.2	0.1 mg/L	0.2 mg/L
Nitrate-nitrite Nitrogen	SM4500-NO3-F	0.01 mg/L	0.04 mg/L
PAHs	SW846-8270D	0.05 ug/L	0.1 µg/L
Phthalates plus pentachlorophenol	SW846-8270D	0.5 ug/L	1.0 µg/L
Pesticides, Nitrogen (Dichlobenil, Prometon)	SW846-8270D-SIM	0.05 ug/L	0.1 µg/L
Pesticides, Organophosphorus (Diazinon, Malathion, Chlorpyrifos)	SW846-8270D-SIM	0.05 ug/L	0.10 µg/L

Parameter	Method	Method Detection Limit	Reporting Detection Limit
Semi-Volatile Petroleum Products (NWTPH-Dx)	NWTPH-Dx (GC/FID) Ecology, 1997 (Publication No. ECY-97-602)	0.2 mg/L	0.2 mg/L
TPH (NWTPH-Gx)	NWTPH-Gx (GC/FID) Ecology, 1997 (Publication No. ECY-97-602)	0.25 mg/L	0.25 mg/L

NTU = Nephelometric Turbidity Units

1. For turbid samples 9221E will be used.

Umhos/cm = micromho per centimeter

Su = Standard Units

Parameter	Method	Method Detection Limit (a)	Reporting Detection Limit (b)	Practical Quantitation Limit (c)
Total recoverable zinc	EPA 200.8	0.081 ug/L	0.5 ug/L	2.5 ug/L
Dissolved zinc	EPA 200.8	0.081 ug/L	0.5 ug/L	2.5 ug/L
Total recoverable lead	EPA 200.8	0.0047 ug/L	0.1 ug/L	0.5 ug/L
Dissolved lead	EPA 200.8	0.0047 ug/L	0.1 ug/L	0.5 ug/L
Total recoverable copper*	EPA 200.8	0.043 ug/L	0.4 ug/L	2.0 ug/L
Dissolved copper*	EPA 200.8	0.043 ug/L	0.4 ug/L	2.0 ug/L
Total recoverable cadmium	EPA 200.8	0.0027 ug/L	0.05 ug/L	0.25 ug/L
Dissolved cadmium	EPA 200.8	0.0027 ug/L	0.05 ug/L	0.25 ug/L

Total mercury (CVAA-M)	EPA 245.1	0.0046 ug/L	0.05 ug/L	0.10 ug/L
Dissolved mercury (CVAA-M, DISS)	EPA 245.1	0.0046 ug/L	0.05 ug/L	0.10 ug/L

(a) Method Detection Limit: King County Environmental Laboratory's empirically derived EPA 40 CFR MDL may change annually when MDL studies are performed. These values do not show up on any reported data.

(b) Reporting Detection Limit: King County Environmental Laboratory's Reporting Detection Limit. King County Environmental Laboratory reports show this as the "LIMS MDL".

(c) Practical Quantitation Limit: King County Environmental Laboratory's limit for accurate quantification as defined by EPA SW846 procedures. A low level check standard at or near this concentration must yield +/- 30% of the True Value. King County Environmental Laboratory reports show this as the "LIMS RDL".

* King County Environmental Laboratory reporting limit for total and dissolved copper is 0.4 ug/L using EPA method 200.8 without using a "clean hands/dirty hands" method based upon EPA 1669 sample collection for ultra low trace metals. Automated samplers are not suitable for ultra low detection limits. Therefore, this slightly higher reporting limit will be used for this project.

The following table contains the analytical method that will be used for this project for sediment analysis:

Table 14. Sediment Analytical Methods and Detection Limits

Parameter	Method	Method Detection Limit
Grain Size	ASTM D422	Sieve (Gravel & Sand) 0.1% Hydrometer (Silt & Clay) 0.5 %
Total solids (% solids)	SM2540G	0.005%
Total organic carbon	EPA9060-PSEP96	0.05%
Total recoverable zinc	EPA3050B/6010C	0.25 mg/Kg wet weight
Total recoverable lead	EPA3050B/6010C	1.0 mg/Kg wet weight
Total mercury (CVAA-M)	EPA 7471B	0.005 mg/kg wet weight
Total recoverable copper	EPA3050B/6010C	0.2 mg/Kg wet weight
Total recoverable cadmium	EPA3050B/6010C	0.1 mg/Kg wet weight
PAHs	SW846-8270D	70 µg/Kg dry
Phthalates	SW846-8270D	70 µg/Kg dry

Parameter	Method	Method Detection Limit
Phenolics	SW846-8270D	70 µg/Kg dry
PCBs	SW846-8082A	80 µg/Kg dry
Fungicides: Pentachlorophenol	SW846-8270DSIM	1.0 µg/Kg
Pesticides, organophosphates (diazinon, chloropyrifos, malathion)	SW846-8270DSIM	0.05 µg/Kg

7.6 Toxicity Sample Volumes

A sufficient sample for toxicity consists of the following:

- Approximately 12.7 liters (3.4 gallons) for the analysis of the required chemistry parameters listed in the following table, and
- Approximately 24 to 44 liters (6.4 to11.6 gallons) for toxicity testing.

Table 15. Chemical Parameters and Volumes for Toxicity Sampling.

Parameter/Specific Analyte		Volume in Liters*
Herbicides: 2,4-D, MCPP and Triclopyr		2.0
Insecticides: Diazinon, Malathion, Chloropyrifos, Dichlobenil, and Prometon Fungicides: Pentachlorophenol		4.0
Phthalates and PAHs		4.0
Total Metals: Copper, Zinc, Cadmium, Lead		0.25
Dissolved Metals: Copper, Zinc, Cadmium, Lead		0.25
Total Mercury		0.5
Dissolved Mercury		0.5
TSS		1.0
Chloride		0.1
Hardness**		0.25

MBAS*		0.50
	Total Chemistry Sample Volume Needed	13.35 L
	Total # of Samples Derived from Composite Sample	8

*Volume estimates provided by Columbia Analytical Laboratory

*** The hardness sample referenced above is the optional hardness sample collected from the receiving water in order for the laboratory to adjust the sample hardness to match receiving water*

As demonstrated above, BOD_5, fecal coliform, TPH, turbidity, nutrients and conductivity are not required for analysis for toxicity. The following will be measured at the toxicity laboratory upon sample receipt:

- Conductivity
- pH
- DO
- alkalinity
- hardness (stormwater sample)
- ammonia

Table 16. Toxicity Testing Parameters, Recommended Quantity, Container Type, Holding Time and Preservative

Analysis	Recommended Quantity	Container	Holding Time	Preservation
Toxicity Samples				
Environment Canada Trout Embryo Viability	11.6 gallons – 6.4 gallons	5 gallon glass containers	36 hours	Dark, minimal headspace, 0-6 ° C

*Information in this table was provided by Nautilus Laboratory.

*Container type, holding times and recommended quantity may vary between laboratories

7.6.1 Toxicity Sample of Insufficient Volume

KCEL estimates that a total of 30L of each sample is required to run the embryo test (29L for water hardening, rinsing of eggs and testing; 900 mL for chemistry). An additional 7L may be required for a tissue sample replicate. Sufficient sample for test setup and daily renewals must

be collected at the time of the storm event; subsequent samples will not qualify as first-flush, and precipitation may cease after one or two days.

If the total sample volume after the qualifying storm is less than 11.6 gallons (44 liters) but greater than 6.3 gallons (24 liters) then the volume that was collected will determine changes in the toxicity testing configuration described above in accordance with the following:

- 10 gallons (38 liters) of sample – base the concentration series on a 0.3 dilution factor.
- 8.7 gallons (33 liters) of sample – base the concentration series on a 0.3 dilution factor and reduce the number of replicates to three.
- 7.9 gallons (30 liters) – reduce the number of extra replicates of 100% sample for yolk/embryo analysis from seven to three and the number of replicates in the test itself to three.
- 6.9 gallons (26 liters) – reduce the number of extra replicates of 100% sample for yolk/embryo analysis from seven to three and base the concentration series on a 0.3 dilution factor.
- 6.3 gallons (24 liters) – reduce the number of extra replicates of 100% sample for yolk/embryo analysis from seven to three, base the concentration series on a 0.3 dilution factor, and reduce the number of replicates in the test itself to three.

If the sample volume falls between the values listed above, then the test configuration must match the next lowest volume and the excess sample used for additional replicates of 100% sample to improve the detection limit for the yolk/embryo analysis. If sample volume is less than 6.3 gallons (24 liters), toxicity sample analysis will not be conducted.

7.7 Temperature

Sample holding times, temperatures, and handling shall meet Ecology's guidance (WQ-R-95-80) or version current at the permit revision date. If the sample temperature exceeds 6 degrees Celsius at receipt by the laboratory, then the WET Coordinator, Randall Marshall (rmar461@ecy.wa.gov or 360-407-6445) will be contacted in accordance with Department of Ecology publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* to get acceptance for the sample temperature deviation. Acceptance will not be given for samples warmer than 14 degrees Celsius unless the sample is received by the laboratory within one hour after collection. Samples should meet the required temperature stated in the reference above, which is available from Ecology's website: http//www.ecy.wa.gov/programs/wq/wet.

7.8 Holding Time

If the maximum holding time of the toxicity sample is exceeded (36 hours), staff will contact Ecology's WET Coordinator for conditional acceptance. Sample holding times in excess of 72 hours will not be accepted by the laboratory or Ecology. The date and time of test initiation will be recorded on laboratory data forms or in laboratory notebooks.

7.9 Toxicity Testing Procedures (7-day Test)

Rainbow trout eggs are dry-fertilized in the lab, the embryos exposed to sample solutions, and the test ended 7 days after fertilization, with the endpoint consisting of embryo viability. The rainbow trout embryo survival test is used to evaluate the effects of storm water (seasonal first-flush) and in monitoring of receiving waters. The toxicity test shall have five concentrations and a control with four replicates at each concentration. An additional seven replicates of 100% sample and control water shall be run in order to provide tissue for yolk/embryo analysis if needed. The test concentration series shall be determined using a 0.5 dilution factor.

Procedures for the 7-day toxicity test are illustrated in the following references:

- Environment Canada. 1998. Biological Test Method: Toxicity Tests Using Early Life Stages of Salmonid Fish (Rainbow Trout). Environmental Protection Series 1/RM/28 Second Edition.
- Canaria, E.C., J.R. Elphick, and H.C. Bailey. 1999. A Simplified Procedure for Conducting Small Scale Short-Term Embryo Toxicity Tests with Salmonids. *Env. Toxicol.* 14, 301-307.
- WaDOE, 2005. Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. p39.*

Green eggs and sperm will be obtained primarily from:

Trout Lodge
12000 McCutcheon Road (or P.O. Box 1290)
Sumner, WA 98390
Phone: (253) 863-0446; Fax: (253) 863-4715; Web: troutlodge.com

However, alternative gamete sources (to be determined) may be used to achieve greater scheduling flexibility if QA/QC goals of the project can still be met.

The test is terminated at 7 days, at which time D.O., pH and temperature are measured and samples for water quality are collected. Dead embryos are counted, recorded and removed. Remaining embryos are counted, collected by pouring through a nylon screen and placed into 14-mL plastic screw-cap vials each containing 10 mL Stockard's solution as a clearing and preservative solution. After approximately 20-30 minutes, the embryos will be "cleared" of the opaque outer coating sufficiently for examination. Preserved embryos are stored in the dark at room temperature until observation. The eggs are then visually tested for viability. Nonviable eggs are described as eggs failing to complete morphogenesis. The endpoint of this test includes:

- Eggs that did not survive during exposure to the stormwater sample
- Eggs that inhibited development
- Eggs that were not successfully fertilized initially

Bench sheets will be developed during the 7-day test and included in the final data report.

An EC_{50} will be calculated for each test result using the Spearman-Karber Method. Abbot's correction may be applied to the data before deriving the point estimations. A minimum of five concentrations and a control will be used. If an EC_{50} is 100% sample or less, then the permit requires follow-up actions. Information on follow-up actions can be found in Section 8, *Sampling Procedures*.

7.10 Invalid or Anomalous Tests

Invalid toxicity tests may occur if the laboratory does not follow the test protocol or when the results do not meet the test acceptability criteria in the test protocol. The laboratory will usually identify invalid tests and arrange to repeat them. Ecology will also identify invalid tests when the laboratories do not. Anomalous test results happen when the laboratory appears to have conducted the toxicity test in accordance with the test protocol, but the results are considered unreliable according to the anomalous test identification criteria in Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria.* Only Ecology may identify a test result as anomalous. Invalid or anomalous tests will be repeated with freshly sampled stormwater in accordance with Section 4, *Project Description*.

If a test is found invalid or anomalous, the Permittee will keep the results on file and report the information in the Annual Stormwater Monitoring Report. A second attempt for toxicity testing is necessary (see Section 4, *Project Description*).

7.11 Follow-up Actions When Toxicity Is Detected

Follow-up actions when toxicity is detected ($EC_{50} \leq 100\%$ sample) are based upon an evaluation of water quality sample chemistry compared to an existing library of fish embryo toxicity test results (Trout Library).

If the EC_{50} from any valid and non-anomalous test is 100% stormwater or less, the following procedures will be followed:

- Preserve terminated organisms for up to six months. Embryos in the extra replicates in the 100% sample treatment are sampled for tissue analysis by GC/MS by pouring the embryos onto a nylon screen, patting them lightly with a paper towel to remove excess water, placing them into a 40-mL amber glass screw-cap vial, and freezing them at -20°C. The additional 7 replicates will yield approximately 24.5 grams of tissue for analysis.
- Compare the water quality analytical results to the Trout Library to determine the presence of a detected toxicant within sixty (60) days after final validation of the data.
- Determine, through a good faith effort, if the presence of a detected parameter is within the range reported in the Trout Library that may adversely affect fish embryos and if so, review the source literature found in the trout library.

The results of the toxicity testing, and documentation of follow-up actions, will be submitted to Ecology with the appropriate Annual Stormwater Monitoring Report. Section 12, *Audits and Reports*, describes the contents of reporting on toxicity.

The follow-up actions when toxicity is detected should also anticipate potentially adding other chemicals to the parameter list for future sampling. Chemicals found by yolk analysis (described below) may be worth measuring in stormwater to allow a quantitative comparison to the Trout Library. The list of PAHs, pesticides, and other chemicals analyzed may be expanded for future samples if additional analyses may possibly help resolve toxicant identity. The list of analyses should be expanded only if knowledge of industrial or commercial activity within the drainage area suggests the presence of a chemical which the fish embryo toxicity library (Trout Library) shows could be toxic to this life stage or if a potentially toxic chemical has been found in the yolk.

If the concurrent chemical analyses of the sample do not detect any chemicals at concentrations known to adversely affect fish embryos, then a Gas Chromatograph/Mass Spectrometer (GC/MS) scan-type analysis of the yolk tissue from the highest test concentration (usually 100%) is needed. The GC/MS need not be quantitative but only capable of identifying stormwater contaminants present in the embryo or yolk tissue.

Example procedures include, but are not limited to the following:

- Washington State Department of Ecology Manchester Environmental Laboratory, Standard Operating Procedures for Micro-Acetonitrile Back Extraction Clean-up of Fish Tissue, Version 1.0, 2006
- Puget Sound Water Quality Action Team, Recommended Guidelines for Sampling Marine Sediment, Water Column and Tissue in Puget Sound, April 1997
- Environmental Protection Agency, SW-846, Method 3500B, Organic Extraction and Sample Preparation, 1996
- U.S. Geological Survey, EPA Extraction and Lipid Separation of Fish Samples for Contaminant Analysis and Lipid Determination, Standard Operating Procedure # HC521A, Great Lakes Science Center, Ann Arbor, Michigan, Version 1, 1995
- Washington State Department of Health, Human Health Evaluation of Contaminants In Puget Sound Fish, 2006

To be most useful, a yolk/embryo analysis should not be restricted to the list of chemical parameters required by the Phase I Permit. The GC/MS scan should capture and identify as many chemicals as it reasonably can. The Trout Library has many more chemicals than the required parameters, and will be useful for comparing GC/MS results. Yolk tissue analysis need not be quantitative because the Trout Library is based upon water and not tissue concentrations. The presence of a chemical within the yolk/embryo tissue means that the exposure can be considered significant enough to warrant checking the Trout Library to see if the chemical might be toxic to the embryo life stage.

A chemical detected in the yolk/embryo tissue testing may be added to the list of parameters measured in stormwater samples at the investigators discretion. Quantitative analysis would be useful so that concentrations may then be compared to fish embryo toxicity data. Ecology will be entering the results of the chemical analyses and trout embryo toxicity testing into a database for evaluation over the long term. Examination of results at the same outfall over time and from different outfalls from around the state may reveal patterns of chemical analytical results related to toxicity test results. The overall goal of toxicity data is to update our understanding of stormwater toxicity and provide information upon which to base adaptive stormwater

management. As long as this goal is being met, confirmation of toxicant identity is not necessary.

7.12 Additional Resources or References to Assist with this Section

1. Ecology's Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria, June 2005 (Canary Book Reference)
2. Environmental Protection Agency's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms, Appendix I, Spearman-Karber Method pages 439 – 443.
3. Department of Ecology Phase I Municipal Stormwater Permit Fact Sheet
4. Ecology's Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria, June 2005, http://www.ecy.wa.gov/pubs/9580.pdf.
5. Environment Canada, Environmental Toxicology Section, Standard Operating Procedures for the Toxicity Test Using Early Life Stages of Rainbow Trout, SOP ID RBTELS11. SOP, February 1999
6. Environmental Protection Agency's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms, Appendix I, Spearman-Karber Method pages 439 – 443. http://www.epa.gov/waterscience/methods/wet/disk1/
7. A Simplified Procedure for Conducting Small Scale Short-Term Embryo Toxicity Tests with Salmonids, E.C. Canaria, J.R. Elphick, H.C. Bailey, March 1998.

8.0. QUALITY CONTROL

8.1 Conventionals

Laboratory QC samples for conventional analyses and associated control limits are summarized below. These QC samples will be analyzed at a frequency of one per analytical batch of 20 or fewer samples.

Table 17. Conventionals QC – Liquid Matrices

Parameters	Method Blank	Lab Duplicate %RPD	Spike Blank %Recovery	Matrix Spike %Recovery	Lab Control Sample %Recovery
Biochemical Oxygen Demand	<MDL	NA	80-120%	NA	NA
Chloride	<MDL	20%	80-120%	75-125%	85-115%
Conductivity	NA	10%	NA	NA	90-110%
Methylene Blue Active Substances	<MDL	Subc.	Subc.	Subc.	Subc.
Nitrate-Nitrite	<MDL	20%	80-120%	75-125%	85-115%
Orthophosphate Phosphorus	<MDL	20%	80-120%	75-125%	85-115%
Total Kjeldahl Nitrogen	<MDL	20%	80-120%	70-130%	80-120%
Total Phosphorus	<MDL	20%	80-120%	75-125%	85-115%
Total Suspended Solids	<MDL	25%	N/A	N/A	80-120%
Turbidity	NA	25%	N/A	N/A	90-110%

Table 18. Conventional QC – Solid Matrices

Parameters	Method Blank	Lab Triplicate %RSD	Matrix Spike %Recovery	Lab Control Sample[1] %Recovery
Grain Size	N/A	20%	N/A	N/A

Total Organic Carbon	<MDL	20%	75-125%	80-120%
Total Solids	<MDL	20%	N/A	N/A

1: This may be an SRM, LCS or SB depending on method

8.2 Metals

Laboratory QC samples for trace metals analyses and associated control limits are summarized below. These QC samples will be analyzed at a frequency of one per analytical batch of 20 or fewer samples.

Table 19. Metals QC – Liquid Matrices

Parameters	Method Blank	Lab Duplicate %RPD	Matrix Spike %Recovery	Spike Blank %Recovery
Dissolved Metals	<MDL	20%	75-125	85-115
Total Metals and Hardness	<MDL	20%	75-125	85-115

Table 20. Metals QC – Solid Matrices

Parameters	Method Blank	Lab Duplicate %RPD	Matrix Spike %Recovery	Spike Blank %Recovery	LCS % Recovery
Total Metals	<MDL	20%	75-125	85-115	Performance Based

8.3 Organics

Laboratory QC samples for organics analyses associated control limits are summarized below. Unless otherwise noted below, these QC samples will be analyzed at a frequency of one per analytical batch of 20 or fewer samples.

Table 21. Organics QC – Liquid Matrices

Analysis	Method Blank	Spike Blank (% Recovery)	Matrix Spike % Recovery	MS/MSD RPD	Lab Duplicate (RPD)	Surrogate % Recovery
Semi-Volatile Petroleum Products (NWTPH-Dx)	<MDL	50-150	NA	NA 100	[a]	50-150

Table 22. Trace Organic Parameters Spike Blank Recovery Limits

Analyte	Lower % Limit	Upper % Limit	%RPD
2-Methylnaphthalene	46	97	100
Acenaphthene	50	100	100
Acenaphthylene	51	107	100
Anthracene	50	116	100
Benzo(a)anthracene	55	122	100
Benzo(a)pyrene	59	125	100
Benzo(b)fluoranthene	52	120	100
Benzo(g,h,i)perylene	59	116	100
Benzo(k)fluoranthene	47	140	100
Benzyl Butyl Phthalate	49	143	100
Bis(2-ethylhexyl)Phthalate	10	196	100
Chrysene	48	127	100
Dibenzo(a,h)anthracene	57	122	100
Diethyl Phthalate	54	136	100
Dimethyl Phthalate	53	118	100
Di-N-Butyl Phthalate	48	133	100
Di-N-Octyl Phthalate	43	156	100
Fluoranthene	54	131	100
Fluorene	54	117	100
Indeno(1,2,3-cd)Pyrene	59	120	100
Naphthalene	39	94	100
Pentachlorophenol	44	102	100
Phenanthrene	55	104	100
Phenol	37	97	100
Pyrene	52	123	100
Chlorpyrifos	55	147	100
Diazinon	63	129	100
Malathion	62	152	100
2,4-D	10	200	100

Analyte	Lower % Limit	Upper % Limit	%RPD
MCPP	10	200	100
Triclopyr	10	200	100
Dichlorobenil	detect	200	100
Prometon	detect	200	100

Table 23. Trace Organics Parameters – Matrix Spike Recovery Limits

Analyte	Lower % Limit	Upper % Limit	%RPD
2-Methylnaphthalene	41	94	100
Acenaphthene	45	101	100
Acenaphthylene	45	98	100
Anthracene	49	103	100
Benzo(a)anthracene	62	112	100
Benzo(a)pyrene	66	108	100
Benzo(b)fluoranthene	48	118	100
Benzo(g,h,i)perylene	59	109	100
Benzo(k)fluoranthene	55	116	100
Benzyl Butyl Phthalate	48	134	100
Chrysene	52	110	100
Dibenzo(a,h)anthracene	60	107	100
Diethyl Phthalate	44	142	100
Dimethyl Phthalate	48	114	100
Di-N-Butyl Phthalate	62	125	100
Di-N-Octyl Phthalate	71	120	100
Fluoranthene	48	131	100
Fluorene	34	128	100
Indeno(1,2,3-cd)Pyrene	60	109	100
Naphthalene	43	77	100
Pentachlorophenol	38	119	100
Phenanthrene	59	93	100
Phenol	37	97	100
Pyrene	47	123	100
Chlorpyrifos	55	147	100
Diazinon	63	129	100
Malathion	62	152	100
2,4-D	10	200	100

Analyte	Lower % Limit	Upper % Limit	%RPD
MCPP	10	200	100
Triclopyr	10	200	100
Dichlorobenil	detect	200	100
Prometon	detect	200	100

Table 24. Laboratory QC Limits for Water BNAs, Surrogate Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)
2-Fluorobiphenyl	31	101
d14-Terphenyl	51	130
D10-Chlorpyrifos	54	164
2,4-dichlorophenylacetic acid	10	200
2,6-dichlorophenylacetic acid	10	200

[a] For NWTPH-Dx, the Lab Duplicate will be analyzed at a frequency of one per 10 samples or fewer.

* Extraction batch = 20 samples or less prepared within a 12 hour shift

**QC batch = 20 samples or less prepared over a 14-day period. Samples must be of the same matrix.

< MDL = Method Blank result should be less than the *method detection limit*.

RPD = Relative Percent Difference

NA = Not Applicable

Table 25. Laboratory QC Limits for Sediment BNAs, Matrix Spike Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)	Parameter	Lower Limit (%)	Upper Limit (%)
2,4,5-Trichlorophenol	23	166	Benzo(k)fluoranthene	10	192
2,4,6-Trichlorophenol	26	153	Benzyl Butyl Phthalate	41	145

2,4-Dichlorophenol	24	142	Bis(2-Ethylhexyl)Phthalate	10	189
2,4-Dimethylphenol	10	150	Chrysene	14	184
2,4-Dinitrophenol	18	134	Di-N-Butyl Phthalate	10	194
2-Chlorophenol	10	112	Di-N-Octyl Phthalate	52	151
2-Methylnaphthalene	22	112	Dibenzo(a,h)anthracene	10	166
2-Methylphenol	10	142	Diethyl Phthalate	31	150
2-Nitrophenol	20	107	Dimethyl Phthalate	13	162
4,6-Dinitro-O-Cresol	40	145	Fluoranthene	12	188
4-Chloro-3-Methylphenol	48	132	Fluorene	22	147
4-Methylphenol	10	163	Indeno(1,2,3-Cd)Pyrene	10	177
4-Nitrophenol	45	153	Naphthalene	12	97
Acenaphthene	25	130	Pentachlorophenol	17	170
Acenaphthylene	27	132	Phenanthrene	10	200
Anthracene	10	181	Phenol	10	127
Benzo(a)anthracene	32	168	Pyrene	20	174
Benzo(a)pyrene	10	200	Diazinon	65	138
Benzo(b)fluoranthene	10	199	Malathion	42	178
Benzo(g,h,i)perylene	10	173	Chlorpyrifos	69	130

Table 26. Laboratory QC Limits for Sediment BNAs, Blank Spike Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)	Parameter	Lower Limit (%)	Upper Limit (%)
2,4,5-Trichlorophenol	33	113	Benzo(k)fluoranthene	58	128
2,4,6-Trichlorophenol	27	98	Benzyl Butyl Phthalate	15	183

2,4-Dichlorophenol	24	103	Bis(2-Ethylhexyl)Phthalate	10	182
2,4-Dimethylphenol	10	81	Chrysene	69	111
2,4-Dinitrophenol	10	149	Di-N-Butyl Phthalate	17	180
2-Chlorophenol	10	102	Di-N-Octyl Phthalate	10	200
2-Methylnaphthalene	22	99	Dibenzo(a,h)anthracene	53	129
2-Methylphenol	16	91	Diethyl Phthalate	51	118
2-Nitrophenol	21	98	Dimethyl Phthalate	38	114
4,6-Dinitro-O-Cresol	18	157	Fluoranthene	55	132
4-Chloro-3-Methylphenol	50	105	Fluorene	39	106
4-Methylphenol	10	125	Indeno(1,2,3-Cd)Pyrene	51	132
4-Nitrophenol	40	170	Naphthalene	17	94
Acenaphthene	29	102	Pentachlorophenol	38	124
Acenaphthylene	31	101	Phenanthrene	57	104
Anthracene	45	114	Phenol	10	107
Benzo(a)anthracene	69	117	Pyrene	48	132
Benzo(a)pyrene	15	137	Diazinon	65	138
Benzo(b)fluoranthene	50	121	Malathion	42	178
Benzo(g,h,i)perylene	46	126	Chlorpyrifos	69	130

Table 27. Laboratory QC Limits for Sediment BNAs, Surrogate Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)
2,4,6-Tribromophenol	29	112
2-Fluorophenol	10	112
d5-Phenol	10	106
d5-Nitrobenzene	28	94

d4-2-Chlorophenol	11	105
d4-1,2-Dichlorobenzene	24	91
2-Fluorobiphenyl	31	101
d14-Terphenyl	51	130
D10-Chlorpyrifos	50	150

Table 28. Laboratory QC Limits for Sediment PCBs, Matrix Spike Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)
Aroclor 1016	32	164
Aroclor 1260	28	144

Table 29. Laboratory QC Limits for Sediment PCBs, Blank Spike Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)
Aroclor 1016	39	121
Aroclor 1260	53	140

Table 30. Laboratory QC Limits Sediment PCBs, Surrogate Recoveries

Parameter	Lower Limit (%)	Upper Limit (%)
Decachlorobiphenyl	12	158
2,4,5,6-Tetrachloro-m-xylene	10	118

Table 31. Analytical QC Limits for Sediment Semi-Volatile Petroleum Products.

Analysis	Method Blank	Spike Blank (% Recovery)	Matrix Spike % Recovery	MS/MSD RPD	Lab Duplicate (RPD)	Surrogate % Recovery
Semi-Volatile Petroleum Products (NWTPH-Dx)	<MDL	50-150	NA	NA	100 [a]	50-150

* Extraction batch = 20 samples or less prepared within a 12 hour shift

**QC batch = 20 samples or less prepared over a 14-day period. Samples must be of the same matrix.

< MDL = Method Blank result should be less than the *method detection limit*.

RPD = Relative Percent Difference

NA = Not Applicable

8.4 Microbiology QC

Laboratory QC samples for microbiology analyses associated control limits are summarized below. Unless otherwise noted below, these QC samples will be analyzed at a frequency of one per analytical batch of 20 or fewer samples.

Table 32. Microbiology QC Limits

Parameter	QC	Lab Duplicate	Before Filtration	After Filtration
Fecal Coliform	One set per 20 samples*	One per 20 samples*	One per 20 samples*	One per 20 samples*
	Positive and Negative Controls		One MF filter run before samples are processed through filtration system	One MF filter run after samples are processed though filtration system

*= If batches are less then 20 in size and received throughout the working day, then QC, LD, BF and AF are run on samples received over a 4 hour period of time.

Note: To meet NPDES requirements for fecal coliform analysis, samples must be delivered to the laboratory no later then 6 hours after collection.

8.5 Laboratory Quality Assurance/Quality Control Samples

Laboratory analytical quality control (QC) procedures involve the use of four basic types of QC samples. QC samples are analyzed within a batch of client samples to provide an indication of the performance of the entire analytical system. Therefore, QC samples go through all sample preparation, clean up, measurement, and data reduction steps in the procedure. In some cases, the laboratory may perform additional tests that check only one part of the analytical system.

8.6 Types of Laboratory Quality Control Samples

8.6.1.1 Check standards

Check standards are QC samples of known concentration prepared independently of the calibration standards. They are sometimes called laboratory control samples (LCS) or spiked blanks. Results are used to verify that analytical precision in the control and whether or not the level of bias due to calibration is acceptable. If the results for the check standards do not fall within established control limits, the measurement system should be re-calibrated. In some analytical methods, sample results may be qualified when associated check standard results are not within acceptable limits. Check standards are usually prepared in de-ionized water by the laboratory. Their concentration should be in the range of interest for the samples, and at least one check standard should be analyzed with each batch of 20 samples or fewer. Reference materials that more closely match the matrix of environmental samples may be used as check standards for the project. Some proficiency testing (PT) samples from commercial vendors can be stored and used as check standards once the true values are known. The acceptance limits for the results of analyses of these commercial samples should not be those set by the vendor but should be established in the laboratory by replicate analyses of the PT sample. An exception may occur when reference materials are sent to the laboratory for analysis as blinds. Ecology's Laboratory Accreditation Section can help identify suppliers of PT samples and certified reference materials.

8.6.1.2 Laboratory Analytical duplicates

The laboratory can analyze duplicate samples of one or more samples within each sample batch. Results are used to estimate analytical precision for that matrix at that concentration. The project manager may specify which samples are to be analyzed in duplicate. If the samples selected for duplicate analyses do not contain measurable amounts of the analyte of interest, the results provide no information on precision. In addition, if the laboratory selects samples from another study with significantly different levels of the analyte or different matrices, the estimate of precision may not be applicable to your samples. *One of the field duplicates is a good choice for an analytical duplicate since you may then estimate total and analytical variability from results for the same sample.*

8.6.1.3 Matrix spikes

A matrix spike is an aliquot of a sample to which a known amount of analyte is added at the start of the procedure. Matrix spike recoveries may provide an indication of bias due to interference from components of the sample matrix. Since the percent recovery is calculated from the difference between the analytical results for the spiked and un-spiked samples, its precision may be relatively poor if the spiked amount is much less than the sample concentration. If the spike is too high relative to the sample concentration, any interference effect at the sample concentration level could be masked. The laboratory will spike at a concentration approximately equal to the concentration in the sample before spiking. The project manager may indicate to the laboratory,

which samples might be most appropriate for use as matrix spikes and, if necessary, larger sample volumes will be provided to the laboratory for this purpose. In some cases, many replicate spikes would need to be analyzed in order to distinguish bias from the effects of random error on the recoveries. Matrix spike results will only be used in conjunction with other QC data to qualify them. The primary use of matrix spikes is to indicate the presence of bias, duplicate spike results can be used to estimate analytical precision at the concentration of the spiked samples. The project manager may instruct the laboratory to spike certain samples since matrix spikes are not automatically included in all analytical methods.

8.6.1.4 Laboratory blanks

Blanks are prepared and analyzed in the laboratory to document the response of the measurement system to a sample containing effectively none of the analyte of interest. Depending on the analytical method, the analyst will analyze one or more blanks with each batch of samples and compare the results to established acceptance limits. A positive blank response can be due to a variety of factors related to the procedure, equipment, or reagents. Unusually high blank responses indicate laboratory contamination. The blank response becomes very important when the analyte concentration is near the detection limit. Blank responses are sometimes used to correct the sample responses and to determine the limit of detection.

8.7 Types of Field Quality Control Samples

8.7.1 Replicates

Replicates are two samples collected at the same time and place. Replicate results provide a way to estimate the total random variability (precision) of individual results. If conditions in the medium being measured are changing faster than the procedure can be repeated, then the precision calculated from replicate results will include that variability as well. Section 6, *Quality Objectives* includes a formula for relative percent difference (RPD) to check precision of duplicate field samples.

8.7.2 Field blanks

Field blanks are samples of “clean” material, which are exposed to sample collection procedures in the field. They should be analyzed like any other sample. The results for field blanks may indicate the presence of contamination due to sample collection and handling procedures (in the field or during transport to the laboratory) or to conditions in the field, such as boat or vehicle exhaust. Clearly identify field blanks so that they are not selected for analytical duplicates or matrix spikes. Field blanks are used when there is reason to expect problems with contamination or to meet programmatic or contractual requirements to demonstrate absence of contamination**.** Field blanks can be used to determine whether or not consistent and adequate field procedures are conducted during sampling. The use of good operational procedures in the field and

thorough training of field staff reduces the risk of contamination. Several types of field blanks are described below. The pure water or other "clean" material used to prepare them must be obtained from the laboratory or other reliable supplier.

Field blanks can include:

- Transport blanks (trip blanks): A container of pure water, which is prepared at the laboratory and carried unopened to the field and back with the other sample containers to check for possible contamination in the containers or for cross-contamination during transportation and storage of the samples.
- Equipment blanks: Prepare by exposing clean material to the sampling equipment after the equipment has been used in the field and cleaned. The results provide a check on the effectiveness of the cleaning procedures. The rinsate blank may also detect contamination from the surroundings, from containers, or from cross-contamination during transportation and storage of the samples and is therefore the most comprehensive type of field blank.
- Filter blanks: Prepare by filtering pure water through the filtration apparatus after routine cleaning. The filter blank may detect contamination from the filter or other part of the filtration apparatus. Ideally, the results for your field blanks will be "not detected." If the results are positives, you will need to consider them when reporting sample results and determining whether your MQOs have been met.
- Field filtration blank: (e.g. field filtration blank for orthophosphorus filtration) Carry R.O. water into the field and filter using field equipment.
- Temperature blanks: Prepared in the field using distilled or de-ionized water and placed in the sampler cooler and transported to the laboratory. The laboratory can use this blank to check the temperature of the samples upon receipt.

8.8 Toxicity Testing Quality Assurance

Toxicity tests should meet quality assurance criteria in the most recent versions of the Environment Canada manual EPS 1/RM/28 and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The toxicity test shall have five concentrations and a control with four replicates at each concentration. An additional seven replicates of 100% sample shall be run in order to provide tissue for yolk/embryo analysis if needed. The test concentration series shall be determined using a 0.5 dilution factor.

Quality control is maintained through:

- test acceptance criteria based upon control performance and
- control charting of results from reference toxicant tests.
- Monitoring of test conditions to ensure they are within acceptable limits

The criterion for test acceptance is 70% or greater viable embryos in the controls (percent non-viable embryos, including unfertilized eggs, must be < 30%).

A concurrent reference toxicant test (e.g. positive control) will be performed with each sample or batch of samples run at one time. The IC25 for SDS will be compared to current laboratory

control limits of mean IC25 ± 2SD. The comparison will give an indication of the relative sensitivity of a given batch of embryos. However, an IC25 that falls outside the current control limits will not automatically invalidate an otherwise valid test.

Test results may be confounded if incubation conditions (*e.g.* temperature, D.O.) fall outside of acceptable limits. In these situations, the WA DOE (2005) laboratory guidance document is consulted and, if necessary, the client and regulatory authority are

Notified in order to discuss recommendations regarding test acceptability. Test conditions are summarized below:

- Test species: *Oncorhynchus mykiss*
- Approved test method: E Test in Environment Canada EPS 1/RM/28 (Small volume modification is allowed.)
- Test type: 7-day static-renewal (80% renewal of test solution in each test chamber daily and all settled material removed from contact with embryos)
- Temperature: 14° ± 1°C
- Illumination: dark with dim or red light only during test solution renewals
- Test chamber size: 1 L
- Test solution volume: 500 mL
- Age of test organisms: maximum 30 minutes after fertilization
- Number of organisms/chamber: 30
- Number of replicates/concentration: 4 (minimum)
- Feeding: none
- Aeration: continuous gentle aeration (< 100 bubbles/minute)
- Test duration: 7 days
- Endpoints: number of viable embryos at end of test
- Control performance criteria: ≥ 70% embryo viability

9.0. DATA QUALITY ASSESSMENT, QUALIFICATION, AND REPORTING

Data reported by the lab, including field measurements, must pass a review process before final results are available to the client. A "Peer Review" process is used where a second analyst or individual proficient at the method reviews the data set. The reviewer will complete a data review checklist which will document the completeness of the data package and if any QC failures exist. The Laboratory Project Manager will coordinate this data review.

Once data review is complete and all data quality issues have been resolved or corrected, the status of the data in LIMS will be changed to "approved". Once a data set has been approved, it is "posted" or transferred to the portion of the LIMS database known as the Environmental Data System (EDS) where all historical LIMS data are maintained. Signatures or initials of the lab lead and reviewer(s) indicate formal approval of hardcopy data or reports (non-LIMS), typically on the review checklist. A copy of this approved checklist should be stored with the final hardcopy data package.

Flow and precipitation data collected in association with this monitoring program will be reviewed for quality assurance purposes. These data will be examined for gaps, anomalies, or inconsistencies between the discharge, water level, and/or precipitation data from the various monitoring stations. In the event that quality assurance issues are identified on the basis of these reviews, a site visit will be performed immediately to troubleshoot the problem and to implement corrective actions if possible. Any quality assurance issues that are detected through these reviews will be documented in the electronic data record and in separate tracking forms. This review will be performed to ensure that all data are consistent, correct, and complete, and that all required quality control information has been provided. Quality control elements identified in the Quality Objectives section will also be examined to determine whether the data quality objectives for the project have been met. Results from these reviews will be documented in quality assurance worksheets that will be prepared for each batch of samples. In the event that a potential quality assurance issue is identified through these reviews, the quality assurance technical lead will review the data to determine whether any response actions are required.

King County will retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years.

Flow measurement devices and methods will be consistent with accepted scientific practices and will be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices will be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration will be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records will be maintained for a minimum of three years.

9.1 Data Storage

Data will not be distributed outside each lab unit or to clients until it has met the full definition of final data. "Final Data" is defined as approved data posted to the historical database (EDS) or is otherwise in its final reportable and stored format (if not a LIMS parameter). This implies the data has been appropriately peer reviewed, properly qualified and is in its final format in terms of units and significant figures. Not only is final data assured of a higher level of quality through peer reviewing and qualification, but it will also match any future reports since it has come from the final storage location.

9.2 Data Reduction, Review, and Reporting

All lab and field measurements will follow the procedures outlined in the KCEL's SOPs and QA Manual. Laboratory staff will be responsible for internal quality control verification, proper data transfer, and reporting data to the Project Manager via the Laboratory Information Management System (LIMS).

The annual stormwater monitoring report will include:

- The location, land use, drainage area size, and hydrology at each monitoring site.
- The Quality Assurance/Quality Control (QA/QC) report.
- The annual water-year pollutant load for each monitoring site expressed in total pounds, and pounds/acre.
- The wet and dry season pollutant loads based on the water-year expressed in total pounds, and pounds/acre.
- Once enough data has been collected, an assessment of strategies for handling non-detected data (e.g. Helsel and Hirsch, 2002) will be conducted.

In addition, the report on the toxicity testing will include:

- Documentation of any invalid or anomalous test results, good faith attempts to collect the required volume, and any unsuccessful second attempts
- Bench sheets for toxicity 7-day E-tests
- An analytical report for the chemistry analysis
- A toxicity data analytical report (if available in electronic format, this is the preferred submittal method to Ecology)
- CETIS export files for the 7-day Embryo Test
- Reference toxicant results for test methods
- A summary of the Trout Library comparison findings
- A summary review of relevant source literature used from the Trout Library
- The GC/MS data analytical results (if applicable)

9.3 Proposed Laboratory Qualifiers.

Qualifiers will be applied to both water and sediment quality data during the data quality review process.

Table 33. Laboratory Qualifiers

Qualifier	Description
General	
H	Indicates that an analysis holding time criterion was not met..
SH	Indicates that a sample handling criterion was not met. The sample may have been compromised during the sampling procedure or may not comply with storage conditions or preservation requirements.
R	Indicates that the data are judged unusable by the data reviewer. The qualifier is applied based on the professional judgment of the data reviewer rather than any specific set of QC parameters and is applied when the reviewer feels that the data may not or will not provide any useful information to the data user.
<MDL	Applied when a target analyte is not detected or detected at a concentration less than the associated method detection limit (MDL). The MDL is the lowest concentration at which a sample result will be reported.
<RDL	Applied when a target analyte is detected at a concentration greater than or equal to the associated MDL but less than the associated reporting detection limit (RDL). RDL is defined as the lowest concentration at which an analyte can reliably be quantified.
RDL	Applied when a target analyte is detected at a concentration that, in the raw data is equal to the RDL.
TA	Applied to a sample result when additional narrative information is available in the text field. The additional information may help to qualify the sample result but is not necessarily covered by any other qualifier.
Chemistry	

Qualifier	Description
B, B2 or B3	Applied to a sample result when an analyte was detected at a concentration greater than the MDL in the associated method blank. The qualifier is applied when the sample concentration is >MDL but less than ten times the blank concentration. The qualifier indicates that the analyte concentration in the sample may be significantly influenced by laboratory contamination.
E	Applied to a sample result that was measured at a concentration greater than the calibration range of the method. It is applied when the detected analyte concentration exceeds the upper instrument calibration limit and further dilution is not feasible. The reported value is an estimated analyte concentration.
J	Applied to a sample result that is considered an estimated value.
JG	Applied to a sample result that is considered an estimated value with a low bias. This will typically be applied when QC results indicate the recovery of the analyte is below the expected limits of the method.
JK	Applied to a sample result that is considered an estimated value with an unknown bias. This will typically be applied when QC results indicate the method precision did not meet the expected limits of the method.
JL	Applied to a sample result that is considered an estimated value with a high bias. This will typically be applied when QC results indicate the recovery of the analyte is above the expected limits of the method.
Microbiology	
FAIL	The result of the positive or negative control failed (applied to QC results only)
PASS	The result of the positive or negative control passed (applied to QC results only)
C	Value is an estimate, based on presence of confluent growth

9.4 Calculating Pollutant Loads

These methods follow the procedures provided by Ecology in their 2009 document Standard Operating Procedures for Calculating Pollutant Loads for Stormwater Discharge. The methods below assume there is no base flow at any of the three outfall monitoring sites.

1) Calculate total storm flows and volumes on a seasonal and annual basis

$$V_{st} = V_{sw} + V_{sd}$$

Where:

V_{st} = Total annual storm flow volume

V_{sw} = Storm flow volume in the wet season

V_{sd} = Storm flow volume in the dry season

2) Seasonal Flow-Weighted Mean Storm Flow Concentration

$$C_{sw} = \sum(EMC_{sw\text{-}i} \; X \; SF_{w\text{-}i})/\sum SF_{w\text{-}i} \quad (i = 1 \text{ to } n)$$

$$C_{sd} = \sum(EMC_{sd\text{-}i} \; X \; SF_{d\text{-}i})/\sum SF_{d\text{-}i} \quad (i = 1 \text{ to } n)$$

Where:

C_{sw} = Wet season flow-weighted mean storm flow concentration

C_{sd} = Dry season flow-weighted mean storm flow concentration

$EMC_{sw\text{-}i}$ = Wet season event mean concentration for storm flow event *i*, and [n] = number of wet season storm flow sampling events

$SF_{w\text{-}i}$ = Average storm flow rate of wet season sampled storm flow event

EMC_{sd-i} = Dry season event mean concentration for storm flow event *i*, and [n] = number of dry season storm flow sampling events

SF_{d-i} = Average storm flow rate of dry season sampled storm flow event

3a) Wet and Dry Season Pollutant Load (total pounds)

$$L_{sw} = V_{sw} \; X \; C_{sw}$$

$$L_{sd} = V_{sd} \; X \; C_{sd}$$

Where:

L_{sw} = Wet season pollutant load

L_{sd} = Dry season pollutant load

3b) Annual Pollutant Load (total pounds)

$$L_{st} = L_{sw} + L_{sd}$$

4a) Wet and Dry Season Pollutant Yield (pounds/acre)

$$Y_{sw} = L_{sw}/Ac_{db}$$

$$Y_{sd} = L_{sd}/Ac_{db}$$

Where:

Y_{sw} = Wet season pollutant yield

Y_{sd} = Dry season pollutant yield

Ac_{db} = Drainage basin size in acres

4b) Annual Pollutant Yield (pounds/acre)

$$Y_{st} = Y_{sw} + Y_{sd}$$

10.0.REFERENCES

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Appendix A

Alternative, Additional Methods to the Phase 1 Municipal Stormwater Permit Methods Listed in Appendix 9

The purpose of this table is to provide alternative laboratory methods approved by the Department of Ecology (Ecology) in advance of the Permittees' QAPP submittals under the Phase I Municipal Stormwater Permit (Permit). In developing this table, Ecology evaluated the current EPA-approved analytical methods listed in 40 CFR Part 136 for consistency with the methods listed in Appendix 9 of the Permit. Some methods originally listed in Appendix 9 of the Permit do not reflect current changes to 40 CFR Part 136 because the CFR has been updated since permit issuance. Ecology has evaluated all methods listed in Appendix 9 and, where applicable, has identified alternative, approved laboratory methods. All identified alternative methods have an equal or lower reporting limit to those limits stated in Appendix 9.

This table does NOT substitute, modify or revoke Permit language. Permittees still have the option to propose additional alternative methods to Ecology for review as stated on Page 1 of Appendix 9. That language is as follows:

> *Any alternative method proposed by the Permittee must have a similar reporting limit, or must be justified as adequate for the likely range of concentrations. Permittees are not guaranteed approval of their alternative methods or reporting limits.*

Unless alternative methods are approved by Ecology, the analytical methods indicated in column #2 (Method in Water/Sediment per Appendix 9) or column #5 (Approved Additional Methods) shall be used by Permittees when analyzing stormwater samples as required by section S8 of the permit. Any alternative method proposed by the Permittee must have a similar reporting limit, or must be justified as adequate for the likely range of concentrations. Permittees are not guaranteed approval of their alternative methods or reporting limits.

Table 34. Alternative Analytical Methods for Liquid Matrices

Analyte (or surrogate)	Method in Water Per Appendix 9	40 CFR Part 136 List of Methods (October 4, 2007)		Approved Additional Methods	Reporting Limit Target Per Appendix 9
		EPA Method	Standard Method (SM) 20th Edition		
Total suspended solids	EPA Method 160.2 or SM 2540B	160.2	2540D	2540D	1.0 mg/L
Turbidity	EPA Method 180.1	180.1	2130B	SM 2130B	+/- 0.2 NTU
Conductivity	SM 2510 or EPA Method 120.1	120.1	2510B		+/- 1 umho/cm
Chloride	EPA Method 300.0 or 325.2	300.0, 300.1	4110B	SM4110B	0.2 mg/L
BOD_5	EPA Method 405.1[1]	405.1	5210B	SM 5210B	2.0 mg/L
Particle Size Distribution	Coulter Counter, Laser diffraction, or comparable method - *see attached method*	None listed	2560B (Coulter Counter)	2560B	NA
Grain Size	Ecology method sieve and pipette (PSEP 1997), or comparable method	None listed	None listed		NA
pH	EPA Method 150.1 or SM $4500H^+$	150.2	$4500H^+$	EPA 150.2	0.2 units

[1] EPA Method 405.1 for BOD5 was discontinued, effective April 11, 2007; therefore, should not be used.

Analyte (or surrogate)	**Method in Water Per Appendix 9**	**40 CFR Part 136 List of Methods (October 4, 2007)**		**Approved Additional Methods**	**Reporting Limit Target Per Appendix 9**
		EPA Method	Standard Method (SM) 20th Edition		
Hardness as $CaCO_3$	EPA Method 200.7, SM 2340B (ICP) or 2340C (titration)	130.1	2340 B or C	SM 3120B	1.0 mg/L
Methylene Blue Activated Substances (MBAS)	CHEMetrics Colorimetric	None listed	5540C	SM 5540C	0.025 mg/L
Fecal Coliform	SM 9221E	None	9221 C or E		2 min., 2E6 max
Total phosphorus	EPA Method 365.3 or SM 4500-P I[2]	365.3, 365.1, 365.4	4500 P B.5, 4500P E or F	EPA 365.1, 365.4 and SM4500P E or F	0.01 mg P/L
Orthophosphate	EPA Method 365.3 or SM 4500-P G[2]	365.3, 365.1, 300.0, 300.1	4500 P E, or F and 4110B	EPA 365.1, and SM4500 P E or F	0.01 mg P/L
Total kjeldahl nitrogen	EPA Method 351.2	351.2, 351.1	4500-Norg B or C and 4500 NH_3 B,	EPA 351.1 and SM 4500-Norg B or C and 4500 NH_3 D,G,E, and F	0.5 mg/L
Nitrate-Nitrite	EPA Method 353.2 or SM 4500 -NO3 I [1]	353.2, 300.0	4500-NO3-E, F, H, 4110B	SM4500-NO_3 E	0.01 mg/L

[2] Method SM 4500 P G and SM 4500 –NO3 I are no longer listed in 40CFR 136 (March 2007); therefore, should not be used.

Analyte (or surrogate)	**Method in Water Per Appendix 9**	**40 CFR Part 136 List of Methods (October 4, 2007)**		**Approved Additional Methods**	**Reporting Limit Target Per Appendix 9**
		EPA Method	Standard Method (SM) 20th Edition		
Total recoverable zinc	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B	200.7	5.0 ug/L
Dissolved zinc	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		1.0 ug/L
Total recoverable lead	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.1 ug/L
Dissolved lead	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.02 ug/L
Total recoverable copper	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.1 ug/L
Dissolved copper	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.1 ug/L
Total recoverable cadmium	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.2 ug/L
Dissolved cadmium	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS)	200.8	3120B		0.02 ug/L
Total Mercury	EPA Method 7470 (CVAA)[2]	245.1, 245.2, 245.7	3112B	EPA 245.7 and EPA	0.1 ug/L

[2] The method detection limit for 7470 (CVAA) is higher than the target reporting limit, 0.2 ug/L and 0.1 ug/L, respectively. This method should not be used for analysis.

Analyte (or surrogate)	**Method in Water Per Appendix 9**	**40 CFR Part 136 List of Methods (October 4, 2007)**		**Approved Additional Methods**	**Reporting Limit Target Per Appendix 9**
		EPA Method	Standard Method (SM) 20th Edition		
				1631E[3]	
Dissolved Mercury	EPA Method 7470 (CVAA)	245.1, 245.2, 245.7	3112B	EPA 245.7 and EPA 1631E[3]	0.1 ug/L
PAH Compounds	EPA Method 8310 or 8270D SIM	610, 625, 1625	6410B, 6440B		0.1 ug/L
Phthalates	EPA Method 8270D	606, 625, 1625	6410B		1.0 ug/L
Herbicides (2,4-D, MCPP, Triclopyr, Dichlobenil, Pentachlorophenol)	EPA Method 8270D SIM or 8151				0.01 – 1.0 ug/L
Pesticides, Nitrogen (Prometon)	EPA Method 8270D SIM				0.1 – 5.0 ug/L
Pesticides, Organophosphates (Diazinon, Malathion, Chloropyrifos)	EPA Method 8270D SIM or 8141				0.01 – 1.0 ug/L
TPH	NWTPH-Dx - Ecology, 1997, (Publication No. 97-602)				0.25 mg/L

[3] SM 1631E is not listed in 40 CFR but can be used to obtain the lower reporting limit for mercury.

Analyte (or surrogate)	Method in Water Per Appendix 9	40 CFR Part 136 List of Methods (October 4, 2007)		Approved Additional Methods	Reporting Limit Target Per Appendix 9
		EPA Method	Standard Method (SM) 20th Edition		
TPH	NWTPH-Gx - Ecology, 1997, (Publication No. 97-602)				0.25 mg/L

SIM = Selective Ion Monitoring – a way to get a lower detection.

Table 35. Alternative Analytical Procedures for Sediment Matrices

Analyte (or surrogate)	Method in Sediment Per Appendix 9	40CFR Part 136 List of Methods (October 4, 2007)		Approved Additional Methods	Reporting Limit Target Per Appendix 9
		EPA Method	Standard Method (SM)		
Total Solids	EPA Method 160.3 or SM 2540B	None listed	None listed		NA
Total Organic Carbon	Puget Sound Estuary Protocols: (PSEP 1997)	None listed	5310 B, C or D	SM5310 B,C, or D or EPA 9060	0.1%
Grain-size	Ecology Method Sieve and Pipet (PSEP 1997) or ASTM F312-97	None listed	None listed	ASTM D422	NA
Total Recoverable Zinc	EPA Method 200.8	200.8	3120B	EPA 6010 and EPA	5.0 mg/kg

Analyte (or surrogate)	Method in Sediment Per Appendix 9	40CFR Part 136 List of Methods (October 4, 2007)		Approved Additional Methods	Reporting Limit Target Per Appendix 9
		EPA Method	Standard Method (SM)		
	(ICP/MS), or SM 3125 (ICP/MS), or EPA Method 200.7 (ICP)		200.7	6020	
Total Recoverable Lead	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS), or EPA Method 200.9[4] (ICP)	200.8	3120B	EPA 6010 and EPA 6020	0.1 mg/kg
Total Recoverable Copper	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS), or EPA Method 200.9[4] (ICP)	200.8	3120B	EPA 6010 and EPA 6020	0.1 mg/kg
Total Recoverable Cadmium	EPA Method 200.8 (ICP/MS), or SM 3125 (ICP/MS), or EPA Method 200.9[4] (ICP)	200.8	3120B	EPA 6010 and EPA 6020	0.1 mg/kg
Total Recoverable Mercury	None Currently Listed for Mercury in Sediment			EPA 245.5	0.1 mg/kg

[4] This is a permit error. ICP should be 200.7 not 200.9; however, 200.7 is not an adequate method to meet the target reporting limit.

Analyte (or surrogate)	Method in Sediment Per Appendix 9	40CFR Part 136 List of Methods (October 4, 2007)		Approved Additional Methods	Reporting Limit Target Per Appendix 9
		EPA Method	Standard Method (SM)		
				EPA 7471B	
PAH Compounds	EPA Method 8270D				70 ug/kg dry
Phthalates	EPA Method 8270D				70 ug/kg dry
Phenolics	EPA Method 8270D			PSEP 1997	70 ug/kg dry
PCB's	EPA Method 8082				80 ug/kg dry
Herbicides (pentachlorophenol)	EPA Method 8270D SIM or 8151				1.0 ug/kg
Pesticides, organophosphate (Diazinon, Chlorpyrifos, Malathion)	EPA Method 8270D SIM or 8141				Diazinon= 50 ug/kg, Chlorpyrifos and Malathion = 25 ug/kg
NWTPH-Dx	Ecology, 1997 (Publication No. 97-602) or EPA SW-846 method 8015B				25.0-100.0 mg/kg

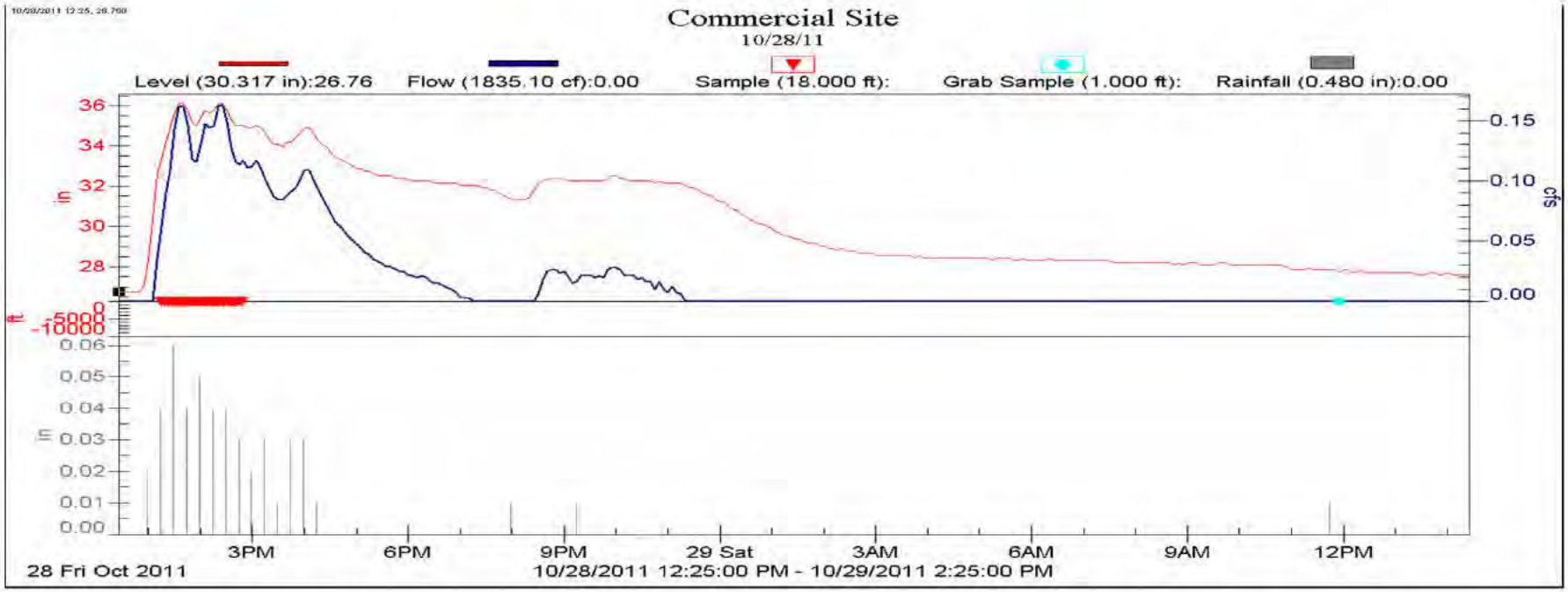
Appendix B
Targeted and Sampled Storm Events at COM, HDR, and LDR monitoring sites

	Monitoring Station						
	COM		HDR		LDR		
Date	Grab	Comp	Grab	Comp	Grab	Comp	Notes/Explanation
10/28/2011	***X***	***X***				X	HDR: GFI switch was tripped resulting in power loss to the autosampler - no samples collected. LDR: No storm flow during site visits so no grab sample was collected. COM: Composite sample did not represent 75 percent of the hydrograph. Grab sample collected late in storm event.
11/2/2011	***X***	***X***				X	LDR: No storm flow during site visits so no grab sample was collected. COM: Composite sample did not represent 75 percent of the hydrograph. Grab sample collected late in storm event.
11/11/2011							HDR and COM: Storm was almost 4 times larger than forecast. Flow was paced for smaller storm and therefore did not represent 75 percent of the hydrgraph. Samples were collected but not submitted. Grab samples collected late in storm event. LDR: Storm was not qualifying.
11/16/2011	***X***	***X***	***X***	X	***X***	X	COM: Composite sample did not represent 75 percent of the hydrograph.
Break in storm sampling between January 1, 2012 and June 15, 2012. See Section 3.1 of WY12 report for details.							
6/15/2012							HDR and COM: Storm not targeted or qualifying. LDR: Storm targeted but was smaller than forecast. Did not meet storm size criterion and did not collect enough aliquots for qualifying sample.
6/22/2012	X		X	***X***	X		HDR: Grab sample collected. Composite sample submitted but represented less than 75 percent of the hydrograph. LDR: Grab sample collected. Composite sample collected but storm was larger than forecast and sample represented less than 75 percent of the hydrgraph. Sample not submitted. COM: Grab sample collected. Composite sample collected but storm was larger than forecast and sample represented less than 75 percent of the hydrgraph. Sample not submitted.
6/28/2012							HDR and COM: Storm was forecasted to be a qualifying event and was targeted for both grab and composite samples. Rainfall totaled only 0.09-inches so the storm was not qualifying and no samples were submitted.
7/20/2012	***X***		***X***		X		Event targeted at all sites. Grab samples collected and submitted from each site. Grab samples from HDR and COM were collected late in the storm event.. Composite samples collected but storm was larger than forecast and sample represented less than 75 percent of the hydrgraph. No composite
9/7/2012							Storm unsuccessfully targeted at LDR.
9/10/2012							COM and HDR: The event was targeted for composite samples; however, the samples did not represent 75 percent of the hydrograph and were therefore not submitted to the lab for analysis.

	COM		HDR		LDR	
	Grab	Comp	Grab	Comp	Grab	Comp
Total Targeted	8	8	8	8	8	8
Total Colleted	5	3	3	2	3	3
Total Qualifying	1	0	1	1	3	3

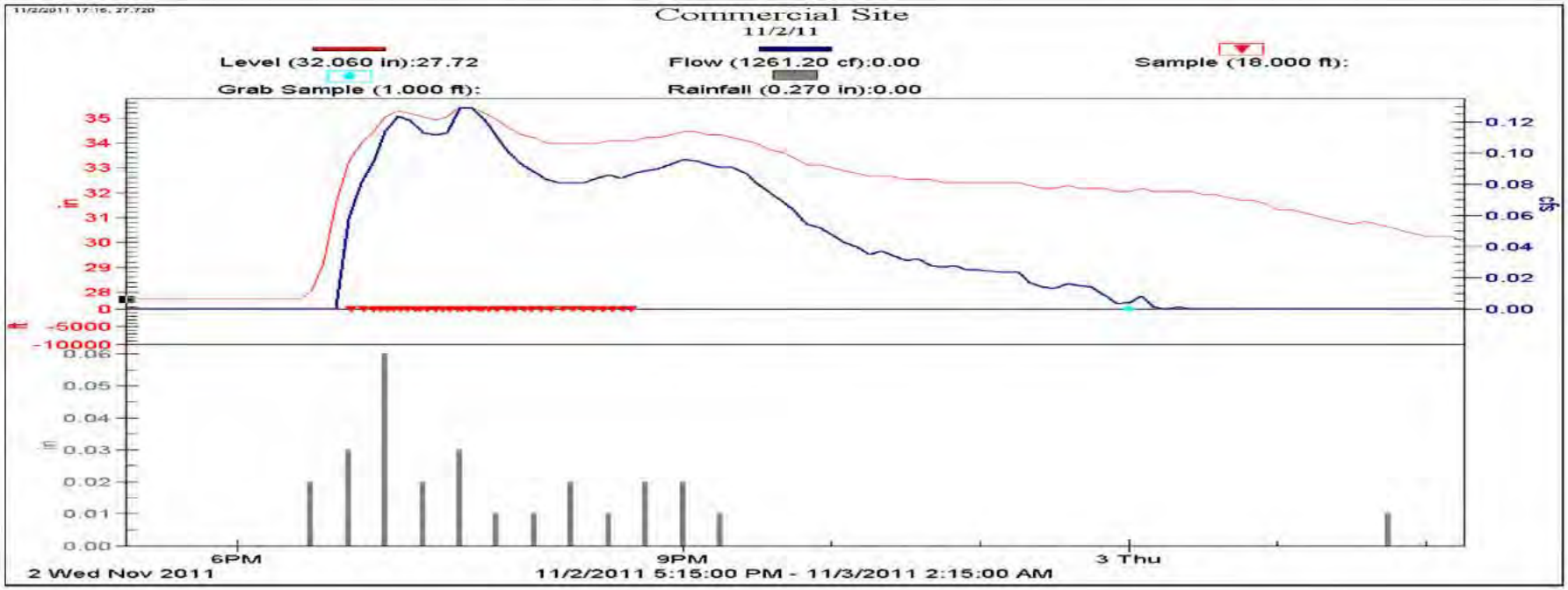
	Not targeted		Targeted, no sample collected (see notes)
X	Qualifying sample collected	***X***	Sample collected, not qualifying (see notes)

Appendix C
Storm Event Files



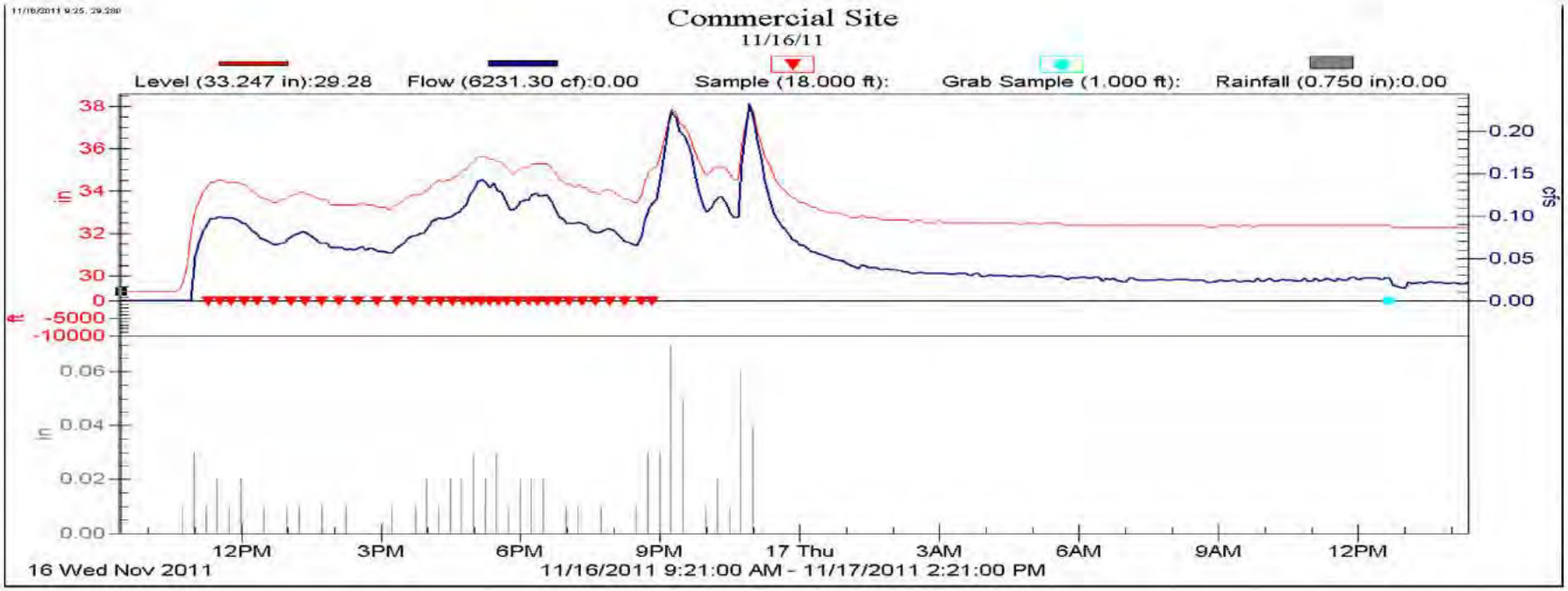
Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.47		No. of Aliquots	≥ 10	18	
Precipitation Duration (hrs)	NA	8.25		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.06		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	40.75		Composite Start date/time	NA	10/28/2011 13:10	
24 hr Runoff volume (cf)	NA	1835		Composite end date/time	NA	10/28/2011 14:48	
Runoff volume sampled (cf)	NA	864		Sampling Duration (hr)	≥ 1	1.63	
Percent runoff sampled (%)	≥ 75	47		Grab Sample Date/Time	NA	10/29/2011 11:55	
Average flow during sampling (cfs)	NA	0.127					
NOTES:							

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



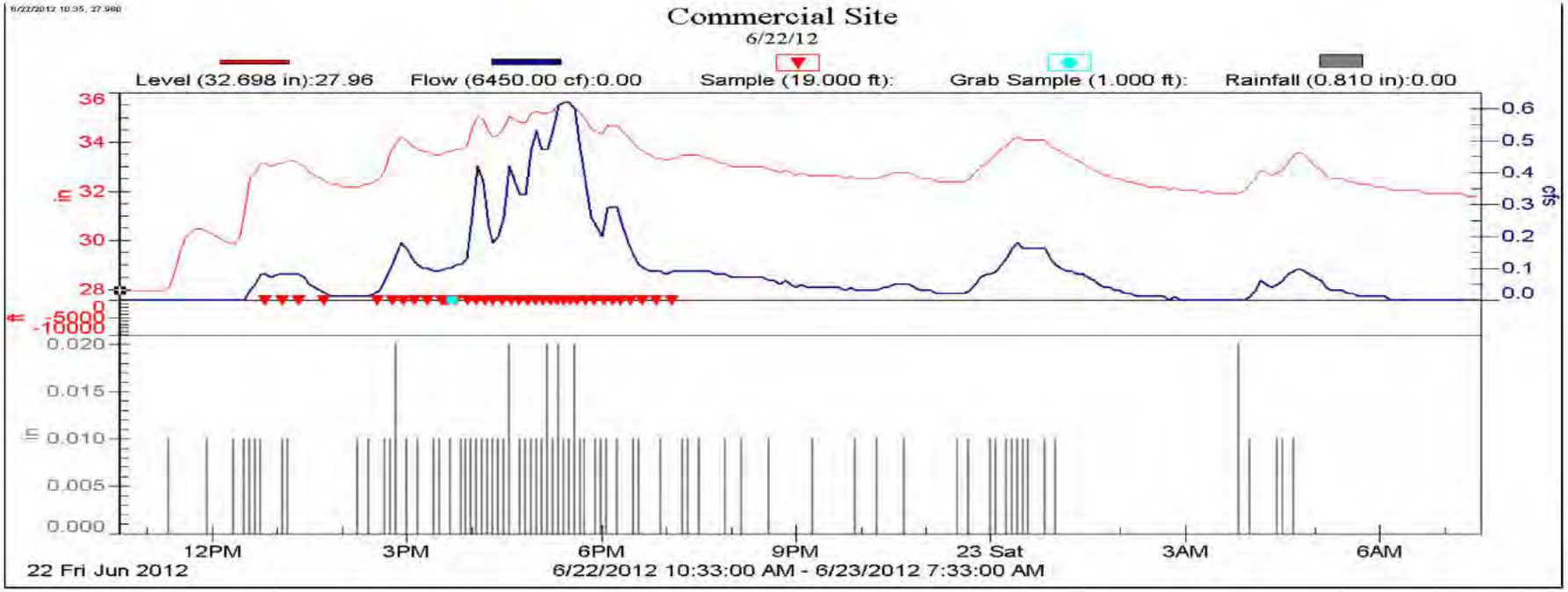
Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.27		No. of Aliquots	≥ 10	35	
Precipitation Duration (hrs)	NA	7.25		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.04		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	69.75		Composite Start date/time	NA	11/2/2011 18:40	
24 hr Runoff volume (cf)	NA	1261		Composite end date/time	NA	11/2/2011 20:39	
Runoff volume sampled (cf)	NA	821		Sampling Duration (hr)	≥ 1	1.98	
Percent runoff sampled (%)	≥ 75	65		Grab Sample Date/Time	NA	11/3/2011 0:00	
Average flow during sampling (cfs)	NA	0.097					
NOTES:							

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.75		No. of Aliquots	≥ 10	35	
Precipitation Duration (hrs)	NA	12.25		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.06		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	37.50		Composite Start date/time	NA	11/16/2011 11:00	
24 hr Runoff volume (cf)	NA	5871		Composite end date/time	NA	11/16/2011 20:50	
Runoff volume sampled (cf)	NA	3190		Sampling Duration (hr)	≥ 1	9.83	
Percent runoff sampled (%)	≥ 75	54		Grab Sample Date/Time	NA	11/17/2011 12:39	
Average flow during sampling (cfs)	NA	0.088					
NOTES:							

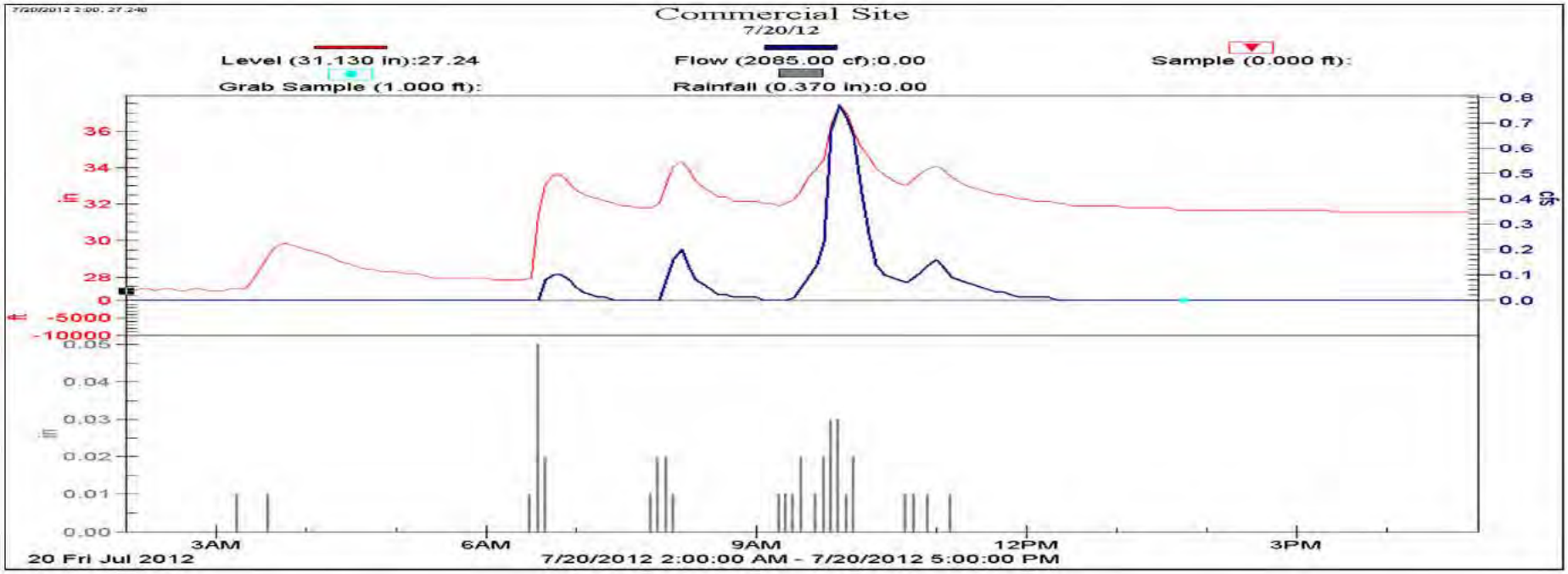
[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.81		No. of Aliquots	≥ 10	37	
Precipitation Duration (hrs)	NA	17.33		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.05		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	87.17		Composite Start date/time	NA	6/22/2012 12:35	
24 hr Runoff volume (cf)	NA	6450		Composite end date/time	NA	6/22/2012 19:05	
Runoff volume sampled (cf)	NA	4425		Sampling Duration (hr)	≥ 1	6.50	
Percent runoff sampled (%)	≥ 75	69		Grab Sample Date/Time	NA	6/22/2012 15:42	
Average flow during sampling (cfs)	NA	0.186					

NOTES: Since composite did not represent 75 percent of the hydrograph the sample was not submitted for analysis.

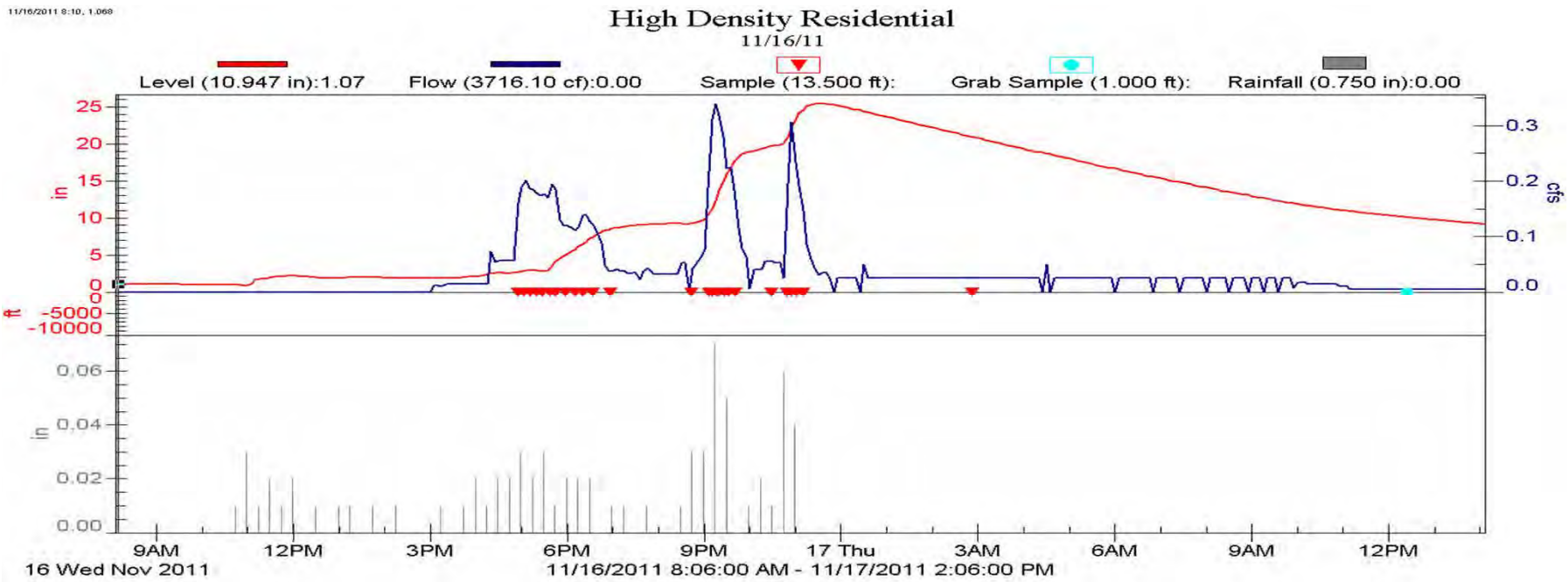
[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.37		No. of Aliquots	≥ 10	NA	
Precipitation Duration (hrs)	NA	7.92		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.05		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	399.17		Composite Start date/time	NA	NA	
24 hr Runoff volume (cf)	NA	2085		Composite end date/time	NA	NA	
Runoff volume sampled (cf)	NA	0	See Notes	Sampling Duration (hr)	≥ 1	NA	
Percent runoff sampled (%)	≥ 75	0		Grab Sample Date/Time	NA	7/20/2012 13:45	
Average flow during sampling (cfs)	NA	0.122					

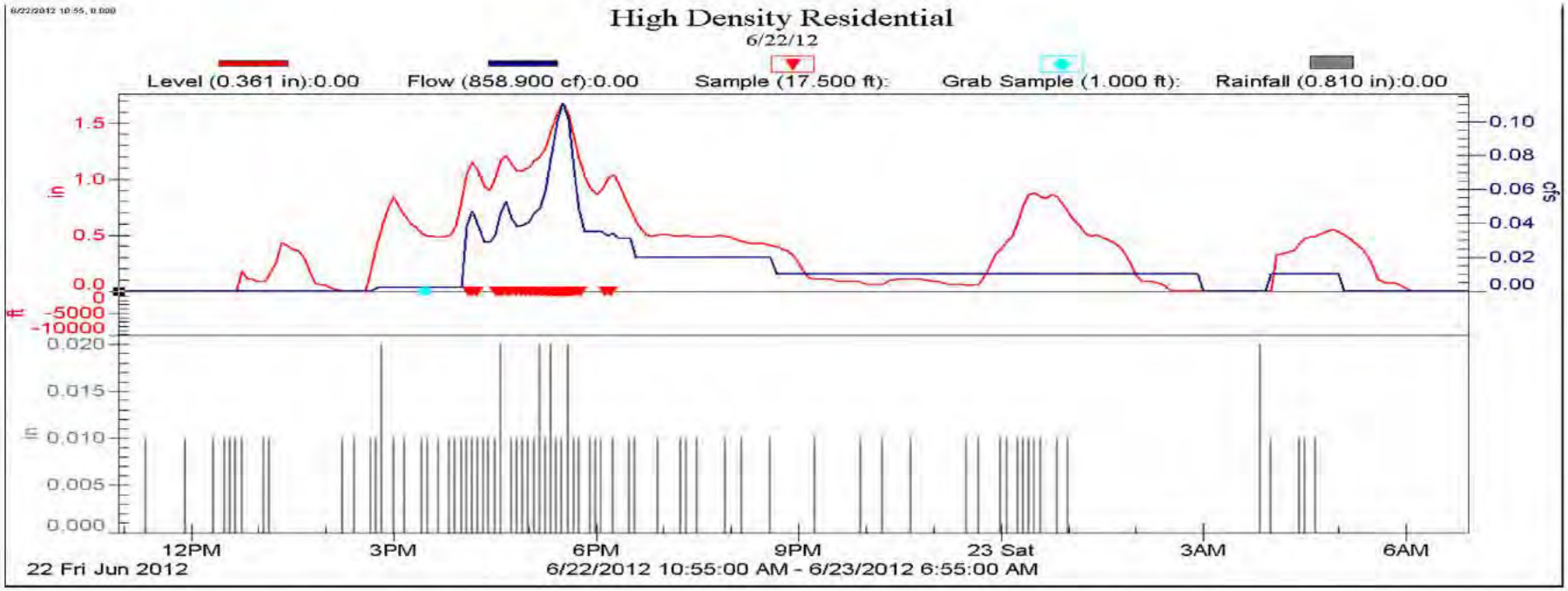
NOTES: Since composite did not represent 75 percent of the hydrograph the sample was not submitted for analysis.

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



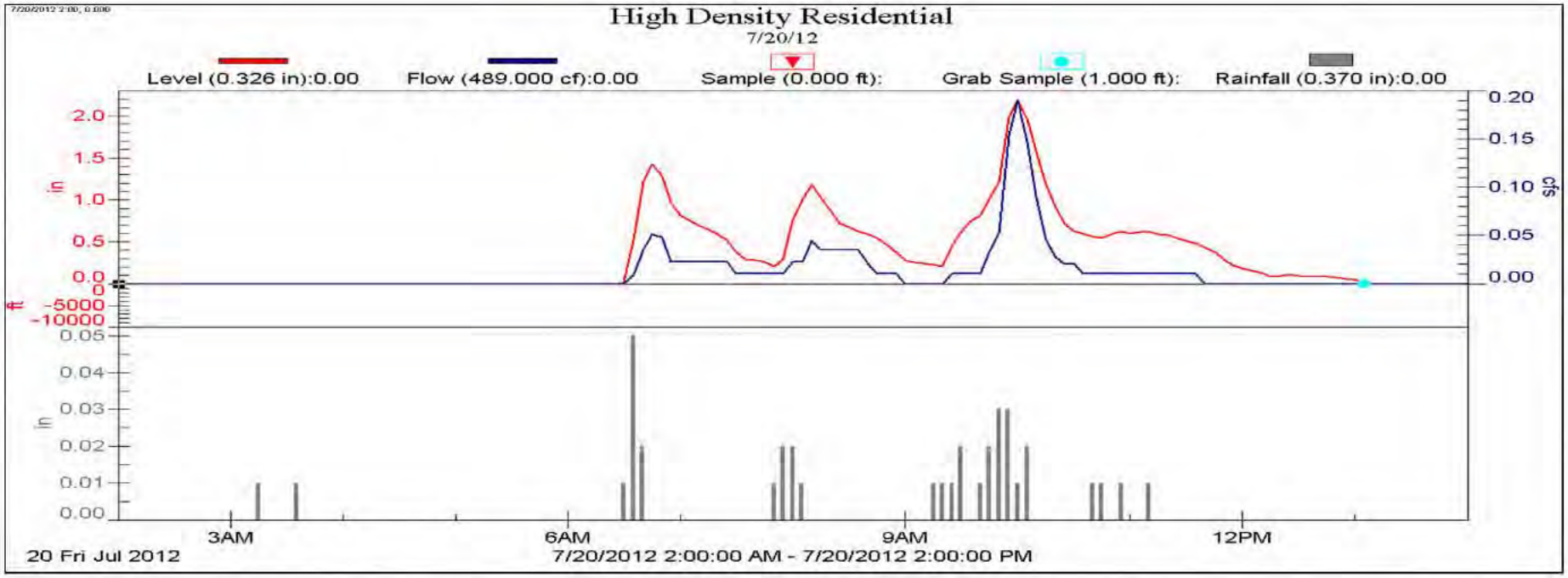
Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.75		No. of Aliquots	≥ 10	26	
Precipitation Duration (hrs)	NA	12.25		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.06		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	37.50		Composite Start date/time	NA	11/16/2011 15:05	
24 hr Runoff volume (cf)	NA	3716		Composite end date/time	NA	11/17/2011 2:52	
Runoff volume sampled (cf)	NA	3051		Sampling Duration (hr)	≥ 1	11.78	
Percent runoff sampled (%)	≥ 75	82		Grab Sample Date/Time	NA	11/17/2011 12:24	
Average flow during sampling (cfs)	NA	0.071					
NOTES:							

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.81		No. of Aliquots	≥ 10	34	
Precipitation Duration (hrs)	NA	17.33		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.05		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	87.17		Composite Start date/time	NA	6/22/2012 14:45	
24 hr Runoff volume (cf)	NA	859		Composite end date/time	NA	6/22/2012 18:13	
Runoff volume sampled (cf)	NA	432		Sampling Duration (hr)	≥ 1	3.47	
Percent runoff sampled (%)	≥ 75	50		Grab Sample Date/Time	NA	6/22/2012 15:28	
Average flow during sampling (cfs)	NA	0.032					
NOTES:							

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season



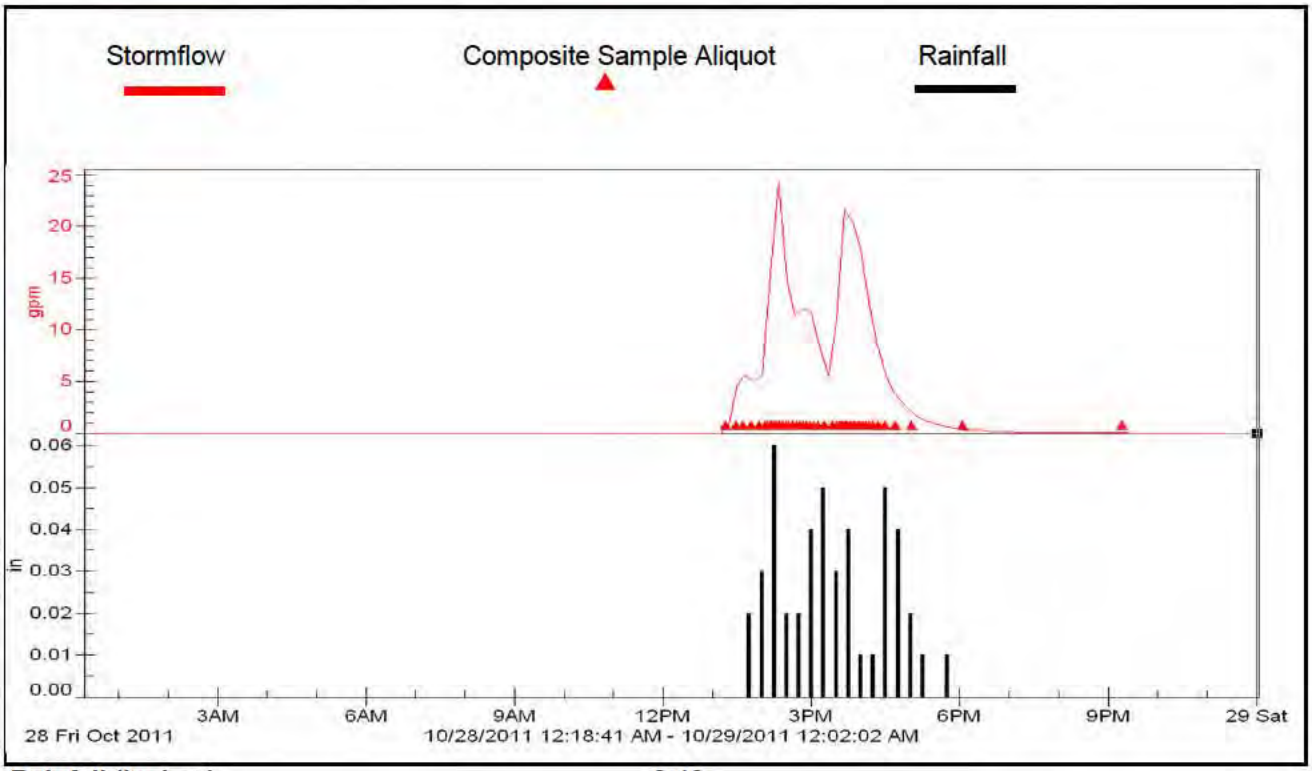
Sampling Period Information	Criterion	Value	Notes	Sample Information	Criterion	Value	Notes
Precipitation Total (in)	≥ 0.20	0.37		No. of Aliquots	≥ 10	NA	
Precipitation Duration (hrs)	NA	7.92		Stormflow present during event	Y	Y	
Mean precip. Intensity (in/hr)	NA	0.05		Baseflow Included in composite	N	N	
Antecedent period w/ ≤ 0.02 (hr)	>24 or >72[1]	399.17		Composite Start date/time	NA	NA	
24 hr Runoff volume (cf)	NA	489		Composite end date/time	NA	NA	
Runoff volume sampled (cf)	NA	0	See Notes	Sampling Duration (hr)	≥ 1	NA	
Percent runoff sampled (%)	≥ 75	0		Grab Sample Date/Time	NA	7/20/2012 13:05	
Average flow during sampling (cfs)	NA	0.029					

NOTES: Since composite did not represent 75 percent of the hydrograph the sample was not submitted for analysis.

[1] antecedent based on previous 24 hours during wet season and previous 72 hours during dry season

Roads Rural Residential Site Charactorization Monitoring:

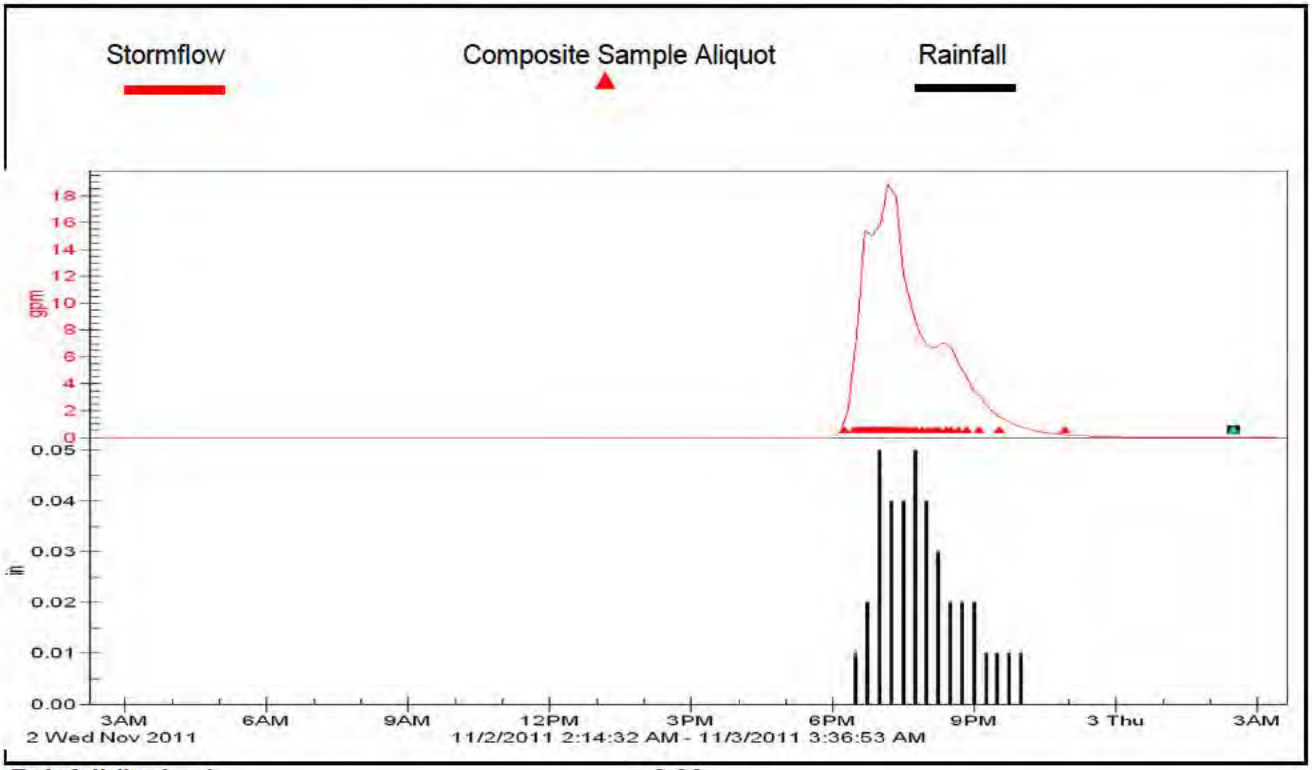
Storm Date:	October 28th 2011
Site:	**148th Ave SE** **(RSW1)**
Flow Measurement:	Extra-Large 60° Trapezoidal flume with stilling well
Monitoring Equipment:	Isco 6712 Autosampler with 4230 bubble meter
Raingage:	King County Renton RG



Rainfall (inches):	0.46
Duration (hours):	4
Average Intensity (inches per hour):	0.115
Antecedent Dry Period (hours):	37
Inter-storm Dry Period (hours):	<6
Sampler Set Up:	10/26/2012
Mid-Storm Visit:	None
Post Storm Visit:	10/31/2012
Sample Parameters:	
Total Storm Flow (gallons):	2,390
Sampled Stormflow (gallons)	2,390
Baseflow (gpm):	0
Percent of Hydrograph Sampled:	100%
Number of Aliquots Collected:	50
Comments:	No stormflow during site visits - no grab samples collected.
	Sample met criteria, composite sample analyzed.

Roads Rural Residential Site Charactorization Monitoring:

Storm Date:	November 2nd, 2011	
Site:	**148th Ave SE**	**(RSW1)**
Flow Measurement:	Extra-Large 60° Trapezoidal flume with stilling well	
Monitoring Equipment:	Isco 6712 Autosampler with 4230 bubble meter	
Raingage:	King County Renton RG	

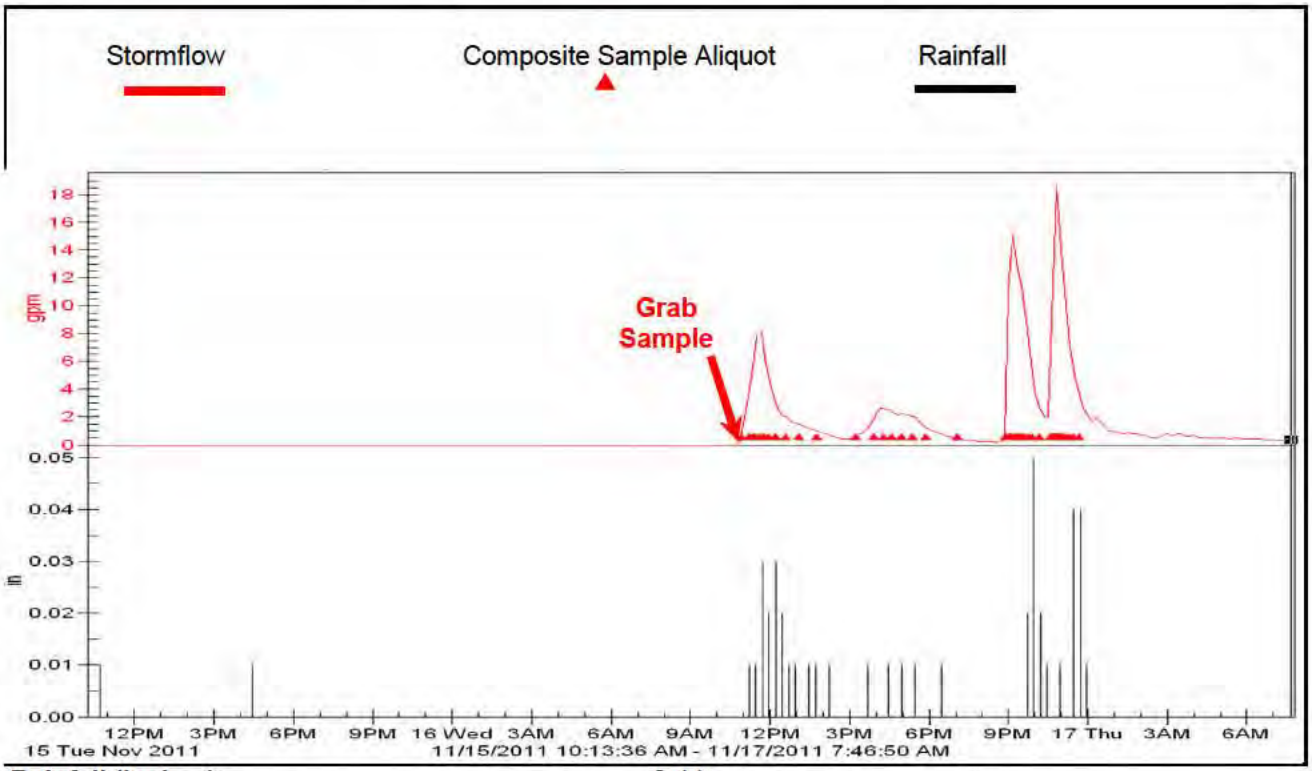


Rainfall (inches):	0.38
Duration (hours):	2.5
Average Intensity (inches per hour):	0.152
Antecedent Dry Period (hours):	43
Inter-storm Dry Period (hours):	<6
Sampler Set Up:	11/2/2012
Mid-Storm Visit:	None
Post Storm Visit:	11/3/2012
Sample Parameters:	
Total Storm Flow (gallons):	1,762
Sampled Stormflow (gallons)	1,762
Baseflow (gpm):	0
Percent of Hydrograph Sampled:	100%
Number of Aliquots Collected:	37
Comments:	No stormflow during site visits - no grab samples collected.

Sample met criteria, composite sample analyzed.

Roads Rural Residential Site Charactorization Monitoring:

Storm Date:	November 15th, 2011	
Site:	**148th Ave SE**	**(RSW1)**
Flow Measurement:	Extra-Large 60° Trapezoidal flume with stilling well	
Monitoring Equipment:	Isco 6712 Autosampler with 4230 bubble meter	
Raingage:	King County Renton RG	

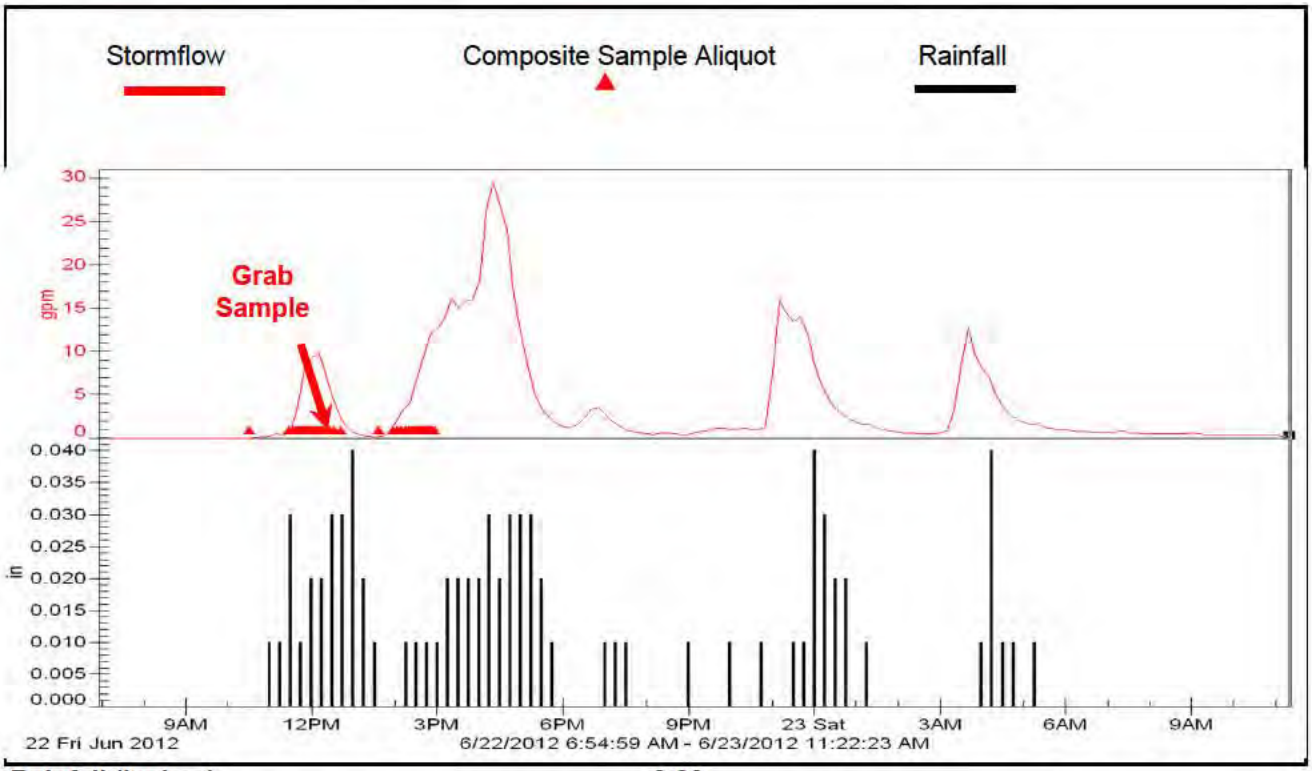


Rainfall (inches):	0.44
Duration (hours):	14
Average Intensity (inches per hour):	0.031
Antecedent Dry Period (hours):	44
Inter-storm Dry Period (hours):	<6
Sampler Set Up:	11/15/2012
Mid-Storm Visit:	11/16/2011
Post Storm Visit:	11/17/2012
Sample Parameters:	
Total Storm Flow (gallons):	2,750
Sampled Stormflow (gallons)	2,424
Baseflow (gpm):	0
Percent of Hydrograph Sampled:	88%
Number of Aliquots Collected:	50
Comments:	Grab sample collected 11/16/11 @ 10:46

Sample met criteria, composite sample analyzed.

Roads Rural Residential Site Charactorization Monitoring:

Storm Date:	June 22 - 23 2012	
Site:	**148th Ave SE**	**(RSW1)**
Flow Measurement:	Extra-Large 60° Trapezoidal flume with stilling well	
Monitoring Equipment:	Isco 6712 Autosampler with 4230 bubble meter	
Raingage:	King County Renton RG	



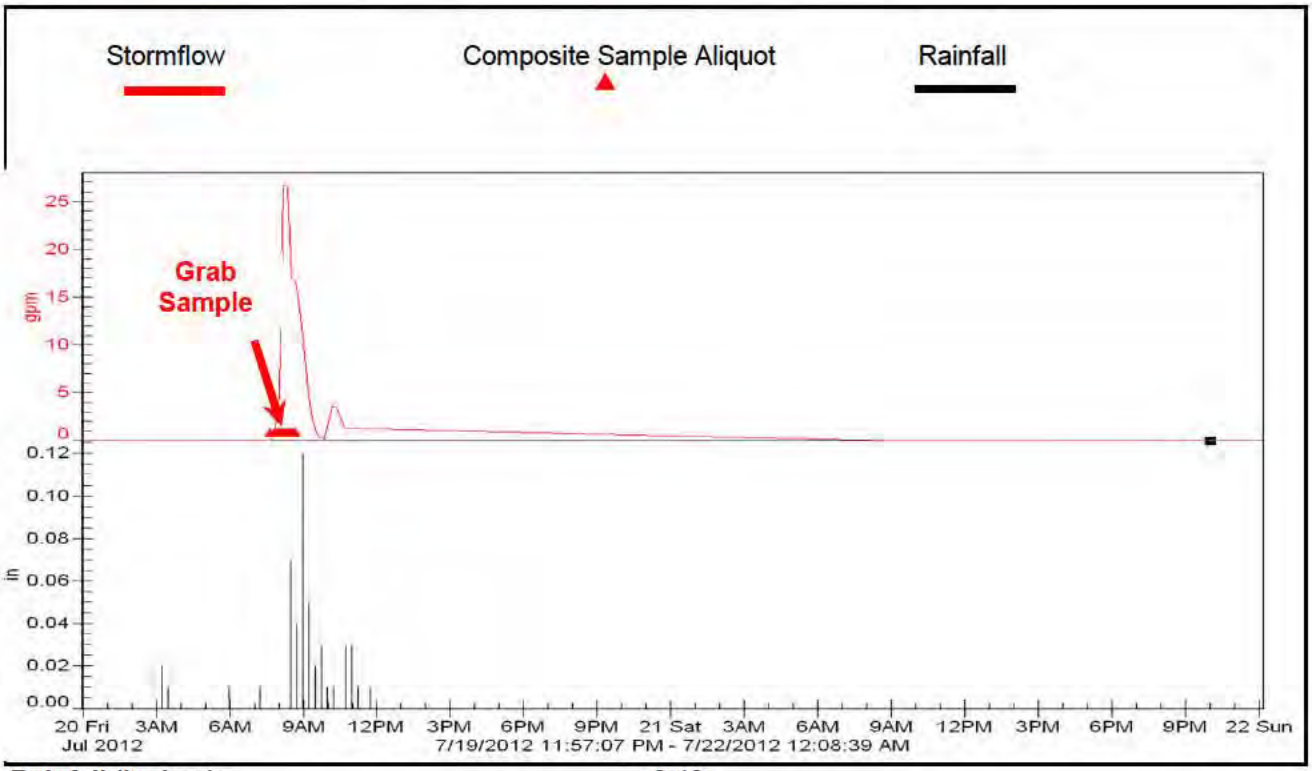
Rainfall (inches):	0.88
Duration (hours):	19
Average Intensity (inches per hour):	0.046
Antecedent Dry Period (hours):	75
Inter-storm Dry Period (hours):	<6
Sampler Set Up:	6/20/2012
Mid-Storm Visit:	6/22/2012
Post Storm Visit:	6/23/2012
Sample Parameters:	
Total Storm Flow (gallons):	5,790
Sampled Stormflow (gallons)	1,137
Baseflow (gpm):	0
Percent of Hydrograph Sampled:	20%
Number of Aliquots Collected:	50

Comments: Grab sample collected 6/22/12 @ 12:00.

Storm met criteria but was significantly larger than forecast.Composite only sampled 19.6% of storm. Composite sample was not analyzed

Roads Rural Residential Site Charactorization Monitoring:

Storm Date:	July 20th 2012	
Site:	**148th Ave SE**	**(RSW1)**
Flow Measurement:	Extra-Large 60° Trapezoidal flume with stilling well	
Monitoring Equipment:	Isco 6712 Autosampler with 4230 bubble meter	
Raingage:	King County Renton RG	



Rainfall (inches):	0.48
Duration (hours):	9
Average Intensity (inches per hour):	0.053
Antecedent Dry Period (hours):	413
Inter-storm Dry Period (hours):	<6
Sampler Set Up:	7/19/2012
Mid-Storm Visit:	7/20/2012
Post Storm Visit:	7/20/2012
Sample Parameters:	
Total Storm Flow (gallons):	1,381
Sampled Stormflow (gallons)	926
Baseflow (gpm):	0
Percent of Hydrograph Sampled:	68%
Number of Aliquots Collected:	50

Comments: Grab sample collected 7/20/12 @ 09:22.

Storm met criteria but was significantly larger than forecast.Composite only sampled 67.7% of storm. Composite sample was not analyzed

Appendix D
Analytical Data Quality Assurance/ Quality Control Discussion

Appendix D

ANALYTICAL DATA – QUALITY ASSURANCE/QUALITY CONTROL DISCUSSION

This Analytical Data Quality Assurance/Quality Control (QA/QC) Report addresses analytical data collected for the Stormwater Characterization (S8.D) project. All laboratory data packages received included a hardcopy report and an electronic data deliverable (EDD). The laboratory case narratives were reviewed for quality control issues and corrective action taken for each sample delivery group. The data were evaluated for required methods, holding times, reporting limits, accuracy, precision, and blank contamination. Each EDD was imported into a review template where deviations from the MQOs were identified and associated samples were qualified accordingly. The following tables describe the details of this review.

Water & Sediment Analytical Methods & Reporting Limits:
The following tables describes the method the laboratory performed, the method nomenclature the laboratory used on the data reports, the method described in KC QAPP and the method Ecology has accredited the lab to perform. The comment section addresses any areas of non-conformance. Reporting limits shown in the table below represent the minimum value the laboratory is able to report. Reporting limits can vary for individual samples, particularly for sediments where the quantity prepared and dilution analyzed affect the minimum detectable value.

Stormwater Samples

Parameters	Units	Analytical Method Performed	Analytical Method Reported	Analytical Method in QAPP	Lab Ecology Accreditation	Lab Report Limit
Biochemical Oxygen Demand (BOD5)	mg/L	SM5210-B	SM5210-B	SM5210-B	SM5210-B	2
Chloride	mg/L	SM4110B CL	SM4110B CL	SM4110B CL	SM4110B	0.05
Conductivity	umhos/cm	SM2510-B	SM2510-B	SM2510-B	SM2510B	1
Methylene Blue Act. Substance	mg/L	SM 5540C	SM 5540C	SM 5540C	SM5540c	0.05
Nitrite + Nitrate Nitrogen	mg/L	SM4500-NO3-F	SM4500-NO3-F	SM4500-NO3-F	SM4500-NO3-F	0.01
Orthophosphate Phosphorus	mg/L	SM4500-P-F	SM4500-P-F	SM4500-P-F	SM4500-P-F	0.002
Total Kjeldahl Nitrogen	mg/L	EPA 351.2	EPA 351.2	EPA 351.2	EPA 351.2	0.1
Total Phosphorus	mg/L	SM4500-P-B,F	SM4500-P-B,F	SM4500-P-B,F	SM4500-P-F	0.005
Total Suspended Solids	mg/L	SM2540-D	SM2540-D	SM2540-D	SM2540-D	0.5
Turbidity	NTU	SM2130-B	SM2130-B	SM2130-B	SM2130-B	0.2
Fecal Coliform	cfu/100ml	SM 9222D 20TH	SM 9222D 20TH	SM 9222D 20TH	SM9222D	1
Cadmium, Total & Dissolved	ug/L	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	0.05
Copper, Total & Dissolved	ug/L	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	0.4
Lead, Total & Dissolved	ug/L	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	0.1
Zinc, Total &	ug/L	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	0.5

Dissolved						
Hardness, Calc	mg/L as CaCO3	EPA 200.8/SM2340B	EPA 200.8/SM2340B	EPA 200.8/SM2340B	SM2340B	0.066
Mercury, Total & Dissolved	ug/L	EPA 245.1	EPA 245.1	EPA 245.1	EPA 245.1	0.05
Phthalates	ug/L	SW846 8270D	SW846 8270D	SW846 8270D	EPA 8270	0.05
Polynuclear Aromatic Hydrocarbons	ug/L	SW846 8270D	SW846 8270D	SW846 8270D	EPA 8270	0.01
Pentachlorophenol	ug/L	SW846 8270D	SW846 8270D	SW846 8270D	EPA 8270	0.1
Diazinon	ug/L	SW846 8270D SIM	SW846 8270D SIM	SW846 8270D SIM	EPA 8270	0.05
Chlorpyrifos	ug/L	SW846 8270D SIM	SW846 8270D SIM	SW846 8270D SIM	EPA 8270	0.05
Malathion	ug/L	SW846 8270D SIM	SW846 8270D SIM	SW846 8270D SIM	EPA 8270	0.05
2,4-D	ug/L	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	EPA 8151	0.5
Dichlobenil	ug/L	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	EPA 8151	0.5
MCPP	ug/L	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	EPA 8151	0.5
Prometon	ug/L	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	EPA 8151	2.5
Triclopyr	ug/L	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	SW-846 8151A GCMS MODIFIED	EPA 8151	0.5
Diesel Range (>C12-C24)	mg/L	WDOE NWTPH-DX	WDOE NWTPH-DX	WDOE NWTPH-DX	WDOE NWTPH-DX	0.2
Lube Oil Range (>C24)	mg/L	WDOE NWTPH-DX	WDOE NWTPH-DX	WDOE NWTPH-DX	WDOE NWTPH-DX	0.2
Gasoline Range (C7-C12)	mg/L	WDOE NWTPH-GX	WDOE NWTPH-GX	WDOE NWTPH-GX	WDOE-NWTPH-G	0.25

Sediment

Parameters	**Units**	**Analytical Method Performed**	**Analytical Method Reported**	**Analytical Method in QAPP**	**Lab Ecology Accreditation**	**Lab Report Limit**
Particle Size Distribution	%	ASTM D422	ASTM D422	ASTM D422	ASTM D422	0.1, 0.5
Total Solids	%	SM2540-G	SM2540-G	SM2540-G	SM2540-G	0.005
Total Organic Carbon	mg/Kg	9060-PSEP96	9060-PSEP96	9060-PSEP96	9060-PSEP96	1600
Cadmium, Total, ICP	mg/Kg	EPA 6010C	EPA 6010C	EPA 6010C	EPA 6010C	0.1
Copper, Total, ICP	mg/Kg	EPA 6010C	EPA 6010C	EPA 6010C	EPA 6010C	0.2
Lead, Total, ICP	mg/Kg	EPA 6010C	EPA 6010C	EPA 6010C	EPA 6010C	1.0
Zinc, Total, ICP	mg/Kg	EPA 6010C	EPA 6010C	EPA 6010C	EPA 6010C	0.25
Mercury, Total, CVAA	mg/Kg	EPA 7471B	EPA 7471B	EPA 7471B	EPA 7471B	0.005
Organophosphorus Pesticides	ug/Kg	EPA 8270D	EPA 8270D	EPA 8270D SIM	EPA 8270D	48

PCB	ug/Kg	EPA 8082A	EPA 8082A	EPA 8082A	EPA 8082	1.3
Phthalates	ug/Kg	EPA 8270D	EPA 8270D	EPA 8270D	EPA 8270D	11
Polynuclear Aromatic Hydrocarbons	ug/Kg	EPA 8270D	EPA 8270D	EPA 8270D	EPA 8270D	5
Phenolics	ug/Kg	EPA 8270D	EPA 8270D	EPA 8270D	EPA 8270D	11
Pentachlorophenol	ug/Kg	EPA 8270D	EPA 8270D	EPA 8270D SIM	EPA 8270D	27

Method Detection Limits:
Stormwater: The reported MDLs met the limits defined in the QAPP with the following exceptions: The MDLs for Chloride and TSS were reported above the QAPP MDL due to necessary dilution of selected samples. The MDLs for Diesel Range and Lube Oil Range Hydrocarbons were reported above the QAPP MDL for selected samples due to sample volume available for that test being slightly less than one liter. The reported MDLs for 2, 4-D, Triclopyr and MCPP were a factor of 10 above the QAPP MDLs since the analytical method used for analysis was not sufficiently sensitive. A more sensitive alternate method is currently not available.

Sediment: The reported MDLs met the limits defined in the QAPP with the following exceptions: The MDLs reported for the Organophosphorus Pesticides and Pentachlorophenol were higher than the values listed in the QAPP since these parameters were analyzed using routine 8270D rather than the SIM mode for that method. Particle Size Distribution parameters showed MDL values above the QAPP limit due to high water content of all 3 samples which limits the amount of solids that can be tested. The MDLs reported for Total Organic Carbon were also elevated compared to the QAPP limits since smaller amounts of sample were tested due to the relatively high TOC content.

Holding Times:
The Orthophosphate Phosphorus, Dissolved Metals and TKN analyses were all filtered or preserved outside their respective NPDES method required holding times. Samples for Orthophosphate Phosphorus and Dissolved Metals must be filtered within 15 minutes of sampling and samples for TKN must be preserved within 15 minutes of sampling. All composite samples were split, filtered and preserved at the laboratory so the 15 minute requirement was not met. All of the Orthophosphate Phosphorus and Dissolved Metals results have therefore been flagged with an “H” qualifier. The TKN results were flagged with an “SH” qualifier.

MBAS analysis was performed beyond the 48 hour holding time for 2 samples. Because these samples were collected on Friday afternoons or Saturday mornings, they could not be delivered to the subcontract lab within 48 hours. The MBAS results for these 2 samples have been flagged with an “H” qualifier.

Total Phosphorus, Turbidity and BOD analysis was performed beyond the analytical holding time for 1 sample. The Total Phosphorus, Turbidity and BOD results for this sample have been flagged with an “H” qualifier.

Method Blank Report
Stormwater: Bis(2-ethylhexyl)phthalate and/or di-n-butyl phthalate and/or diethyl phthalate and/or di-n-octylphthalate were detected in the all method blanks (MB) for semi volatile organic analysis.

The bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, diethyl phthalate and di-n-octylphthalate results in the samples were qualified with either a “B”, a “B2” or a “B3” flag as appropriate. A B flag indicates the sample result was less than 5 times the MB result for a common lab contaminant. A B2 flag indicates a sample result was greater than 5 times but less than 10 times the MB result for a common lab contaminant. A B3 flag indicates a sample result was greater than 5 times but less than 10 times the MB result for a non-common lab contaminant. If the sample result was greater than 10 times the associated blank response, no qualifier was added.

Calcium and Magnesium were occasionally detected in the method blank for total metals analysis. The concentrations detected in the associated samples were greater than 10 times the MB results therefore the Hardness data for the samples should not be biased.

Sediments: Pyrene, bis(2-ethylhexyl)phthalate, di-n-octylphthalate, dibenzo(a,h)anthracene and benzo(g,h,i)perylene were detected in the method blank (MB) for semi volatile organic analysis. The results were flagged with the appropriate “B” qualifier. If the sample result was greater than 10 times the associated blank response, no qualifier was added.

Accuracy and Precision Checks

All laboratory control samples, surrogates, matrix spike recoveries and standard reference materials that were associated with reported sample results were within acceptance criteria with the following exceptions.

Parameter	Sample ID	Matrix	QC Analysis Type	Recovery Check	Corrective Action
Bis (2-ethylhexyl) phthalate	L53142-2	Stormwater	MSD	Rec > UCL	Result flagged with a qualifier
Bis (2-ethylhexyl) phthalate	L53142-2	Stormwater	MS/MSD	RPD > UCL	Result flagged with a qualifier
2,4-D	L54422-1, L54423-1	Stormwater	MS/MSD	Rec < LCL	Result flagged with a qualifier
Prometon	L54422-1, L54423-1	Stormwater	MS/MSD	Rec > UCL	None, compound not detected in the sample
Bis (2-ethylhexyl) phthalate	L54548, L54549	Lab water	SB	Rec > UCL	Result flagged with a qualifier
Chrysene	L54548-1, L54549-1	Lab water	SB	Rec > UCL	None, compound not detected in the sample
BOD	L55874-2	Stormwater	SB	Rec < LCL	Text information provided
Triclopyr	L55874-2	Stormwater	SB and SBD	Rec < LCL	Result flagged with a qualifier
2,4-D	L55874-2	Stormwater	SB/SBD	RPD > UCL	None, compound not detected in the sample
Prometon	L55874-2	Stormwater	SB	Rec < LCL	Result flagged with a qualifier
Prometon	L55874-2	Stormwater	SB/SBD	RPD > UCL	Result flagged with a qualifier
Bis (2-ethylhexyl) phthalate	L56268-1,2,3	FW Sediment	MS	Rec > UCL	Result flagged with a qualifier
Butyl benzyl phthalate		FW Sediment	MSD	Rec > UCL	None, all other QC was acceptable
Bis (2-ethylhexyl) phthalate		FW Sediment	MS/MSD	RPD > UCL	Result flagged with a qualifier

Table of Qualified Data

The following table lists data that was qualified and the reason for the qualification.

Parameter	Sample ID	Matrix	Qualifier	Reason for Qualification
Orthophosphate Phosphorus	All	Stormwater	H	Sample filtered outside the 15 filtration holding time
Total Kjeldahl Nitrogen	All	Stormwater	SH	Sample preserved outside the 15 preservation holding time
Dissolved Metals (Cd, Cu, Pb, Zn)	All	Stormwater	H	Sample filtered outside the 15 filtration holding time
Bis(2-ethylhexyl)phthalate	Various	Stormwater	B, B2	Method Blank contamination
Di-n-butyl phthalate	Various	Stormwater	B, B2	Method Blank contamination
Diethyl phthalate	Various	Stormwater	B, B2	Method Blank contamination
Di-n-octyl phthalate	L54624-1	Stormwater	B3	Method Blank contamination
Bis (2-ethylhexyl) phthalate	L53142-1,2, L53697-1	Stormwater	J	MSD > UCL, RPD > UCL
Total Phosphorus	L54423-1	Stormwater	H	Analyzed outside of holding time
Turbidity	L54423-1	Stormwater	H	Analyzed outside of holding time
BOD	L54423-1	Stormwater	H	Analyzed outside of holding time
MBAS	L54423-1, L54422-1	Stormwater	H	Analyzed outside of holding time
2,4-D	L54423-1, L54422-1	Stormwater	J	MS and MSD < LCL
Bis (2-ethylhexyl) phthalate	L54548-1, L54549-1	Stormwater	JL	SB > UCL
Triclopyr	L55874-2	Stormwater	JG	Rec < LCL
Prometon	L55874-2	Stormwater	JG	Rec < LCL, RPD > UCL
Pyrene	L56268-1,2,3	FW Sediment	B	Method Blank contamination
Bis (2-ethylhexyl) phthalate	L56268-1,2,3	FW Sediment	B	Method Blank contamination
Di-n-octyl phthalate	L56268-1,2,3	FW Sediment	B	Method Blank contamination
Dibenzo(a,h)anthracene	L56268-1,2,3	FW Sediment	B	Method Blank contamination
Benzo(g,h,i)perylene	L56268-1,2,3	FW Sediment	B	Method Blank contamination
Bis (2-ethylhexyl) phthalate	L56268-1,2,3	FW Sediment	J	Rec > UCL, RPD > UCL

Appendix E
Analytical Lab Reports

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

December 1, 2011

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L54422-1, 3, 5 and L54423-1, 3, collected October 28, 2011.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on October 29 and 31, 2011. The sample was analyzed in the Trace Metals, Conventionals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #14767 was prepared and sent via e-mail on December 1, 2011.

Sample Collection:
The composite samples, FCSW01 and RSW1UP, were delivered to the laboratory on October 29 and 31 respectively. The sample delivered on October 31 (RSW1UP) was maintained on ice until delivery.

Conventionals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

The results for Total Kjeldahl Nitrogen (TKN) have been flagged with an "SH" qualifier to indicate that the sample was not preserved within 15 minutes of the collection of the last aliquot into the composite sample.

The results for Orthophosphate Phosphorus (ORTHOP) analysis have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

The following analyses were prepared or preserved outside their respective holding times for sample L54423-1: Total Phosphorus, Turbidity, BOD and MBAS. The following analysis was

prepared or preserved outside its holding time for sample L54422-1: MBAS. All of these results have been flagged with an "H" qualifier.

Trace Metals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exception.

The results for dissolved metals and mercury have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

The matrix spike/matrix spike duplicate RPD for 2,4-D in the Herbicides analysis was outside its control limit at 42%. 2,4-D was not detected in the samples. The 2,4-D entries were flagged with a "J" qualifier.

The matrix spike and matrix spike duplicate recoveries for Prometon was outside the upper control limit at 162 and 163% respectively. Prometon was not detected in the samples. A qualifier has not been applied to the entries in the report.

Di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were detected in the method blank for semivolatile analysis. All entries in the data report and the QC report have been flagged with a "B" qualifier.

Microbiology:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Subcontract Parameters: MBAS
The data have passed all QA/QC checks for accuracy and completeness.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW01	FFBLANK
Descrip:	FALL CITY HD COMME	FALL CITY HD COMME	FIELD FILTER BLANK
Sample:	L54422-1	L54422-3	L54422-5
Matrix:	LG STORM WTR	LG STORM WTR	LN BLANK WTR
ColDate:	10/28/11 14:13	10/29/11 11:55	10/29/11 13:20
TimeSpan:	1.55		
TotalSolid:			
ClientLoc:			
SampDepth:			
	WET Weight Basis	**WET Weight Basis**	**WET Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV EPA 351.2															
Total Kjeldahl Nitrogen	1.83	SH	0.1	0.2	mg/L										
CV SM 5540C															
Methylene Blue Act. Substance	0.064	H	0.025	0.025	mg/L										
CV SM2130-B															
Turbidity	180		0.2	0.5	NTU										
CV SM2510-B															
Conductivity	34		1	5	umhos/cm										
CV SM2540-D															
Total Suspended Solids	232		10	20	mg/L										
CV SM4110B CL															
Chloride	1.35		0.05	0.1	mg/L										
CV SM4500-NO3-F															
Nitrite + Nitrate Nitrogen	0.21		0.01	0.04	mg/L							<MDL	0.01	0.04	mg/L
CV SM4500-P-B,F															
Total Phosphorus	0.406		0.005	0.01	mg/L										
CV SM4500-P-F															
Orthophosphate Phosphorus	0.0475	H	0.002	0.005	mg/L							<MDL	0.002	0.005	mg/L
CV SM5210-B															
Biochemical Oxygen Demand	13		2	2	mg/L										
MC SM 9222D 20TH															
Fecal Coliform						1600				CFU/100ml					
MT EPA 200.8*SW846 6020A															
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L										
Cadmium, Total, ICP-MS	0.23	<RDL	0.05	0.25	ug/L										
Calcium, Total, ICP-MS	5380		50	50	ug/L										
Copper, Dissolved, ICP-MS	6.25	H	0.4	2	ug/L										
Copper, Total, ICP-MS	35.4		0.4	2	ug/L										
Lead, Dissolved, ICP-MS	0.22	<RDL,H	0.1	0.5	ug/L										
Lead, Total, ICP-MS	21.7		0.1	0.5	ug/L										
Magnesium, Total, ICP-MS	3050		50	50	ug/L										
Zinc, Dissolved, ICP-MS	14.7	H	0.5	2.5	ug/L										
Zinc, Total, ICP-MS	157		0.5	2.5	ug/L										
MT EPA 200.8/SW846 6020A*SM2340B															
Hardness, Calc	26		0.331	0.331	mg CaCO3/L										
MT EPA 245.1*SW846 7470A															
Mercury, Dissolved, CVAA		<MDL,H	0.05	0.1	ug/L										
Mercury, Total, CVAA		<MDL	0.05	0.1	ug/L										
OR SW846 3520C*SW846 8270D															
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L										
Acenaphthene		<MDL	0.0094	0.0189	ug/L										
Acenaphthylene		<MDL	0.0094	0.0189	ug/L										

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW01	FFBLANK
Descrip:	FALL CITY HD COMME	FALL CITY HD COMME	FIELD FILTER BLANK
Sample:	L54422-1	L54422-3	L54422-5
Matrix:	LG STORM WTR	LG STORM WTR	LN BLANK WTR
ColDate:	10/28/11 14:13	10/29/11 11:55	10/29/11 13:20
TimeSpan:	1.55		
TotalSolid:			
ClientLoc:			
SampDepth:			
WET Weight Basis		**WET Weight Basis**	**WET Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene		<MDL	0.0094	0.0189	ug/L										
Benzo(a)anthracene		<MDL	0.0094	0.0189	ug/L										
Benzo(a)pyrene	0.116		0.0094	0.0189	ug/L										
Benzo(b,j,k)fluoranthene		<MDL	0.0094	0.0189	ug/L										
Benzo(g,h,i)perylene	0.129		0.0094	0.0189	ug/L										
Benzyl Butyl Phthalate	0.25		0.047	0.0943	ug/L										
Bis(2-Ethylhexyl)Phthalate	2.59		0.024	0.0472	ug/L										
Chrysene	0.101		0.0094	0.0189	ug/L										
Dibenzo(a,h)anthracene		<MDL	0.0094	0.0189	ug/L										
Diethyl Phthalate	0.578		0.024	0.0472	ug/L										
Dimethyl Phthalate	0.0554		0.024	0.0472	ug/L										
Di-N-Butyl Phthalate	0.138	B	0.024	0.0472	ug/L										
Di-N-Octyl Phthalate	0.666		0.024	0.0472	ug/L										
Fluoranthene	0.106		0.0094	0.0189	ug/L										
Fluorene		<MDL	0.0094	0.0189	ug/L										
Indeno(1,2,3-Cd)Pyrene		<MDL	0.0094	0.0189	ug/L										
Naphthalene	0.0413		0.0094	0.0189	ug/L										
Pentachlorophenol		<MDL	0.094	0.189	ug/L										
Phenanthrene	0.0735		0.0094	0.0189	ug/L										
Pyrene	0.195		0.0094	0.0189	ug/L										
OR SW846 3520C*SW846 8270D SIM															
Chlorpyrifos		<MDL	0.032	0.0472	ug/L										
Diazinon		<MDL	0.041	0.0472	ug/L										
Dichlobenil		<MDL	0.047	0.0943	ug/L										
Malathion		<MDL	0.045	0.0472	ug/L										
Prometon		<MDL	0.047	0.0943	ug/L										
OR SW846 3535A/8151A*8270D SIM															
2,4-D		<MDL,J	0.5	1	ug/L										
MCPP		<MDL	0.5	1	ug/L										
Triclopyr		<MDL	0.5	1	ug/L										
OR WDOE NWTPH-DX															
Diesel Range (>C12-C24)							<MDL	0.19	0.19	mg/L					
Lube Oil Range (>C24)						0.379		0.19	0.19	mg/L					
OR WDOE NWTPH-GX															
Gasoline Range (C7-C12)							<MDL	250	250	ug/L					

King County Environmental Lab Analytical Report

	Project:	421879-210				Project:	421879-210				
	Locator:	RSW1UP				Locator:	FFBLANK				
	Descrip:	148TH AVE SE UPSTR				Descrip:	FIELD FILTER BLANK				
	Sample:	L54423-1				Sample:	L54423-3				
	Matrix:	LG STORM WTR				Matrix:	LN BLANK WTR				
	ColDate:	10/28/11 13:28				ColDate:	10/31/11 11:00				
	TimeSpan:	3.57				TimeSpan:					
	TotalSolid:					TotalSolid:					
	ClientLoc:					ClientLoc:					
	SampDepth:					SampDepth:					
	WET Weight Basis					**WET Weight Basis**					
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**
CV EPA 351.2										
Total Kjeldahl Nitrogen	0.392	SH	0.1	0.2	mg/L					
CV SM 5540C										
Methylene Blue Act. Substance		<MDL,H	0.025	0.025	mg/L					
CV SM2130-B										
Turbidity	9.12	H	0.2	0.5	NTU					
CV SM2510-B										
Conductivity	26		1	5	umhos/cm					
CV SM2540-D										
Total Suspended Solids	9.6		0.5	1	mg/L					
CV SM4110B CL										
Chloride	0.658		0.05	0.1	mg/L					
CV SM4500-NO3-F										
Nitrite + Nitrate Nitrogen	0.372		0.01	0.04	mg/L		<MDL	0.01	0.04	mg/L
CV SM4500-P-B,F										
Total Phosphorus	0.0716	H	0.005	0.01	mg/L					
CV SM4500-P-F										
Orthophosphate Phosphorus	0.0302	H	0.002	0.005	mg/L		<MDL	0.002	0.005	mg/L
CV SM5210-B										
Biochemical Oxygen Demand	2.48	H	2	2	mg/L					
MC SM 9222D 20TH										
Fecal Coliform										
MT EPA 200.8*SW846 6020A										
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L					
Cadmium, Total, ICP-MS		<MDL	0.05	0.25	ug/L					
Calcium, Total, ICP-MS	2310		50	50	ug/L					
Copper, Dissolved, ICP-MS	2	<RDL,H	0.4	2	ug/L					
Copper, Total, ICP-MS	2.86		0.4	2	ug/L					
Lead, Dissolved, ICP-MS	0.11	<RDL,H	0.1	0.5	ug/L					
Lead, Total, ICP-MS	0.988		0.1	0.5	ug/L					
Magnesium, Total, ICP-MS	557		50	50	ug/L					
Zinc, Dissolved, ICP-MS	3.17	H	0.5	2.5	ug/L					
Zinc, Total, ICP-MS	6.52		0.5	2.5	ug/L					
MT EPA 200.8/SW846 6020A*SM2340B										
Hardness, Calc	8.05		0.331	0.331	mg CaCO3/L					
MT EPA 245.1*SW846 7470A										
Mercury, Dissolved, CVAA										
Mercury, Total, CVAA										
OR SW846 3520C*SW846 8270D										
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L					
Acenaphthene		<MDL	0.0094	0.0189	ug/L					
Acenaphthylene		<MDL	0.0094	0.0189	ug/L					

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L54423-1	Sample:	L54423-3
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	10/28/11 13:28	ColDate:	10/31/11 11:00
TimeSpan:	3.57	TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene		<MDL	0.0094	0.0189	ug/L					
Benzo(a)anthracene	0.0272		0.0094	0.0189	ug/L					
Benzo(a)pyrene	0.122		0.0094	0.0189	ug/L					
Benzo(b,j,k)fluoranthene	0.122		0.0094	0.0189	ug/L					
Benzo(g,h,i)perylene	0.0936		0.0094	0.0189	ug/L					
Benzyl Butyl Phthalate		<MDL	0.047	0.0943	ug/L					
Bis(2-Ethylhexyl)Phthalate	0.401	B	0.024	0.0472	ug/L					
Chrysene	0.0753		0.0094	0.0189	ug/L					
Dibenzo(a,h)anthracene		<MDL	0.0094	0.0189	ug/L					
Diethyl Phthalate	0.8		0.024	0.0472	ug/L					
Dimethyl Phthalate		<MDL	0.024	0.0472	ug/L					
Di-N-Butyl Phthalate	0.039	<RDL,B	0.024	0.0472	ug/L					
Di-N-Octyl Phthalate		<MDL	0.024	0.0472	ug/L					
Fluoranthene	0.139		0.0094	0.0189	ug/L					
Fluorene		<MDL	0.0094	0.0189	ug/L					
Indeno(1,2,3-Cd)Pyrene	0.123		0.0094	0.0189	ug/L					
Naphthalene	0.014	<RDL	0.0094	0.0189	ug/L					
Pentachlorophenol	0.521		0.094	0.189	ug/L					
Phenanthrene	0.0373		0.0094	0.0189	ug/L					
Pyrene	0.114		0.0094	0.0189	ug/L					
OR SW846 3520C*SW846 8270D SIM										
Chlorpyrifos		<MDL	0.032	0.0472	ug/L					
Diazinon		<MDL	0.041	0.0472	ug/L					
Dichlobenil		<MDL	0.047	0.0943	ug/L					
Malathion		<MDL	0.045	0.0472	ug/L					
Prometon		<MDL	0.047	0.0943	ug/L					
OR SW846 3535A/8151A*8270D SIM										
2,4-D		<MDL,J	0.51	1.01	ug/L					
MCPP		<MDL	0.51	1.01	ug/L					
Triclopyr		<MDL	0.51	1.01	ug/L					
OR WDOE NWTPH-DX										
Diesel Range (>C12-C24)										
Lube Oil Range (>C24)										
OR WDOE NWTPH-GX										
Gasoline Range (C7-C12)										

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Total Kjeldahl Nitrogen	Methylene Blue Act. Substance	Turbidity	Conductivity	Total Suspended Solids	Chloride	Nitrite + Nitrate Nitrogen	Total Phosphorus	Orthophosphate Phosphorus	Biochemical Oxygen Demand	Cadmium, Total, ICP-MS	Calcium, Total, ICP-MS	Copper, Dissolved, ICP-MS	Copper, Total, ICP-MS	Lead, Dissolved, ICP-MS	Lead, Total, ICP-MS	Magnesium, Total, ICP-MS	Zinc, Dissolved, ICP-MS	Zinc, Total, ICP-MS	Hardness, Calc
			mg/L	mg/L	NTU	umhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg CaCO3/L
FCSW01	421879-210	L54422-1	1.83	0.064	180	34	232	1.35	0.21	0.406	0.0475	13	0.23	5380	6.25	35.4	0.22	21.7	3050	14.7	157	26
FCSW01	421879-210	L54422-3																				
RSW1UP	421879-210	L54423-1	0.392		9.12	26	9.6	0.658	0.372	0.0716	0.0302	2.48		2310	2	2.86	0.11	0.988	557	3.17	6.52	8.05
* Not converted to dry weight basis																						
If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code																						

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b,j,k)fluoranthene	Benzo(g,h,i)perylene	Benzyl Butyl Phthalate	Bis(2-Ethylhexyl)Phthalate	Chrysene	Di-N-Butyl Phthalate	Di-N-Octyl Phthalate	Diethyl Phthalate	Dimethyl Phthalate	Fluoranthene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene	Fecal Coliform	Lube Oil Range (>C24)
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	CFU/100ml	mg/L
FCSW01	421879-210	L54422-1		0.116		0.129	0.25	2.59	0.101	0.138	0.666	0.578	0.0554	0.106		0.0413		0.0735	0.195		
FCSW01	421879-210	L54422-3																		1600	0.379
RSW1UP	421879-210	L54423-1	0.0272	0.122	0.122	0.0936		0.401	0.0753	0.039		0.8		0.139	0.123	0.014	0.521	0.0373	0.114		
* Not converted to dry weight basis																					
If a parameter/analyze appears twice in the column header,																					

King County Environmental Lab Analytical Text Value Report

Project	Sample	Parameter	Textvalue
421879-210	L54422-1	Methylene Blue Act. Substance	Analyzed 1 day past 2 day holding time.
421879-210	L54422-1	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54422-1	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time
421879-210	L54423-1	Biochemical Oxygen Demand	Analyzed one day beyond hold time
421879-210	L54423-1	Methylene Blue Act. Substance	Analyzed 1 day past 2 day holding time.
421879-210	L54423-1	Orthophosphate Phosphorus	Filtered past the 15 minute holdtime
421879-210	L54423-1	Total Kjeldahl Nitrogen	Preserved three days after end of composite
421879-210	L54423-1	Total Phosphorus	Preservation holding time exceeded by one day.
421879-210	L54423-1	Turbidity	Sample analyzed 1 day past holding time.

Login: P54422 | NPDES Stormwater Permit Monitoring - Fall City | Personnel: FWG, JD

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by Frederick Gottlieb	*Date* 10/29/11	*Time* 1330
Received by [illegible]	*Date* 10/31/11	*Time* 1330 0845
Sample Numbers		*[All]*

Sample Number	P54422-1	P54422-2	P54422-3
QC Link			
Locator	FCSW01	FCSW02	FCSW01
Short Loc Desc	NPDES-SW1	NPDES-SW2	NPDES-SW1
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	FALL CITY HD COMMERCIAL
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	grab, HD Commercial
Start Date/Time	10/28/11 1413	Power fail @ 10 AM 27 Oct	10-29-11 11:55
End Date/Time	10/28/11 1546		
Time Span	1.55		
Sample Depth			
Dept, Matrix, Prod	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG HG-CVAA, DISS-M 6 LG HG-CVAA-M 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G

Login: P54422 NPDES Stormwater Permit Monitoring - Fall City Personnel: _____

Project: 421879-210

Sample Number	P54422-4	P54422-5	
QC Link			
Locator	FCSW02	FFBLANK	
Short Loc Desc	NPDES-SW2	FFBLANK	
Locator Desc	FALL CITY HD RESIDENTIAL	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	grab, HD Residential	filter blank, orthop	
Start Date/Time	Power fail at 1020p 27-OCT-11	10/29/11 1300	
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP	

Login: P54423 NPDES Stormwater Permit Monitoring - May Creek Personnel: SANDERS

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by Ken Sanders	*Date* 31Oct11	*Time* 1200
Received by [illegible]	*Date* 31-Oct-11	*Time* 1200
Sample Numbers 1, 2, 3		*[All]*

Sample Number	P54423-1	P54423-2	P54423-3
QC Link			
Locator	RSW1UP	RSW1UP	FFBLANK
Short Loc Desc	RSW1UP	RSW1UP	FFBLANK
Locator Desc	148TH AVE SE UPSTREAM	148TH AVE SE UPSTREAM	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	comp, LD Rural/Residential	grab, LD Rural/Residential	filter blank, orthop
Start Date/Time	28oct11 1328		31oct11
End Date/Time	28oct11 1702		1100
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LG BOD — out of hold time 3 LG CL 3 LG COND 3 LG MBAS — out of hold time 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G No Sample	3 LN NO23 3 LN ORTHOP

analyze past hold time.

4.3°C

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Nov 4 2011
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Sample Manager

Dear Sample Manager:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
P54422-1	Water	11-A015835	CONV

Your sample was received on Monday, October 31, 2011. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

Project #: 421185
PO Number: 421185

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

Rec'd 11/29/11 K.S.

WG118732

CHAIN OF CUSTODY RECORD

Project Number: 421185
Purchase Order Number:
Subcontract Laboratory: ARI
LPM/TC: Fritz Grothkopp

Shipment Number: EL-11-42
Shipment Method: ENA
Fax data to: Sample Manager
Fax Number: (206) 684-2395
e-mail: sample.login@kingcounty.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

Sample ID	Collect Date	Matrix	QC Required	Requested Parameters: Imbas											No. of Containers	Comments
P54422-1	10/28/2011	LG-storm water	Level II	X											1	collected @1546

Total Number of Containers: 1

Requested TAT: 7 Days
Data Package Due: 8/19/2011

Please return signed original CoC with data package.

RELINQUISHED BY		Date	RECEIVED BY		Date
Signature	[signature]	10/31/11	Signature	[signature]	10/31/11
Printed Name	Lynne Cox	Time 0923	Printed Name	L Lake	Time 11:05
Organization	King County DNR, Environmental Laboratory		Organization	Anatest	

Please analyzed despite the expiration of the hold time.

T 5.1

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Sample Manager
Project #: 421185
PO Number: 421185
All results reported on an as received basis.

Date Received: 10/31/11
Date Reported: 11/ 4/11

AMTEST Identification Number **11-A015835**
Client Identification **P54422-1**
Sampling Date **10/28/11, 15:46**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.064	mg/l		0.025	SM 5540C	NLN	10/31/11

Kathy Fugiel
President

AMTEST LABORATORIES

QC Summary for sample number: 11-A015835

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
11-A015835	Surfactants	mg/l	0.064	0.060	6.5

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.12	0.12	100. %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1174823

Project Name: _____ Date Received: 10/31/11 Received By: Lynn Lake

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 5.1 degrees C

	YES	NO	N/A
Were the Custody Seals intact?	☑	☐	☐
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☐	☑	☐
Are the samples within specified holding times?	☑	☐	☐
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?	☐	☐	☑

Explain any discrepancies or problems with the samples (include sample numbers):

_____

_____

_____

_____

_____

E: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of ffance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Nov 4 2011
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Sample Manager

Dear Sample Manager:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
p54423-1	Water	11-A015859	CONV

Your sample was received on Monday, October 31, 2011. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugie
President

Project #: 421879-210
PO Number: 421879-210

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

Rec'd 11/29/11 K.S.
WG118732

CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number:
Subcontract Laboratory: amtest
LPM/TC: Fritz Grothkopp

Shipment Number: EL-11-53
Shipment Method: ENA
Fax data to: Sample Manager
Fax Number: (206) 684-2395
e-mail: sample.login@kingcounty.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

5959

Sample ID	Collect Date	Matrix	QC Required	mbas												No. of Containers	Comments
p54423-1	10/28/2011	LG-storm water	Level II	X												1	collected @1328

Requested Parameters

Total Number of Containers: 1

TAT

Please return signed original CoC with data package.

Requested TAT: 7 Days
Data Package Due: ~~8/19/2011~~

RELINQUISHED BY		Date	RECEIVED BY		Date
Signature	Lynne Cox	10/31/11	Signature	L Lake	10/31/11
Printed Name	Lynne Cox	Time 1212	Printed Name	L Lake	Time
Organization	King County DNR, Environmental Laboratory		Organization	Amtest	

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www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Sample Manager
Project #: 421879-210
PO Number: 421879-210
All results reported on an as received basis.

Date Received: 10/31/11
Date Reported: 11/ 4/11

AMTEST Identification Number **11-A015859**
Client Identification **p54423-1**
Sampling Date **10/28/11, 13:28**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	< 0.025	mg/l		0.025	SM 5540C	NLN	10/31/11

Kathy Fugiel
President

AMTEST LABORATORIES

QC Summary for sample number: 11-A015859

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
11-A015835	Surfactants	mg/l	0.064	0.060	6.5

L54422-1

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.12	0.12	100. %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1174832

Project Name: _____ Date Received: 10/31/11 Received By: Lynn Lake

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.7 degrees C

	YES	NO	N/A
Were the Custody Seals intact?	☐	☐	☑
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☑	☐	☐
Are the samples within specified holding times?	☐	☐	☑
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?			

Explain any discrepancies or problems with the samples (include sample numbers):

E: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of
bliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118409 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-1	421879-210	NPDES SW Fall City	CVBOD	STORM WTR	10/28/2011 14:13	10/30/2011 18:30	10/30/2011 20:33		
WG118409-1	MB		CVBOD	BLANK WTR		10/30/2011 18:30	10/30/2011 20:30	WG118409-1,-2	MB1
WG118409-2	SB		CVBOD	BLANK WTR		10/30/2011 18:30	10/30/2011 20:32		WG118409-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118410 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54423-1	421879-210	NPDES SW Fall City	CVBOD	STORM WTR	10/28/2011 13:28	10/31/2011 11:00	10/31/2011 13:50		
WG118410-1	MB		CVBOD	BLANK WTR		10/31/2011 11:00	10/31/2011 13:43	WG118410-2,-1	MB1
WG118410-2	SB		CVBOD	BLANK WTR		10/31/2011 11:00	10/31/2011 13:49		WG118410-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118654 Anions

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54252-1	423484-802-4	Brightwater Cross Valley Water District Groundwater Monitoring	CVCL	GRND WTR	11/2/2011 0:00	11/21/2011 14:00	11/22/2011 12:07	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54422-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	10/28/2011 14:13	11/21/2011 14:00	11/21/2011 18:21		
L54423-1	421879-210		CVCL	STORM WTR	10/28/2011 13:28	11/21/2011 14:00	11/21/2011 20:23		
L54548-1	421879-210		CVCL	STORM WTR	11/2/2011 19:44	11/21/2011 14:00	11/21/2011 22:55		
L54549-1	421879-210		CVCL	STORM WTR	11/2/2011 18:15	11/21/2011 14:00	11/21/2011 23:56		
L54574-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:00		
L54574-1	421422-CFGW		CVSO4	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:30	WG118654-1,-2,-3,-7,-8,-4	
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 5:00	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-1	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 6:32	WG118654-1,-2,-3,-7,-8,-4	
L54576-2	421422-VAGW		CVCL	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 8:03	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-2	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 9:04	WG118654-1,-2,-3,-7,-8,-4	
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 9:34	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-1	421422-CFGW		CVSO4	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 10:05	WG118654-1,-2,-3,-7,-8,-4	
L54578-3	421422-CFGW		CVCL	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 10:35	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-3	421422-CFGW		CVSO4	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 11:36	WG118654-1,-2,-3,-7,-8,-4	
L54624-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	11/16/2011 12:15	11/21/2011 14:00	11/22/2011 0:26		
L54624-2	421879-210		CVCL	STORM WTR	11/16/2011 17:56	11/21/2011 14:00	11/22/2011 1:58	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54625-1	421879-210		CVCL	STORM WTR	11/16/2011 10:57	11/21/2011 14:00	11/22/2011 2:28		
WG118654-1	CS		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18		RDL_LEVEL
WG118654-1	CS		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18	WG118654-1,-2,-3,-7,-8,-4	RDL_LEVEL
WG118654-2	MB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	MB1 111121
WG118654-2	MB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-7,-8,-4	MB1 111121
WG118654-3	SB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	WG118654-2
WG118654-3	SB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-7,-8,-4	WG118654-2
WG118654-4	LCS		CVCL	BLANK WTR		11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	LEVEL1

WG118654-4	LCS	CVSO4	BLANK WTR	11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-7,-8,-4	LEVEL1
WG118654-5	LD	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 20:53	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54423-1
WG118654-6	MS	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 21:54		L54423-1
WG118654-7	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 5:31		L54576-1
WG118654-7	LD	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:02	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-8	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 6:01	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54576-1
WG118654-8	MS	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:33	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-9	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 12:37	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54252-1
WG118654-10	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 13:08		L54252-1

WG118482 Conductivity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-8	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVCOND	FRESH WTR	10/27/2011 5:10	11/9/2011 19:06	11/9/2011 19:06	WG118482-1,-2,-3,-4,-5,-6	
L53806-10	421422-CHSW-Q		CVCOND	FRESH WTR	10/27/2011 6:30	11/9/2011 19:27	11/9/2011 19:27		
L54395-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVCOND	GRND WTR	10/28/2011 9:30	11/9/2011 19:40	11/9/2011 19:40		
L54398-1	421422-CHGW		CVCOND	GRND WTR	10/25/2011 7:30	11/9/2011 20:02	11/9/2011 20:02		
L54400-1	421422-CHGW		CVCOND	GRND WTR	10/28/2011 8:30	11/9/2011 20:12	11/9/2011 20:12		
L54422-1	421879-210	NPDES SW Fall City	CVCOND	STORM WTR	10/28/2011 14:13	11/9/2011 19:00	11/9/2011 19:00		
L54423-1	421879-210		CVCOND	STORM WTR	10/28/2011 13:28	11/9/2011 19:02	11/9/2011 19:02		
L54429-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVCOND	GRND WTR	10/28/2011 8:10	11/9/2011 20:21	11/9/2011 20:21		
L54429-6	421422-CHGW		CVCOND	GRND WTR	10/28/2011 8:30	11/9/2011 20:32	11/9/2011 20:32		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCOND	GRND WTR	11/1/2011 0:00	11/9/2011 20:45	11/9/2011 20:45		
L54548-1	421879-210	NPDES SW Fall City	CVCOND	STORM WTR	11/2/2011 19:44	11/9/2011 19:04	11/9/2011 19:04		
L54549-1	421879-210		CVCOND	STORM WTR	11/2/2011 18:15	11/9/2011 19:05	11/9/2011 19:05		
L54557-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCOND	GRND WTR	11/4/2011 7:20	11/9/2011 20:56	11/9/2011 20:56		
WG118482-1	LCS		CVCOND	BLANK WTR		11/9/2011 18:48	11/9/2011 18:48		LEVEL1
WG118482-2	LD		CVCOND	STORM WTR		11/9/2011 19:01	11/9/2011 19:01		L54422-1
WG118482-3	LD		CVCOND	FRESH WTR		11/9/2011 19:17	11/9/2011 19:17		L53806-8
WG118482-4	LD		CVCOND	GRND WTR		11/9/2011 19:51	11/9/2011 19:51		L54395-1
WG118482-5	LCS		CVCOND	BLANK WTR		11/9/2011 21:09	11/9/2011 21:09		LEVEL1
WG118482-6	LCS		CVCOND	BLANK WTR		11/9/2011 21:10	11/9/2011 21:10		LEVEL2

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118299 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54269-34	421250ON	Ambient Offshore Water Column-North	CVORTHOP	BLANK WTR	10/17/2011 8:35	10/31/2011 9:00	10/31/2011 10:44	WG118299-1,-2,-3,-4,-5,-6,-7,-10,-11,-14,-15,-16,-17	FFB
L54270-6	421250-700	Marine Phytoplankton Study	CVNH3-FL	BLANK WTR	10/18/2011 12:10	10/31/2011 9:00	10/31/2011 10:46	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	FFB
L54270-6	421250-700		CVORTHOP	BLANK WTR	10/18/2011 12:10	10/31/2011 9:00	10/31/2011 10:46	WG118299-1,-2,-3,-4,-5,-6,-7,-10,-11,-14,-15,-16,-17	FFB
L54270-7	421250-700		CVORTHOP	BLANK WTR	10/19/2011 8:30	10/31/2011 9:00	10/31/2011 10:57		FFB
L54271-4	423589-030-1	LDWG-Water Column PCB Analysis	CVORTHOP	BLANK WTR	10/17/2011 12:08	10/31/2011 9:00	10/31/2011 10:59		FFB
L54273-34	421250OS	Ambient Offshore Water Column-South	CVORTHOP	BLANK WTR	10/18/2011 8:45	10/31/2011 9:00	10/31/2011 11:01		FFB
L54309-1	421879-220	NPDES SW Sammamish	CVORTHOP	STORM WTR	10/21/2011 0:37	10/31/2011 9:00	10/31/2011 12:55		
L54309-4	421879-220		CVORTHOP	STORM WTR	10/21/2011 8:44	10/31/2011 9:00	10/31/2011 12:57		
L54309-9	421879-220		CVORTHOP	BLANK WTR	10/22/2011 11:00	10/31/2011 9:00	10/31/2011 13:06		FFB OrthoP
L54423-1	421879-210	NPDES SW Fall City	CVNO23	STORM WTR	10/28/2011 13:28	10/31/2011 9:00	10/31/2011 14:21		
L54423-1	421879-210		CVORTHOP	STORM WTR	10/28/2011 13:28	10/31/2011 9:00	10/31/2011 14:21		
L54423-3	421879-210		CVNO23	BLANK WTR	10/31/2011 11:00	10/31/2011 9:00	10/31/2011 14:29		
L54423-3	421879-210		CVORTHOP	BLANK WTR	10/31/2011 11:00	10/31/2011 9:00	10/31/2011 14:29		
L54460-1	421250BN		CVNH3-FL	SALT WTR	10/19/2011 12:22	10/31/2011 9:00	10/31/2011 11:13	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	
L54460-1	421250BN		CVNO23	SALT WTR	10/19/2011 12:22	10/31/2011 9:00	10/31/2011 11:13	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	
L54460-2	421250BN		CVNH3-FL	SALT WTR	10/19/2011 11:48	10/31/2011 9:00	10/31/2011 11:15	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	
L54460-2	421250BN		CVNO23	SALT WTR	10/19/2011 11:48	10/31/2011 9:00	10/31/2011 11:15	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	
L54460-3	421250BN		CVNH3-FL	SALT WTR	10/19/2011 11:22	10/31/2011 9:00	10/31/2011 11:26	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	
L54460-3	421250BN		CVNO23	SALT WTR	10/19/2011 11:22	10/31/2011 9:00	10/31/2011 11:26	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	
L54460-4	421250BN		CVNH3-FL	FRESH WTR	10/19/2011 11:31	10/31/2011 9:00	10/31/2011 11:28	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	
L54460-4	421250BN		CVNO23	FRESH WTR	10/19/2011 11:31	10/31/2011 9:00	10/31/2011 14:04	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	
L54460-4	421250BN		CVORTHOP	FRESH WTR	10/19/2011 11:31	10/31/2011 9:00	10/31/2011 11:28		

L54460-5	421250BN		CVNH3-FL	SALT WTR	10/19/2011 10:49	10/31/2011 9:00	10/31/2011 11:36	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-5	421250BN		CVNO23	SALT WTR	10/19/2011 10:49	10/31/2011 9:00	10/31/2011 11:36	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-6	421250BN		CVNH3-FL	SALT WTR	10/19/2011 10:02	10/31/2011 9:00	10/31/2011 11:38	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-6	421250BN		CVNO23	SALT WTR	10/19/2011 10:02	10/31/2011 9:00	10/31/2011 11:38	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-7	421250BN		CVNH3-FL	SALT WTR	10/19/2011 10:08	10/31/2011 9:00	10/31/2011 11:40	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-7	421250BN		CVNO23	SALT WTR	10/19/2011 10:08	10/31/2011 9:00	10/31/2011 11:40	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-8	421250BN		CVNH3-FL	SALT WTR	10/19/2011 9:40	10/31/2011 9:00	10/31/2011 11:42	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-8	421250BN		CVNO23	SALT WTR	10/19/2011 9:40	10/31/2011 9:00	10/31/2011 11:42	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-9	421250BN		CVNH3-FL	SALT WTR	10/19/2011 9:20	10/31/2011 9:00	10/31/2011 11:45	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-9	421250BN		CVNO23	SALT WTR	10/19/2011 9:20	10/31/2011 9:00	10/31/2011 11:45	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-10	421250BN		CVNH3-FL	BLANK WTR	10/19/2011 9:06	10/31/2011 9:00	10/31/2011 12:01	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54460-10	421250BN		CVNO23	BLANK WTR	10/19/2011 9:06	10/31/2011 9:00	10/31/2011 13:22	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54460-10	421250BN		CVORTHOP	BLANK WTR	10/19/2011 9:06	10/31/2011 9:00	10/31/2011 12:01	
L54462-1	421250BS	Ambient Intertidal Beaches-North	CVNH3-FL	SALT WTR	10/19/2011 8:50	10/31/2011 9:00	10/31/2011 12:10	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-1	421250BS		CVNO23	SALT WTR	10/19/2011 8:50	10/31/2011 9:00	10/31/2011 13:31	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-2	421250BS		CVNH3-FL	SALT WTR	10/19/2011 9:01	10/31/2011 9:00	10/31/2011 12:26	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13

L54462-2	421250BS		CVNO23	SALT WTR	10/19/2011 9:01	10/31/2011 9:00	10/31/2011 13:39	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-3	421250BS		CVNH3-FL	SALT WTR	10/19/2011 9:10	10/31/2011 9:00	10/31/2011 12:28	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-3	421250BS		CVNO23	SALT WTR	10/19/2011 9:10	10/31/2011 9:00	10/31/2011 13:41	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-4	421250BS		CVNH3-FL	SALT WTR	10/19/2011 9:20	10/31/2011 9:00	10/31/2011 12:30	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-4	421250BS		CVNO23	SALT WTR	10/19/2011 9:20	10/31/2011 9:00	10/31/2011 13:52	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-5	421250BS		CVNH3-FL	SALT WTR	10/19/2011 9:38	10/31/2011 9:00	10/31/2011 12:32	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-5	421250BS		CVNO23	SALT WTR	10/19/2011 9:38	10/31/2011 9:00	10/31/2011 13:54	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-6	421250BS		CVNH3-FL	SALT WTR	10/19/2011 10:15	10/31/2011 9:00	10/31/2011 12:35	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-6	421250BS		CVNO23	SALT WTR	10/19/2011 10:15	10/31/2011 9:00	10/31/2011 13:56	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-7	421250BS		CVNH3-FL	SALT WTR	10/19/2011 10:38	10/31/2011 9:00	10/31/2011 12:37	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-7	421250BS		CVNO23	SALT WTR	10/19/2011 10:38	10/31/2011 9:00	10/31/2011 13:58	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-8	421250BS		CVNH3-FL	SALT WTR	10/19/2011 11:00	10/31/2011 9:00	10/31/2011 12:39	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-8	421250BS		CVNO23	SALT WTR	10/19/2011 11:00	10/31/2011 9:00	10/31/2011 14:00	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17
L54462-9	421250BS		CVNH3-FL	SALT WTR	10/19/2011 11:25	10/31/2011 9:00	10/31/2011 12:41	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13
L54462-9	421250BS		CVNO23	SALT WTR	10/19/2011 11:25	10/31/2011 9:00	10/31/2011 14:02	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17

L54462-10	421250BS		CVNH3-FL	BLANK WTR	10/19/2011 8:38	10/31/2011 9:00	10/31/2011 12:53	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	
L54462-10	421250BS		CVNO23	BLANK WTR	10/19/2011 8:38	10/31/2011 9:00	10/31/2011 12:53	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	
L54462-10	421250BS		CVORTHOP	BLANK WTR	10/19/2011 8:38	10/31/2011 9:00	10/31/2011 12:53		
L54463-8	421250BS		CVORTHOP	SALT WTR	10/18/2011 11:17	10/31/2011 9:00	10/31/2011 11:05		
L54463-9	421250BS		CVORTHOP	BLANK WTR	10/18/2011 7:00	10/31/2011 9:00	10/31/2011 11:03		
WG118299-1	MB		CVNH3-FL	BLANK WTR		10/31/2011 9:00	10/31/2011 10:36	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	CONNUTS3
WG118299-1	MB		CVNO23	BLANK WTR		10/31/2011 9:00	10/31/2011 10:36	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	CONNUTS3
WG118299-1	MB		CVORTHOP	BLANK WTR		10/31/2011 9:00	10/31/2011 10:36		CONNUTS3
WG118299-2	SB		CVNH3-FL	BLANK WTR		10/31/2011 9:00	10/31/2011 10:38	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	WG118299-1
WG118299-2	SB		CVNO23	BLANK WTR		10/31/2011 9:00	10/31/2011 10:38	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	WG118299-1
WG118299-2	SB		CVORTHOP	BLANK WTR		10/31/2011 9:00	10/31/2011 10:38		WG118299-1
WG118299-3	LCS		CVNH3-FL	BLANK WTR		10/31/2011 10:40	10/31/2011 10:40	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	LEVEL1
WG118299-3	LCS		CVNO23	BLANK WTR		10/31/2011 10:40	10/31/2011 10:40	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	LEVEL1
WG118299-3	LCS		CVORTHOP	BLANK WTR		10/31/2011 10:40	10/31/2011 10:40		LEVEL1
WG118299-4	LD		CVORTHOP	SALT WTR		10/31/2011 9:00	10/31/2011 11:07		L54463-8
WG118299-5	MS		CVORTHOP	SALT WTR		10/31/2011 9:00	10/31/2011 11:09		L54463-8
WG118299-6	LD		CVNH3-FL	FRESH WTR		10/31/2011 9:00	10/31/2011 11:30	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54460-4
WG118299-6	LD		CVNO23	FRESH WTR		10/31/2011 9:00	10/31/2011 14:06	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54460-4
WG118299-6	LD		CVORTHOP	FRESH WTR		10/31/2011 9:00	10/31/2011 11:30		L54460-4
WG118299-7	MS		CVNH3-FL	FRESH WTR		10/31/2011 9:00	10/31/2011 11:32	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54460-4
WG118299-7	MS		CVNO23	FRESH WTR		10/31/2011 9:00	10/31/2011 14:08	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54460-4
WG118299-7	MS		CVORTHOP	FRESH WTR		10/31/2011 9:00	10/31/2011 11:32		L54460-4
WG118299-8	LD		CVNH3-FL	SALT WTR		10/31/2011 9:00	10/31/2011 11:55	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54460-9
WG118299-8	LD		CVNO23	SALT WTR		10/31/2011 9:00	10/31/2011 13:08	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54460-9

WG118299-9	MS	CVNH3-FL	SALT WTR	10/31/2011 9:00	10/31/2011 11:57	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54460-9
WG118299-9	MS	CVNO23	SALT WTR	10/31/2011 9:00	10/31/2011 13:10	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54460-9
WG118299-10	MB	CVNH3-FL	BLANK WTR	10/31/2011 9:00	10/31/2011 12:03	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	CONNUTS3
WG118299-10	MB	CVNO23	BLANK WTR	10/31/2011 9:00	10/31/2011 13:25	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	CONNUTS3
WG118299-10	MB	CVORTHOP	BLANK WTR	10/31/2011 9:00	10/31/2011 12:03		CONNUTS3
WG118299-11	LCS	CVNH3-FL	BLANK WTR	10/31/2011 12:05	10/31/2011 12:05	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	LEVEL1
WG118299-11	LCS	CVNO23	BLANK WTR	10/31/2011 13:27	10/31/2011 13:27	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	LEVEL1
WG118299-11	LCS	CVORTHOP	BLANK WTR	10/31/2011 12:05	10/31/2011 12:05		LEVEL1
WG118299-12	LD	CVNH3-FL	SALT WTR	10/31/2011 9:00	10/31/2011 12:12	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54462-1
WG118299-12	LD	CVNO23	SALT WTR	10/31/2011 9:00	10/31/2011 13:33	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54462-1
WG118299-13	MS	CVNH3-FL	SALT WTR	10/31/2011 9:00	10/31/2011 12:14	WG118299-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13	L54462-1
WG118299-13	MS	CVNO23	SALT WTR	10/31/2011 9:00	10/31/2011 13:35	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54462-1
WG118299-14	LD	CVORTHOP	STORM WTR	10/31/2011 9:00	10/31/2011 13:00	WG118299-1,-2,-3,-4,-5,-6,-7,-10,-11,-14,-15,-16,-17	L54309-4
WG118299-15	MS	CVORTHOP	STORM WTR	10/31/2011 9:00	10/31/2011 13:02		L54309-4
WG118299-16	LD	CVNO23	STORM WTR	10/31/2011 9:00	10/31/2011 14:23	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54423-1
WG118299-16	LD	CVORTHOP	STORM WTR	10/31/2011 9:00	10/31/2011 14:23	WG118299-1,-2,-3,-4,-5,-6,-7,-10,-11,-14,-15,-16,-17	L54423-1
WG118299-17	MS	CVNO23	STORM WTR	10/31/2011 9:00	10/31/2011 14:25	WG118299-1,-2,-3,-8,-9,-10,-11,-12,-13,-6,-7,-16,-17	L54423-1

WG118299-17	MS		CVORTHOP	STORM WTR		10/31/2011 9:00	10/31/2011 14:25	WG118299-1,-2,-3,-4,-5,-6,-7,-10,-11,-14,-15,-16,-17	L54423-1

WG118317 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54197-1	422019		CVNH3-FL	FRESH WTR	10/24/2011 9:50	11/1/2011 11:00	11/1/2011 14:05	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54197-1	422019		CVNO23	FRESH WTR	10/24/2011 9:50	11/1/2011 11:00	11/1/2011 14:05	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54197-1	422019		CVORTHOP	FRESH WTR	10/24/2011 9:50	11/1/2011 11:00	11/1/2011 14:05	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	
L54197-2	422019		CVNH3-FL	FRESH WTR	10/24/2011 10:53	11/1/2011 11:00	11/1/2011 14:07	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54197-2	422019		CVNO23	FRESH WTR	10/24/2011 10:53	11/1/2011 11:00	11/1/2011 14:07	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54197-2	422019		CVORTHOP	FRESH WTR	10/24/2011 10:53	11/1/2011 11:00	11/1/2011 14:07	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	
L54197-3	422019		CVNH3-FL	FRESH WTR	10/24/2011 11:13	11/1/2011 11:00	11/1/2011 14:09	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54197-3	422019		CVNO23	FRESH WTR	10/24/2011 11:13	11/1/2011 11:00	11/1/2011 14:09	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54197-3	422019		CVORTHOP	FRESH WTR	10/24/2011 11:13	11/1/2011 11:00	11/1/2011 14:09	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	
L54197-4	422019		CVNH3-FL	FRESH WTR	10/24/2011 11:35	11/1/2011 11:00	11/1/2011 14:11	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54197-4	422019		CVNO23	FRESH WTR	10/24/2011 11:35	11/1/2011 11:00	11/1/2011 14:11	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54197-4	422019		CVORTHOP	FRESH WTR	10/24/2011 11:35	11/1/2011 11:00	11/1/2011 14:11	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	
L54197-5	422019		CVNH3-FL	FRESH WTR	10/24/2011 11:56	11/1/2011 11:00	11/1/2011 14:13	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	

L54197-5	422019	WRIA 7 Streams Ambient Monitoring	CVNO23	FRESH WTR	10/24/2011 11:56	11/1/2011 11:00	11/1/2011 14:13	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-5	422019		CVORTHOP	FRESH WTR	10/24/2011 11:56	11/1/2011 11:00	11/1/2011 14:13	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-6	422019		CVNH3-FL	FRESH WTR	10/24/2011 12:20	11/1/2011 11:00	11/1/2011 14:15	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-6	422019		CVNO23	FRESH WTR	10/24/2011 12:20	11/1/2011 11:00	11/1/2011 14:15	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-6	422019		CVORTHOP	FRESH WTR	10/24/2011 12:20	11/1/2011 11:00	11/1/2011 14:15	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-7	422019		CVNH3-FL	FRESH WTR	10/24/2011 12:44	11/1/2011 11:00	11/1/2011 14:32	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-7	422019		CVNO23	FRESH WTR	10/24/2011 12:44	11/1/2011 11:00	11/1/2011 14:32	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-7	422019		CVORTHOP	FRESH WTR	10/24/2011 12:44	11/1/2011 11:00	11/1/2011 14:32	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-8	422019		CVNH3-FL	FRESH WTR	10/24/2011 13:25	11/1/2011 11:00	11/1/2011 14:34	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-8	422019		CVNO23	FRESH WTR	10/24/2011 13:25	11/1/2011 11:00	11/1/2011 14:34	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-8	422019		CVORTHOP	FRESH WTR	10/24/2011 13:25	11/1/2011 11:00	11/1/2011 14:34	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-9	422019		CVNH3-FL	FRESH WTR	10/24/2011 13:44	11/1/2011 11:00	11/1/2011 14:36	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-9	422019		CVNO23	FRESH WTR	10/24/2011 13:44	11/1/2011 11:00	11/1/2011 14:36	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-9	422019		CVORTHOP	FRESH WTR	10/24/2011 13:44	11/1/2011 11:00	11/1/2011 14:36	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-10	422019		CVNH3-FL	FRESH WTR	10/24/2011 14:16	11/1/2011 11:00	11/1/2011 14:38	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8

L54197-10	422019		CVNO23	FRESH WTR	10/24/2011 14:16	11/1/2011 11:00	11/1/2011 14:38	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-10	422019		CVORTHOP	FRESH WTR	10/24/2011 14:16	11/1/2011 11:00	11/1/2011 14:38	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-11	422019		CVNH3-FL	FRESH WTR	10/24/2011 14:34	11/1/2011 11:00	11/1/2011 14:40	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-11	422019		CVNO23	FRESH WTR	10/24/2011 14:34	11/1/2011 11:00	11/1/2011 14:40	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-11	422019		CVORTHOP	FRESH WTR	10/24/2011 14:34	11/1/2011 11:00	11/1/2011 14:40	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-12	422019		CVNH3-FL	FRESH WTR	10/24/2011 14:48	11/1/2011 11:00	11/1/2011 14:43	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-12	422019		CVNO23	FRESH WTR	10/24/2011 14:48	11/1/2011 11:00	11/1/2011 14:43	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-12	422019		CVORTHOP	FRESH WTR	10/24/2011 14:48	11/1/2011 11:00	11/1/2011 14:43	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54197-13	422019		CVNH3-FL	BLANK WTR	10/24/2011 9:45	11/1/2011 11:00	11/1/2011 14:47	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54197-13	422019		CVNO23	BLANK WTR	10/24/2011 9:45	11/1/2011 11:00	11/1/2011 14:47	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54197-13	422019		CVORTHOP	BLANK WTR	10/24/2011 9:45	11/1/2011 11:00	11/1/2011 14:47	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54422-1	421879-210	NPDES SW Fall City	CVNO23	STORM WTR	10/28/2011 14:13	11/1/2011 11:00	11/1/2011 14:59	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54422-1	421879-210		CVORTHOP	STORM WTR	10/28/2011 14:13	11/1/2011 11:00	11/1/2011 14:59	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9
L54422-5	421879-210		CVNO23	BLANK WTR	10/29/2011 13:20	11/1/2011 11:00	11/1/2011 14:57	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54422-5	421879-210		CVORTHOP	BLANK WTR	10/29/2011 13:20	11/1/2011 11:00	11/1/2011 14:57	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9

L54511-1	421303B	MARCKWORTH FOREST	CVNH3-FL	FRESH WTR	10/26/2011 10:45	10/26/2011 14:50	11/1/2011 13:32	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54511-1	421303B		CVNO23	FRESH WTR	10/26/2011 10:45	10/26/2011 14:50	11/1/2011 13:32	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54511-2	421303B		CVNH3-FL	FRESH WTR	10/26/2011 11:40	10/26/2011 14:50	11/1/2011 13:34	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54511-2	421303B		CVNO23	FRESH WTR	10/26/2011 11:40	10/26/2011 14:50	11/1/2011 13:34	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54511-3	421303B		CVNH3-FL	FRESH WTR	10/26/2011 12:20	10/26/2011 14:50	11/1/2011 13:36	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54511-3	421303B		CVNO23	FRESH WTR	10/26/2011 12:20	10/26/2011 14:50	11/1/2011 13:36	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54511-4	421303B		CVNH3-FL	FRESH WTR	10/26/2011 12:55	10/26/2011 14:50	11/1/2011 13:38	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54511-4	421303B		CVNO23	FRESH WTR	10/26/2011 12:55	10/26/2011 14:50	11/1/2011 13:38	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54511-5	421303B		CVNH3-FL	FRESH WTR	10/26/2011 10:50	10/26/2011 14:50	11/1/2011 13:46	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54511-5	421303B		CVNO23	FRESH WTR	10/26/2011 10:50	10/26/2011 14:50	11/1/2011 13:46	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-1	421304		CVNH3-FL	FRESH WTR	10/25/2011 9:01	10/26/2011 9:00	11/1/2011 12:35	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-1	421304		CVNO23	FRESH WTR	10/25/2011 9:01	10/26/2011 9:00	11/1/2011 12:35	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-2	421304		CVNH3-FL	FRESH WTR	10/25/2011 9:21	10/26/2011 9:00	11/1/2011 12:38	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-2	421304		CVNO23	FRESH WTR	10/25/2011 9:21	10/26/2011 9:00	11/1/2011 12:38	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-3	421304		CVNH3-FL	FRESH WTR	10/25/2011 13:01	10/26/2011 9:00	11/1/2011 12:40	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8

L54512-3	421304		CVNO23	FRESH WTR	10/25/2011 13:01	10/26/2011 9:00	11/1/2011 12:40	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-4	421304		CVNH3-FL	FRESH WTR	10/25/2011 9:45	10/26/2011 9:00	11/1/2011 12:42	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-4	421304		CVNO23	FRESH WTR	10/25/2011 9:45	10/26/2011 9:00	11/1/2011 12:42	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-5	421304		CVNH3-FL	FRESH WTR	10/25/2011 10:53	10/26/2011 9:00	11/1/2011 12:44	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-5	421304		CVNO23	FRESH WTR	10/25/2011 10:53	10/26/2011 9:00	11/1/2011 12:44	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-6	421304		CVNH3-FL	FRESH WTR	10/25/2011 10:18	10/26/2011 9:00	11/1/2011 13:00	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-6	421304		CVNO23	FRESH WTR	10/25/2011 10:18	10/26/2011 9:00	11/1/2011 13:00	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-7	421304		CVNH3-FL	FRESH WTR	10/25/2011 11:16	10/26/2011 9:00	11/1/2011 13:03	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-7	421304		CVNO23	FRESH WTR	10/25/2011 11:16	10/26/2011 9:00	11/1/2011 13:03	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-8	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	FRESH WTR	10/25/2011 11:41	10/26/2011 9:00	11/1/2011 13:05	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-8	421304		CVNO23	FRESH WTR	10/25/2011 11:41	10/26/2011 9:00	11/1/2011 13:05	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-9	421304		CVNH3-FL	FRESH WTR	10/25/2011 11:48	10/26/2011 9:00	11/1/2011 13:07	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-9	421304		CVNO23	FRESH WTR	10/25/2011 11:48	10/26/2011 9:00	11/1/2011 13:07	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14
L54512-10	421304		CVNH3-FL	FRESH WTR	10/25/2011 12:11	10/26/2011 9:00	11/1/2011 13:09	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8
L54512-10	421304		CVNO23	FRESH WTR	10/25/2011 12:11	10/26/2011 9:00	11/1/2011 13:09	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14

L54512-11	421304		CVNH3-FL	FRESH WTR	10/25/2011 13:17	10/26/2011 9:00	11/1/2011 13:11	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54512-11	421304		CVNO23	FRESH WTR	10/25/2011 13:17	10/26/2011 9:00	11/1/2011 13:11	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54512-12	421304		CVNH3-FL	FRESH WTR	10/25/2011 13:35	10/26/2011 9:00	11/1/2011 13:13	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54512-12	421304		CVNO23	FRESH WTR	10/25/2011 13:35	10/26/2011 9:00	11/1/2011 13:13	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54512-13	421304		CVNH3-FL	FRESH WTR	10/25/2011 13:58	10/26/2011 9:00	11/1/2011 13:15	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54512-13	421304		CVNO23	FRESH WTR	10/25/2011 13:58	10/26/2011 9:00	11/1/2011 13:15	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
L54512-14	421304		CVNH3-FL	FRESH WTR	10/25/2011 11:49	10/26/2011 9:00	11/1/2011 13:17	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	
L54512-14	421304		CVNO23	FRESH WTR	10/25/2011 11:49	10/26/2011 9:00	11/1/2011 13:17	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	
WG118317-1	MB		CVNH3-FL	BLANK WTR		10/26/2011 9:00	11/1/2011 12:19	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	CONNUTS3
WG118317-1	MB		CVNO23	BLANK WTR		10/26/2011 9:00	11/1/2011 12:19	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	CONNUTS3
WG118317-1	MB		CVORTHOP	BLANK WTR		10/26/2011 9:00	11/1/2011 12:19	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	CONNUTS3
WG118317-2	SB		CVNH3-FL	BLANK WTR		10/26/2011 9:00	11/1/2011 12:21	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	WG118317-1
WG118317-2	SB		CVNO23	BLANK WTR		10/26/2011 9:00	11/1/2011 12:21	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	WG118317-1
WG118317-2	SB		CVORTHOP	BLANK WTR		10/26/2011 9:00	11/1/2011 12:21	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	WG118317-1
WG118317-3	LCS		CVNH3-FL	BLANK WTR		11/1/2011 12:31	11/1/2011 12:31	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	LEVEL1

WG118317-3	LCS	CVNO23	BLANK WTR	11/1/2011 12:31	11/1/2011 12:31	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	LEVEL1
WG118317-3	LCS	CVORTHOP	BLANK WTR	11/1/2011 12:31	11/1/2011 12:31	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	LEVEL1
WG118317-4	LD	CVNH3-FL	FRESH WTR	10/26/2011 9:00	11/1/2011 12:46	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54512-5
WG118317-4	LD	CVNO23	FRESH WTR	10/26/2011 9:00	11/1/2011 12:46	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54512-5
WG118317-5	MS	CVNH3-FL	FRESH WTR	10/26/2011 9:00	11/1/2011 12:48	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54512-5
WG118317-5	MS	CVNO23	FRESH WTR	10/26/2011 9:00	11/1/2011 12:48	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54512-5
WG118317-6	MB	CVNH3-FL	BLANK WTR	10/26/2011 14:50	11/1/2011 13:30	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	CONNUTS3
WG118317-6	MB	CVNO23	BLANK WTR	10/26/2011 14:50	11/1/2011 13:30	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	CONNUTS3
WG118317-7	LD	CVNH3-FL	FRESH WTR	10/26/2011 14:50	11/1/2011 13:40	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54511-4
WG118317-7	LD	CVNO23	FRESH WTR	10/26/2011 14:50	11/1/2011 13:40	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54511-4
WG118317-8	MS	CVNH3-FL	FRESH WTR	10/26/2011 14:50	11/1/2011 13:42	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54511-4
WG118317-8	MS	CVNO23	FRESH WTR	10/26/2011 14:50	11/1/2011 13:42	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54511-4
WG118317-9	MB	CVNH3-FL	BLANK WTR	11/1/2011 11:00	11/1/2011 13:59	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	CONNUTS3
WG118317-9	MB	CVNO23	BLANK WTR	11/1/2011 11:00	11/1/2011 13:59	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	CONNUTS3
WG118317-9	MB	CVORTHOP	BLANK WTR	11/1/2011 11:00	11/1/2011 13:59	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	CONNUTS3

WG118317-10	LCS	CVNH3-FL	BLANK WTR	11/1/2011 14:01	11/1/2011 14:01	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	LEVEL1
WG118317-10	LCS	CVNO23	BLANK WTR	11/1/2011 14:01	11/1/2011 14:01	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	LEVEL1
WG118317-10	LCS	CVORTHOP	BLANK WTR	11/1/2011 14:01	11/1/2011 14:01	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	LEVEL1
WG118317-11	LD	CVNH3-FL	FRESH WTR	11/1/2011 11:00	11/1/2011 14:18	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54197-6
WG118317-11	LD	CVNO23	FRESH WTR	11/1/2011 11:00	11/1/2011 14:18	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54197-6
WG118317-11	LD	CVORTHOP	FRESH WTR	11/1/2011 11:00	11/1/2011 14:18	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	L54197-6
WG118317-12	MS	CVNH3-FL	FRESH WTR	11/1/2011 11:00	11/1/2011 14:28	WG118317-9,-10,-11,-12,-1,-2,-3,-4,-5,-6,-7,-8	L54197-6
WG118317-12	MS	CVNO23	FRESH WTR	11/1/2011 11:00	11/1/2011 14:28	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54197-6
WG118317-12	MS	CVORTHOP	FRESH WTR	11/1/2011 11:00	11/1/2011 14:28	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	L54197-6
WG118317-13	LD	CVNO23	STORM WTR	11/1/2011 11:00	11/1/2011 15:01	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54422-1
WG118317-13	LD	CVORTHOP	STORM WTR	11/1/2011 11:00	11/1/2011 15:01	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	L54422-1
WG118317-14	MS	CVNO23	STORM WTR	11/1/2011 11:00	11/1/2011 15:03	WG118317-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14	L54422-1
WG118317-14	MS	CVORTHOP	STORM WTR	11/1/2011 11:00	11/1/2011 15:03	WG118317-10,-11,-12,-13,-14,-1,-2,-3,-9	L54422-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118379 TKN

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTKN	FRESH WTR	10/25/2011 8:00	11/1/2011 9:15	11/3/2011 11:12		
L53806-3	421422-CHSW-Q		CVTKN	FRESH WTR	10/25/2011 8:10	11/1/2011 9:15	11/3/2011 11:14		
L53806-5	421422-CHSW-Q		CVTKN	FRESH WTR	10/25/2011 8:50	11/1/2011 9:15	11/3/2011 11:16		
L53806-6	421422-CHSW-Q		CVTKN	FRESH WTR	10/25/2011 9:30	11/1/2011 9:15	11/3/2011 11:33		
L53806-8	421422-CHSW-Q		CVTKN	FRESH WTR	10/27/2011 5:10	11/1/2011 9:15	11/3/2011 11:35		
L53806-9	421422-CHSW-Q		CVTKN	FRESH WTR	10/26/2011 7:05	11/1/2011 9:15	11/3/2011 11:37		
L53806-10	421422-CHSW-Q		CVTKN	FRESH WTR	10/27/2011 6:30	11/1/2011 9:15	11/3/2011 11:39		
L53806-11	421422-CHSW-Q		CVTKN	FRESH WTR	10/26/2011 10:15	11/1/2011 9:15	11/3/2011 11:41		
L54422-1	421879-210	NPDES SW Fall City	CVTKN	STORM WTR	10/28/2011 14:13	11/1/2011 9:15	11/3/2011 11:43	WG118379-1,-2,-3,-4,-5,-6,-7,-8	
L54423-1	421879-210		CVTKN	STORM WTR	10/28/2011 13:28	11/1/2011 9:15	11/3/2011 11:50		
WG118379-1	MB		CVTKN	BLANK WTR		11/1/2011 9:15	11/3/2011 11:04		MB1
WG118379-2	SB		CVTKN	BLANK WTR		11/1/2011 9:15	11/3/2011 11:06		WG118379-1
WG118379-3	LCS		CVTKN	BLANK WTR		11/1/2011 9:15	11/3/2011 11:08		LEVEL1
WG118379-4	LCS		CVTKN	BLANK WTR		11/1/2011 9:15	11/3/2011 11:10		LEVEL2
WG118379-5	LD		CVTKN	FRESH WTR		11/1/2011 9:15	11/3/2011 11:18		L53806-5
WG118379-6	MS		CVTKN	FRESH WTR		11/1/2011 9:15	11/3/2011 11:20		L53806-5
WG118379-7	LD		CVTKN	STORM WTR		11/1/2011 9:15	11/3/2011 11:45		L54422-1
WG118379-8	MS		CVTKN	STORM WTR		11/1/2011 9:15	11/3/2011 11:48		L54422-1

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NPDES SW Permit, SWM, L54422, L54423

WG118387 Total Phosphorus

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-1	421879-220	NPDES SW Sammamish	CVTOTP	STORM WTR	11/2/2011 19:07	11/4/2011 8:15	11/8/2011 12:16		
L54308-2	421879-220		CVTOTP	STORM WTR	11/2/2011 19:06	11/4/2011 8:15	11/8/2011 12:18		
L54422-1	421879-210	NPDES SW Fall City	CVTOTP	STORM WTR	10/28/2011 14:13	11/4/2011 8:15	11/8/2011 12:51		
L54423-1	421879-210		CVTOTP	STORM WTR	10/28/2011 13:28	11/4/2011 8:15	11/8/2011 11:58		
L54516-1	421879-220	NPDES SW Sammamish	CVTOTP	STORM WTR	11/2/2011 2:07	11/4/2011 8:15	11/8/2011 12:58		
L54516-2	421879-220		CVTOTP	STORM WTR	11/2/2011 19:56	11/4/2011 8:15	11/8/2011 12:22		
L54516-3	421879-220		CVTOTP	STORM WTR	11/2/2011 19:30	11/4/2011 8:15	11/8/2011 12:25		
L54548-1	421879-210	NPDES SW Fall City	CVTOTP	STORM WTR	11/2/2011 19:44	11/4/2011 8:15	11/8/2011 12:55		
L54549-1	421879-210		CVTOTP	STORM WTR	11/2/2011 18:15	11/4/2011 8:15	11/8/2011 12:01		
L54594-1	423575-850-4	Brightwater Conveyance System Construction NPDES Monitoring	CVTOTP	STORM WTR	11/2/2011 14:03	11/4/2011 8:15	11/8/2011 12:42		
								WG118387-1,-2,-3,-4,-5,-6,-7,-8,-9	
WG118387-1	MB		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:50		MB 11/4/11
WG118387-2	SB		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:52		WG118387-1
WG118387-3	LCS		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:54		LEVEL1
WG118387-4	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:03		L54549-1
WG118387-5	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:07		L54549-1
WG118387-6	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:27		L54516-3
WG118387-7	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:31		L54516-3
WG118387-8	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:44		L54594-1
WG118387-9	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:47		L54594-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118384 TSS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54326-1	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/2/2011 0:00	11/3/2011 12:00	11/4/2011 12:11	WG118384-1,-2,-3,-4,-5,-6,-7	
L54326-11	422027		CVTSS	STORM WTR	11/2/2011 0:00	11/3/2011 12:00	11/4/2011 12:12		
L54422-1	421879-210	NPDES SW Fall City	CVTSS	STORM WTR	10/28/2011 14:13	11/3/2011 12:00	11/4/2011 12:06		
L54423-1	421879-210		CVTSS	STORM WTR	10/28/2011 13:28	11/3/2011 12:00	11/4/2011 12:07		
L54430-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	10/31/2011 9:20	11/3/2011 12:00	11/4/2011 12:04		
L54430-2	421422-CHSW-P2		CVTSS	FRESH WTR	10/31/2011 8:00	11/3/2011 12:00	11/4/2011 12:04		
L54430-3	421422-CHSW-P2		CVTSS	FRESH WTR	10/31/2011 9:05	11/3/2011 12:00	11/4/2011 12:05		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/1/2011 0:00	11/3/2011 12:00	11/4/2011 12:08		
L54547-2	421422-VAGW		CVTSS	GRND WTR	11/3/2011 7:40	11/3/2011 12:00	11/4/2011 12:09		
L54591-1	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	11/1/2011 0:00	11/3/2011 12:00	11/4/2011 12:10		
WG118384-1	MB		CVTSS	BLANK WTR		11/3/2011 12:00	11/4/2011 12:02		MB1 111103
WG118384-2	LCS		CVTSS	BLANK WTR		11/3/2011 12:00	11/4/2011 12:03		LEVEL1
WG118384-3	LD		CVTSS	FRESH WTR		11/3/2011 12:00	11/4/2011 12:05		L54430-3
WG118384-4	LD		CVTSS	STORM WTR		11/3/2011 12:00	11/4/2011 12:06		L54422-1
WG118384-5	LD		CVTSS	GRND WTR		11/3/2011 12:00	11/4/2011 12:08		L54541-1
WG118384-6	LD		CVTSS	SEWER WTR		11/3/2011 12:00	11/4/2011 12:10		L54591-1
WG118384-7	LD		CVTSS	STORM WTR		11/3/2011 12:00	11/4/2011 12:12		L54326-11

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118298 Turbidity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54423-1	421879-210	NPDES SW Fall City	CVTURB	STORM WTR	10/28/2011 13:28	10/31/2011 14:29	10/31/2011 14:29	WG118298-1,-2,-3,-4	
L54430-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTURB	FRESH WTR	10/31/2011 9:20	10/31/2011 14:19	10/31/2011 14:19		
L54430-2	421422-CHSW-P2		CVTURB	FRESH WTR	10/31/2011 8:00	10/31/2011 14:21	10/31/2011 14:21		
L54430-3	421422-CHSW-P2		CVTURB	FRESH WTR	10/31/2011 9:05	10/31/2011 14:26	10/31/2011 14:26		
WG118298-1	LCS		CVTURB	BLANK WTR		10/31/2011 14:18	10/31/2011 14:18		LEVEL1
WG118298-2	LD		CVTURB	FRESH WTR		10/31/2011 14:23	10/31/2011 14:23		L54430-2
WG118298-3	LD		CVTURB	STORM WTR		10/31/2011 14:30	10/31/2011 14:30		L54423-1
WG118298-4	LCS		CVTURB	BLANK WTR		10/31/2011 14:31	10/31/2011 14:31		LEVEL2

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NPDES SW Permit, SWM, L54422, L54423

WG118414 Turbidity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-1	421879-210	NPDES SW Fall City	CVTURB	STORM WTR	10/28/2011 14:13	10/30/2011 18:50	10/30/2011 18:50		
WG118414-1	LCS		CVTURB	BLANK WTR		10/30/2011 18:46	10/30/2011 18:46	WG118414-2,-1	LEVEL1
WG118414-2	LCS		CVTURB	BLANK WTR		10/30/2011 18:51	10/30/2011 18:51		LEVEL2

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118265 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-3	421879-210	NPDES SW Fall City	MCFC-MF	STORM WTR	10/29/2011 11:55	10/29/2011 14:00	10/30/2011 14:20		
WG118265-2	PC		MCFC-MF	BLANK WTR		10/29/2011 14:00	10/30/2011 14:20		QC-PERFORMED:29-OCT-11
WG118265-3	NC		MCFC-MF	BLANK WTR		10/29/2011 14:00	10/30/2011 14:20	WG118265-2,-3,-4,-5	QC-PERFORMED:29-OCT-11
WG118265-4	BF		MCFC-MF	BLANK WTR		10/29/2011 14:00	10/30/2011 14:20		QC-PERFORMED:29-OCT-11
WG118265-5	AF		MCFC-MF	BLANK WTR		10/29/2011 14:00	10/30/2011 14:20		QC-PERFORMED:29-OCT-11

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NPDES SW Permit, SWM, L54422, L54423

WG118306 Total Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	10/25/2011 8:00	11/3/2011 7:00	11/8/2011 6:44	WG118306-1,-2,-3,-4	
L53806-2	421422-CHSW-Q		MTICPMS	FRESH WTR	10/25/2011 8:00	11/3/2011 7:00	11/7/2011 10:38		
L53806-3	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/25/2011 8:10	11/3/2011 7:00	11/8/2011 6:44		
L53806-3	421422-CHSW-Q		MTICPMS	FRESH WTR	10/25/2011 8:10	11/3/2011 7:00	11/7/2011 10:57		
L53806-5	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/25/2011 8:50	11/3/2011 7:00	11/8/2011 6:44		
L53806-5	421422-CHSW-Q		MTICPMS	FRESH WTR	10/25/2011 8:50	11/3/2011 7:00	11/7/2011 11:03		
L53806-6	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/25/2011 9:30	11/3/2011 7:00	11/8/2011 6:44		
L53806-6	421422-CHSW-Q		MTICPMS	FRESH WTR	10/25/2011 9:30	11/3/2011 7:00	11/7/2011 11:09		
L53806-8	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/27/2011 5:10	11/3/2011 7:00	11/8/2011 6:44		
L53806-8	421422-CHSW-Q		MTICPMS	FRESH WTR	10/27/2011 5:10	11/3/2011 7:00	11/7/2011 11:15		
L53806-9	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/26/2011 7:05	11/3/2011 7:00	11/8/2011 6:44		
L53806-9	421422-CHSW-Q		MTICPMS	FRESH WTR	10/26/2011 7:05	11/3/2011 7:00	11/7/2011 11:22		
L53806-10	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/27/2011 6:30	11/3/2011 7:00	11/8/2011 6:44		
L53806-10	421422-CHSW-Q		MTICPMS	FRESH WTR	10/27/2011 6:30	11/3/2011 7:00	11/7/2011 11:41		
L53806-11	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	10/26/2011 10:15	11/3/2011 7:00	11/8/2011 6:44		
L53806-11	421422-CHSW-Q		MTICPMS	FRESH WTR	10/26/2011 10:15	11/3/2011 7:00	11/7/2011 11:47		
L54309-1	421879-220	NPDES SW Sammamish	MTHARD-ICPMS	STORM WTR	10/21/2011 0:37	11/3/2011 7:00	11/8/2011 6:44		
L54309-1	421879-220		MTICPMS	STORM WTR	10/21/2011 0:37	11/3/2011 7:00	11/7/2011 11:53		
L54309-4	421879-220		MTHARD-ICPMS	STORM WTR	10/21/2011 8:44	11/3/2011 7:00	11/8/2011 6:44		
L54309-4	421879-220		MTICPMS	STORM WTR	10/21/2011 8:44	11/3/2011 7:00	11/7/2011 12:00		
L54422-1	421879-210	NPDES SW Fall City	MTHARD-ICPMS	STORM WTR	10/28/2011 14:13	11/3/2011 7:00	11/8/2011 6:44		
L54422-1	421879-210		MTICPMS	STORM WTR	10/28/2011 14:13	11/3/2011 7:00	11/7/2011 12:06		
L54423-1	421879-210		MTHARD-ICPMS	STORM WTR	10/28/2011 13:28	11/3/2011 7:00	11/8/2011 6:44		
L54423-1	421879-210		MTICPMS	STORM WTR	10/28/2011 13:28	11/3/2011 7:00	11/7/2011 12:12		
L54430-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	MTICPMS	FRESH WTR	10/31/2011 9:20	11/3/2011 7:00	11/7/2011 12:19		
L54430-2	421422-CHSW-P2		MTICPMS	FRESH WTR	10/31/2011 8:00	11/3/2011 7:00	11/7/2011 12:25		
L54430-3	421422-CHSW-P2		MTICPMS	FRESH WTR	10/31/2011 9:05	11/3/2011 7:00	11/7/2011 12:31		
L54470-1	423258-400	Reclaimed Water Soil Cove-GW Study 2011	MTHARD-ICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/8/2011 6:44		
L54470-1	423258-400		MTICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/7/2011 12:37		
L54470-2	423258-400		MTHARD-ICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/8/2011 6:44		
L54470-2	423258-400		MTICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/7/2011 12:56		
L54470-3	423258-400		MTHARD-ICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/8/2011 6:44		
L54470-3	423258-400		MTICPMS	OTHR WTR	10/11/2011 11:00	11/3/2011 7:00	11/7/2011 13:03		
WG118306-1	MB		MTHARD-ICPMS	BLANK WTR		11/3/2011 7:00	11/8/2011 6:44		METHOD BLANK
WG118306-1	MB		MTICPMS	BLANK WTR		11/3/2011 7:00	11/7/2011 10:25		METHOD BLANK
WG118306-2	SB		MTHARD-ICPMS	BLANK WTR		11/3/2011 7:00	11/8/2011 6:44		WG118306-1 MS-20
WG118306-2	SB		MTICPMS	BLANK WTR		11/3/2011 7:00	11/7/2011 10:31		WG118306-1 MS-20
WG118306-3	LD		MTHARD-ICPMS	FRESH WTR		11/3/2011 7:00	11/8/2011 6:44		L53806-2 RPD-LIQ
WG118306-3	LD		MTICPMS	FRESH WTR		11/3/2011 7:00	11/7/2011 10:44		L53806-2 RPD-LIQ
WG118306-4	MS		MTHARD-ICPMS	FRESH WTR		11/3/2011 7:00	11/8/2011 6:44		L53806-2 MS-20
WG118306-4	MS		MTICPMS	FRESH WTR		11/3/2011 7:00	11/7/2011 10:50		L53806-2 MS-20

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118335 Total and Dissolved Mercury

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-8	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	MTHG-MID	FRESH WTR	10/27/2011 5:10	11/2/2011 9:45	11/3/2011 9:36	WG118335-1,-2	
L53806-9	421422-CHSW-Q		MTHG-MID	FRESH WTR	10/26/2011 7:05	11/2/2011 9:45	11/3/2011 9:38		
L53806-10	421422-CHSW-Q		MTHG-MID	FRESH WTR	10/27/2011 6:30	11/2/2011 9:45	11/3/2011 9:40		
L53806-11	421422-CHSW-Q		MTHG-MID	FRESH WTR	10/26/2011 10:15	11/2/2011 9:45	11/3/2011 9:42		
L54395-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	10/28/2011 9:30	11/2/2011 9:45	11/3/2011 9:49	WG118335-1,-3,-4	
L54398-2	421422-CHGW		MTHG-MID-DISS	GRND WTR	10/26/2011 6:45	11/2/2011 9:45	11/3/2011 9:51		
L54398-5	421422-CHGW		MTHG-MID-DISS	GRND WTR	10/26/2011 8:10	11/2/2011 9:45	11/3/2011 9:52		
L54400-1	421422-CHGW		MTHG-MID-DISS	GRND WTR	10/28/2011 8:30	11/2/2011 9:45	11/3/2011 9:54		
L54400-5	421422-CHGW		MTHG-MID-DISS	GRND WTR	10/26/2011 9:05	11/2/2011 9:45	11/3/2011 9:31		
L54422-1	421879-210	NPDES SW Fall City	MTHG-MID	STORM WTR	10/28/2011 14:13	11/2/2011 9:45	11/3/2011 9:43	WG118335-1,-2	
L54422-1	421879-210		MTHG-MID-DISS	STORM WTR	10/28/2011 14:13	11/2/2011 9:45	11/3/2011 9:56	WG118335-1,-3,-4	
L54429-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	10/28/2011 8:10	11/2/2011 9:45	11/3/2011 9:58		
L54429-6	421422-CHGW		MTHG-MID-DISS	GRND WTR	10/28/2011 8:30	11/2/2011 9:45	11/3/2011 10:00		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/1/2011 0:00	11/2/2011 9:45	11/3/2011 10:01		
WG118335-1	MB		MTHG-MID	BLANK WTR		11/2/2011 9:45	11/3/2011 9:27	WG118335-1,-2	METHOD BLANK
WG118335-1	MB		MTHG-MID-DISS	BLANK WTR		11/2/2011 9:45	11/3/2011 9:27	WG118335-1,-3,-4	METHOD BLANK
WG118335-2	SB		MTHG-MID	BLANK WTR		11/2/2011 9:45	11/3/2011 9:29	WG118335-1,-2	WG118335-1 HG-LMID
WG118335-3	MS		MTHG-MID-DISS	GRND WTR		11/2/2011 9:45	11/3/2011 9:32	WG118335-1,-3,-4	L54400-5 HG-LMID
WG118335-4	MSD		MTHG-MID-DISS	GRND WTR		11/2/2011 9:45	11/3/2011 9:34		WG118335-3 L54400-5 HG-LMID-MSD

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118389 Dissolved Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	MTICPMS-DISS	FRESH WTR	10/25/2011 8:00	11/4/2011 9:00	11/4/2011 10:41		
L53806-3	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 8:10	11/4/2011 9:00	11/4/2011 10:47		
L53806-5	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 8:50	11/4/2011 9:00	11/4/2011 10:53		
L53806-6	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 9:30	11/4/2011 9:00	11/4/2011 11:00		
L54308-1	421879-220	NPDES SW Sammamish	MTICPMS-DISS	STORM WTR	11/2/2011 19:07	11/4/2011 9:00	11/4/2011 11:18		
L54308-2	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:06	11/4/2011 9:00	11/4/2011 11:24		
L54398-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	MTICPMS-DISS	GRND WTR	10/26/2011 8:10	11/4/2011 9:00	11/4/2011 11:43		
L54422-1	421879-210	NPDES SW Fall City	MTICPMS-DISS	STORM WTR	10/28/2011 14:13	11/4/2011 9:00	11/4/2011 11:49		
L54423-1	421879-210		MTICPMS-DISS	STORM WTR	10/28/2011 13:28	11/4/2011 9:00	11/4/2011 11:55		
L54516-1	421879-220	NPDES SW Sammamish	MTICPMS-DISS	STORM WTR	11/2/2011 2:07	11/4/2011 9:00	11/4/2011 12:01	WG118389-1,-2,-3,-4	
L54516-2	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:56	11/4/2011 9:00	11/4/2011 12:08		
L54516-3	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:30	11/4/2011 9:00	11/4/2011 12:14		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTICPMS-DISS	GRND WTR	11/1/2011 0:00	11/4/2011 9:00	11/4/2011 12:20		
L54547-2	421422-VAGW		MTICPMS-DISS	GRND WTR	11/3/2011 7:40	11/4/2011 9:00	11/4/2011 12:27		
L54548-1	421879-210	NPDES SW Fall City	MTICPMS-DISS	STORM WTR	11/2/2011 19:44	11/4/2011 9:00	11/4/2011 12:33		
L54549-1	421879-210		MTICPMS-DISS	STORM WTR	11/2/2011 18:15	11/4/2011 9:00	11/4/2011 12:39		
WG118389-1	MB		MTICPMS-DISS	BLANK WTR		11/4/2011 9:00	11/4/2011 10:29		METHOD BLANK
WG118389-2	SB		MTICPMS-DISS	BLANK WTR		11/4/2011 9:00	11/4/2011 10:35		
									WG118389-1 MS-20
WG118389-3	LD		MTICPMS-DISS	FRESH WTR		11/4/2011 9:00	11/4/2011 11:06		L53806-6 RPD-LIQ
WG118389-4	MS		MTICPMS-DISS	FRESH WTR		11/4/2011 9:00	11/4/2011 11:12		L53806-6 MS-20

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118315 Herbicides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-1	421879-210	NPDES SW Fall City	ORHERB-NPDES	STORM WTR	10/28/2011 14:13	11/1/2011 9:00	11/28/2011 11:47	WG118315-5,-1,-2,-3,-4	
L54423-1	421879-210		ORHERB-NPDES	STORM WTR	10/28/2011 13:28	11/1/2011 9:00	11/28/2011 11:18		
WG118315-1	MB		ORHERB-NPDES	BLANK WTR		11/1/2011 9:00	11/28/2011 9:51		MB111101
WG118315-2	SB		ORHERB-NPDES	BLANK WTR		11/1/2011 9:00	11/28/2011 10:20		WG118315-1
WG118315-3	SBD		ORHERB-NPDES	BLANK WTR		11/1/2011 9:00	11/28/2011 10:49		WG118315-2
WG118315-4	MS		ORHERB-NPDES	STORM WTR		11/1/2011 9:00	11/28/2011 12:16		WG118315-1 L54422-1
WG118315-5	MSD		ORHERB-NPDES	STORM WTR		11/1/2011 9:00	11/28/2011 12:45		WG118315-4 L54422-1

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NPDES SW Permit, SWM, L54422, L54423

WG118322 Organophosphorus Pesticides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-1	421879-210	NPDES SW Fall City	OROPPEST-NPDES	STORM WTR	10/28/2011 14:13	11/2/2011 8:15	11/10/2011 16:40		
L54423-1	421879-210		OROPPEST-NPDES	STORM WTR	10/28/2011 13:28	11/2/2011 8:15	11/9/2011 12:01		
WG118322-1	MB		OROPPEST-NPDES	BLANK WTR		11/2/2011 8:15	11/9/2011 10:08		MB111102
WG118322-2	SB		OROPPEST-NPDES	BLANK WTR		11/2/2011 8:15	11/9/2011 10:36	WG118322-4,-1,-2,-3	WG118322-1
WG118322-3	MS		OROPPEST-NPDES	STORM WTR		11/2/2011 8:15	11/9/2011 11:05		L54423-1
WG118322-4	MSD		OROPPEST-NPDES	STORM WTR		11/2/2011 8:15	11/9/2011 11:32		WG118322-3 L54423-1

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NPDES SW Permit, SWM, L54422, L54423

WG118324 Semi Volatile Organics

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-1	421879-210	NPDES SW Fall City	ORPAHPHTH-SUR	STORM WTR	10/28/2011 14:13	11/2/2011 8:15	11/21/2011 15:32		
L54423-1	421879-210		ORPAHPHTH-SUR	STORM WTR	10/28/2011 13:28	11/2/2011 8:15	11/21/2011 12:53		
WG118324-1	MB		ORPAHPHTH-SUR	BLANK WTR		11/2/2011 8:15	11/21/2011 10:53		MB111102
WG118324-2	SB		ORPAHPHTH-SUR	BLANK WTR		11/2/2011 8:15	11/21/2011 11:33	WG118324-2,-3,-4,-1	WG118324-1
WG118324-3	MS		ORPAHPHTH-SUR	STORM WTR		11/2/2011 8:15	11/21/2011 14:12		L54422-1
WG118324-4	MSD		ORPAHPHTH-SUR	STORM WTR		11/2/2011 8:15	11/21/2011 14:52		WG118324-3 L54422-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54422, L54423

WG118329 WTPH-Dx

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-3	421879-210	NPDES SW Fall City	ORWTPH-DX	STORM WTR	10/29/2011 11:55	11/2/2011 8:15	11/7/2011 13:30		
L54572-7	421093-911		ORWTPH-DX	FRESH WTR	11/1/2011 13:30	11/2/2011 8:15	11/7/2011 13:54		
L54572-8	421093-911	WTD Offsite Facility	ORWTPH-DX	FRESH WTR	11/1/2011 13:32	11/2/2011 8:15	11/7/2011 14:17		
L54572-9	421093-911	Overflows.	ORWTPH-DX	FRESH WTR	11/2/2011 9:50	11/2/2011 8:15	11/7/2011 14:40		
L54572-10	421093-911		ORWTPH-DX	FRESH WTR	11/2/2011 9:55	11/2/2011 8:15	11/7/2011 15:03	WG118329-4,-3,-2,-1	
WG118329-1	MB		ORWTPH-DX	BLANK WTR		11/2/2011 8:15	11/7/2011 11:58		MB111102
WG118329-2	SB		ORWTPH-DX	BLANK WTR		11/2/2011 8:15	11/7/2011 12:21		WG118329-1 MO
WG118329-3	SB		ORWTPH-DX	BLANK WTR		11/2/2011 8:15	11/7/2011 12:44		WG118329-1 DSL
WG118329-4	LD		ORWTPH-DX	STORM WTR		11/2/2011 8:15	11/7/2011 13:07		L54422-3

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NPDES SW Permit, SWM, L54422, L54423

WG118338 WTPH-G

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54422-3	421879-210	NPDES SW Fall City	ORWTPH-G	STORM WTR	10/29/2011 11:55	11/2/2011 18:39	11/2/2011 18:39	WG118338-3,-2,-1	
WG118338-1	MB		ORWTPH-G	BLANK WTR		11/2/2011 16:30	11/2/2011 16:30		MB111102
WG118338-2	SB		ORWTPH-G	BLANK WTR		11/2/2011 17:02	11/2/2011 17:02		WG118338-1
WG118338-3	LD		ORWTPH-G	STORM WTR		11/2/2011 18:07	11/2/2011 18:07		L54422-3

Workgroup: WG118409 BOD

MB:WG118409-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG118409-2 MB:WG118409-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	174	88		80--120

Workgroup: WG118410 BOD

MB:WG118410-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG118410-2 MB:WG118410-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	180	91		80--120

Workgroup: WG118654 Anions

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.1	0.087	87		70--130

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	0.2	0.18	91		70--130

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Method Blank)

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

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sulfate	0.1	0.2	mg/L	<MDL	

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	<MDL	2	2.15	107		80--120

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	<MDL	5	5.29	106		80--120

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	3	3	100		85--115

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	15	14	93		85--115

LD:WG118654-5 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	0.652	1		0--20

MS:WG118654-6 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	2	2.64	99		75--125

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	3.02	2		0--20

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	9.14	1		0--20

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	2	13.6	106		75--125

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	5	14.5	104		75--125

LD:WG118654-9 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2.33	8		0--20

MS:WG118654-10 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2	11.7	92		75--125

Workgroup: WG118482 Conductivity

LCS:WG118482-1 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	76.4	103		90--110

LD:WG118482-2 L54422-1 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	34	36.2	6		0--10

LD:WG118482-3 L53806-8 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	138	138	0		0--10

LD:WG118482-4 L54395-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	265	265	0		0--10

LCS:WG118482-5 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	77.3	105		90--110

LCS:WG118482-6 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	717	100		90--110

Workgroup: WG118299 Dissolved Nutrients

MB:WG118299-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118299-1 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:WG118299-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG118299-2 MB:WG118299-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.0968	97		80--120

SB:WG118299-2 MB:WG118299-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.792	99		80--120

SB:WG118299-2 MB:WG118299-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0396	99		80--120

LCS:WG118299-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.104	104		85--115

LCS:WG118299-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.797	100		85--115

LCS:WG118299-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0397	99		85--115

LD:WG118299-4 L54463-8 Matrix: SALT WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421250BS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0232	0.0237	2		0--20

MS:WG118299-5 L54463-8 Matrix: SALT WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421250BS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0232	0.04	0.062	97		75--125

LD:WG118299-6 L54460-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BN Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0065	0.0065			0--20

LD:WG118299-6 L54460-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BN Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	1.55	1.56	0		0--20

LD:WG118299-6 L54460-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421250BN Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0508	0.0503	1		0--20

MS:WG118299-7 L54460-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BN Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0065	0.1	0.107	100		75--125

MS:WG118299-7 L54460-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BN Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.05	0.2	mg/L	1.55	0.8	5.55	100		75--125

MS:WG118299-7 L54460-4 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421250BN Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0508	0.04	0.0877	92		75--125

LD:WG118299-8 L54460-9 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BN Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.03	0.031	4		0--20

LD:WG118299-8 L54460-9 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BN Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.353	0.351	0		0--20

MS:WG118299-9 L54460-9 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BN Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.03	0.1	0.12	90		75--125

MS:WG118299-9 L54460-9 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BN Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.353	0.8	1.15	99		75--125

MB:WG118299-10 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118299-10 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:WG118299-10 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

LCS:WG118299-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.104	104		85--115

LCS:WG118299-11 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.793	99		85--115

LCS:WG118299-11 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0393	98		85--115

LD:WG118299-12 L54462-1 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0208	0.0204	2		0--20

LD:WG118299-12 L54462-1 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.341	0.341	0		0--20

MS:WG118299-13 L54462-1 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250BS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0208	0.1	0.128	107		75--125

MS:WG118299-13 L54462-1 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250BS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.341	0.8	1.15	101		75--125

LD:WG118299-14 L54309-4 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0117	0.0118	1		0--20

MS:WG118299-15 L54309-4 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0117	0.04	0.048	91		75--125

LD:WG118299-16 L54423-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.372	0.374	1		0--20

LD:WG118299-16 L54423-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0302	0.0307	1		0--20

MS:WG118299-17 L54423-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.372	0.8	1.16	99		75--125

MS:WG118299-17 L54423-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0302	0.04	0.0679	94		75--125

Workgroup: WG118317 Dissolved Nutrients

MB:WG118317-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118317-1 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:WG118317-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG118317-2 MB:WG118317-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.0976	98		80--120

SB:WG118317-2 MB:WG118317-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.785	98		80--120

SB:WG118317-2 MB:WG118317-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0393	98		80--120

LCS:WG118317-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.103	103		85--115

LCS:WG118317-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.797	100		85--115

LCS:WG118317-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0395	99		85--115

LD:WG118317-4 L54512-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421304 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0072	0.007			0--20

LD:WG118317-4 L54512-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421304 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.305	0.305	0		0--20

MS:WG118317-5 L54512-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0072	0.1	0.108	101		75--125

MS:WG118317-5 L54512-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.305	0.8	1.09	98		75--125

MB:WG118317-6 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118317-6 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:WG118317-7 L54511-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421303B Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0055	<MDL			0--20

LD:WG118317-7 L54511-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421303B Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.37	0.372	0		0--20

MS:WG118317-8 L54511-4 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421303B Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0055	0.1	0.105	100		75--125

MS:WG118317-8 L54511-4 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421303B Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.37	0.8	1.14	96		75--125

MB:WG118317-9 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118317-9 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:WG118317-9 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

LCS:WG118317-10 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.104	104		85--115

LCS:WG118317-10 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.787	98		85--115

LCS:WG118317-10 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0395	99		85--115

LD:WG118317-11 L54197-6 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	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.017	0.0173	2		0--20

LD:WG118317-11 L54197-6 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	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.276	0.276	0		0--20

LD:WG118317-11 L54197-6 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	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0045	0.0042			0--20

MS:WG118317-12 L54197-6 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.017	0.1	0.117	100		75--125

MS:WG118317-12 L54197-6 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.276	0.8	1.05	97		75--125

MS:WG118317-12 L54197-6 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0045	0.04	0.0412	92		75--125

LD:WG118317-13 L54422-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.21	0.211	1		0--20

LD:WG118317-13 L54422-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0475	0.0482	1		0--20

MS:WG118317-14 L54422-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.21	0.8	0.994	98		75--125

MS:WG118317-14 L54422-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0475	0.04	0.0861	96		75--125

Workgroup: WG118379 TKN

MB:WG118379-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	

SB:WG118379-2 MB:WG118379-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	5	4.85	97		80--120

LCS:WG118379-3 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.5	0.501	100		80--120

LCS:WG118379-4 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	5	4.97	99		80--120

LD:WG118379-5 L53806-5 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.774	0.746	4		0--20

MS:WG118379-6 L53806-5 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.774	5	5.65	97		70--130

LD:WG118379-7 L54422-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	1.83	1.96	7		0--20

MS:WG118379-8 L54422-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	1.83	5	6.9	101		70--130

Workgroup: WG118387 Total Phosphorus

MB:WG118387-1 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:WG118387-2 MB:WG118387-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.103	103		80--120

LCS:WG118387-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.103	103		85--115

LD:WG118387-4 L54549-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0868	0.0808	7		0--20

MS:WG118387-5 L54549-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0868	0.1	0.177	90		75--125

LD:WG118387-6 L54516-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0521	0.0479	9		0--20

MS:WG118387-7 L54516-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0521	0.1	0.15	98		75--125

LD:WG118387-8 L54594-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423575-850-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.0368	1		0--20

MS:WG118387-9 L54594-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423575-850-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.1	0.135	97		75--125

Workgroup: WG118384 TSS

MB:WG118384-1 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:WG118384-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	95	95		80--120

LD:WG118384-3 L54430-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	1.2	1.2			0--25

LD:WG118384-4 L54422-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	10	20	mg/L	232	226	3		0--25

LD:WG118384-5 L54541-1 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	Lab Limit
Total Suspended Solids	1.1	2.2	mg/L	1.1	<MDL			0--25

LD:WG118384-6 L54591-1 Matrix: SEWER WTR Listtype:CVTSS Method:SM2540-D Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	25	50	mg/L	250	225	11		0--25

LD:WG118384-7 L54326-11 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	2.5	5	mg/L	127	135	7		0--25

Workgroup: WG118298 Turbidity

LCS:WG118298-1 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	10	9.78	98		90--110

LD:WG118298-2 L54430-2 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421422-CHSW-P2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	25.8	25.5	1		0--25

LD:WG118298-3 L54423-1 Matrix: STORM WTR Listtype:CVTURB Method:SM2130-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	9.12	9.48	4		0--25

LCS:WG118298-4 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	100	97.2	97		90--110

Workgroup: WG118414 Turbidity

LCS:WG118414-1 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	10	9.6	96		90--110

LCS:WG118414-2 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	100	95.9	96		90--110

Workgroup: WG118265 Fecal coliform

PC:WG118265-2 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:WG118265-3 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:WG118265-4 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			CFU/100ml	0	

AF:WG118265-5 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			CFU/100ml	0	

Workgroup: WG118306 Total Metals

MB:WG118306-1 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:WG118306-1 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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118306-2 MB:WG118306-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	30.8	93		85--115

SB:WG118306-2 MB:WG118306-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	4700	94		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4690	94		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	19.4	97		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4840	97		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4580	92		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.8	94		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	19	95		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4820	96		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	94		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	20.2	101		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.6	103		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	21	105		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20	100		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.6	98		85--115
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	18.7	94		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19	95		85--115
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.5	92		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.4	97		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115

LD:WG118306-3 L53806-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	55.1	57.2	4		0--20

LD:WG118306-3 L53806-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	3460	3610	4		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	4740	4920	4		0--20
Aluminum, Total, ICP-MS	2	10	ug/L	425	437	3		0--20
Potassium, Total, ICP-MS	100	500	ug/L	2490	2570	3		0--20
Calcium, Total, ICP-MS	50	50	ug/L	14300	14800	4		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.25	1.29	3		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	1.01	1.03	2		0--20
Iron, Total, ICP-MS	10	50	ug/L	537	551	3		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	44	45.7	4		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.256	0.253	1		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	2.74	2.84	4		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	8.08	8.26	2		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	28.1	29.1	4		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.703	0.728	3		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	0.3	1.5	ug/L	<MDL	<MDL			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	0.3			0--20
Barium, Total, ICP-MS	0.05	0.25	ug/L	8.85	9.14	3		0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.19	0.19			0--20

MS:WG118306-4 L53806-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	55.1	33.1	88.5	101		75--125

MS:WG118306-4 L53806-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	104		75--125
Sodium, Total, ICP-MS	100	100	ug/L	3460	5000	8490	101		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	4740	5000	9760	100		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	425	20	439		4xRule	75--125
Potassium, Total, ICP-MS	100	500	ug/L	2490	5000	7530	101		75--125
Calcium, Total, ICP-MS	50	50	ug/L	14300	5000	19300	102		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.25	20	20.3	95		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	1.01	20	20.1	95		75--125
Iron, Total, ICP-MS	10	50	ug/L	537	5000	5490	99		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	44	20	64.4	102		75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.256	20	18.6	92		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	2.74	20	22.9	101		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	8.08	20	28.3	101		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	28.1	20	48.1	100		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.703	20	20.3	98		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.6	98		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20	100		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.5	98		75--125
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	16.9	84		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.1	96		75--125
Barium, Total, ICP-MS	0.05	0.25	ug/L	8.85	20	28	96		75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.9	99		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.19	20	19.7	98		75--125

Workgroup: WG118335 Total and Dissolved Mercury

MB:WG118335-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	

MB:WG118335-1 Matrix: BLANK WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	

SB:WG118335-2 MB:WG118335-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	1	0.96	96		85--115

MSD:WG118335-4 MS:WG118335-3 L54400-5 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-CHGW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	1	0.945	94		75--125	1	0.979	98		4		0--20

Workgroup: WG118389 Dissolved Metals

MB:WG118389-1 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-MS	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-MS	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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118389-2 MB:WG118389-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.3	92		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4450	89		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4560	91		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	19.8	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	4420	88		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.7	93		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.6	93		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4730	95		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	19	95		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	18.9	94		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	93		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.2	96		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.9	95		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92		85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	18	90		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	17.8	89		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.5	88		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.3	92		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	93		85--115

LD:WG118389-3 L53806-6 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	5980	5860	2		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	4200	4180	1		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	12.3	12.2	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1600	1640	3		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	12600	12600	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.611	0.613	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	168	171	2		0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.28	1.28	0		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.053	0.051			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.907	0.985	8		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.4	1.4			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.6	1.6			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
Tin, Dissolved, ICP-MS	0.3	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	0.05	0.25	ug/L	5.2	5.21	0		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG118389-4 L53806-6 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	93		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	5980	5000	10400	88		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	4200	5000	8700	90		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	12.3	20	30.1	89		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1600	5000	6240	93		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	12600	5000	16800	84		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.611	20	19.1	92		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.7	93		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	168	5000	4920	95		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.28	20	19.2	90		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.053	20	17.7	88		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.907	20	20.1	96		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.4	20	20.5	96		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.6	20	20.6	95		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.35	20	19.5	96		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.1	100		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.8	94		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92		75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	18	90		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.1	90		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	5.2	20	23	89		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.4	92		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.6	93		75--125

Workgroup: WG118315 Herbicides

MB:WG118315-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
MCPP	0.5	1	ug/L	<MDL	
2,4-D	0.5	1	ug/L	<MDL	
Triclopyr	0.5	1	ug/L	<MDL	

SBD:WG118315-3 SB:WG118315-2 MB:WG118315-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	BD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	1	ug/L	<MDL	5	3.23	65		21--147	5	2.54	51		24		0--40
2,4-D	0.5	1	ug/L	<MDL	5	1.2	24		10--175	5	0.52	10		80	*	0--40
Triclopyr	0.5	1	ug/L	<MDL	5	1.98	40	*	59--151	5	1.09	22	*	58	*	0--40

MSD:WG118315-5 MS:WG118315-4 L54422-1 Matrix: STORM WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	1	ug/L	<MDL	5	3.02	60		20--162	5	3.47	69		14		0--40
2,4-D	0.5	1	ug/L	<MDL	5	1.31	26		10--196	5	2.02	40		42	*	0--40
Triclopyr	0.5	1	ug/L	<MDL	5	1.93	39		30--150	5	2.45	49		24		0--40

Surrogate:	2,4-Dichlorophenylacetic acid	2,6-Dichlorophenylacetic acid
(Lab Limits)	**11--153**	**40--148**
L54422-1	62	38 *
L54423-1	72	48
WG118315-1	56	35 *
WG118315-2	67	43
WG118315-3	57	35 *
WG118315-4	70	48
WG118315-5	79	59

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Workgroup: WG118322 Organophosphorus Pesticides

MB:WG118322-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diazinon	0.043	0.05	ug/L	<MDL	
Malathion	0.048	0.05	ug/L	<MDL	
Chlorpyrifos	0.034	0.05	ug/L	<MDL	
Dichlobenil	0.05	0.1	ug/L	<MDL	
Prometon	0.05	0.1	ug/L	<MDL	

SB:WG118322-2 MB:WG118322-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diazinon	0.043	0.05	ug/L	<MDL	0.24	0.224	93		52--129
Malathion	0.048	0.05	ug/L	<MDL	0.24	0.249	104		25--161
Chlorpyrifos	0.034	0.05	ug/L	<MDL	0.24	0.25	104		57--127
Dichlobenil	0.05	0.1	ug/L	<MDL	0.24	0.23	96		70--98
Prometon	0.05	0.1	ug/L	<MDL	0.24	0.151	63		40--160

MSD:WG118322-4 MS:WG118322-3 L54423-1 Matrix: STORM WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	0.041	0.0472	ug/L	<MDL	0.226	0.214	94		67--148	0.226	0.222	98		4		0--40
Malathion	0.045	0.0472	ug/L	<MDL	0.226	0.218	96		52--190	0.226	0.228	101		5		0--40
Chlorpyrifos	0.032	0.0472	ug/L	<MDL	0.226	0.209	93		57--141	0.226	0.2	89		4		0--40
Dichlobenil	0.047	0.0943	ug/L	<MDL	0.226	0.197	87		40--160	0.226	0.208	92		5		0--40
Prometon	0.047	0.0943	ug/L	<MDL	0.226	0.367	162	*	40--160	0.226	0.37	163	*	1		0--40

Surrogate:	Chlor pyrifos-D10
(Lab Limits)	41--166
L54422-1	54
L54423-1	73
WG118322-1	65
WG118322-2	80
WG118322-3	65
WG118322-4	77

Workgroup: WG118324 Semi Volatile Organics

MB:WG118324-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.01	0.02	ug/L	<MDL	
Acenaphthylene	0.01	0.02	ug/L	<MDL	
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	
Acenaphthene	0.01	0.02	ug/L	<MDL	
Fluorene	0.01	0.02	ug/L	<MDL	
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	
Pentachlorophenol	0.1	0.2	ug/L	<MDL	
Phenanthrene	0.01	0.02	ug/L	<MDL	
Anthracene	0.01	0.02	ug/L	<MDL	
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.034	B
Fluoranthene	0.01	0.02	ug/L	<MDL	
Pyrene	0.01	0.02	ug/L	<MDL	
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	
Chrysene	0.01	0.02	ug/L	<MDL	
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.199	B
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	

SB:WG118324-2 MB:WG118324-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Naphthalene	0.01	0.02	ug/L	<MDL	2.5	1.72	69		32--93
Acenaphthylene	0.01	0.02	ug/L	<MDL	2.5	2.65	106		49--107
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.74	110		31--119
Acenaphthene	0.01	0.02	ug/L	<MDL	2.5	2.2	88		43--103
Fluorene	0.01	0.02	ug/L	<MDL	2.5	2.83	113		43--127
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.91	116		26--141
Pentachlorophenol	0.1	0.2	ug/L	<MDL	2.5	2.26	90		10--137
Phenanthrene	0.01	0.02	ug/L	<MDL	2.5	2.83	113		57--114
Anthracene	0.01	0.02	ug/L	<MDL	2.5	3.03	121		59--122
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.034	2.5	3.36	133		52--145
Fluoranthene	0.01	0.02	ug/L	<MDL	2.5	3.03	121		57--123
Pyrene	0.01	0.02	ug/L	<MDL	2.5	3.38	135		51--139
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	2.5	3.22	129		49--145
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	2.5	3.19	128		67--130
Chrysene	0.01	0.02	ug/L	<MDL	2.5	2.96	118	*	58--114
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.199	2.5	3.31	124		48--128
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	3.27	131	*	51--126
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	7.5	8.44	112		49--139
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	2.5	2.7	108		55--132
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	2.5	2.58	103		53--122
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	2.5	2.58	103		47--134
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	2.5	2.67	107		32--130
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	2.5	1.52	61		25--104

MSD:WG118324-4 MS:WG118324-3 L54422-1 Matrix: STORM WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Naphthalene	0.0094	0.0189	ug/L	0.0413	2.36	1.92	80		37--95	2.36	1.7	70		12		0--40
Acenaphthylene	0.0094	0.0189	ug/L	<MDL	2.36	2.82	119		46--122	2.36	2.72	115		3		0--40
Dimethyl Phthalate	0.024	0.0472	ug/L	0.0554	2.36	2.94	122		34--134	2.36	2.82	117		4		0--40
Acenaphthene	0.0094	0.0189	ug/L	<MDL	2.36	2.29	97		47--105	2.36	2.27	96		1		0--40
Fluorene	0.0094	0.0189	ug/L	<MDL	2.36	2.63	111		44--137	2.36	2.65	112		1		0--40
Diethyl Phthalate	0.024	0.0472	ug/L	0.578	2.36	3.18	110		33--140	2.36	3.15	109		1		0--40
Pentachlorophenol	0.094	0.189	ug/L	<MDL	2.36	3.2	136		44--145	2.36	3.1	131		3		0--40
Phenanthrene	0.0094	0.0189	ug/L	0.0735	2.36	2.53	104		62--116	2.36	2.63	108		4		0--40
Anthracene	0.0094	0.0189	ug/L	<MDL	2.36	2.57	109		32--140	2.36	2.63	112		3		0--40
Di-N-Butyl Phthalate	0.024	0.0472	ug/L	0.138	2.36	2.81	113		44--134	2.36	2.94	119		4		0--40
Fluoranthene	0.0094	0.0189	ug/L	0.106	2.36	2.37	96		49--123	2.36	2.55	104		8		0--40
Pyrene	0.0094	0.0189	ug/L	0.195	2.36	3	119		37--147	2.36	3.03	120		1		0--40
Benzyl Butyl Phthalate	0.047	0.0943	ug/L	0.25	2.36	3.23	126		39--151	2.36	3.29	129		2		0--40
Benzo(a)anthracene	0.0094	0.0189	ug/L	<MDL	2.36	2.75	117		50--120	2.36	2.84	121	*	3		0--40
Chrysene	0.0094	0.0189	ug/L	0.101	2.36	2.53	103		42--115	2.36	2.61	107		3		0--40
Bis(2-Ethylhexyl)Phthalate	0.024	0.0472	ug/L	2.59	2.36	5.29	114		11--188	2.36	5.67	130		7		0--40
Di-N-Octyl Phthalate	0.024	0.0472	ug/L	0.666	2.36	4.15	148		48--150	2.36	4.03	143		3		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0189	ug/L	<MDL	7.08	7.33	104		42--123	7.08	7.33	104		0		0--40
Benzo(a)pyrene	0.0094	0.0189	ug/L	0.116	2.36	2.22	89		45--121	2.36	2.24	90		1		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0189	ug/L	<MDL	2.36	2.07	88		39--122	2.36	2.21	94		6		0--40
Dibenzo(a,h)anthracene	0.0094	0.0189	ug/L	<MDL	2.36	2.07	88		31--121	2.36	2.18	93		5		0--40
Benzo(g,h,i)perylene	0.0094	0.0189	ug/L	0.129	2.36	2.2	88		22--125	2.36	2.4	96		9		0--40
2-Methylnaphthalene	0.0094	0.0189	ug/L	<MDL	2.36	2.04	87		40--121	2.36	1.83	78		11		0--40

Surrogate: (Lab Limits)	2,4,6-Tribromo phenol 20--142	2-Fluoro biphenyl 30--128	2-Fluoro phenol 30--110	d14-Ter phenyl 51--133	d4-2-Chloro phenol 42--113	d5-Nitro benzene 48--116	5-Phenol 31--143
L54422-1	113	56	73	102	68	92	78
L54423-1	96	54	61	119	52	72	53
WG118324-1	56	78	97	122	89	95	97
WG118324-2	92	80	99	113	94	103	102
WG118324-3	110	75	79	114	74	91	83
WG118324-4	111	71	78	109	73	90	83

Workgroup: WG118329 WTPH-Dx

MB:WG118329-1 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:WG118329-2 MB:WG118329-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.03	103		50--150

SB:WG118329-3 MB:WG118329-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.975	97		50--150

LD:WG118329-4 L54422-3 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Diesel Range (>C12-C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.19	0.19	mg/L	0.379	0.509	29		0--40

Surrogate: (Lab Limits)	2-Fluoro biphenyl 50--150	Penta cosane 50--150
L54422-3	93	99
L54572-7	90	92
L54572-8	92	96
L54572-9	94	90
L54572-10	93	93
WG118329-1	81	88
WG118329-2	94	97
WG118329-3	102	97
WG118329-4	86	94

Workgroup: WG118338 WTPH-G

MB:WG118338-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	

SB:WG118338-2 MB:WG118338-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	500	370	74		50--150

LD:WG118338-3 L54422-3 Matrix: STORM WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	4-Bromo fluoro benzene 50--150	I8-Toluene 50--150
L54422-3	93	92
WG118338-1	94	92
WG118338-2	93	94
WG118338-3	93	92

==========

4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Trace Metals Data Anomaly Form

Date(s) Occurred: *11/2/11*

WG #(s): *WG118335*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54422-1*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☒ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☐ X II-O ☐ PE)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.

☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: David Chin		
Reviewer: Kevin Cummings		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: Fritz Grothkopp		

Trace Metals Data Anomaly Form

Date(s) Occurred:

WG #(s): *WG118389*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54308-(1,2), L54422-1, L54423-1, L54516-(1-3), L54548-1, L54549-1*

Project #(s): *421879-210, 421879-220*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☐ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☒ X II-O)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes.*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.

☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: Derrick Sanders	_____	_____
Reviewer: Steve Talbot	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☒ Other: *Total Kjeldahl Nitrogen (TKN)*

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☒ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☐ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☐ Holding time exceeded by:
11 ☐ Insufficient sample amount.
12 ☒ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for project 421879-210 were preserved past the fifteen minute holding time for TKN.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *SH*
☒ Text added: *Preserved past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were presrved for TKN as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The TKN data for these samples and the associated matrix QC were qualified with an "SH" and the text "Preserved past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and preservation may have introduced bias to the TKN results for these samples. The extent of any bias is unknown and so the TKN data should be used with caution.*

	Signatures	Signature Dates
Reported By: *David C Hunn*		
Reviewer: *Brian Prosch*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM: *Fritz Grothkopp*	_____	_____

Conventionals Data Anomaly Form

Date(s) Occurred: *10/31/2011*

WG #(s): *WG118410*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54423-1*

Project #(s): *421879*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands: *Biochemical Oxygen Demand (BOD)*
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☒ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3900 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Recoveries

10 ☒ Holding time exceeded by: *One day*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description:
The acceptable holding time between collection and analysis for BOD is two days. The composite sample L54423-1 finished on 10/28/2011. It was delivered to the lab on 10/31/2011. It was set-up for BOD analysis that same day -- one day beyond holding time.

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed ☐ Sample(s) re-prepared and re-analyzed
☐ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *Analyzed one day beyond hold time.*
☐ Other

Corrective Action Description:
Other than to qualify the data as indicated above, no corrective action was possible.

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory):
Extended time between collection and analysis may lead to bias due to degradation of the target analyte. In this case, since the hold time was only exceeded by one day, the expected bias

is small. However, the magnitude of the bias is unknown. Thus, the BOD result for L54423-1 should be used with caution.

	Signatures	Signature Dates
Reported By: *David C Hunn*		
Reviewer: *Debbie Osada*		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: *Fritz Grothkopp*		

Conventionals Data Anomaly Form

Date(s) Occurred: *10/31/2011*

WG #(s): *WG118298*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54423-1 & -1 LD (WG118298-3)*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☒ Physicals: *Turbidity*
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☐ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☒ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☒ Holding time exceeded by: *1 day*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Sample L54423-1 is a composite sample beginning on and ending on 10/28/11. However, it was not received at the laboratory until 10/31/11 which is one day beyond the established tow day holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed ☐ Sample(s) re-prepared and re-analyzed
☐ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *"Sample analyzed 1 day past holding time."*
☐ Other

Corrective Action Description: *Samples L54423-1 and WG118298-3 (-1 LD) were analyzed on 10/31/11 upon receipt at the laboratory which is one day beyond the established two day holding time. The data for L54423-1 and WG118298-3 (-1 LD) were qualified with "H" and the text "Sample analyzed 1 day past holding time" was added to the TextValue field for each sample. No other corrective actions could be taken.*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *Extended time between sample collection and analysis may result in sample degradation. As a result, the turbidity data for the above sample may be biased and should be used with caution.*

	Signatures	Signature Dates
Reported By: *Debbie Osada*		
Reviewer: *Lynne Cox*		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM:		

Trace Organics Data Anomaly Form

Date(s) Occurred: *11-09-2011*

WG #(s): *118322*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA	☐ BNALL	☐ EDC	☐ EDC-LVI
☐ CLPESTPCB	☐ PEST	☐ PCB	☒ OPPEST
☐ VOA-GCMS	☐ NWTPH-GX	☐ NWTPH-DX	☐ NWTPH-HCID
☐ BUTYL TIN	☐ HERB		
☐ Other:			
☐ Subcontracted:			

II. Instrument

GC/ICP/MS:	☐ P					
GC/MS:	☐ A	☐ J	☐ K	☐ L	☐ M	☒ N
GC ECD:	☐ F	☐ B	☐ C			
GC FID:	☐ I	☐ D	☐ Q TCD/ECD			
Extraction/Cleanup:	☐ PFE		☐ GPC			
	☐ Other:					

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☐ Blank Contamination	8 ☐ Surrogate Spike Recoveries
2 ☐ SB/SBD Spike Recoveries	9 ☐ SB/SBD RPD
3 ☒ MS/MSD Spike Recoveries	10 ☐ MS/MSD RPD
4 ☐ LCS/SRM Recoveries	11 ☐ Sample/LD RPD
5 ☐ Initial Calibration	12 ☐ Continuing Calibration Checks
6 ☐ Performance Checks	13 ☐ Tuning Criteria
7 ☐ ISTD %Differences	14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description: *3) The recovery of Prometon exceeded the upper QC limit in the MS and MSD.*

IV. Type of Project Anomaly

- ☐ SAP/Work Plan specified MDLs not met.
- ☐ SAP/Work Plan specified QC frequency or QC type not met.
- ☐ SAP/Work Plan specified methodology not used.
- ☐ Sample exceeds regulatory and/or hazardous waste limits.
- ☐ Sample data results are unusual or inconsistent with expected results.
- ☐ Other

Anomaly Description:

V. Corrective Action Taken

- ☐ Sample(s) re-analyzed
- ☒ Sample(s) reported "AS IS"
- ☐ Sample(s) Diluted
- ☐ Data qualified with the following flags:
- ☐ Other
- ☐ Sample(s) re-prepared and re-analyzed
- ☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description: *3) Asterisk applied to the QC report.*

VI. Potential Effects on Data Quality (mandatory):

3) Since the Prometon response in the MS/MSD is high, no sample bias is suggested given that all associated samples are "ND".

	Signatures	Signature Dates
Reported By: Felix Zboralski	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Conventionals Data Anomaly Form

Date(s) Occurred: *10/31/11*

WG #(s): *WG118387*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54423-1*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☒ Nutrients: *TOTP*
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201
Autoanalyzer:	☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)
	☒ Astoria2 (total nutrients system) ☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer
Dissolved Oxygen:	☐ YSI 5100 ☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU
Ion Chromatography:	☐ Dionex 120
pH Probe:	☐ Metrohm 736GP ☐ Accument XL60
Salinometer:	☐ Portosal 8410A
Spectrophotometer:	☐ Hitachi U3000 UV/VIS ☐ Hitachi U3900 UV/VIS
	☐ Hach DR 890
TOC Analyzer:	☐ OI 1020A ☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN
Other:	☐ Description:

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

[1] ☐ Initial Calibration	[4] ☐ MB Anomaly	[7] ☐ MS RPD
[2] ☐ Continuing Calibration Checks	[5] ☐ LCS/SRM Recoveries	[8] ☐ Sample/LD RPD
[3] ☐ SB Spike Recoveries	[6] ☐ Sample/LD/LT RSD	[9] ☐ MS Recoveries

[10] ☒ Holding time exceeded by: *One day*
[11] ☐ Insufficient sample amount.
[12] ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Sample L54423-1 was collected on 10/28/11 and received at the laboratory on 10/31/11. The sample was preserved on 10/31/11 which exceeded the holding time between collection and preservation by one day.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed ☐ Sample(s) re-prepared and re-analyzed
☐ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *"Preservation holding time exceeded by one day."*
☐ Other

Corrective Action Description: *Sample L54423-1 was frozen on 10/31/11, which was outside the acceptable holding time window by one day. The data for sample L54423-1 was qualified with an "H" to indicate that holding time between collection and preservation had been exceeded and the text, "Preservation holding time exceeded by one day." was added to the sample. No other corrective actions could be taken.*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *Extended time between sample collection and preservation can result in the degradation of the target analyte leading to a low*

bias in the associated data. The extent of any bias cannot be quantified so the sample results should be used with caution.

	Signatures	Signature Dates
Reported By: *Debbie Osada*		
Reviewer: *David Hunn*		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: *Fritz Grothkopp*		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210 & 421879-220*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☒ Nutrients: *Orthophosphate Phosphorus (ORTHOP)*
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201
Autoanalyzer:	☐ Astoria2+2 (freshwater system) ☒ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system) ☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer
Dissolved Oxygen:	☐ YSI 5100 ☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU
Ion Chromatography:	☐ Dionex 120
pH Probe:	☐ Metrohm 736GP ☐ Accument XL60
Salinometer:	☐ Portosal 8410A
Spectrophotometer:	☐ Hitachi U3000 UV/VIS ☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890
TOC Analyzer:	☐ OI 1020A ☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN
Other:	☐ Description:

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☒ Holding time exceeded by: *> 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for projects 421879-210 and 421879-220 were filtered past the fifteen minute holding time for ORTHOP.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *Filtered past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were filtered for ORTHOP as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The ORTHOP data for these samples and the associated matrix QC were qualified with an "H" and the text "Filtered past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and filtration may have introduced bias to the ORTHOP results for these samples. The extent of any bias is unknown and so the ORTHOP data should be used with caution.*

	Signatures	Signature Dates
Reported By: *Terry Siebens*		
Reviewer: *Dave Hunn*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott*	_____	_____
(For QA1 only)	_____	_____
cc: LPM: *Fritz Grothkopp*		

Conventionals Data Anomaly Form

Date(s) Occurred: *October 31, 2011*

WG #(s): *WG118732*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54422-1 & L54423-1*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☒ Other: *MBAS*

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201
Autoanalyzer:	☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system) ☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer
Dissolved Oxygen:	☐ YSI 5100 ☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU
Ion Chromatography:	☐ Dionex 120
pH Probe:	☐ Metrohm 736GP ☐ Accument XL60
Salinometer:	☐ Portosal 8410A
Spectrophotometer:	☐ Hitachi U3000 UV/VIS ☐ Hitachi U3900 UV/VIS
	☐ Hach DR 890
TOC Analyzer:	☐ OI 1020A ☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN
Other:	☒ Description: *Subcontract*

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration
2 ☐ Continuing Calibration Checks
3 ☐ SB Spike Recoveries
4 ☐ MB Anomaly
5 ☐ LCS/SRM Recoveries
6 ☐ Sample/LD/LT RSD
7 ☐ MS RPD
8 ☐ Sample/LD RPD
9 ☐ MS Recoveries
10 ☒ Holding time exceeded by: *1 day*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *MBAS was analyzed one day past the two day holding time by the subcontract lab*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☐ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *Analyzed 1 day past 2 day holding time.*
☐ Other

Corrective Action Description: *No analytical corrective action could be taken once the holding time was missed for L54422-1 and L54423-1 other than to "H" qualify the results and note how many days had passed between sample collection and analysis with the text, "Analyzed 1 day past 2 day holding time."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *Because the holding time between sample collection and analysis was exceeded for samples L54422-1 and L54423-1, the MBAS results should be used with caution.*

For L54422-1 the sample's composite ended during the afternoon on Friday 10/28/11 and the sample was picked up and split on Saturday 10/29/11. The subcontract lab was unavailable for analysis on the weekend, so the sample was shipped to the subcontract lab on Monday 10/31/11 and was analyzed that same day.

For L54423-1, the composite ended during the afternoon on Friday 10/28/11. The sample was picked up and split on Monday 10/31/11. The sample was shipped to the subcontract lab on Monday 10/31/11 and was analyzed that same day.

	Signatures	**Signature Dates**
Reported By: *Keith Solberg*	_____	_____
Reviewer: *Brian Prosch*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM: *Fritz Grothkopp*		

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

December 7, 2011

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L54548-1, 3, 5 and L54549-1, 3, collected November 2-3, 2011.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on November 3, 2011. The sample was analyzed in the Trace Metals, Conventionals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #14772 was prepared and sent via e-mail on December 5, 2011.

Sample Collection:
The grab sample for location RSW1UP was not collected for this event. Location FCSW02 did not collect during this event.

Conventionals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

The results for Total Kjeldahl Nitrogen (TKN) have been flagged with an "SH" qualifier to indicate that the sample was not preserved within 15 minutes of the collection of the last aliquot into the composite sample.

The results for Orthophosphate Phosphorus (ORTHOP) analysis have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Metals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exception.

The results for dissolved metals and mercury have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

Diethyl phthalate, Di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were detected in the method blank for semivolatile analysis. All entries in the data report and the QC report have been flagged with a "B" qualifier.

A spike blank (SB) only was analyze with the samples for semi volatile analysis. Chrysene and bis(2-ethyl hexyl)phthalate were outside their upper control limits at 116 and 227% recovery. The results for bis(2-ethylhexyl)phthalate have been flagged with a "JL" qualifier to indicate the possibility of a high bias due to the high recovery in the SB.

Microbiology:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Subcontract Parameters: MBAS
The data have passed all QA/QC checks for accuracy and completeness.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

	Project:	421879-210					Project:	421879-210					Project:	421879-210							
	Locator:	FCSW01					Locator:	FCSW01					Locator:	FFBLANK							
	Descrip:	FALL CITY HD COMME					Descrip:	FALL CITY HD COMME					Descrip:	FIELD FILTER BLANK							
	Sample:	L54548-1					Sample:	L54548-3					Sample:	L54548-5							
	Matrix:	LG STORM WTR					Matrix:	LG STORM WTR					Matrix:	LN BLANK WTR							
	ColDate:	11/2/11 19:44					ColDate:	11/3/11 0:00					ColDate:	11/3/11 15:30							
	TimeSpan:	1.9					TimeSpan:						TimeSpan:								
	TotalSolid:						TotalSolid:						TotalSolid:								
	ClientLoc:						ClientLoc:						ClientLoc:								
	SampDepth:						SampDepth:						SampDepth:								
	WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**								
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**				
CV EPA 351.2																					
Total Kjeldahl Nitrogen	1.61	SH	0.1	0.2	mg/L																
CV SM 5540C																					
Methylene Blue Act. Substance	0.062		0.025	0.025	mg/L																
CV SM2130-B																					
Turbidity	102		0.2	0.5	NTU																
CV SM2510-B																					
Conductivity	33.4		1	5	umhos/cm																
CV SM2540-D																					
Total Suspended Solids	128		3.6	7.1	mg/L																
CV SM4110B CL																					
Chloride	1.41		0.05	0.1	mg/L																
CV SM4500-NO3-F																					
Nitrite + Nitrate Nitrogen	0.192		0.01	0.04	mg/L									<MDL	0.01	0.04	mg/L				
CV SM4500-P-B,F																					
Total Phosphorus	0.334		0.005	0.01	mg/L																
CV SM4500-P-F																					
Orthophosphate Phosphorus	0.0637	H	0.002	0.005	mg/L									<MDL	0.002	0.005	mg/L				
CV SM5210-B																					
Biochemical Oxygen Demand	15.9		2	2	mg/L																
MC SM 9222D 20TH																					
Fecal Coliform							2800				CFU/100ml										
MT EPA 200.8*SW846 6020A																					
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L																
Cadmium, Total, ICP-MS	0.12	<RDL	0.05	0.25	ug/L																
Calcium, Total, ICP-MS	4260		50	50	ug/L																
Copper, Dissolved, ICP-MS	6.4	H	0.4	2	ug/L																
Copper, Total, ICP-MS	22.8		0.4	2	ug/L																
Lead, Dissolved, ICP-MS	0.17	<RDL,H	0.1	0.5	ug/L																
Lead, Total, ICP-MS	11.3		0.1	0.5	ug/L																
Magnesium, Total, ICP-MS	1930		50	50	ug/L																
Zinc, Dissolved, ICP-MS	14.7	H	0.5	2.5	ug/L																
Zinc, Total, ICP-MS	91.5		0.5	2.5	ug/L																
MT EPA 200.8/SW846 6020A*SM2340B																					
Hardness, Calc	18.6		0.331	0.331	mg CaCO3/L																
MT EPA 245.1*SW846 7470A																					
Mercury, Dissolved, CVAA		<MDL,H	0.05	0.1	ug/L																
Mercury, Total, CVAA		<MDL	0.05	0.1	ug/L																
OR SW846 3520C*SW846 8270D																					
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L																
Acenaphthene		<MDL	0.0094	0.0189	ug/L																
Acenaphthylene		<MDL	0.0094	0.0189	ug/L																

King County Environmental Lab Analytical Report

	Project:	421879-210					Project:	421879-210					Project:	421879-210									
	Locator:	FCSW01					Locator:	FCSW01					Locator:	FFBLANK									
	Descrip:	FALL CITY HD COMME					Descrip:	FALL CITY HD COMME					Descrip:	FIELD FILTER BLANK									
	Sample:	L54548-1					Sample:	L54548-3					Sample:	L54548-5									
	Matrix:	LG STORM WTR					Matrix:	LG STORM WTR					Matrix:	LN BLANK WTR									
	ColDate:	11/2/11 19:44					ColDate:	11/3/11 0:00					ColDate:	11/3/11 15:30									
	TimeSpan:	1.9					TimeSpan:						TimeSpan:										
	TotalSolid:						TotalSolid:						TotalSolid:										
	ClientLoc:						ClientLoc:						ClientLoc:										
	SampDepth:						SampDepth:						SampDepth:										
	WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**										
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**						
Anthracene		<MDL	0.0094	0.0189	ug/L																		
Benzo(a)anthracene		<MDL	0.0094	0.0189	ug/L																		
Benzo(a)pyrene		<MDL	0.0094	0.0189	ug/L																		
Benzo(b,j,k)fluoranthene		<MDL	0.0094	0.0189	ug/L																		
Benzo(g,h,i)perylene	0.118		0.0094	0.0189	ug/L																		
Benzyl Butyl Phthalate	0.298		0.047	0.0943	ug/L																		
Bis(2-Ethylhexyl)Phthalate	3.38	B2,JL	0.024	0.0472	ug/L																		
Chrysene	0.0874		0.0094	0.0189	ug/L																		
Dibenzo(a,h)anthracene		<MDL	0.0094	0.0189	ug/L																		
Diethyl Phthalate	0.671		0.024	0.0472	ug/L																		
Dimethyl Phthalate		<MDL	0.024	0.0472	ug/L																		
Di-N-Butyl Phthalate	0.173	B	0.024	0.0472	ug/L																		
Di-N-Octyl Phthalate	0.802		0.024	0.0472	ug/L																		
Fluoranthene	0.0825		0.0094	0.0189	ug/L																		
Fluorene		<MDL	0.0094	0.0189	ug/L																		
Indeno(1,2,3-Cd)Pyrene		<MDL	0.0094	0.0189	ug/L																		
Naphthalene	0.0633		0.0094	0.0189	ug/L																		
Pentachlorophenol	0.536		0.094	0.189	ug/L																		
Phenanthrene		<MDL	0.0094	0.0189	ug/L																		
Pyrene	0.16		0.0094	0.0189	ug/L																		
OR SW846 3520C*SW846 8270D SIM																							
Chlorpyrifos		<MDL	0.032	0.0472	ug/L																		
Diazinon		<MDL	0.041	0.0472	ug/L																		
Dichlobenil		<MDL	0.047	0.0943	ug/L																		
Malathion		<MDL	0.045	0.0472	ug/L																		
Prometon		<MDL	0.047	0.0943	ug/L																		
OR SW846 3535A/8151A*8270D SIM																							
2,4-D		<MDL	0.5	1	ug/L																		
MCPP		<MDL	0.5	1	ug/L																		
Triclopyr		<MDL	0.5	1	ug/L																		
OR WDOE NWTPH-DX																							
Diesel Range (>C12-C24)								<MDL	0.19	0.19	mg/L												
Lube Oil Range (>C24)								<MDL	0.19	0.19	mg/L												
OR WDOE NWTPH-GX																							
Gasoline Range (C7-C12)								<MDL	250	250	ug/L												

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L54549-1	Sample:	L54549-3
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	11/2/11 18:15	ColDate:	11/3/11 13:40
TimeSpan:	4.67	TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV EPA 351.2										
Total Kjeldahl Nitrogen	0.399	SH	0.1	0.2	mg/L					
CV SM 5540C										
Methylene Blue Act. Substance	0.025	RDL	0.025	0.025	mg/L					
CV SM2130-B										
Turbidity	9.41		0.2	0.5	NTU					
CV SM2510-B										
Conductivity	26.5		1	5	umhos/cm					
CV SM2540-D										
Total Suspended Solids	9.58		0.5	1.1	mg/L					
CV SM4110B CL										
Chloride	0.704		0.05	0.1	mg/L					
CV SM4500-NO3-F										
Nitrite + Nitrate Nitrogen	0.344		0.01	0.04	mg/L		<MDL	0.01	0.04	mg/L
CV SM4500-P-B,F										
Total Phosphorus	0.0868		0.005	0.01	mg/L					
CV SM4500-P-F										
Orthophosphate Phosphorus	0.0381	H	0.002	0.005	mg/L		<MDL	0.002	0.005	mg/L
CV SM5210-B										
Biochemical Oxygen Demand	3.34		2	2	mg/L					
MC SM 9222D 20TH										
Fecal Coliform										
MT EPA 200.8*SW846 6020A										
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L					
Cadmium, Total, ICP-MS		<MDL	0.05	0.25	ug/L					
Calcium, Total, ICP-MS	2200		50	50	ug/L					
Copper, Dissolved, ICP-MS	1.9	<RDL,H	0.4	2	ug/L					
Copper, Total, ICP-MS	2.81		0.4	2	ug/L					
Lead, Dissolved, ICP-MS		<MDL,H	0.1	0.5	ug/L					
Lead, Total, ICP-MS	0.814		0.1	0.5	ug/L					
Magnesium, Total, ICP-MS	596		50	50	ug/L					
Zinc, Dissolved, ICP-MS	3.86	H	0.5	2.5	ug/L					
Zinc, Total, ICP-MS	6.36		0.5	2.5	ug/L					
MT EPA 200.8/SW846 6020A*SM2340B										
Hardness, Calc	7.96		0.331	0.331	mg CaCO3/L					
MT EPA 245.1*SW846 7470A										
Mercury, Dissolved, CVAA										
Mercury, Total, CVAA										
OR SW846 3520C*SW846 8270D										
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L					
Acenaphthene		<MDL	0.0094	0.0189	ug/L					
Acenaphthylene		<MDL	0.0094	0.0189	ug/L					

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L54549-1	Sample:	L54549-3
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	11/2/11 18:15	ColDate:	11/3/11 13:40
TimeSpan:	4.67	TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene		<MDL	0.0094	0.0189	ug/L					
Benzo(a)anthracene	0.0882		0.0094	0.0189	ug/L					
Benzo(a)pyrene	0.193		0.0094	0.0189	ug/L					
Benzo(b,j,k)fluoranthene	0.308		0.0094	0.0189	ug/L					
Benzo(g,h,i)perylene	0.158		0.0094	0.0189	ug/L					
Benzyl Butyl Phthalate		<MDL	0.047	0.0943	ug/L					
Bis(2-Ethylhexyl)Phthalate	0.93	B,JL	0.024	0.0472	ug/L					
Chrysene	0.194		0.0094	0.0189	ug/L					
Dibenzo(a,h)anthracene		<MDL	0.0094	0.0189	ug/L					
Diethyl Phthalate	0.568		0.024	0.0472	ug/L					
Dimethyl Phthalate		<MDL	0.024	0.0472	ug/L					
Di-N-Butyl Phthalate	0.0704	B	0.024	0.0472	ug/L					
Di-N-Octyl Phthalate		<MDL	0.024	0.0472	ug/L					
Fluoranthene	0.343		0.0094	0.0189	ug/L					
Fluorene		<MDL	0.0094	0.0189	ug/L					
Indeno(1,2,3-Cd)Pyrene	0.172		0.0094	0.0189	ug/L					
Naphthalene	0.034		0.0094	0.0189	ug/L					
Pentachlorophenol	0.508		0.094	0.189	ug/L					
Phenanthrene	0.0891		0.0094	0.0189	ug/L					
Pyrene	0.313		0.0094	0.0189	ug/L					
OR SW846 3520C*SW846 8270D SIM										
Chlorpyrifos		<MDL	0.032	0.0472	ug/L					
Diazinon		<MDL	0.041	0.0472	ug/L					
Dichlobenil		<MDL	0.047	0.0943	ug/L					
Malathion		<MDL	0.045	0.0472	ug/L					
Prometon		<MDL	0.047	0.0943	ug/L					
OR SW846 3535A/8151A*8270D SIM										
2,4-D		<MDL	0.5	0.99	ug/L					
MCPP		<MDL	0.5	0.99	ug/L					
Triclopyr		<MDL	0.5	0.99	ug/L					
OR WDOE NWTPH-DX										
Diesel Range (>C12-C24)										
Lube Oil Range (>C24)										
OR WDOE NWTPH-GX										
Gasoline Range (C7-C12)										

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Total Kjeldahl Nitrogen	Methylene Blue Act. Substance	Turbidity	Conductivity	Total Suspended Solids	Chloride	Nitrite + Nitrate Nitrogen	Total Phosphorus	Orthophosphate Phosphorus	Biochemical Oxygen Demand	Cadmium, Total, ICP-MS	Calcium, Total, ICP-MS	Copper, Dissolved, ICP-MS	Copper, Total, ICP-MS	Lead, Dissolved, ICP-MS	Lead, Total, ICP-MS	Magnesium, Total, ICP-MS	Zinc, Dissolved, ICP-MS	Zinc, Total, ICP-MS	Hardness, Calc
			mg/L	mg/L	NTU	umhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg CaCO3/L
FCSW01	421879-210	L54548-1	1.61	0.062	102	33.4	128	1.41	0.192	0.334	0.0637	15.9	0.12	4260	6.4	22.8	0.17	11.3	1930	14.7	91.5	18.6
FCSW01	421879-210	L54548-3																				
RSW1UP	421879-210	L54549-1	0.399	0.025	9.41	26.5	9.58	0.704	0.344	0.0868	0.0381	3.34		2200	1.9	2.81		0.814	596	3.86	6.36	7.96
* Not converted to dry weight basis																						
If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code																						

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b,j,k)fluoranthene	Benzo(g,h,i)perylene	Benzyl Butyl Phthalate	Bis(2-Ethylhexyl)Phthalate	Chrysene	Di-N-Butyl Phthalate	Di-N-Octyl Phthalate	Diethyl Phthalate	Fluoranthene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene	Fecal Coliform
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	CFU/100ml
FCSW01	421879-210	L54548-1				0.118	0.298	3.38	0.0874	0.173	0.802	0.671	0.0825		0.0633	0.536		0.16	
FCSW01	421879-210	L54548-3																	2800
RSW1UP	421879-210	L54549-1	0.0882	0.193	0.308	0.158		0.93	0.194	0.0704		0.568	0.343	0.172	0.034	0.508	0.0891	0.313	
* Not converted to dry weight basis																			
If a parameter/analyze appears twice in the column header,																			

King County Environmental Lab Analytical Text Value Report

Project	Sample	Parameter	Textvalue
421879-210	L54548-1	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54548-1	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time
421879-210	L54549-1	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54549-1	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time

Login: P54548 | NPDES Stormwater Permit Monitoring | Personnel: JD

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by [illegible]	Date 11-3-11	Time 1455
Received by [illegible]	Date 11-3-11	Time 1455
Sample Numbers -3,1,5		

Sample Number	P54548-1	P54548-2	P54548-3
QC Link			
Locator	FCSW01	FCSW02	FCSW01
Short Loc Desc	NPDES-SW1	NPDES-SW2	NPDES-SW1
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	FALL CITY HD COMMERCIAL
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	grab, HD Commercial
Start Date/Time	11/2/11 1944		
End Date/Time	11/2/11 2138		
Time Span			
Sample Depth			
Dept, Matrix, Prod			
	3 LG BOD	3 LG BOD	5 LG FC-MF
	3 LG CL	3 LG CL	7 LG WTPH-DX
	3 LG COND	3 LG COND	7 LG WTPH-G
	3 LG MBAS	3 LG MBAS	
	3 LG NO23	3 LG NO23	
	3 LG ORTHOP	3 LG ORTHOP	
	3 LG TKN	3 LG TKN	
	3 LG TOTP	3 LG TOTP	
	3 LG TSS	3 LG TSS	
	3 LG TURB	3 LG TURB	
	6 LG CA-ICPMS	6 LG CA-ICPMS	
	6 LG CD-ICPMS	6 LG CD-ICPMS	
	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS	
	6 LG CU-ICPMS	6 LG CU-ICPMS	
	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS	
	6 LG HG-CVAA, DISS-M	6 LG ICPMS-HARDNESS	
	6 LG HG-CVAA-M	6 LG MG-ICPMS	
	6 LG ICPMS-HARDNESS	6 LG PB-ICPMS	
	6 LG MG-ICPMS	6 LG PB-ICPMS, DISS	
	6 LG PB-ICPMS	6 LG ZN-ICPMS	
	6 LG PB-ICPMS, DISS	6 LG ZN-ICPMS, DISS	
	6 LG ZN-ICPMS	7 LG HERB-NPDES	
	6 LG ZN-ICPMS, DISS	7 LG OPPEST-NPDES	
	7 LG HERB-NPDES	7 LG PAHPHTH-SUR	
	7 LG OPPEST-NPDES		
	7 LG PAHPHTH-SUR		

Login: P54548 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

Sample Number	P54548-4	P54548-5	
QC Link			
Locator	FCSW02	FFBLANK	
Short Loc Desc	NPDES-SW2	FFBLANK	
Locator Desc	FALL CITY HD RESIDENTIAL	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	grab, HD Residential	filter blank, orthop	
Start Date/Time		11/3/11 1530	
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP	

Login: P54549 | NPDES Stormwater Permit Monitoring | Personnel: FINLINSON

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by		Date 11/3/2011	Time 1400
Received by		Date 11-3-11	Time 1400
Sample Numbers	54549 -1, -3		[All]

Sample Number	P54549-1	P54549-2	P54549-3
QC Link			
Locator	RSW1UP	RSW1UP	FFBLANK
Short Loc Desc	RSW1UP	RSW1UP	FFBLANK
Locator Desc	148TH AVE SE UPSTREAM	148TH AVE SE UPSTREAM	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	comp, LD Rural/Residential	grab, LD Rural/Residential	filter blank, orthop
Start Date/Time	11/3/2011 1815		11/3/2011 1340
End Date/Time	11/2/2011 2255	No GRABS COLLECTED	11/3/2011 1345
Time Span	4.67		
Sample Depth	Temp: 8°		
Dept, Matrix, Prod	3 LG BOD	5 LG FC-MF	3 LN NO23
	3 LG CL	7 LG WTPH-DX	3 LN ORTHOP
	3 LG COND	7 LG WTPH-G	
	3 LG MBAS		
	3 LG NO23		
	3 LG ORTHOP		
	3 LG TKN		
	3 LG TOTP		
	3 LG TSS		
	3 LG TURB		
	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 HERB-NPDES		
	7 LG OPPEST-NPDES		
	7 LG PAHPHTH-SUR		

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

67703

Nov 8 2011
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Fritz Grothkopp

Dear Fritz Grothkopp:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
P54548-1	Water	11-A016173	CONV
P54549-1	Water	11-A016174	CONV

Your samples were received on Friday, November 4, 2011. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugle
President

Project #: 421879-210

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

Rec'd 11/29/11 KS.
WG118732

CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number:
Subcontract Laboratory: amtest
LPM/TC: Fritz Grothkopp

Shipment Number: EL-11-56
Shipment Method: ENA
Fax data to: Sample Manager
Fax Number: (206) 684-2395
e-mail: sample.login@kingcounty.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

	Sample ID	Collect Date	Matrix	QC Required	Requested Parameters: mbas												No. of Containers	Comments
173	P54548-1	11/2/2011	LG-storm water	Level II	X												1	collected @2138
174	P54549-1	11/2/2011	LG-storm water	Level II	X												1	collected @2255

Total Number of Containers: 2

Requested TAT: 14 Days
Data Package Due: 11/17/2011

Please return signed original CoC with data package.

RELINQUISHED BY		Date	RECEIVED BY	Date
Signature			Signature	11-4-11
Printed Name	Lynne Cox	Time	Printed Name	Time
Organization	King County DNR, Environmental Laboratory		Organization	10:55

6.7 °C

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Fritz Grothkopp
Project Name:
Project #: 421879-210
All results reported on an as received basis.

Date Received: 11/04/11
Date Reported: 11/ 8/11

AMTEST Identification Number 11-A016173
Client Identification P54548-1
Sampling Date 11/02/11, 21:38

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.062	mg/l		0.025	SM 5540C	NLN	11/04/11

AMTEST Identification Number 11-A016174
Client Identification P54549-1
Sampling Date 11/02/11, 22:55

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.025	mg/l		0.025	SM 5540C	NLN	11/04/11

Kathy Fugiel
President

AMTEST LABORATORIES

QC Summary for sample numbers: 11-A016173 to 11-A016174

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
11-A016153	Surfactants	mg/l	< 0.025	< 0.025	
11-A016174 LS4549-1	Surfactants	mg/l	0.025	0.025	0.00

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.12	0.13	108. %
Surfactants	mg/l	0.12	0.11	91.7 %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1174912

Project Name: _____ Date Received: 11/ 4/11 Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.7 degrees C

	YES	NO	N/A
Were the Custody Seals intact?	☑	☐	☐
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☑	☐	☐
Are the samples within specified holding times?	☐	☐	☑
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?			

Explain any discrepancies or problems with the samples (include sample numbers):

_____

_____

_____

_____

_____

E: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of liance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

lient: King County DNR Environmental COC # _____ Batch Number 1174912

roject Name: _____ Date Received: 11/ 4/11 Received By: Jean Olson

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54548, L54549

WG118412 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-1	421879-210	NPDES SW Fall City	CVBOD	STORM WTR	11/2/2011 19:44	11/4/2011 9:15	11/4/2011 15:34		
L54549-1	421879-210		CVBOD	STORM WTR	11/2/2011 18:15	11/4/2011 9:15	11/4/2011 15:36		
L54553-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVBOD	LEACHATE	11/2/2011 5:10	11/4/2011 9:15	11/4/2011 15:38		
L54553-3	421422-CHLS-M		CVBOD	LEACHATE	11/2/2011 8:10	11/4/2011 9:15	11/4/2011 15:40		
L54553-4	421422-CHLS-M		CVBOD	LEACHATE	11/2/2011 7:00	11/4/2011 9:15	11/4/2011 15:41		
L54553-5	421422-CHLS-M		CVBOD	LEACHATE	11/2/2011 8:00	11/4/2011 9:15	11/4/2011 15:43	WG118412-1,-2	
L54558-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVBOD	LEACHATE	11/3/2011 9:40	11/4/2011 9:15	11/4/2011 15:45		
WG118412-1	MB		CVBOD	BLANK WTR		11/4/2011 9:15	11/4/2011 15:27		MB1
WG118412-2	SB		CVBOD	BLANK WTR		11/4/2011 9:15	11/4/2011 15:33		WG118412-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54548, L54549

WG118654 Anions

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54252-1	423484-802-4	Brightwater Cross Valley Water District Groundwater Monitoring	CVCL	GRND WTR	11/2/2011 0:00	11/21/2011 14:00	11/22/2011 12:07		
L54422-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	10/28/2011 14:13	11/21/2011 14:00	11/21/2011 18:21	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54423-1	421879-210		CVCL	STORM WTR	10/28/2011 13:28	11/21/2011 14:00	11/21/2011 20:23		
L54548-1	421879-210		CVCL	STORM WTR	11/2/2011 19:44	11/21/2011 14:00	11/21/2011 22:55		
L54549-1	421879-210		CVCL	STORM WTR	11/2/2011 18:15	11/21/2011 14:00	11/21/2011 23:56		
L54574-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:00		
L54574-1	421422-CFGW		CVSO4	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:30	WG118654-1,-2,-3,-7,-8,-4	
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 5:00	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-1	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 6:32	WG118654-1,-2,-3,-7,-8,-4	
L54576-2	421422-VAGW		CVCL	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 8:03	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-2	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 9:04	WG118654-1,-2,-3,-7,-8,-4	
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 9:34	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-1	421422-CFGW		CVSO4	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 10:05	WG118654-1,-2,-3,-7,-8,-4	
L54578-3	421422-CFGW		CVCL	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 10:35	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-3	421422-CFGW		CVSO4	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 11:36	WG118654-1,-2,-3,-7,-8,-4	
L54624-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	11/16/2011 12:15	11/21/2011 14:00	11/22/2011 0:26	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54624-2	421879-210		CVCL	STORM WTR	11/16/2011 17:56	11/21/2011 14:00	11/22/2011 1:58		
L54625-1	421879-210		CVCL	STORM WTR	11/16/2011 10:57	11/21/2011 14:00	11/22/2011 2:28		
WG118654-1	CS		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18		RDL_LEVEL
WG118654-1	CS		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18	WG118654-1,-2,-3,-7,-8,-4	RDL_LEVEL
WG118654-2	MB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	MB1 111121
WG118654-2	MB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-7,-8,-4	MB1 111121
WG118654-3	SB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	WG118654-2
WG118654-3	SB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-7,-8,-4	WG118654-2
WG118654-4	LCS		CVCL	BLANK WTR		11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	LEVEL1

WG118654-4	LCS	CVSO4	BLANK WTR	11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-7,-8,-4	LEVEL1
WG118654-5	LD	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 20:53	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54423-1
WG118654-6	MS	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 21:54		L54423-1
WG118654-7	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 5:31		L54576-1
WG118654-7	LD	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:02	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-8	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 6:01	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54576-1
WG118654-8	MS	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:33	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-9	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 12:37	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54252-1
WG118654-10	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 13:08		L54252-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54548, L54549

WG118482 Conductivity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-8	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVCOND	FRESH WTR	10/27/2011 5:10	11/9/2011 19:06	11/9/2011 19:06		
L53806-10	421422-CHSW-Q		CVCOND	FRESH WTR	10/27/2011 6:30	11/9/2011 19:27	11/9/2011 19:27		
L54395-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVCOND	GRND WTR	10/28/2011 9:30	11/9/2011 19:40	11/9/2011 19:40		
L54398-1	421422-CHGW		CVCOND	GRND WTR	10/25/2011 7:30	11/9/2011 20:02	11/9/2011 20:02		
L54400-1	421422-CHGW		CVCOND	GRND WTR	10/28/2011 8:30	11/9/2011 20:12	11/9/2011 20:12		
L54422-1	421879-210	NPDES SW Fall City	CVCOND	STORM WTR	10/28/2011 14:13	11/9/2011 19:00	11/9/2011 19:00		
L54423-1	421879-210		CVCOND	STORM WTR	10/28/2011 13:28	11/9/2011 19:02	11/9/2011 19:02		
L54429-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVCOND	GRND WTR	10/28/2011 8:10	11/9/2011 20:21	11/9/2011 20:21		
L54429-6	421422-CHGW		CVCOND	GRND WTR	10/28/2011 8:30	11/9/2011 20:32	11/9/2011 20:32		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCOND	GRND WTR	11/1/2011 0:00	11/9/2011 20:45	11/9/2011 20:45		
L54548-1	421879-210	NPDES SW Fall City	CVCOND	STORM WTR	11/2/2011 19:44	11/9/2011 19:04	11/9/2011 19:04	WG118482-1,-2,-3,-4,-5,-6	
L54549-1	421879-210		CVCOND	STORM WTR	11/2/2011 18:15	11/9/2011 19:05	11/9/2011 19:05		
L54557-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCOND	GRND WTR	11/4/2011 7:20	11/9/2011 20:56	11/9/2011 20:56		
WG118482-1	LCS		CVCOND	BLANK WTR		11/9/2011 18:48	11/9/2011 18:48		LEVEL1
WG118482-2	LD		CVCOND	STORM WTR		11/9/2011 19:01	11/9/2011 19:01		L54422-1
WG118482-3	LD		CVCOND	FRESH WTR		11/9/2011 19:17	11/9/2011 19:17		L53806-8
WG118482-4	LD		CVCOND	GRND WTR		11/9/2011 19:51	11/9/2011 19:51		L54395-1
WG118482-5	LCS		CVCOND	BLANK WTR		11/9/2011 21:09	11/9/2011 21:09		LEVEL1
WG118482-6	LCS		CVCOND	BLANK WTR		11/9/2011 21:10	11/9/2011 21:10		LEVEL2

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54548, L54549

WG118468 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-1	421879-220	NPDES SW Sammamish	CVORTHOP	STORM WTR	11/2/2011 19:07	11/9/2011 10:30	11/9/2011 11:15	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54308-2	421879-220		CVORTHOP	STORM WTR	11/2/2011 19:06	11/9/2011 10:30	11/9/2011 11:17		
L54308-5	421879-220		CVORTHOP	BLANK WTR	11/3/2011 12:30	11/9/2011 10:30	11/9/2011 11:34		FFB OrthoP
L54477-1	421250-700	Marine Phytoplankton Study	CVNH3-FL	SALT WTR	11/8/2011 8:35	11/9/2011 10:30	11/9/2011 12:05	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54477-1	421250-700		CVNO23	SALT WTR	11/8/2011 8:35	11/9/2011 10:30	11/9/2011 12:05	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54477-2	421250-700		CVNH3-FL	BLANK WTR	11/8/2011 8:25	11/9/2011 10:30	11/9/2011 12:14	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	FFB
L54477-2	421250-700		CVNO23	BLANK WTR	11/8/2011 8:25	11/9/2011 10:30	11/9/2011 12:14		FFB
L54477-2	421250-700		CVORTHOP	BLANK WTR	11/8/2011 8:25	11/9/2011 10:30	11/9/2011 12:14		FFB
L54516-1	421879-220	NPDES SW Sammamish	CVORTHOP	STORM WTR	11/2/2011 2:07	11/9/2011 10:30	11/9/2011 11:38		
L54516-2	421879-220		CVORTHOP	STORM WTR	11/2/2011 19:56	11/9/2011 10:30	11/9/2011 11:40		
L54516-3	421879-220		CVORTHOP	STORM WTR	11/2/2011 19:30	11/9/2011 10:30	11/9/2011 11:36		
L54548-1	421879-210	NPDES SW Fall City	CVNO23	STORM WTR	11/2/2011 19:44	11/9/2011 10:30	11/9/2011 11:42	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54548-1	421879-210		CVORTHOP	STORM WTR	11/2/2011 19:44	11/9/2011 10:30	11/9/2011 11:42		
L54548-5	421879-210		CVNO23	BLANK WTR	11/3/2011 15:30	11/9/2011 10:30	11/9/2011 11:59		
L54548-5	421879-210		CVORTHOP	BLANK WTR	11/3/2011 15:30	11/9/2011 10:30	11/9/2011 11:59		
L54549-1	421879-210		CVNO23	STORM WTR	11/2/2011 18:15	11/9/2011 10:30	11/9/2011 12:03		
L54549-1	421879-210		CVORTHOP	STORM WTR	11/2/2011 18:15	11/9/2011 10:30	11/9/2011 12:03		
L54549-3	421879-210		CVNO23	BLANK WTR	11/3/2011 13:40	11/9/2011 10:30	11/9/2011 12:01		
L54549-3	421879-210		CVORTHOP	BLANK WTR	11/3/2011 13:40	11/9/2011 10:30	11/9/2011 12:01		
L54561-1	421240A		CVNH3-FL	FRESH WTR	11/7/2011 9:30	11/9/2011 10:30	11/9/2011 12:41	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54561-1	421240A		CVNO23	FRESH WTR	11/7/2011 9:30	11/9/2011 10:30	11/9/2011 12:41	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54561-1	421240A		CVORTHOP	FRESH WTR	11/7/2011 9:30	11/9/2011 10:30	11/9/2011 12:41	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54561-2	421240A		CVNH3-FL	FRESH WTR	11/7/2011 10:30	11/9/2011 10:30	11/9/2011 12:43	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54561-2	421240A		CVNO23	FRESH WTR	11/7/2011 10:30	11/9/2011 10:30	11/9/2011 12:43	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54561-2	421240A		CVORTHOP	FRESH WTR	11/7/2011 10:30	11/9/2011 10:30	11/9/2011 12:43	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	

L54561-3	421240A		CVNH3-FL	FRESH WTR	11/7/2011 10:53	11/9/2011 10:30	11/9/2011 12:45	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-3	421240A		CVNO23	FRESH WTR	11/7/2011 10:53	11/9/2011 10:30	11/9/2011 12:45	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-3	421240A		CVORTHOP	FRESH WTR	11/7/2011 10:53	11/9/2011 10:30	11/9/2011 12:45	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12
L54561-4	421240A		CVNH3-FL	FRESH WTR	11/7/2011 11:10	11/9/2011 10:30	11/9/2011 13:04	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-4	421240A		CVNO23	FRESH WTR	11/7/2011 11:10	11/9/2011 10:30	11/9/2011 13:04	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-4	421240A		CVORTHOP	FRESH WTR	11/7/2011 11:10	11/9/2011 10:30	11/9/2011 13:04	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-5	421240A		CVNH3-FL	FRESH WTR	11/7/2011 11:38	11/9/2011 10:30	11/9/2011 13:06	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-5	421240A		CVNO23	FRESH WTR	11/7/2011 11:38	11/9/2011 10:30	11/9/2011 13:06	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-5	421240A		CVORTHOP	FRESH WTR	11/7/2011 11:38	11/9/2011 10:30	11/9/2011 13:06	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-6	421240A		CVNH3-FL	FRESH WTR	11/7/2011 11:58	11/9/2011 10:30	11/9/2011 13:08	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-6	421240A		CVNO23	FRESH WTR	11/7/2011 11:58	11/9/2011 10:30	11/9/2011 13:08	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-6	421240A		CVORTHOP	FRESH WTR	11/7/2011 11:58	11/9/2011 10:30	11/9/2011 13:08	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-7	421240A		CVNH3-FL	FRESH WTR	11/7/2011 12:20	11/9/2011 10:30	11/9/2011 13:26	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-7	421240A		CVNO23	FRESH WTR	11/7/2011 12:20	11/9/2011 10:30	11/9/2011 13:26	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-7	421240A		CVORTHOP	FRESH WTR	11/7/2011 12:20	11/9/2011 10:30	11/9/2011 13:26	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-8	421240A		CVNH3-FL	FRESH WTR	11/7/2011 12:50	11/9/2011 10:30	11/9/2011 13:29	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15

L54561-8	421240A		CVNO23	FRESH WTR	11/7/2011 12:50	11/9/2011 10:30	11/9/2011 13:29	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-8	421240A		CVORTHOP	FRESH WTR	11/7/2011 12:50	11/9/2011 10:30	11/9/2011 13:29	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-9	421240A		CVNH3-FL	FRESH WTR	11/7/2011 13:25	11/9/2011 10:30	11/9/2011 13:31	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-9	421240A		CVNO23	FRESH WTR	11/7/2011 13:25	11/9/2011 10:30	11/9/2011 13:31	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-9	421240A		CVORTHOP	FRESH WTR	11/7/2011 13:25	11/9/2011 10:30	11/9/2011 13:31	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-10	421240A		CVNH3-FL	FRESH WTR	11/7/2011 13:48	11/9/2011 10:30	11/9/2011 13:33	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-10	421240A		CVNO23	FRESH WTR	11/7/2011 13:48	11/9/2011 10:30	11/9/2011 13:33	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-10	421240A		CVORTHOP	FRESH WTR	11/7/2011 13:48	11/9/2011 10:30	11/9/2011 13:33	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-11	421240A		CVNH3-FL	FRESH WTR	11/7/2011 14:12	11/9/2011 10:30	11/9/2011 13:35	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-11	421240A		CVNO23	FRESH WTR	11/7/2011 14:12	11/9/2011 10:30	11/9/2011 13:35	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-11	421240A		CVORTHOP	FRESH WTR	11/7/2011 14:12	11/9/2011 10:30	11/9/2011 13:35	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-12	421240A	STREAMS MONITOR (surf wtr)	CVNH3-FL	FRESH WTR	11/7/2011 14:36	11/9/2011 10:30	11/9/2011 13:37	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54561-12	421240A		CVNO23	FRESH WTR	11/7/2011 14:36	11/9/2011 10:30	11/9/2011 13:37	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-12	421240A		CVORTHOP	FRESH WTR	11/7/2011 14:36	11/9/2011 10:30	11/9/2011 13:37	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54561-13	421240A		CVNH3-FL	BLANK WTR	11/7/2011 9:15	11/9/2011 10:30	11/9/2011 13:24	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15

L54561-13	421240A		CVNO23	BLANK WTR	11/7/2011 9:15	11/9/2011 10:30	11/9/2011 13:24	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54561-13	421240A		CVORTHOP	BLANK WTR	11/7/2011 9:15	11/9/2011 10:30	11/9/2011 13:24	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-1	421240A		CVNH3-FL	FRESH WTR	11/7/2011 9:38	11/9/2011 10:30	11/9/2011 13:39	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-1	421240A		CVNO23	FRESH WTR	11/7/2011 9:38	11/9/2011 10:30	11/9/2011 13:39	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-1	421240A		CVORTHOP	FRESH WTR	11/7/2011 9:38	11/9/2011 10:30	11/9/2011 13:39	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-2	421240A		CVNH3-FL	FRESH WTR	11/7/2011 10:08	11/9/2011 10:30	11/9/2011 13:41	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-2	421240A		CVNO23	FRESH WTR	11/7/2011 10:08	11/9/2011 10:30	11/9/2011 13:41	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-2	421240A		CVORTHOP	FRESH WTR	11/7/2011 10:08	11/9/2011 10:30	11/9/2011 13:41	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-3	421240A		CVNH3-FL	FRESH WTR	11/7/2011 10:47	11/9/2011 10:30	11/9/2011 13:43	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-3	421240A		CVNO23	FRESH WTR	11/7/2011 10:47	11/9/2011 10:30	11/9/2011 13:43	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-3	421240A		CVORTHOP	FRESH WTR	11/7/2011 10:47	11/9/2011 10:30	11/9/2011 13:43	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-4	421240A		CVNH3-FL	FRESH WTR	11/7/2011 11:12	11/9/2011 10:30	11/9/2011 13:54	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-4	421240A		CVNO23	FRESH WTR	11/7/2011 11:12	11/9/2011 10:30	11/9/2011 13:54	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-4	421240A		CVORTHOP	FRESH WTR	11/7/2011 11:12	11/9/2011 10:30	11/9/2011 13:54	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-5	421240A		CVNH3-FL	FRESH WTR	11/7/2011 11:30	11/9/2011 10:30	11/9/2011 13:56	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15

L54562-5	421240A		CVNO23	FRESH WTR	11/7/2011 11:30	11/9/2011 10:30	11/9/2011 13:56	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-5	421240A		CVORTHOP	FRESH WTR	11/7/2011 11:30	11/9/2011 10:30	11/9/2011 13:56	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-6	421240A		CVNH3-FL	FRESH WTR	11/7/2011 12:11	11/9/2011 10:30	11/9/2011 13:58	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-6	421240A		CVNO23	FRESH WTR	11/7/2011 12:11	11/9/2011 10:30	11/9/2011 13:58	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-6	421240A		CVORTHOP	FRESH WTR	11/7/2011 12:11	11/9/2011 10:30	11/9/2011 13:58	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-7	421240A		CVNH3-FL	FRESH WTR	11/7/2011 12:51	11/9/2011 10:30	11/9/2011 14:00	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-7	421240A		CVNO23	FRESH WTR	11/7/2011 12:51	11/9/2011 10:30	11/9/2011 14:00	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-7	421240A		CVORTHOP	FRESH WTR	11/7/2011 12:51	11/9/2011 10:30	11/9/2011 14:00	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-8	421240A		CVNH3-FL	FRESH WTR	11/7/2011 13:15	11/9/2011 10:30	11/9/2011 14:02	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-8	421240A		CVNO23	FRESH WTR	11/7/2011 13:15	11/9/2011 10:30	11/9/2011 14:02	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-8	421240A		CVORTHOP	FRESH WTR	11/7/2011 13:15	11/9/2011 10:30	11/9/2011 14:02	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54562-9	421240A		CVNH3-FL	BLANK WTR	11/7/2011 9:35	11/9/2011 10:30	11/9/2011 14:06	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15
L54562-9	421240A		CVNO23	BLANK WTR	11/7/2011 9:35	11/9/2011 10:30	11/9/2011 14:06	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L54562-9	421240A		CVORTHOP	BLANK WTR	11/7/2011 9:35	11/9/2011 10:30	11/9/2011 14:06	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15
L54563-1	421195-190		CVNH3-FL	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:16	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15

L54563-1	421195-190	Vashon Island Surface Water	CVNO23	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:16	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-1	421195-190		CVORTHOP	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:16	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54563-2	421195-190		CVNH3-FL	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:26	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-2	421195-190		CVNO23	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:26	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-2	421195-190		CVORTHOP	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:26	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54563-3	421195-190		CVNH3-FL	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:28	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-3	421195-190		CVNO23	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:28	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-3	421195-190		CVORTHOP	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:28	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54563-4	421195-190		CVNH3-FL	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:39	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-4	421195-190		CVNO23	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:39	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-4	421195-190		CVORTHOP	FRESH WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:39	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
L54563-5	421195-190		CVNH3-FL	BLANK WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:36	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-5	421195-190		CVNO23	BLANK WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:36	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L54563-5	421195-190		CVORTHOP	BLANK WTR	11/8/2011 0:00	11/9/2011 10:30	11/9/2011 12:36	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	
WG118468-1	MB		CVNH3-FL	BLANK WTR		11/9/2011 10:30	11/9/2011 11:07	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	CONNUTS3

WG118468-1	MB	CVNO23	BLANK WTR	11/9/2011 10:30	11/9/2011 11:07	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	CONNUTS3
WG118468-1	MB	CVORTHOP	BLANK WTR	11/9/2011 10:30	11/9/2011 11:07	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	CONNUTS3
WG118468-2	SB	CVNH3-FL	BLANK WTR	11/9/2011 10:30	11/9/2011 11:09	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	WG118468-1
WG118468-2	SB	CVNO23	BLANK WTR	11/9/2011 10:30	11/9/2011 11:09	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	WG118468-1
WG118468-2	SB	CVORTHOP	BLANK WTR	11/9/2011 10:30	11/9/2011 11:09	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	WG118468-1
WG118468-3	LCS	CVNH3-FL	BLANK WTR	11/9/2011 11:11	11/9/2011 11:11	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-3	LCS	CVNO23	BLANK WTR	11/9/2011 11:11	11/9/2011 11:11	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-3	LCS	CVORTHOP	BLANK WTR	11/9/2011 11:11	11/9/2011 11:11	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-4	LD	CVORTHOP	STORM WTR	11/9/2011 10:30	11/9/2011 11:28		L54308-2
WG118468-5	MS	CVORTHOP	STORM WTR	11/9/2011 10:30	11/9/2011 11:30		L54308-2
WG118468-6	LD	CVNO23	STORM WTR	11/9/2011 10:30	11/9/2011 11:44	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54548-1
WG118468-6	LD	CVORTHOP	STORM WTR	11/9/2011 10:30	11/9/2011 11:44	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54548-1
WG118468-7	MS	CVNO23	STORM WTR	11/9/2011 10:30	11/9/2011 11:46	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54548-1
WG118468-7	MS	CVORTHOP	STORM WTR	11/9/2011 10:30	11/9/2011 11:46	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54548-1
WG118468-8	LD	CVNH3-FL	SALT WTR	11/9/2011 10:30	11/9/2011 12:07	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54477-1
WG118468-8	LD	CVNO23	SALT WTR	11/9/2011 10:30	11/9/2011 12:07	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54477-1
WG118468-9	MS	CVNH3-FL	SALT WTR	11/9/2011 10:30	11/9/2011 12:09	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54477-1

WG118468-9	MS	CVNO23	SALT WTR	11/9/2011 10:30	11/9/2011 12:09	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54477-1
WG118468-10	LD	CVNH3-FL	FRESH WTR	11/9/2011 10:30	11/9/2011 12:30	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-10	LD	CVNO23	FRESH WTR	11/9/2011 10:30	11/9/2011 12:30	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-10	LD	CVORTHOP	FRESH WTR	11/9/2011 10:30	11/9/2011 12:30	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-11	MS	CVNH3-FL	FRESH WTR	11/9/2011 10:30	11/9/2011 12:32	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-11	MS	CVNO23	FRESH WTR	11/9/2011 10:30	11/9/2011 12:32	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-11	MS	CVORTHOP	FRESH WTR	11/9/2011 10:30	11/9/2011 12:32	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54563-3
WG118468-12	MB	CVNH3-FL	BLANK WTR	11/9/2011 10:30	11/9/2011 12:57	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	CONNUTS3
WG118468-12	MB	CVNO23	BLANK WTR	11/9/2011 10:30	11/9/2011 12:57	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	CONNUTS3
WG118468-12	MB	CVORTHOP	BLANK WTR	11/9/2011 10:30	11/9/2011 12:57	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	CONNUTS3
WG118468-13	LCS	CVNH3-FL	BLANK WTR	11/9/2011 12:59	11/9/2011 12:59	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-13	LCS	CVNO23	BLANK WTR	11/9/2011 12:59	11/9/2011 12:59	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-13	LCS	CVORTHOP	BLANK WTR	11/9/2011 12:59	11/9/2011 12:59	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	LEVEL1
WG118468-14	LD	CVNH3-FL	FRESH WTR	11/9/2011 10:30	11/9/2011 13:10	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54561-6
WG118468-14	LD	CVNO23	FRESH WTR	11/9/2011 10:30	11/9/2011 13:10	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54561-6

WG118468-14	LD	CVORTHOP	FRESH WTR	11/9/2011 10:30	11/9/2011 13:10	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54561-6
WG118468-15	MS	CVNH3-FL	FRESH WTR	11/9/2011 10:30	11/9/2011 13:12	WG118468-1,-2,-3,-8,-9,-10,-11,-12,-13,-14,-15	L54561-6
WG118468-15	MS	CVNO23	FRESH WTR	11/9/2011 10:30	11/9/2011 13:12	WG118468-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L54561-6
WG118468-15	MS	CVORTHOP	FRESH WTR	11/9/2011 10:30	11/9/2011 13:12	WG118468-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15	L54561-6

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NPDES SW Permit, SWM, L54548, L54549

WG118599 TKN

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54451-1	421430-300	OCS-Lake Haven Utility District routine testing	CVTKN	EFFLUENT	11/7/2011 7:42	11/15/2011 10:00	11/16/2011 11:16		
L54451-3	421430-300		CVTKN	EFFLUENT	11/7/2011 7:10	11/15/2011 10:00	11/16/2011 11:18		
L54548-1	421879-210	NPDES SW Fall City	CVTKN	STORM WTR	11/2/2011 19:44	11/15/2011 10:00	11/16/2011 11:24		
L54549-1	421879-210		CVTKN	STORM WTR	11/2/2011 18:15	11/15/2011 10:00	11/16/2011 11:36		
L54553-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTKN	LEACHATE	11/2/2011 5:10	11/15/2011 10:00	11/16/2011 11:43		
L54553-3	421422-CHLS-M		CVTKN	LEACHATE	11/2/2011 8:10	11/15/2011 10:00	11/16/2011 12:44		
L54553-4	421422-CHLS-M		CVTKN	LEACHATE	11/2/2011 7:00	11/15/2011 10:00	11/16/2011 11:51		
L54553-5	421422-CHLS-M		CVTKN	LEACHATE	11/2/2011 8:00	11/15/2011 10:00	11/16/2011 11:53		
L54558-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVTKN	LEACHATE	11/3/2011 9:40	11/15/2011 10:00	11/16/2011 11:55		
WG118599-1	MB		CVTKN	BLANK WTR		11/15/2011 10:00	11/16/2011 11:07	WG118599-1,-2,-3,-4,-9,-10,-5,-6,-7,-8	MB1
WG118599-2	SB		CVTKN	BLANK WTR		11/15/2011 10:00	11/16/2011 11:09		WG118599-1
WG118599-3	LCS		CVTKN	BLANK WTR		11/15/2011 10:00	11/16/2011 11:11		LEVEL1
WG118599-4	LCS		CVTKN	BLANK WTR		11/15/2011 10:00	11/16/2011 11:13		LEVEL2
WG118599-5	LD		CVTKN	EFFLUENT		11/15/2011 10:00	11/16/2011 11:20		L54451-3
WG118599-6	MS		CVTKN	EFFLUENT		11/15/2011 10:00	11/16/2011 11:22		L54451-3
WG118599-7	LD		CVTKN	STORM WTR		11/15/2011 10:00	11/16/2011 11:38		L54549-1
WG118599-8	MS		CVTKN	STORM WTR		11/15/2011 10:00	11/16/2011 11:41		L54549-1
WG118599-9	LD		CVTKN	LEACHATE		11/15/2011 10:00	11/16/2011 11:45		L54553-1
WG118599-10	MS		CVTKN	LEACHATE		11/15/2011 10:00	11/16/2011 11:47		L54553-1

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NPDES SW Permit, SWM, L54548, L54549

WG118387 Total Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-1	421879-220	NPDES SW Sammamish	CVTOTP	STORM WTR	11/2/2011 19:07	11/4/2011 8:15	11/8/2011 12:16	WG118387-1,-2,-3,-4,-5,-6,-7,-8,-9	
L54308-2	421879-220		CVTOTP	STORM WTR	11/2/2011 19:06	11/4/2011 8:15	11/8/2011 12:18		
L54422-1	421879-210	NPDES SW Fall City	CVTOTP	STORM WTR	10/28/2011 14:13	11/4/2011 8:15	11/8/2011 12:51		
L54423-1	421879-210		CVTOTP	STORM WTR	10/28/2011 13:28	11/4/2011 8:15	11/8/2011 11:58		
L54516-1	421879-220	NPDES SW Sammamish	CVTOTP	STORM WTR	11/2/2011 2:07	11/4/2011 8:15	11/8/2011 12:58		
L54516-2	421879-220		CVTOTP	STORM WTR	11/2/2011 19:56	11/4/2011 8:15	11/8/2011 12:22		
L54516-3	421879-220		CVTOTP	STORM WTR	11/2/2011 19:30	11/4/2011 8:15	11/8/2011 12:25		
L54548-1	421879-210	NPDES SW Fall City	CVTOTP	STORM WTR	11/2/2011 19:44	11/4/2011 8:15	11/8/2011 12:55		
L54549-1	421879-210		CVTOTP	STORM WTR	11/2/2011 18:15	11/4/2011 8:15	11/8/2011 12:01		
L54594-1	423575-850-4	Brightwater Conveyance System Construction NPDES Monitoring	CVTOTP	STORM WTR	11/2/2011 14:03	11/4/2011 8:15	11/8/2011 12:42		
WG118387-1	MB		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:50		MB 11/4/11
WG118387-2	SB		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:52		WG118387-1
WG118387-3	LCS		CVTOTP	BLANK WTR		11/4/2011 8:15	11/8/2011 11:54		LEVEL1
WG118387-4	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:03		L54549-1
WG118387-5	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:07		L54549-1
WG118387-6	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:27		L54516-3
WG118387-7	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:31		L54516-3
WG118387-8	LD		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:44		L54594-1
WG118387-9	MS		CVTOTP	STORM WTR		11/4/2011 8:15	11/8/2011 12:47		L54594-1

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NPDES SW Permit, SWM, L54548, L54549

WG118419 TSS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-1	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/2/2011 19:07	11/4/2011 12:30	11/7/2011 12:17		
L54308-2	421879-220		CVTSS	STORM WTR	11/2/2011 19:06	11/4/2011 12:30	11/7/2011 12:17		
L54432-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/4/2011 10:40	11/4/2011 12:30	11/7/2011 12:19		
L54516-1	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/2/2011 2:07	11/4/2011 12:30	11/7/2011 12:14		
L54516-2	421879-220		CVTSS	STORM WTR	11/2/2011 19:56	11/4/2011 12:30	11/7/2011 12:15		
L54516-3	421879-220		CVTSS	STORM WTR	11/2/2011 19:30	11/4/2011 12:30	11/7/2011 12:16		
L54548-1	421879-210	NPDES SW Fall City	CVTSS	STORM WTR	11/2/2011 19:44	11/4/2011 12:30	11/7/2011 12:14	WG118419-1,-2,-3,-4	
L54549-1	421879-210		CVTSS	STORM WTR	11/2/2011 18:15	11/4/2011 12:30	11/7/2011 12:13		
L54557-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/4/2011 7:20	11/4/2011 12:30	11/7/2011 12:18		
WG118419-1	MB		CVTSS	BLANK WTR		11/4/2011 12:30	11/7/2011 12:12		MB1 111104
WG118419-2	LCS		CVTSS	BLANK WTR		11/4/2011 12:30	11/7/2011 12:13		LEVEL1
WG118419-3	LD		CVTSS	STORM WTR		11/4/2011 12:30	11/7/2011 12:15		L54516-1
WG118419-4	LD		CVTSS	GRND WTR		11/4/2011 12:30	11/7/2011 12:18		L54557-1

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NPDES SW Permit, SWM, L54548, L54549

WG118388 Turbidity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-1	421879-210	NPDES SW Fall City	CVTURB	STORM WTR	11/2/2011 19:44	11/4/2011 8:41	11/4/2011 8:41		
L54549-1	421879-210		CVTURB	STORM WTR	11/2/2011 18:15	11/4/2011 8:45	11/4/2011 8:45		
WG118388-1	LCS		CVTURB	BLANK WTR		11/4/2011 8:39	11/4/2011 8:39	WG118388-2,-3,-1	LEVEL1
WG118388-2	LD		CVTURB	STORM WTR		11/4/2011 8:43	11/4/2011 8:43		L54548-1
WG118388-3	LCS		CVTURB	BLANK WTR		11/4/2011 8:46	11/4/2011 8:46		LEVEL2

WG118370 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-3	421879-210	NPDES SW Fall City	MCFC-MF	STORM WTR	11/3/2011 0:00	11/3/2011 16:40	11/4/2011 15:00		
WG118370-1	LD		MCFC-MF	STORM WTR		11/3/2011 16:40	11/4/2011 15:00		L54548-3
WG118370-2	PC		MCFC-MF	BLANK WTR		11/3/2011 16:40	11/4/2011 15:00		QC-PERFORMED:03-NOV-11
WG118370-3	NC		MCFC-MF	BLANK WTR		11/3/2011 16:40	11/4/2011 15:00	WG118370-1,-2,-3,-4,-5	QC-PERFORMED:03-NOV-11
WG118370-4	BF		MCFC-MF	BLANK WTR		11/3/2011 16:40	11/4/2011 15:00		QC-PERFORMED:03-NOV-11
WG118370-5	AF		MCFC-MF	BLANK WTR		11/3/2011 16:40	11/4/2011 15:00		QC-PERFORMED:03-NOV-11

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NPDES SW Permit, SWM, L54548, L54549

WG118559 Total Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-1	421879-220	NPDES SW Sammamish	MTHARD-ICPMS	STORM WTR	11/2/2011 19:07	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54308-1	421879-220		MTICPMS	STORM WTR	11/2/2011 19:07	11/16/2011 9:00	11/17/2011 9:12	WG118559-1,-2,-3,-4,-5,-6	
L54308-2	421879-220		MTHARD-ICPMS	STORM WTR	11/2/2011 19:06	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54308-2	421879-220		MTICPMS	STORM WTR	11/2/2011 19:06	11/16/2011 9:00	11/17/2011 9:18	WG118559-1,-2,-3,-4,-5,-6	
L54441-1	421195-260	Ravensdale Monthly GW	MTICPMS	GRND WTR	11/15/2011 11:00	11/16/2011 9:00	11/17/2011 9:24		
L54450-1	421184-110	OCS-City of Enumclaw	MTICPMS	EFFLUENT	11/1/2011 7:30	11/16/2011 9:00	11/17/2011 9:30		
L54450-3	421184-110		MTICPMS	INFLUENT	11/1/2011 7:30	11/16/2011 9:00	11/17/2011 9:36		
L54452-1	421430-300	OCS-Lake Haven Utility District routine testing	MTICPMS	EFFLUENT	11/7/2011 7:10	11/16/2011 9:00	11/17/2011 9:41		
L54516-1	421879-220	NPDES SW Sammamish	MTHARD-ICPMS	STORM WTR	11/2/2011 2:07	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54516-1	421879-220		MTICPMS	STORM WTR	11/2/2011 2:07	11/16/2011 9:00	11/17/2011 10:11	WG118559-1,-2,-3,-4,-5,-6	
L54516-2	421879-220		MTHARD-ICPMS	STORM WTR	11/2/2011 19:56	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54516-2	421879-220		MTICPMS	STORM WTR	11/2/2011 19:56	11/16/2011 9:00	11/17/2011 10:17	WG118559-1,-2,-3,-4,-5,-6	
L54516-3	421879-220		MTHARD-ICPMS	STORM WTR	11/2/2011 19:30	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54516-3	421879-220		MTICPMS	STORM WTR	11/2/2011 19:30	11/16/2011 9:00	11/17/2011 10:23	WG118559-1,-2,-3,-4,-5,-6	
L54548-1	421879-210	NPDES SW Fall City	MTHARD-ICPMS	STORM WTR	11/2/2011 19:44	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54548-1	421879-210		MTICPMS	STORM WTR	11/2/2011 19:44	11/16/2011 9:00	11/17/2011 10:29	WG118559-1,-2,-3,-4,-5,-6	
L54549-1	421879-210		MTHARD-ICPMS	STORM WTR	11/2/2011 18:15	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54549-1	421879-210		MTICPMS	STORM WTR	11/2/2011 18:15	11/16/2011 9:00	11/17/2011 10:35	WG118559-1,-2,-3,-4,-5,-6	
L54616-1	421301A	Georgetown Yard Industiral SW Monitoring	MTICPMS	OTHR WTR	11/9/2011 14:35	11/16/2011 9:00	11/17/2011 10:53		
L54616-2	421301A		MTICPMS	OTHR WTR	11/9/2011 14:50	11/16/2011 9:00	11/17/2011 10:59		
L54626-2	421879-220	NPDES SW Sammamish	MTHARD-ICPMS	STORM WTR	11/14/2011 10:00	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	
L54626-2	421879-220		MTICPMS	STORM WTR	11/14/2011 10:00	11/16/2011 9:00	11/17/2011 11:05	WG118559-1,-2,-3,-4,-5,-6	
WG118559-1	MB		MTHARD-ICPMS	BLANK WTR		11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	METHOD BLANK
WG118559-1	MB		MTICPMS	BLANK WTR		11/16/2011 9:00	11/17/2011 9:00	WG118559-1,-2,-3,-4,-5,-6	METHOD BLANK

WG118559-2	SB	MTHARD-ICPMS	BLANK WTR	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	WG118559-1 MS-20
WG118559-2	SB	MTICPMS	BLANK WTR	11/16/2011 9:00	11/17/2011 9:06	WG118559-1,-2,-3,-4,-5,-6	WG118559-1 MS-20
WG118559-3	LD	MTICPMS	EFFLUENT	11/16/2011 9:00	11/17/2011 9:47		L54452-1 RPD-LIQ
WG118559-4	MS	MTICPMS	EFFLUENT	11/16/2011 9:00	11/17/2011 9:53		L54452-1 MS-20
WG118559-5	LD	MTHARD-ICPMS	STORM WTR	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	L54549-1 RPD-LIQ
WG118559-5	LD	MTICPMS	STORM WTR	11/16/2011 9:00	11/17/2011 10:41	WG118559-1,-2,-3,-4,-5,-6	L54549-1 RPD-LIQ
WG118559-6	MS	MTHARD-ICPMS	STORM WTR	11/16/2011 9:00	11/21/2011 9:55	WG118559-1,-2,-5,-6	L54549-1 MS-20
WG118559-6	MS	MTICPMS	STORM WTR	11/16/2011 9:00	11/17/2011 10:47	WG118559-1,-2,-3,-4,-5,-6	L54549-1 MS-20

WG118523 Total and Dissolved Mercury

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54429-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/8/2011 8:00	11/14/2011 13:30	11/15/2011 13:30	WG118523-1	
L54429-5	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/8/2011 8:40	11/14/2011 13:30	11/15/2011 13:32		
L54432-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/4/2011 10:40	11/14/2011 13:30	11/15/2011 13:38		
L54450-1	421184-110	OCS-City of Enumclaw	MTHG-MID	EFFLUENT	11/1/2011 7:30	11/14/2011 13:30	11/15/2011 13:25	WG118523-1,-2,-3,-4,-5,-6	
L54547-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/3/2011 7:40	11/14/2011 13:30	11/15/2011 13:39	WG118523-1	
L54548-1	421879-210	NPDES SW Fall City	MTHG-MID	STORM WTR	11/2/2011 19:44	11/14/2011 13:30	11/15/2011 13:41	WG118523-1,-2,-3,-4,-5,-6	
L54548-1	421879-210		MTHG-MID-DISS	STORM WTR	11/2/2011 19:44	11/14/2011 13:30	11/15/2011 13:43	WG118523-1	
L54553-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	MTHG-MID	LEACHATE	11/2/2011 5:10	11/14/2011 13:30	11/15/2011 13:45	WG118523-1,-2,-3,-4,-5,-6	
L54553-3	421422-CHLS-M		MTHG-MID	LEACHATE	11/2/2011 8:10	11/14/2011 13:30	11/15/2011 13:47		
L54553-4	421422-CHLS-M		MTHG-MID	LEACHATE	11/2/2011 7:00	11/14/2011 13:30	11/15/2011 13:19		
L54553-5	421422-CHLS-M		MTHG-MID	LEACHATE	11/2/2011 8:00	11/14/2011 13:30	11/15/2011 13:48		
L54557-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/4/2011 7:20	11/14/2011 13:30	11/15/2011 13:54	WG118523-1	
L54557-2	421422-VAGW		MTHG-MID-DISS	GRND WTR	11/10/2011 10:34	11/14/2011 13:30	11/15/2011 13:59		
L54557-4	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/8/2011 8:25	11/14/2011 13:30	11/15/2011 14:01		
L54558-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	MTHG-MID	LEACHATE	11/3/2011 9:40	11/14/2011 13:30	11/15/2011 13:50	WG118523-1,-2,-3,-4,-5,-6	
L54558-1	421422-VALS-M		MTHG-MID-DISS	LEACHATE	11/3/2011 9:40	11/14/2011 13:30	11/15/2011 13:52	WG118523-1	
L54574-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/10/2011 9:12	11/14/2011 13:30	11/15/2011 14:03		
L54576-5	421422-VAGW		MTHG-MID-DISS	GRND WTR	11/10/2011 7:47	11/14/2011 13:30	11/15/2011 14:05		
WG118523-1	MB		MTHG-MID	BLANK WTR		11/14/2011 13:30	11/15/2011 13:16	WG118523-1,-2,-3,-4,-5,-6	METHOD BLANK
WG118523-1	MB		MTHG-MID-DISS	BLANK WTR		11/14/2011 13:30	11/15/2011 13:16	WG118523-1	METHOD BLANK
WG118523-2	SB		MTHG-MID	BLANK WTR		11/14/2011 13:30	11/15/2011 13:18	WG118523-1,-2,-3,-4,-5,-6	WG118523-1 HG-LMID
WG118523-3	MS		MTHG-MID	LEACHATE		11/14/2011 13:30	11/15/2011 13:21		L54553-4 HG-LMID
WG118523-4	MSD		MTHG-MID	LEACHATE		11/14/2011 13:30	11/15/2011 13:23		WG118523-3 L54553-4 HG-LMID-MSD
WG118523-5	MS		MTHG-MID	EFFLUENT		11/14/2011 13:30	11/15/2011 13:27		L54450-1 HG-LMID

WG118523-6	MSD	MTHG-MID	EFFLUENT	11/14/2011 13:30	11/15/2011 13:29		WG118523-5 L54450-1 HG-LMID-MSD

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NPDES SW Permit, SWM, L54548, L54549

WG118389 Dissolved Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L53806-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	MTICPMS-DISS	FRESH WTR	10/25/2011 8:00	11/4/2011 9:00	11/4/2011 10:41		
L53806-3	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 8:10	11/4/2011 9:00	11/4/2011 10:47		
L53806-5	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 8:50	11/4/2011 9:00	11/4/2011 10:53		
L53806-6	421422-CHSW-Q		MTICPMS-DISS	FRESH WTR	10/25/2011 9:30	11/4/2011 9:00	11/4/2011 11:00		
L54308-1	421879-220	NPDES SW Sammamish	MTICPMS-DISS	STORM WTR	11/2/2011 19:07	11/4/2011 9:00	11/4/2011 11:18		
L54308-2	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:06	11/4/2011 9:00	11/4/2011 11:24		
L54398-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	MTICPMS-DISS	GRND WTR	10/26/2011 8:10	11/4/2011 9:00	11/4/2011 11:43		
L54422-1	421879-210	NPDES SW Fall City	MTICPMS-DISS	STORM WTR	10/28/2011 14:13	11/4/2011 9:00	11/4/2011 11:49		
L54423-1	421879-210		MTICPMS-DISS	STORM WTR	10/28/2011 13:28	11/4/2011 9:00	11/4/2011 11:55		
L54516-1	421879-220	NPDES SW Sammamish	MTICPMS-DISS	STORM WTR	11/2/2011 2:07	11/4/2011 9:00	11/4/2011 12:01	WG118389-1,2,3,4	
L54516-2	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:56	11/4/2011 9:00	11/4/2011 12:08		
L54516-3	421879-220		MTICPMS-DISS	STORM WTR	11/2/2011 19:30	11/4/2011 9:00	11/4/2011 12:14		
L54541-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTICPMS-DISS	GRND WTR	11/1/2011 0:00	11/4/2011 9:00	11/4/2011 12:20		
L54547-2	421422-VAGW		MTICPMS-DISS	GRND WTR	11/3/2011 7:40	11/4/2011 9:00	11/4/2011 12:27		
L54548-1	421879-210	NPDES SW Fall City	MTICPMS-DISS	STORM WTR	11/2/2011 19:44	11/4/2011 9:00	11/4/2011 12:33		
L54549-1	421879-210		MTICPMS-DISS	STORM WTR	11/2/2011 18:15	11/4/2011 9:00	11/4/2011 12:39		
WG118389-1	MB		MTICPMS-DISS	BLANK WTR		11/4/2011 9:00	11/4/2011 10:29		METHOD BLANK
WG118389-2	SB		MTICPMS-DISS	BLANK WTR		11/4/2011 9:00	11/4/2011 10:35		
									WG118389-1 MS-20
WG118389-3	LD		MTICPMS-DISS	FRESH WTR		11/4/2011 9:00	11/4/2011 11:06		L53806-6 RPD-LIQ
WG118389-4	MS		MTICPMS-DISS	FRESH WTR		11/4/2011 9:00	11/4/2011 11:12		L53806-6 MS-20

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NPDES SW Permit, SWM, L54548, L54549

WG118407 Herbicides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-1	421879-210	NPDES SW Fall City	ORHERB-NPDES	STORM WTR	11/2/2011 19:44	11/7/2011 8:00	11/17/2011 0:24		
L54549-1	421879-210		ORHERB-NPDES	STORM WTR	11/2/2011 18:15	11/7/2011 8:00	11/16/2011 23:55		
WG118407-1	MB		ORHERB-NPDES	BLANK WTR		11/7/2011 8:00	11/16/2011 21:28		MB111107
WG118407-2	SB		ORHERB-NPDES	BLANK WTR		11/7/2011 8:00	11/16/2011 21:57	WG118407-5,-1,-2,-3,-4	WG118407-1
WG118407-3	SBD		ORHERB-NPDES	BLANK WTR		11/7/2011 8:00	11/16/2011 22:26		WG118407-2
WG118407-4	MS		ORHERB-NPDES	STORM WTR		11/7/2011 8:00	11/16/2011 22:56		WG118407-1 L54548-1
WG118407-5	MSD		ORHERB-NPDES	STORM WTR		11/7/2011 8:00	11/16/2011 23:26		WG118407-4 L54548-1

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NPDES SW Permit, SWM, L54548, L54549

WG118439 Organophosphorus Pesticides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-1	421879-210	NPDES SW Fall City	OROPPEST-NPDES	STORM WTR	11/2/2011 19:44	11/8/2011 10:00	11/10/2011 14:06		
L54549-1	421879-210		OROPPEST-NPDES	STORM WTR	11/2/2011 18:15	11/8/2011 10:00	11/10/2011 13:38		
WG118439-1	MB		OROPPEST-NPDES	BLANK WTR		11/8/2011 10:00	11/10/2011 11:46		MB111108
WG118439-2	SB		OROPPEST-NPDES	BLANK WTR		11/8/2011 10:00	11/10/2011 12:14	WG118439-4,-1,-2,-3	WG118439-1
WG118439-3	MS		OROPPEST-NPDES	STORM WTR		11/8/2011 10:00	11/10/2011 12:42		L54549-1
WG118439-4	MSD		OROPPEST-NPDES	STORM WTR		11/8/2011 10:00	11/10/2011 13:10		WG118439-3 L54549-1

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NPDES SW Permit, SWM, L54548, L54549

WG118435 Semi Volatile Organics

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-1	421879-210	NPDES SW Fall City	ORPAHPHTH-SUR	STORM WTR	11/2/2011 19:44	11/8/2011 7:00	11/21/2011 16:12	WG118435-2,-1	
L54549-1	421879-210		ORPAHPHTH-SUR	STORM WTR	11/2/2011 18:15	11/8/2011 7:00	11/21/2011 13:33		
WG118435-1	MB		ORPAHPHTH-SUR	BLANK WTR		11/8/2011 7:00	11/21/2011 10:13		MB111107
WG118435-2	SB		ORPAHPHTH-SUR	BLANK WTR		11/8/2011 7:00	11/21/2011 12:13		WG118435-1

WG118438 WTPH-Dx

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54308-3	421879-220	NPDES SW Sammamish	ORWTPH-DX	STORM WTR	11/3/2011 11:05	11/8/2011 10:00	11/17/2011 13:23	WG118438-4,-3,-2,-1	
L54308-4	421879-220		ORWTPH-DX	STORM WTR	11/3/2011 12:15	11/8/2011 10:00	11/17/2011 13:47		
L54516-4	421879-220		ORWTPH-DX	STORM WTR	11/2/2011 12:15	11/8/2011 10:00	11/17/2011 14:10		
L54516-5	421879-220		ORWTPH-DX	STORM WTR	11/2/2011 11:58	11/8/2011 10:00	11/17/2011 14:34		
L54516-6	421879-220		ORWTPH-DX	STORM WTR	11/3/2011 13:45	11/8/2011 10:00	11/17/2011 14:57		
L54548-3	421879-210	NPDES SW Fall City	ORWTPH-DX	STORM WTR	11/3/2011 0:00	11/8/2011 10:00	11/17/2011 15:20		
WG118438-1	MB		ORWTPH-DX	BLANK WTR		11/8/2011 10:00	11/17/2011 11:50		MB111108
WG118438-2	SB		ORWTPH-DX	BLANK WTR		11/8/2011 10:00	11/17/2011 12:14		WG118438-1 SB-MO
WG118438-3	SB		ORWTPH-DX	BLANK WTR		11/8/2011 10:00	11/17/2011 12:37		WG118438-1 SB-DSL
WG118438-4	LD		ORWTPH-DX	STORM WTR		11/8/2011 10:00	11/17/2011 13:00		L54516-6

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NPDES SW Permit, SWM, L54548, L54549

WG118390 WTPH-G

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54548-3	421879-210	NPDES SW Fall City	ORWTPH-G	STORM WTR	11/3/2011 0:00	11/4/2011 14:09	11/4/2011 14:09	WG118390-3,-2,-1	
WG118390-1	MB		ORWTPH-G	BLANK WTR		11/4/2011 11:52	11/4/2011 11:52		MB111104
WG118390-2	SB		ORWTPH-G	BLANK WTR		11/4/2011 12:27	11/4/2011 12:27		WG118390-1
WG118390-3	LD		ORWTPH-G	STORM WTR		11/4/2011 13:35	11/4/2011 13:35		L54548-3

Workgroup: WG118412 BOD

MB:WG118412-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG118412-2 MB:WG118412-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	198	100		80--120

Workgroup: WG118654 Anions

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.1	0.087	87		70--130

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	0.2	0.18	91		70--130

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Method Blank)

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

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sulfate	0.1	0.2	mg/L	<MDL	

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	<MDL	2	2.15	107		80--120

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	<MDL	5	5.29	106		80--120

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	3	3	100		85--115

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	15	14	93		85--115

LD:WG118654-5 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	0.652	1		0--20

MS:WG118654-6 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	2	2.64	99		75--125

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	3.02	2		0--20

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	9.14	1		0--20

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	2	13.6	106		75--125

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	5	14.5	104		75--125

LD:WG118654-9 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2.33	8		0--20

MS:WG118654-10 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2	11.7	92		75--125

Workgroup: WG118482 Conductivity

LCS:WG118482-1 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	76.4	103		90--110

LD:WG118482-2 L54422-1 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	34	36.2	6		0--10

LD:WG118482-3 L53806-8 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	138	138	0		0--10

LD:WG118482-4 L54395-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	265	265	0		0--10

LCS:WG118482-5 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	77.3	105		90--110

LCS:WG118482-6 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	717	100		90--110

Workgroup: WG118468 Dissolved Nutrients

MB:WG118468-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118468-1 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:WG118468-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG118468-2 MB:WG118468-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.0948	95		80--120

SB:WG118468-2 MB:WG118468-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.781	98		80--120

SB:WG118468-2 MB:WG118468-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0396	99		80--120

LCS:WG118468-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.101	101		85--115

LCS:WG118468-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.797	100		85--115

LCS:WG118468-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0407	102		85--115

LD:WG118468-4 L54308-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0277	0.0271	2		0--20

MS:WG118468-5 L54308-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0277	0.04	0.0655	95		75--125

LD:WG118468-6 L54548-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.192	0.191	0		0--20

LD:WG118468-6 L54548-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0637	0.0649	2		0--20

MS:WG118468-7 L54548-1 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.192	0.8	0.953	95		75--125

MS:WG118468-7 L54548-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0637	0.04	0.103	99		75--125

LD:WG118468-8 L54477-1 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250-700 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0344	0.0341	1		0--20

LD:WG118468-8 L54477-1 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250-700 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.294	0.295	1		0--20

MS:WG118468-9 L54477-1 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250-700 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0344	0.1	0.139	104		75--125

MS:WG118468-9 L54477-1 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250-700 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.294	0.8	1.09	100		75--125

LD:WG118468-10 L54563-3 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0073	0.0072			0--20

LD:WG118468-10 L54563-3 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.785	0.787	0		0--20

LD:WG118468-10 L54563-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0212	0.0213	1		0--20

MS:WG118468-11 L54563-3 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0073	0.1	0.107	99		75--125

MS:WG118468-11 L54563-3 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.785	0.8	1.57	99		75--125

MS:WG118468-11 L54563-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0212	0.04	0.059	95		75--125

MB:WG118468-12 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118468-12 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:WG118468-12 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

LCS:WG118468-13 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.103	103		85--115

LCS:WG118468-13 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.799	100		85--115

LCS:WG118468-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0393	98		85--115

LD:WG118468-14 L54561-6 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	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0237	0.0239	1		0--20

LD:WG118468-14 L54561-6 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	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.738	0.744	1		0--20

LD:WG118468-14 L54561-6 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	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0304	0.0302	1		0--20

MS:WG118468-15 L54561-6 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0237	0.1	0.124	100		75--125

MS:WG118468-15 L54561-6 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.738	0.8	1.53	99		75--125

MS:WG118468-15 L54561-6 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421240A Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0304	0.04	0.0682	95		75--125

Workgroup: WG118599 TKN

MB:WG118599-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	

SB:WG118599-2 MB:WG118599-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	5	4.99	100		80--120

LCS:WG118599-3 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.5	0.462	92		80--120

LCS:WG118599-4 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	5	4.84	97		80--120

LD:WG118599-5 L54451-3 Matrix: EFFLUENT Listtype:CVTKN Method:EPA 351.2 Project:421430-300 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	1	2	mg/L	12.9	11.9	8		0--20

MS:WG118599-6 L54451-3 Matrix: EFFLUENT Listtype:CVTKN Method:EPA 351.2 Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	1	2	mg/L	12.9	5	62.6	99		70--130

LD:WG118599-7 L54549-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.399	0.41	3		0--20

MS:WG118599-8 L54549-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.399	5	5.48	102		70--130

LD:WG118599-9 L54553-1 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	50	100	mg/L	244	232	5		0--20

MS:WG118599-10 L54553-1 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	50	100	mg/L	244	5	2600	94		70--130

Workgroup: WG118387 Total Nutrients

MB:WG118387-1 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:WG118387-2 MB:WG118387-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.103	103		80--120

LCS:WG118387-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.103	103		85--115

LD:WG118387-4 L54549-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0868	0.0808	7		0--20

MS:WG118387-5 L54549-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0868	0.1	0.177	90		75--125

LD:WG118387-6 L54516-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0521	0.0479	9		0--20

MS:WG118387-7 L54516-3 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0521	0.1	0.15	98		75--125

LD:WG118387-8 L54594-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423575-850-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.0368	1		0--20

MS:WG118387-9 L54594-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423575-850-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0371	0.1	0.135	97		75--125

Workgroup: WG118419 TSS

MB:WG118419-1 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:WG118419-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG118419-3 L54516-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	30.4	29.2	4		0--25

LD:WG118419-4 L54557-1 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	Lab Limit
Total Suspended Solids	1	2	mg/L	18.4	15.8	15		0--25

Workgroup: WG118388 Turbidity

LCS:WG118388-1 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	10	9.72	97		90--110

LD:WG118388-2 L54548-1 Matrix: STORM WTR Listtype:CVTURB Method:SM2130-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	102	105	3		0--25

LCS:WG118388-3 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	100	96.9	97		90--110

Workgroup: WG118370 Fecal coliform

LD:WG118370-1 L54548-3 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precision	Qual
Fecal Coliform			CFU/100ml	2800	2800	0	0.52	N11

PC:WG118370-2 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:WG118370-3 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:WG118370-4 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			CFU/100ml	0	

AF:WG118370-5 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			CFU/100ml	0	

Workgroup: WG118559 Total Metals

MB:WG118559-1 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:WG118559-1 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	
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Total, ICP-MS	0.4	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	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118559-2 MB:WG118559-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	30.9	94		85--115

SB:WG118559-2 MB:WG118559-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4860	97		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4380	88		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	18.3	92		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	19.8	99		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.4	102		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.2	101		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	19.4	97		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.5	93		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.3	96		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115

LD:WG118559-3 L54452-1 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421430-300 Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.42	0.42			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.67	1.73	4		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	39.5	40.6	3		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	55	55.8	1		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	1.43	1.46	3		0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	7.08	7.17	1		0--20

MS:WG118559-4 L54452-1 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421430-300 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	24.3	122		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.42	20	18.7	92		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.67	20	21.7	100		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	39.5	20	60.4	104		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	55	20	73.2	91		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	1.43	20	21.1	98		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.2	96		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.9	99		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.5	93		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.1	95		75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.4	92		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	7.08	20	25.4	92		75--125

LD:WG118559-5 L54549-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.96	7.92	0		0--20

LD:WG118559-5 L54549-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Magnesium, Total, ICP-MS	50	50	ug/L	596	595	0		0--20
Calcium, Total, ICP-MS	50	50	ug/L	2200	2190	1		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	2.81	2.8	0		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	6.36	6.31	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	0.814	0.82	1		0--20

MS:WG118559-6 L54549-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	7.96	33.1	39.5	95		75--125

MS:WG118559-6 L54549-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Magnesium, Total, ICP-MS	50	50	ug/L	596	5000	5560	99		75--125
Calcium, Total, ICP-MS	50	50	ug/L	2200	5000	6650	89		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	2.81	20	22.9	100		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	6.36	20	25.5	96		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.1	95		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.814	20	20.3	97		75--125

Workgroup: WG118523 Total and Dissolved Mercury

MB:WG118523-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	

MB:WG118523-1 Matrix: BLANK WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	

SB:WG118523-2 MB:WG118523-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	1	0.903	90		85--115

MSD:WG118523-4 MS:WG118523-3 L54553-4 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-CHLS-M Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.1	0.2	ug/L	<MDL	2	2.01	100		75--125	2	1.98	99		1		0--20

MSD:WG118523-6 MS:WG118523-5 L54450-1 Matrix: EFFLUENT Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421184-110 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	1	0.979	98		75--125	1	1.03	103		5		0--20

Workgroup: WG118389 Dissolved Metals

MB:WG118389-1 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-MS	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-MS	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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118389-2 MB:WG118389-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.3	92		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4450	89		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4560	91		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	19.8	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	4420	88		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.7	93		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.6	93		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4730	95		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	19	95		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	18.9	94		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	93		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.2	96		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.9	95		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92		85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	18	90		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	17.8	89		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.5	88		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.3	92		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	93		85--115

LD:WG118389-3 L53806-6 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	5980	5860	2		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	4200	4180	1		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	12.3	12.2	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1600	1640	3		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	12600	12600	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.611	0.613	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	168	171	2		0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.28	1.28	0		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.053	0.051			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.907	0.985	8		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.4	1.4			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.6	1.6			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
Tin, Dissolved, ICP-MS	0.3	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	0.05	0.25	ug/L	5.2	5.21	0		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG118389-4 L53806-6 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	93		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	5980	5000	10400	88		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	4200	5000	8700	90		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	12.3	20	30.1	89		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1600	5000	6240	93		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	12600	5000	16800	84		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.611	20	19.1	92		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.7	93		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	168	5000	4920	95		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.28	20	19.2	90		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.053	20	17.7	88		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.907	20	20.1	96		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.4	20	20.5	96		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.6	20	20.6	95		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.35	20	19.5	96		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.1	100		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.8	94		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92		75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	18	90		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.1	90		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	5.2	20	23	89		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.4	92		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.6	93		75--125

Workgroup: WG118407 Herbicides

MB:WG118407-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
MCPP	0.5	1	ug/L	<MDL	
2,4-D	0.5	1	ug/L	<MDL	
Triclopyr	0.5	1	ug/L	<MDL	

SBD:WG118407-3 SB:WG118407-2 MB:WG118407-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	BD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	1	ug/L	<MDL	5	2.71	54		21--147	5	2.87	57		6		0--40
2,4-D	0.5	1	ug/L	<MDL	5	2.12	42		10--175	5	1.62	32		27		0--40
Triclopyr	0.5	1	ug/L	<MDL	5	2.38	48	*	59--151	5	2.21	44	*	8		0--40

MSD:WG118407-5 MS:WG118407-4 L54548-1 Matrix: STORM WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	0.99	ug/L	<MDL	4.95	3.26	66		20--162	4.95	3.54	72		8		0--40
2,4-D	0.5	0.99	ug/L	<MDL	4.95	3.08	62		10--196	4.95	3.4	69		10		0--40
Triclopyr	0.5	0.99	ug/L	<MDL	4.95	2.92	59		30--150	4.95	3.14	64		7		0--40

Surrogate:	2,4-Dichlorophenylacetic acid	2,6-Dichlorophenylacetic acid
(Lab Limits)	**11--153**	**40--148**
L54548-1	40	92
L54549-1	70	65
WG118407-1	59	51
WG118407-2	55	44
WG118407-3	58	42
WG118407-4	65	56
WG118407-5	71	64

Workgroup: WG118439 Organophosphorus Pesticides

MB:WG118439-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diazinon	0.043	0.05	ug/L	<MDL	
Malathion	0.048	0.05	ug/L	<MDL	
Chlorpyrifos	0.034	0.05	ug/L	<MDL	
Dichlobenil	0.05	0.1	ug/L	<MDL	
Prometon	0.05	0.1	ug/L	<MDL	

SB:WG118439-2 MB:WG118439-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diazinon	0.043	0.05	ug/L	<MDL	0.24	0.24	100		52--129
Malathion	0.048	0.05	ug/L	<MDL	0.24	0.214	89		25--161
Chlorpyrifos	0.034	0.05	ug/L	<MDL	0.24	0.231	96		57--127
Dichlobenil	0.05	0.1	ug/L	<MDL	0.24	0.372	155	*	70--98
Prometon	0.05	0.1	ug/L	<MDL	0.24	0.113	47		40--160

MSD:WG118439-4 MS:WG118439-3 L54549-1 Matrix: STORM WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	0.041	0.0472	ug/L	<MDL	0.226	0.243	107		67--148	0.226	0.258	114		6		0--40
Malathion	0.045	0.0472	ug/L	<MDL	0.226	0.235	104		52--190	0.226	0.243	107		3		0--40
Chlorpyrifos	0.032	0.0472	ug/L	<MDL	0.226	0.235	104		57--141	0.226	0.227	100		4		0--40
Dichlobenil	0.047	0.0943	ug/L	<MDL	0.226	0.286	126		40--160	0.226	0.31	137		8		0--40
Prometon	0.047	0.0943	ug/L	<MDL	0.226	0.297	131		40--160	0.226	0.31	137		4		0--40

Surrogate:	Chlor pyrifos-D10
(Lab Limits)	41--166
L54548-1	84
L54549-1	86
WG118439-1	81
WG118439-2	68
WG118439-3	82
WG118439-4	88

Workgroup: WG118435 Semi Volatile Organics

MB:WG118435-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD (Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.01	0.02	ug/L	<MDL	
Acenaphthylene	0.01	0.02	ug/L	<MDL	
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	
Acenaphthene	0.01	0.02	ug/L	<MDL	
Fluorene	0.01	0.02	ug/L	<MDL	
Diethyl Phthalate	0.025	0.05	ug/L	0.037	B
Pentachlorophenol	0.1	0.2	ug/L	<MDL	
Phenanthrene	0.01	0.02	ug/L	<MDL	
Anthracene	0.01	0.02	ug/L	<MDL	
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.041	B
Fluoranthene	0.01	0.02	ug/L	<MDL	
Pyrene	0.01	0.02	ug/L	<MDL	
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	
Chrysene	0.01	0.02	ug/L	<MDL	
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.495	B
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	

SB:WG118435-2 MB:WG118435-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Naphthalene	0.01	0.02	ug/L	<MDL	2.5	1.83	73		32--93
Acenaphthylene	0.01	0.02	ug/L	<MDL	2.5	2.66	107		49--107
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.71	108		31--119
Acenaphthene	0.01	0.02	ug/L	<MDL	2.5	2.21	89		43--103
Fluorene	0.01	0.02	ug/L	<MDL	2.5	2.86	114		43--127
Diethyl Phthalate	0.025	0.05	ug/L	0.037	2.5	2.89	114		26--141
Pentachlorophenol	0.1	0.2	ug/L	<MDL	2.5	2.41	97		10--137
Phenanthrene	0.01	0.02	ug/L	<MDL	2.5	2.66	107		57--114
Anthracene	0.01	0.02	ug/L	<MDL	2.5	2.88	115		59--122
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.041	2.5	3.25	129		52--145
Fluoranthene	0.01	0.02	ug/L	<MDL	2.5	2.87	115		57--123
Pyrene	0.01	0.02	ug/L	<MDL	2.5	3.16	127		51--139
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	2.5	3.04	122		49--145
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	2.5	3.02	121		67--130
Chrysene	0.01	0.02	ug/L	<MDL	2.5	2.89	116	*	58--114
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.495	2.5	6.17	227	*	48--128
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	3.12	125		51--126
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	7.5	8.08	108		49--139
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	2.5	2.53	101		55--132
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	2.5	2.45	98		53--122
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	2.5	2.46	98		47--134
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	2.5	2.59	103		32--130
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	2.5	1.58	63		25--104

Surrogate: (Lab Limits)	2,4,6-Tribromo phenol 20--142	2-Fluoro biphenyl 30--128	2-Fluoro phenol 30--110	d14-Ter phenyl 51--133	d4-2-Chloro phenol 42--113	d5-Nitro benzene 48--116	5-Phenol 31--143
L54548-1	121	72	79	125	74	103	89
L54549-1	106	64	63	115	58	75	65
WG118435-1	52	75	98	121	91	98	99
WG118435-2	91	78	102	115	96	109	103

Workgroup: WG118438 WTPH-Dx

MB:WG118438-1 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:WG118438-2 MB:WG118438-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.09	109		50--150

SB:WG118438-3 MB:WG118438-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.973	97		50--150

LD:WG118438-4 L54516-6 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
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: (Lab Limits)	2-Fluoro biphenyl 50--150	Penta cosane 50--150
L54308-3	89	97
L54308-4	86	94
L54516-4	87	91
L54516-5	89	92
L54516-6	86	90
L54548-3	91	93
WG118438-1	86	95
WG118438-2	98	101
WG118438-3	96	95
WG118438-4	90	96

King County Environmental Laboratory Analytical QC Report

NPDES SW Permit, SWM, L54548, L54549

Workgroup: WG118390 WTPH-G

MB:WG118390-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	

SB:WG118390-2 MB:WG118390-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	500	454	91		50--150

LD:WG118390-3 L54548-3 Matrix: STORM WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	4-Bromo fluoro benzene 50--150	I8-Toluene 50--150
L54548-3	93	98
WG118390-1	93	98
WG118390-2	92	98
WG118390-3	92	97

Trace Metals Data Anomaly Form

Date(s) Occurred:

WG #(s): *WG118389*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54308-(1,2), L54422-1, L54423-1, L54516-(1-3), L54548-1, L54549-1*

Project #(s): *421879-210, 421879-220*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☐ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☒ X II-O)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes.*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.

☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: Derrick Sanders	_____	_____
Reviewer: Steve Talbot	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Trace Metals Data Anomaly Form

Date(s) Occurred: *11/15/11*

WG #(s): *WG118523*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54548-1*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☒ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☐ X II-O ☐ PE)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.

☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: Anthony Ocana		
Reviewer: Kevin Cummings		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: Fritz Grothkopp		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☒ Other: *Total Kjeldahl Nitrogen (TKN)*

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☒ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☐ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☐ Holding time exceeded by:
11 ☐ Insufficient sample amount.
12 ☒ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for project 421879-210 were preserved past the fifteen minute holding time for TKN.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *SH*
☒ Text added: *Preserved past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were presrved for TKN as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The TKN data for these samples and the associated matrix QC were qualified with an "SH" and the text "Preserved past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and preservation may have introduced bias to the TKN results for these samples. The extent of any bias is unknown and so the TKN data should be used with caution.*

	Signatures	Signature Dates
Reported By: *David C Hunn*		
Reviewer: *Duc Nguyen*		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: *Fritz Grothkopp*		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210 & 421879-220*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☒ Nutrients: *Orthophosphate Phosphorus (ORTHOP)*
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201
Autoanalyzer:	☐ Astoria2+2 (freshwater system) ☒ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system) ☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer
Dissolved Oxygen:	☐ YSI 5100 ☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU
Ion Chromatography:	☐ Dionex 120
pH Probe:	☐ Metrohm 736GP ☐ Accument XL60
Salinometer:	☐ Portosal 8410A
Spectrophotometer:	☐ Hitachi U3000 UV/VIS ☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890
TOC Analyzer:	☐ OI 1020A ☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN
Other:	☐ Description:

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☒ Holding time exceeded by: *> 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for projects 421879-210 and 421879-220 were filtered past the fifteen minute holding time for ORTHOP.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *Filtered past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were filtered for ORTHOP as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The ORTHOP data for these samples and the associated matrix QC were qualified with an "H" and the text "Filtered past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and filtration may have introduced bias to the ORTHOP results for these samples. The extent of any bias is unknown and so the ORTHOP data should be used with caution.*

	Signatures	Signature Dates
Reported By: *Terry Siebens*		
Reviewer: *Dave Hunn*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM: *Fritz Grothkopp*	_____	_____

Trace Organics Data Anomaly Form

Date(s) Occurred: *11-10-2011*

WG #(s): *118439*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☒ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ HERB
☐ Other:
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☐ J ☐ K ☐ L ☐ M ☒ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☐ Other:

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☐ Blank Contamination
2 ☒ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD %Differences
8 ☐ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description: *2) The recovery of Dichlobenil exceeded the upper QC limit in the SB.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Sample(s) Diluted
☐ Data qualified with the following flags:
☐ Other
☐ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description: *2) An Asterisk was applied to the QC report.*

VI. Potential Effects on Data Quality (mandatory):

2) No quantitative bias is suggested as indicated by acceptable recoveries in the MS and MSD and "ND" for all associated samples.

	Signatures	Signature Dates
Reported By: Felix Zboralski	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Trace Organics Data Anomaly Form

Date(s) Occurred: *11-16-2011*

WG #(s): *118407*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54553-3,L54553-5,wg118406-4,&wg118406-5*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☐ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☒ HERB
☐ Other:
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☐ J ☐ K ☐ L ☐ M ☒ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☐ Other:

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☐ Blank Contamination
2 ☒ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD %Differences
8 ☐ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description: *2) The recovery of Triclopyr exceeded the lower recovery limit in the SB and SBD.*

IV. Type of Project Anomaly

- ☐ SAP/Work Plan specified MDLs not met.
- ☐ SAP/Work Plan specified QC frequency or QC type not met.
- ☐ SAP/Work Plan specified methodology not used.
- ☐ Sample exceeds regulatory and/or hazardous waste limits.
- ☐ Sample data results are unusual or inconsistent with expected results.
- ☐ Other

Anomaly Description:

V. Corrective Action Taken

- ☐ Sample(s) re-analyzed
- ☒ Sample(s) reported "AS IS"
- ☐ Sample(s) Diluted
- ☐ Data qualified with the following flags:
- ☐ Other
- ☐ Sample(s) re-prepared and re-analyzed
- ☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description: *2) Triclopyr was flagged with an" * " on the QC report.*

VI. Potential Effects on Data Quality (mandatory):

2) Given acceptable spike recoveries in the MS / MSD and acceptable surrogate recoveries for all associated samples, no bias is suggested for Triclopyr.

	Signatures	Signature Dates
Reported By: Felix Zboralski	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

December 19, 2011

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L54624-1 to 5 and L54625-1 to 3, collected November 16-17, 2011.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on November 16 and 17, 2011. The sample was analyzed in the Trace Metals, Conventionals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #14795 was prepared and sent via e-mail on December 19, 2011.

Sample Collection:
There were no sampling anomalies for this event.

Conventionals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

The results for Total Kjeldahl Nitrogen (TKN) have been flagged with an "SH" qualifier to indicate that the sample was not preserved within 15 minutes of the collection of the last aliquot into the composite sample.

The results for Orthophosphate Phosphorus (ORTHOP) analysis have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Metals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exception.

The results for dissolved metals and mercury have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

Di-n-octyl phthalate, Di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were detected in the method blank for semivolatile analysis. All entries in the data report and the QC report have been flagged with a "B" qualifier.

Microbiology:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Subcontract Parameters: MBAS
The data have passed all QA/QC checks for accuracy and completeness.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW02	FCSW01
Descrip:	FALL CITY HD COMME	FALL CITY HD RESID	FALL CITY HD COMME
Sample:	L54624-1	L54624-2	L54624-3
Matrix:	LG STORM WTR	LG STORM WTR	LG STORM WTR
ColDate:	11/16/11 12:15	11/16/11 17:56	11/17/11 12:39
TimeSpan:	9.57	9.93	
TotalSolid:			
ClientLoc:			
SampDepth:			
	WET Weight Basis	**WET Weight Basis**	**WET Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV EPA 351.2															
Total Kjeldahl Nitrogen	1.18	SH	0.1	0.2	mg/L	1.13	SH	0.1	0.2	mg/L					
CV SM 5540C															
Methylene Blue Act. Substance	0.053		0.025	0.025	mg/L		<MDL	0.025	0.025	mg/L					
CV SM2130-B															
Turbidity	144		0.2	0.5	NTU	21.6		0.2	0.5	NTU					
CV SM2510-B															
Conductivity	82		1	5	umhos/cm	14.5		1	5	umhos/cm					
CV SM2540-D															
Total Suspended Solids	120		5	10	mg/L	59.4		1.4	2.8	mg/L					
CV SM4110B CL															
Chloride	16.3		0.25	0.5	mg/L	0.308		0.05	0.1	mg/L					
CV SM4500-NO3-F															
Nitrite + Nitrate Nitrogen	0.107		0.01	0.04	mg/L	0.022	<RDL	0.01	0.04	mg/L					
CV SM4500-P-B,F															
Total Phosphorus	0.249		0.005	0.01	mg/L	0.16		0.005	0.01	mg/L					
CV SM4500-P-F															
Orthophosphate Phosphorus	0.0139	H	0.002	0.005	mg/L	0.0314	H	0.002	0.005	mg/L					
CV SM5210-B															
Biochemical Oxygen Demand	13.1		2	2	mg/L	9.3		2	2	mg/L					
MC SM 9222D 20TH															
Fecal Coliform											780				CFU/100ml
MT EPA 200.8*SW846 6020A															
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L		<MDL,H	0.05	0.25	ug/L					
Cadmium, Total, ICP-MS	0.16	<RDL	0.05	0.25	ug/L	0.11	<RDL	0.05	0.25	ug/L					
Calcium, Total, ICP-MS	4970		50	50	ug/L	2070		50	50	ug/L					
Copper, Dissolved, ICP-MS	4.4	H	0.4	2	ug/L	1.2	<RDL,H	0.4	2	ug/L					
Copper, Total, ICP-MS	22		0.4	2	ug/L	9.98		0.4	2	ug/L					
Lead, Dissolved, ICP-MS	0.29	<RDL,H	0.1	0.5	ug/L	0.18	<RDL,H	0.1	0.5	ug/L					
Lead, Total, ICP-MS	11.2		0.1	0.5	ug/L	13.4		0.1	0.5	ug/L					
Magnesium, Total, ICP-MS	2440		50	50	ug/L	499		50	50	ug/L					
Zinc, Dissolved, ICP-MS	16.4	H	0.5	2.5	ug/L	2.3	<RDL,H	0.5	2.5	ug/L					
Zinc, Total, ICP-MS	91.4		0.5	2.5	ug/L	28.3		0.5	2.5	ug/L					
MT EPA 200.8/SW846 6020A*SM2340B															
Hardness, Calc	22.5		0.331	0.331	mg CaCO3/L	7.22		0.331	0.331	mg CaCO3/L					
MT EPA 245.1*SW846 7470A															
Mercury, Dissolved, CVAA		<MDL,H	0.05	0.1	ug/L										
Mercury, Total, CVAA		<MDL	0.05	0.1	ug/L										
OR SW846 3520C*SW846 8270D															
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					
Acenaphthene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					
Acenaphthylene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW02	FCSW01
Descrip:	FALL CITY HD COMME	FALL CITY HD RESID	FALL CITY HD COMME
Sample:	L54624-1	L54624-2	L54624-3
Matrix:	LG STORM WTR	LG STORM WTR	LG STORM WTR
ColDate:	11/16/11 12:15	11/16/11 17:56	11/17/11 12:39
TimeSpan:	9.57	9.93	
TotalSolid:			
ClientLoc:			
SampDepth:			
WET Weight Basis			

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					
Benzo(a)anthracene		<MDL	0.0094	0.0189	ug/L	0.0603		0.0094	0.0189	ug/L					
Benzo(a)pyrene		<MDL	0.0094	0.0189	ug/L	0.148		0.0094	0.0189	ug/L					
Benzo(b,j,k)fluoranthene		<MDL	0.0094	0.0189	ug/L	0.169		0.0094	0.0189	ug/L					
Benzo(g,h,i)perylene	0.131		0.0094	0.0189	ug/L	0.128		0.0094	0.0189	ug/L					
Benzyl Butyl Phthalate	0.442		0.047	0.0943	ug/L		<MDL	0.047	0.0943	ug/L					
Bis(2-Ethylhexyl)Phthalate	3.23	B2	0.024	0.0472	ug/L	1.55	B	0.024	0.0472	ug/L					
Chrysene	0.0824		0.0094	0.0189	ug/L	0.0964		0.0094	0.0189	ug/L					
Dibenzo(a,h)anthracene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					
Diethyl Phthalate		<MDL	0.024	0.0472	ug/L	0.251		0.024	0.0472	ug/L					
Dimethyl Phthalate		<MDL	0.024	0.0472	ug/L		<MDL	0.024	0.0472	ug/L					
Di-N-Butyl Phthalate	0.172	B	0.024	0.0472	ug/L	0.0706	B	0.024	0.0472	ug/L					
Di-N-Octyl Phthalate	1.01	B3	0.024	0.0472	ug/L	2.77		0.024	0.0472	ug/L					
Fluoranthene	0.0929		0.0094	0.0189	ug/L	0.184		0.0094	0.0189	ug/L					
Fluorene		<MDL	0.0094	0.0189	ug/L		<MDL	0.0094	0.0189	ug/L					
Indeno(1,2,3-Cd)Pyrene		<MDL	0.0094	0.0189	ug/L	0.136		0.0094	0.0189	ug/L					
Naphthalene	0.0474		0.0094	0.0189	ug/L	0.017	<RDL	0.0094	0.0189	ug/L					
Pentachlorophenol	0.813		0.094	0.189	ug/L		<MDL	0.094	0.189	ug/L					
Phenanthrene	0.0703		0.0094	0.0189	ug/L	0.0987		0.0094	0.0189	ug/L					
Pyrene	0.18		0.0094	0.0189	ug/L	0.16		0.0094	0.0189	ug/L					
OR SW846 3520C*SW846 8270D SIM															
Chlorpyrifos		<MDL	0.032	0.0472	ug/L		<MDL	0.032	0.0472	ug/L					
Diazinon		<MDL	0.041	0.0472	ug/L		<MDL	0.041	0.0472	ug/L					
Dichlobenil		<MDL	0.047	0.0943	ug/L		<MDL	0.047	0.0943	ug/L					
Malathion		<MDL	0.045	0.0472	ug/L		<MDL	0.045	0.0472	ug/L					
Prometon		<MDL	0.047	0.0943	ug/L		<MDL	0.047	0.0943	ug/L					
OR SW846 3535A/8151A*8270D SIM															
2,4-D		<MDL	0.51	1.02	ug/L		<MDL	0.5	1	ug/L					
MCPP		<MDL	0.51	1.02	ug/L		<MDL	0.5	1	ug/L					
Triclopyr		<MDL	0.51	1.02	ug/L		<MDL	0.5	1	ug/L					
OR WDOE NWTPH-DX															
Diesel Range (>C12-C24)												<MDL	0.19	0.19	mg/L
Lube Oil Range (>C24)											0.197		0.19	0.19	mg/L
OR WDOE NWTPH-GX															
Gasoline Range (C7-C12)												<MDL	250	250	ug/L

King County Environmental Lab Analytical Report

Project:	421879-210					Project:	421879-210					Project:	421879-210			
Locator:	FCSW02					Locator:	FFBLANK					Locator:	RSW1UP			
Descrip:	FALL CITY HD RESID					Descrip:	FIELD FILTER BLANK					Descrip:	148TH AVE SE UPSTR			
Sample:	L54624-4					Sample:	L54624-5					Sample:	L54625-1			
Matrix:	LG STORM WTR					Matrix:	LN BLANK WTR					Matrix:	LG STORM WTR			
ColDate:	11/17/11 12:24					ColDate:	11/17/11 14:00					ColDate:	11/16/11 10:57			
TimeSpan:						TimeSpan:						TimeSpan:	12.73			
TotalSolid:						TotalSolid:						TotalSolid:				
ClientLoc:						ClientLoc:						ClientLoc:				
SampDepth:						SampDepth:						SampDepth:				
WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**				
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**
CV EPA 351.2															
Total Kjeldahl Nitrogen											1.57	SH	0.1	0.2	mg/L
CV SM 5540C															
Methylene Blue Act. Substance											0.058		0.025	0.025	mg/L
CV SM2130-B															
Turbidity											9.82		0.2	0.5	NTU
CV SM2510-B															
Conductivity											33.5		1	5	umhos/cm
CV SM2540-D															
Total Suspended Solids											17.1		0.5	1	mg/L
CV SM4110B CL															
Chloride											0.941		0.25	0.5	mg/L
CV SM4500-NO3-F															
Nitrite + Nitrate Nitrogen							<MDL	0.01	0.04	mg/L	0.59		0.01	0.04	mg/L
CV SM4500-P-B,F															
Total Phosphorus											0.0739		0.005	0.01	mg/L
CV SM4500-P-F															
Orthophosphate Phosphorus							<MDL	0.002	0.005	mg/L	0.0262	H	0.002	0.005	mg/L
CV SM5210-B															
Biochemical Oxygen Demand											3.02		2	2	mg/L
MC SM 9222D 20TH															
Fecal Coliform	140				CFU/100ml										
MT EPA 200.8*SW846 6020A															
Cadmium, Dissolved, ICP-MS												<MDL,H	0.05	0.25	ug/L
Cadmium, Total, ICP-MS												<MDL	0.05	0.25	ug/L
Calcium, Total, ICP-MS											3010		50	50	ug/L
Copper, Dissolved, ICP-MS											1.7	<RDL,H	0.4	2	ug/L
Copper, Total, ICP-MS											2.91		0.4	2	ug/L
Lead, Dissolved, ICP-MS												<MDL,H	0.1	0.5	ug/L
Lead, Total, ICP-MS											1.29		0.1	0.5	ug/L
Magnesium, Total, ICP-MS											740		50	50	ug/L
Zinc, Dissolved, ICP-MS											4.03	H	0.5	2.5	ug/L
Zinc, Total, ICP-MS											8.3		0.5	2.5	ug/L
MT EPA 200.8/SW846 6020A*SM2340B															
Hardness, Calc											10.6		0.331	0.331	mg CaCO3/L
MT EPA 245.1*SW846 7470A															
Mercury, Dissolved, CVAA															
Mercury, Total, CVAA															
OR SW846 3520C*SW846 8270D															
2-Methylnaphthalene												<MDL	0.0094	0.0189	ug/L
Acenaphthene												<MDL	0.0094	0.0189	ug/L
Acenaphthylene												<MDL	0.0094	0.0189	ug/L

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW02	FFBLANK	RSW1UP
Descrip:	FALL CITY HD RESID	FIELD FILTER BLANK	148TH AVE SE UPSTR
Sample:	L54624-4	L54624-5	L54625-1
Matrix:	LG STORM WTR	LN BLANK WTR	LG STORM WTR
ColDate:	11/17/11 12:24	11/17/11 14:00	11/16/11 10:57
TimeSpan:			12.73
TotalSolid:			
ClientLoc:			
SampDepth:			
WET Weight Basis		**WET Weight Basis**	**WET Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene												<MDL	0.0094	0.0189	ug/L
Benzo(a)anthracene											0.0405		0.0094	0.0189	ug/L
Benzo(a)pyrene											0.138		0.0094	0.0189	ug/L
Benzo(b,j,k)fluoranthene											0.186		0.0094	0.0189	ug/L
Benzo(g,h,i)perylene											0.118		0.0094	0.0189	ug/L
Benzyl Butyl Phthalate												<MDL	0.047	0.0943	ug/L
Bis(2-Ethylhexyl)Phthalate											0.743	B	0.024	0.0472	ug/L
Chrysene											0.113		0.0094	0.0189	ug/L
Dibenzo(a,h)anthracene											0.0959		0.0094	0.0189	ug/L
Diethyl Phthalate											0.659		0.024	0.0472	ug/L
Dimethyl Phthalate												<MDL	0.024	0.0472	ug/L
Di-N-Butyl Phthalate											0.0613	B	0.024	0.0472	ug/L
Di-N-Octyl Phthalate												<MDL	0.024	0.0472	ug/L
Fluoranthene											0.215		0.0094	0.0189	ug/L
Fluorene												<MDL	0.0094	0.0189	ug/L
Indeno(1,2,3-Cd)Pyrene											0.143		0.0094	0.0189	ug/L
Naphthalene											0.01	<RDL	0.0094	0.0189	ug/L
Pentachlorophenol												<MDL	0.094	0.189	ug/L
Phenanthrene											0.0483		0.0094	0.0189	ug/L
Pyrene											0.182		0.0094	0.0189	ug/L
OR SW846 3520C*SW846 8270D SIM															
Chlorpyrifos												<MDL	0.032	0.0472	ug/L
Diazinon												<MDL	0.041	0.0472	ug/L
Dichlobenil												<MDL	0.047	0.0943	ug/L
Malathion												<MDL	0.045	0.0472	ug/L
Prometon												<MDL	0.047	0.0943	ug/L
OR SW846 3535A/8151A*8270D SIM															
2,4-D												<MDL	0.51	1.01	ug/L
MCPP												<MDL	0.51	1.01	ug/L
Triclopyr												<MDL	0.51	1.01	ug/L
OR WDOE NWTPH-DX															
Diesel Range (>C12-C24)		<MDL	0.19	0.19	mg/L										
Lube Oil Range (>C24)		<MDL	0.19	0.19	mg/L										
OR WDOE NWTPH-GX															
Gasoline Range (C7-C12)		<MDL	250	250	ug/L										

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L54625-2	Sample:	L54625-3
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	11/16/11 10:46	ColDate:	11/17/11 10:15
TimeSpan:		TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV EPA 351.2										
Total Kjeldahl Nitrogen										
CV SM 5540C										
Methylene Blue Act. Substance										
CV SM2130-B										
Turbidity										
CV SM2510-B										
Conductivity										
CV SM2540-D										
Total Suspended Solids										
CV SM4110B CL										
Chloride										
CV SM4500-NO3-F										
Nitrite + Nitrate Nitrogen							<MDL	0.01	0.04	mg/L
CV SM4500-P-B,F										
Total Phosphorus										
CV SM4500-P-F										
Orthophosphate Phosphorus							<MDL	0.002	0.005	mg/L
CV SM5210-B										
Biochemical Oxygen Demand										
MC SM 9222D 20TH										
Fecal Coliform	29				CFU/100ml					
MT EPA 200.8*SW846 6020A										
Cadmium, Dissolved, ICP-MS										
Cadmium, Total, ICP-MS										
Calcium, Total, ICP-MS										
Copper, Dissolved, ICP-MS										
Copper, Total, ICP-MS										
Lead, Dissolved, ICP-MS										
Lead, Total, ICP-MS										
Magnesium, Total, ICP-MS										
Zinc, Dissolved, ICP-MS										
Zinc, Total, ICP-MS										
MT EPA 200.8/SW846 6020A*SM2340B										
Hardness, Calc										
MT EPA 245.1*SW846 7470A										
Mercury, Dissolved, CVAA										
Mercury, Total, CVAA										
OR SW846 3520C*SW846 8270D										
2-Methylnaphthalene										
Acenaphthene										
Acenaphthylene										

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L54625-2	Sample:	L54625-3
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	11/16/11 10:46	ColDate:	11/17/11 10:15
TimeSpan:		TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										
Benzo(b,j,k)fluoranthene										
Benzo(g,h,i)perylene										
Benzyl Butyl Phthalate										
Bis(2-Ethylhexyl)Phthalate										
Chrysene										
Dibenzo(a,h)anthracene										
Diethyl Phthalate										
Dimethyl Phthalate										
Di-N-Butyl Phthalate										
Di-N-Octyl Phthalate										
Fluoranthene										
Fluorene										
Indeno(1,2,3-Cd)Pyrene										
Naphthalene										
Pentachlorophenol										
Phenanthrene										
Pyrene										
OR SW846 3520C*SW846 8270D SIM										
Chlorpyrifos										
Diazinon										
Dichlobenil										
Malathion										
Prometon										
OR SW846 3535A/8151A*8270D SIM										
2,4-D										
MCPP										
Triclopyr										
OR WDOE NWTPH-DX										
Diesel Range (>C12-C24)		<MDL	0.21	0.21	mg/L					
Lube Oil Range (>C24)		<MDL	0.21	0.21	mg/L					
OR WDOE NWTPH-GX										
Gasoline Range (C7-C12)		<MDL	250	250	ug/L					

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Total Kjeldahl Nitrogen	Methylene Blue Act. Substance	Turbidity	Conductivity	Total Suspended Solids	Chloride	Nitrite + Nitrate Nitrogen	Total Phosphorus	Orthophosphate Phosphorus	Biochemical Oxygen Demand	Cadmium, Total, ICP-MS	Calcium, Total, ICP-MS	Copper, Dissolved, ICP-MS	Copper, Total, ICP-MS	Lead, Dissolved, ICP-MS	Lead, Total, ICP-MS	Magnesium, Total, ICP-MS	Zinc, Dissolved, ICP-MS	Zinc, Total, ICP-MS	Hardness, Calc
			mg/L	mg/L	NTU	umhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg CaCO3/L
FCSW01	421879-210	L54624-1	1.18	0.053	144	82	120	16.3	0.107	0.249	0.0139	13.1	0.16	4970	4.4	22	0.29	11.2	2440	16.4	91.4	22.5
FCSW02	421879-210	L54624-2	1.13		21.6	14.5	59.4	0.308	0.022	0.16	0.0314	9.3	0.11	2070	1.2	9.98	0.18	13.4	499	2.3	28.3	7.22
FCSW01	421879-210	L54624-3																				
FCSW02	421879-210	L54624-4																				
RSW1UP	421879-210	L54625-1	1.57	0.058	9.82	33.5	17.1	0.941	0.59	0.0739	0.0262	3.02		3010	1.7	2.91		1.29	740	4.03	8.3	10.6
RSW1UP	421879-210	L54625-2																				
* Not converted to dry weight basis																						
If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code																						

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b,j,k)fluoranthene	Benzo(g,h,i)perylene	Benzyl Butyl Phthalate	Bis(2-Ethylhexyl)Phthalate	Chrysene	Di-N-Butyl Phthalate	Di-N-Octyl Phthalate	Dibenzo(a,h)anthracene	Diethyl Phthalate	Fluoranthene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene	Fecal Coliform	Lube Oil Range (>C24)
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	CFU/100ml	mg/L
FCSW01	421879-210	L54624-1				0.131	0.442	3.23	0.0824	0.172	1.01			0.0929		0.0474	0.813	0.0703	0.18		
FCSW02	421879-210	L54624-2	0.0603	0.148	0.169	0.128		1.55	0.0964	0.0706	2.77		0.251	0.184	0.136	0.017		0.0987	0.16		
FCSW01	421879-210	L54624-3																		780	0.197
FCSW02	421879-210	L54624-4																		140	
RSW1UP	421879-210	L54625-1	0.0405	0.138	0.186	0.118		0.743	0.113	0.0613		0.0959	0.659	0.215	0.143	0.01		0.0483	0.182		
RSW1UP	421879-210	L54625-2																		29	
* Not converted to dry weight basis																					
If a parameter/analyze appears twice in the column header,																					

King County Environmental Lab Analytical Text Value Report

Project	Sample	Parameter	Textvalue
421879-210	L54624-1	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54624-1	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time.
421879-210	L54624-2	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54624-2	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time.
421879-210	L54625-1	Orthophosphate Phosphorus	Filtered past the 15 minute hold time
421879-210	L54625-1	Total Kjeldahl Nitrogen	Preserved past the 15 minute hold time.

Login: P54624 | NPDES Stormwater Permit Monitoring | Personnel: JD

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by	*Date* 11/17/11	*Time* 1370
Received by	*Date* 11/17/11	*Time* 1300
Sample Numbers 54624-1, 2, 4 GP ABS		*[All]*

Sample Number	P54624-1	P54624-2	P54624-3
QC Link			
Locator	FCSW01	FCSW02	FCSW01
Short Loc Desc	NPDES-SW1	NPDES-SW2	NPDES-SW1
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	FALL CITY HD COMMERCIAL
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	grab, HD Commercial
Start Date/Time	11/16/11 1215	11/16 1756	11/17 1239
End Date/Time	11/16/11 2149	11/17 0352	
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 6 LG CA-ICPMS 6 LG CD-ICPMS 6 LG CD-ICPMS, DISS 6 LG CU-ICPMS 6 LG CU-ICPMS, DISS 6 LG HG-CVAA, DISS-M 6 LG HG-CVAA-M 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G

Relinquished by [illegible] 11/17/11 1730
Received by [illegible] 11/17/11 1730
1, 2, 5

35 samples 26 samples

Login: P54624 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

Sample Number	P54624-4	P54624-5	
QC Link			
Locator	FCSW02	FFBLANK	
Short Loc Desc	NPDES-SW2	FFBLANK	
Locator Desc	FALL CITY HD RESIDENTIAL	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	grab, HD Residential	filter blank, orthop	
Start Date/Time	11/17/11 1224		
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP	

Login: P54625 | NPDES Stormwater Permit Monitoring | Personnel: _____

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by [illegible]	*Date* 16 Nov 11	*Time* 1150
Received by [illegible]	*Date* 16 Nov 11	*Time* 1150
Sample Numbers		*[All]*

Sample Number	P54625-1	P54625-2	P54625-3
QC Link			
Locator	RSW1UP	RSW1UP	FFBLANK
Short Loc Desc	RSW1UP	RSW1UP	FFBLANK
Locator Desc	148TH AVE SE UPSTREAM	148TH AVE SE UPSTREAM	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	comp, LD Rural/Residential	grab, LD Rural/Residential	filter blank, orthop
Start Date/Time	16 Nov 11 10:54 16 Nov 11 23:41	16 Nov 11	17 Nov 11 10:15
End Date/Time	10:46 - 1.5 10:54	1046	
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	6 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP

[illegible] 10/17/11 1030

[illegible] 10/17/11 1030

P54625. 1-3

Invoice No. 68054
Invoice Date 12/06/11

TEST LABORATORIES

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Paid by P-Card? ☒ YES
Date/Initials: 12/06/11 KG

Dec 1 2011
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Sample Manager

Dear Sample Manager:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
L54624-1	Water	11-A016951	CONV
L54624-2	Water	11-A016952	CONV

Your samples were received on Friday, November 18, 2011. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

Project #: 421879-210

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number:
Subcontract Laboratory: amtest
LPM/TC: Fritz Grothkopp

Shipment Number: EL-11-63
Shipment Method: ENA
Fax data to: Sample Manager
Fax Number: (206) 684-2395
e-mail: sample.login@kingcounty.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

Requested Parameters

Sample ID	Collect Date	Matrix	QC Required	mbas											No. of Containers	Comments
16951 L54624-1	11/16/2011	LG-storm water	Level II	X											1	collected @2149
52 L54624-2	11/17/2011	LG-storm water	Level II	X											1	collected @0352

Total Number of Containers: 2

Requested TAT: 14 Days
Data Package Due: 11/17/2011

Please return signed original CoC with data package.

RELINQUISHED BY		Date	RECEIVED BY		Date
Signature	[signature]	11/18/11	Signature	[signature]	11/18/11
Printed Name	Lynne Cox	Time 1000	Printed Name	D. J. Olsen	Time 11:46
Organization	King County DNR, Environmental Laboratory		Organization	Amtest	

Courier
Custody seal intact

H. 6 oc

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

TEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Sample Manager
Project #: 421879-210
All results reported on an as received basis.

Date Received: 11/18/11
Date Reported: 12/ 1/11

AMTEST Identification Number **11-A016951**
Client Identification **L54624-1**
Sampling Date **11/16/11, 21:49**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.053	mg/l		0.025	SM 5540C	NLN	11/18/11

AMTEST Identification Number **11-A016952**
Client Identification **L54624-2**
Sampling Date **11/17/11, 03:52**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	< 0.025	mg/l		0.025	SM 5540C	NLN	11/18/11

Kathy Fugiel
President

TEST LABORATORIES

QC Summary for sample numbers: 11-A016951 to 11-A016952

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
11-A016952	Surfactants	mg/l	< 0.025	< 0.025	

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.12	0.12	100. %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1175101

Project Name: _____ Date Received: 11/18/11 Received By: Lynn Lake

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 4.6 degrees C

	YES	NO	N/A
Were the Custody Seals intact?	☑	☐	☐
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☐	☑	☐
Are the samples within specified holding times?	☑	☐	☐
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?	☐	☐	☑

Explain any discrepancies or problems with the samples (include sample numbers):

_____

_____

_____

_____

_____

NOTE: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

Client: King County DNR Environmental COC # _____ Batch Number 1175101

Project Name: _____ Date Received: 11/18/11 Received By: Lynn Lake

Invoice No. [illegible]
Invoice Date: [illegible]

TEST
LABORATORIES

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Paid by P-Card? ☒ YES
Date/Initials: 12/06/11 KY

Dec 1 2011
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Sample Manager

Dear Sample Manager:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
P54625-1	Water	11-A016893	CONV

Your sample was received on Thursday, November 17, 2011. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

Project #: 421879-210

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number:
Subcontract Laboratory: amtest
LPM/TC: Fritz Grothkopp

Shipment Number: EL-11-62
Shipment Method: ENA
Fax data to: Sample Manager
Fax Number: (206) 684-2395
e-mail: sample.login@kingcounty.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

Requested Parameters

16893 Sample ID	Collect Date	Matrix	QC Required	mbas												No. of Containers	Comments
P54625-1	11/16/2011	LG-storm water	Level II	X												1	collected @2341

Total Number of Containers: 1

Please return signed original CoC with data package.

Requested TAT: 14 **Days**
Data Package Due: **11/17/2011**

RELINQUISHED BY		Date	RECEIVED BY		Date
Signature	[signature]	11/17/11	Signature	[signature]	11/17/11
Printed Name	Lynne Cox	Time	Printed Name	L Lake	Time
Organization	King County DNR, Environmental Laboratory	1105	Organization	Amtest	12:00

T 7.3

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Sample Manager
Project #: 421879-210
All results reported on an as received basis.

Date Received: 11/17/11
Date Reported: 12/ 1/11

AMTEST Identification Number **11-A016893**
Client Identification **P54625-1**
Sampling Date **11/16/11, 23:41**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.058	mg/l		0.025	SM 5540C	NLN	11/18/11

Kathy Fugiel
President

LABORATORIES

QC Summary for sample number: 11-A016893

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
11-A016902	Surfactants	mg/l	0.036	0.032	12.

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.12	0.14	117. %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1175084

Project Name: _____ Date Received: 11/17/11 Received By: Lynn Lake

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.3 degrees C

	YES	NO	N/A
Were the Custody Seals intact?	☑	☐	☐
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☐	☑	☐
Are the samples within specified holding times?	☑	☐	☐
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?	☐	☐	☑

Explain any discrepancies or problems with the samples (include sample numbers):

_____

_____

_____

_____

_____

NOTE: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54624, L54625

WG118679 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54351-1	421422-ENLS	SWD-ENLS Enumclaw Wastewater Permit	CVBOD	IW WTR	11/15/2011 7:49	11/17/2011 8:30	11/17/2011 14:49		
L54625-1	421879-210	NPDES SW Fall City	CVBOD	STORM WTR	11/16/2011 10:57	11/17/2011 8:30	11/17/2011 14:52		
L54675-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVBOD	FRESH WTR	11/17/2011 8:09	11/17/2011 8:30	11/17/2011 14:55	WG118679-1,-2	
L54675-2	421422-CHSW-P2		CVBOD	FRESH WTR	11/17/2011 7:26	11/17/2011 8:30	11/17/2011 14:59		
L54675-3	421422-CHSW-P2		CVBOD	FRESH WTR	11/17/2011 8:28	11/17/2011 8:30	11/17/2011 15:01		
WG118679-1	MB		CVBOD	BLANK WTR		11/17/2011 8:30	11/17/2011 14:47		MB1
WG118679-2	SB		CVBOD	BLANK WTR		11/17/2011 8:30	11/17/2011 14:48		WG118679-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54624, L54625

WG118683 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-1	421879-210	NPDES SW Fall City	CVBOD	STORM WTR	11/16/2011 12:15	11/18/2011 9:00	11/18/2011 14:41	WG118683-1,-2	
L54624-2	421879-210		CVBOD	STORM WTR	11/16/2011 17:56	11/18/2011 9:00	11/18/2011 14:44		
WG118683-1	MB		CVBOD	BLANK WTR		11/18/2011 9:00	11/18/2011 14:34		MB1
WG118683-2	SB		CVBOD	BLANK WTR		11/18/2011 9:00	11/18/2011 14:39		WG118683-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L54624, L54625

WG118654 Anions

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54252-1	423484-802-4	Brightwater Cross Valley Water District Groundwater Monitoring	CVCL	GRND WTR	11/2/2011 13:18	11/21/2011 14:00	11/22/2011 12:07	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54422-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	10/28/2011 14:13	11/21/2011 14:00	11/21/2011 18:21		
L54423-1	421879-210		CVCL	STORM WTR	10/28/2011 13:28	11/21/2011 14:00	11/21/2011 20:23		
L54548-1	421879-210		CVCL	STORM WTR	11/2/2011 19:44	11/21/2011 14:00	11/21/2011 22:55		
L54549-1	421879-210		CVCL	STORM WTR	11/2/2011 18:15	11/21/2011 14:00	11/21/2011 23:56		
L54574-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:00		
L54574-1	421422-CFGW		CVSO4	GRND WTR	11/15/2011 7:50	11/21/2011 14:00	11/22/2011 4:30	WG118654-1,-2,-3,-7,-8,-4	
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 5:00	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-1	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:50	11/21/2011 14:00	11/22/2011 6:32	WG118654-1,-2,-3,-7,-8,-4	
L54576-2	421422-VAGW		CVCL	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 8:03	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54576-2	421422-VAGW		CVSO4	GRND WTR	11/14/2011 7:00	11/21/2011 14:00	11/22/2011 9:04	WG118654-1,-2,-3,-7,-8,-4	
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCL	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 9:34	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-1	421422-CFGW		CVSO4	GRND WTR	11/14/2011 10:43	11/21/2011 14:00	11/22/2011 10:05	WG118654-1,-2,-3,-7,-8,-4	
L54578-3	421422-CFGW		CVCL	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 10:35	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54578-3	421422-CFGW		CVSO4	GRND WTR	11/15/2011 10:14	11/21/2011 14:00	11/22/2011 11:36	WG118654-1,-2,-3,-7,-8,-4	
L54624-1	421879-210	NPDES SW Fall City	CVCL	STORM WTR	11/16/2011 12:15	11/21/2011 14:00	11/22/2011 0:26	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	
L54624-2	421879-210		CVCL	STORM WTR	11/16/2011 17:56	11/21/2011 14:00	11/22/2011 1:58		
L54625-1	421879-210		CVCL	STORM WTR	11/16/2011 10:57	11/21/2011 14:00	11/22/2011 2:28		
WG118654-1	CS		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18		RDL_LEVEL
WG118654-1	CS		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 15:18	WG118654-1,-2,-3,-7,-8,-4	RDL_LEVEL
WG118654-2	MB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	MB1 111121
WG118654-2	MB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:19	WG118654-1,-2,-3,-7,-8,-4	MB1 111121
WG118654-3	SB		CVCL	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	WG118654-2
WG118654-3	SB		CVSO4	BLANK WTR		11/21/2011 14:00	11/21/2011 16:50	WG118654-1,-2,-3,-7,-8,-4	WG118654-2
WG118654-4	LCS		CVCL	BLANK WTR		11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	LEVEL1

WG118654-4	LCS	CVSO4	BLANK WTR	11/21/2011 14:00	11/22/2011 15:40	WG118654-1,-2,-3,-7,-8,-4	LEVEL1
WG118654-5	LD	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 20:53	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54423-1
WG118654-6	MS	CVCL	STORM WTR	11/21/2011 14:00	11/21/2011 21:54		L54423-1
WG118654-7	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 5:31		L54576-1
WG118654-7	LD	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:02	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-8	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 6:01	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54576-1
WG118654-8	MS	CVSO4	GRND WTR	11/21/2011 14:00	11/22/2011 7:33	WG118654-1,-2,-3,-7,-8,-4	L54576-1
WG118654-9	LD	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 12:37	WG118654-1,-2,-3,-5,-6,-7,-8,-9,-10,-4	L54252-1
WG118654-10	MS	CVCL	GRND WTR	11/21/2011 14:00	11/22/2011 13:08		L54252-1

WG118657 Conductivity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54565-1	421195-140	Lake Sawyer	CVCOND	FRESH WTR	11/13/2011 14:30	11/21/2011 17:13	11/21/2011 17:13	WG118657-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54565-2	421195-140		CVCOND	FRESH WTR	11/13/2011 14:20	11/21/2011 17:25	11/21/2011 17:25		
L54565-3	421195-140		CVCOND	FRESH WTR	11/13/2011 14:40	11/21/2011 17:35	11/21/2011 17:35		
L54573-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCOND	GRND WTR	11/16/2011 8:05	11/21/2011 17:50	11/21/2011 17:50		
L54574-1	421422-CFGW		CVCOND	GRND WTR	11/15/2011 7:50	11/21/2011 18:00	11/21/2011 18:00		
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVCOND	GRND WTR	11/14/2011 7:50	11/21/2011 18:12	11/21/2011 18:12		
L54576-2	421422-VAGW		CVCOND	GRND WTR	11/14/2011 7:00	11/21/2011 18:22	11/21/2011 18:22		
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVCOND	GRND WTR	11/14/2011 10:43	11/21/2011 18:44	11/21/2011 18:44		
L54578-3	421422-CFGW		CVCOND	GRND WTR	11/15/2011 10:14	11/21/2011 18:54	11/21/2011 18:54		
L54579-1	421422-CFGW		CVCOND	GRND WTR	11/15/2011 10:14	11/21/2011 19:05	11/21/2011 19:05		
L54579-3	421422-CFGW		CVCOND	GRND WTR	11/18/2011 6:05	11/21/2011 19:17	11/21/2011 19:17		
L54582-3	421422-CFGW		CVCOND	GRND WTR	11/18/2011 10:35	11/21/2011 19:26	11/21/2011 19:26		
L54584-1	421422-CFGW		CVCOND	GRND WTR	11/18/2011 9:26	11/21/2011 19:35	11/21/2011 19:35		
L54588-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVCOND	GRND WTR	11/21/2011 7:45	11/21/2011 19:59	11/21/2011 19:59		
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVCOND	FRESH WTR	11/16/2011 7:30	11/21/2011 12:30	11/21/2011 12:30		
L54604-2	421422-CHSW-M		CVCOND	FRESH WTR	11/16/2011 8:23	11/21/2011 12:40	11/21/2011 12:40		
L54604-3	421422-CHSW-M		CVCOND	FRESH WTR	11/16/2011 9:25	11/21/2011 12:50	11/21/2011 12:50		
L54604-4	421422-CHSW-M		CVCOND	FRESH WTR	11/16/2011 8:02	11/21/2011 13:03	11/21/2011 13:03		
L54604-5	421422-CHSW-M		CVCOND	FRESH WTR	11/16/2011 8:40	11/21/2011 13:14	11/21/2011 13:14		
L54604-6	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 6:35	11/21/2011 13:22	11/21/2011 13:22		
L54604-7	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 5:25	11/21/2011 13:32	11/21/2011 13:32		
L54604-8	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 5:55	11/21/2011 13:42	11/21/2011 13:42		
L54604-9	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 7:30	11/21/2011 13:52	11/21/2011 13:52		
L54604-11	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 4:50	11/21/2011 14:11	11/21/2011 14:11		
L54604-12	421422-CHSW-M		CVCOND	FRESH WTR	11/17/2011 5:55	11/21/2011 14:21	11/21/2011 14:21		
L54624-1	421879-210	NPDES SW Fall City	CVCOND	STORM WTR	11/16/2011 12:15	11/21/2011 17:46	11/21/2011 17:46		
L54624-2	421879-210		CVCOND	STORM WTR	11/16/2011 17:56	11/21/2011 17:48	11/21/2011 17:48		
L54625-1	421879-210		CVCOND	STORM WTR	11/16/2011 10:57	11/21/2011 17:49	11/21/2011 17:49		
WG118657-1	LCS		CVCOND	BLANK WTR		11/21/2011 12:17	11/21/2011 12:17		LEVEL1
WG118657-2	LCS		CVCOND	BLANK WTR		11/21/2011 12:18	11/21/2011 12:18		LEVEL2
WG118657-3	LD		CVCOND	FRESH WTR		11/21/2011 14:01	11/21/2011 14:01		L54604-9
WG118657-4	LCS		CVCOND	BLANK WTR		11/21/2011 16:17	11/21/2011 16:17		LEVEL1
WG118657-5	LCS		CVCOND	BLANK WTR		11/21/2011 16:18	11/21/2011 16:18		LEVEL2
WG118657-6	LD		CVCOND	STORM WTR		11/21/2011 17:47	11/21/2011 17:47		L54624-1
WG118657-7	LD		CVCOND	GRND WTR		11/21/2011 18:32	11/21/2011 18:32		L54576-2
WG118657-8	LCS		CVCOND	BLANK WTR		11/21/2011 19:47	11/21/2011 19:47		LEVEL1
WG118657-9	LCS		CVCOND	BLANK WTR		11/21/2011 19:48	11/21/2011 19:48		LEVEL2
WG118657-10	LCS		CVCOND	BLANK WTR		11/21/2011 20:11	11/21/2011 20:11		LEVEL1
WG118657-11	LCS		CVCOND	BLANK WTR		11/21/2011 20:12	11/21/2011 20:12		LEVEL2

WG118673 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54285-1	421195-180	Mercer Island Stormwater Monitoring	CVORTHOP	STORM WTR	11/16/2011 12:14	11/23/2011 9:30	11/29/2011 10:10	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54285-2	421195-180		CVORTHOP	STORM WTR	11/16/2011 12:43	11/23/2011 9:30	11/29/2011 10:29		
L54285-3	421195-180		CVORTHOP	STORM WTR	11/16/2011 13:10	11/23/2011 9:30	11/29/2011 10:31		
L54285-4	421195-180		CVORTHOP	STORM WTR	11/16/2011 13:43	11/23/2011 9:30	11/29/2011 10:33		
L54285-12	421195-180		CVORTHOP	BLANK WTR	11/16/2011 12:06	11/23/2011 9:30	11/29/2011 10:26		
L54624-1	421879-210	NPDES SW Fall City	CVNO23	STORM WTR	11/16/2011 12:15	11/23/2011 9:30	11/23/2011 12:37	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54624-1	421879-210		CVORTHOP	STORM WTR	11/16/2011 12:15	11/23/2011 9:30	11/29/2011 11:31	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54624-2	421879-210		CVNO23	STORM WTR	11/16/2011 17:56	11/23/2011 9:30	11/23/2011 12:39	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54624-2	421879-210		CVORTHOP	STORM WTR	11/16/2011 17:56	11/23/2011 9:30	11/29/2011 10:37	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54624-5	421879-210		CVNO23	BLANK WTR	11/17/2011 14:00	11/23/2011 9:30	11/23/2011 12:56	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54624-5	421879-210		CVORTHOP	BLANK WTR	11/17/2011 14:00	11/23/2011 9:30	11/29/2011 10:43	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54625-1	421879-210		CVNO23	STORM WTR	11/16/2011 10:57	11/23/2011 9:30	11/23/2011 13:00	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54625-1	421879-210		CVORTHOP	STORM WTR	11/16/2011 10:57	11/23/2011 9:30	11/29/2011 11:33	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54625-3	421879-210		CVNO23	BLANK WTR	11/17/2011 10:15	11/23/2011 9:30	11/23/2011 12:58	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
L54625-3	421879-210		CVORTHOP	BLANK WTR	11/17/2011 10:15	11/23/2011 9:30	11/29/2011 10:45	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	
L54627-1	421879-220	NPDES SW Sammamish	CVORTHOP	STORM WTR	11/15/2011 1:49	11/23/2011 9:30	11/29/2011 11:58		
L54627-7	421879-220		CVORTHOP	BLANK WTR	11/16/2011 14:00	11/23/2011 9:30	11/29/2011 11:25		FFB OrthoP
L54661-1	421879-220		CVORTHOP	STORM WTR	11/16/2011 12:44	11/23/2011 9:30	11/29/2011 11:00		
L54661-5	421879-220		CVORTHOP	BLANK WTR	11/17/2011 11:07	11/23/2011 9:30	11/29/2011 11:27		FFB OrthoP
L54684-1	421879-220		CVORTHOP	STORM WTR	11/21/2011 6:08	11/23/2011 9:30	11/29/2011 11:02		
L54685-1	421879-220		CVORTHOP	STORM WTR	11/21/2011 12:23	11/23/2011 9:30	11/29/2011 11:04		
L54685-2	421879-220		CVORTHOP	STORM WTR	11/21/2011 12:24	11/23/2011 9:30	11/29/2011 11:06		
L54685-3	421879-220		CVORTHOP	STORM WTR	11/21/2011 14:53	11/23/2011 9:30	11/29/2011 11:08		
L54685-7	421879-220		CVORTHOP	BLANK WTR	11/22/2011 14:30	11/23/2011 9:30	11/29/2011 11:29		FFB OrthoP
L54693-1	421303B		CVNH3-FL	STORM WTR	11/22/2011 11:20	11/23/2011 9:30	11/23/2011 10:45	WG118673-1,-2,-3,-4,-5,-6,-7	

L54693-1	421303B	MARCKWORTH FOREST	CVNO23	STORM WTR	11/22/2011 11:20	11/23/2011 9:30	11/23/2011 10:45	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54693-2	421303B		CVNH3-FL	STORM WTR	11/22/2011 13:05	11/23/2011 9:30	11/23/2011 10:47	WG118673-1,-2,-3,-4,-5,-6,-7
L54693-2	421303B		CVNO23	STORM WTR	11/22/2011 13:05	11/23/2011 9:30	11/23/2011 10:47	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54693-3	421303B		CVNH3-FL	STORM WTR	11/22/2011 13:40	11/23/2011 9:30	11/23/2011 10:57	WG118673-1,-2,-3,-4,-5,-6,-7
L54693-3	421303B		CVNO23	STORM WTR	11/22/2011 13:40	11/23/2011 9:30	11/23/2011 10:57	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54693-4	421303B		CVNH3-FL	STORM WTR	11/22/2011 14:05	11/23/2011 9:30	11/23/2011 10:59	WG118673-1,-2,-3,-4,-5,-6,-7
L54693-4	421303B		CVNO23	STORM WTR	11/22/2011 14:05	11/23/2011 9:30	11/23/2011 10:59	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54693-5	421303B		CVNH3-FL	STORM WTR	11/22/2011 11:22	11/23/2011 9:30	11/23/2011 11:01	WG118673-1,-2,-3,-4,-5,-6,-7
L54693-5	421303B		CVNO23	STORM WTR	11/22/2011 11:22	11/23/2011 9:30	11/23/2011 11:01	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54693-6	421303B		CVNH3-FL	STORM WTR	11/22/2011 12:04	11/23/2011 9:30	11/23/2011 11:10	WG118673-1,-2,-3,-4,-5,-6,-7
L54693-6	421303B		CVNO23	STORM WTR	11/22/2011 12:04	11/23/2011 9:30	11/23/2011 11:10	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-1	421304		CVNH3-FL	STORM WTR	11/22/2011 9:55	11/23/2011 9:30	11/23/2011 11:12	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-1	421304		CVNO23	STORM WTR	11/22/2011 9:55	11/23/2011 9:30	11/23/2011 11:12	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-2	421304		CVNH3-FL	STORM WTR	11/22/2011 10:22	11/23/2011 9:30	11/23/2011 11:14	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-2	421304		CVNO23	STORM WTR	11/22/2011 10:22	11/23/2011 9:30	11/23/2011 11:14	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-3	421304		CVNH3-FL	STORM WTR	11/22/2011 10:52	11/23/2011 9:30	11/23/2011 11:16	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-3	421304		CVNO23	STORM WTR	11/22/2011 10:52	11/23/2011 9:30	11/23/2011 11:16	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-4	421304		CVNH3-FL	STORM WTR	11/22/2011 11:40	11/23/2011 9:30	11/23/2011 11:26	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-4	421304		CVNO23	STORM WTR	11/22/2011 11:40	11/23/2011 9:30	11/23/2011 11:26	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11

L54694-5	421304		CVNH3-FL	STORM WTR	11/22/2011 12:00	11/23/2011 9:30	11/23/2011 11:28	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-5	421304		CVNO23	STORM WTR	11/22/2011 12:00	11/23/2011 9:30	11/23/2011 11:28	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-6	421304		CVNH3-FL	STORM WTR	11/22/2011 12:25	11/23/2011 9:30	11/23/2011 11:30	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-6	421304		CVNO23	STORM WTR	11/22/2011 12:25	11/23/2011 9:30	11/23/2011 11:30	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-7	421304		CVNH3-FL	STORM WTR	11/22/2011 12:56	11/23/2011 9:30	11/23/2011 11:39	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-7	421304		CVNO23	STORM WTR	11/22/2011 12:56	11/23/2011 9:30	11/23/2011 11:39	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-8	421304	Forestland-Weyerhaeuser Operations	CVNH3-FL	STORM WTR	11/22/2011 13:00	11/23/2011 9:30	11/23/2011 11:41	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-8	421304		CVNO23	STORM WTR	11/22/2011 13:00	11/23/2011 9:30	11/23/2011 11:41	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-9	421304		CVNH3-FL	STORM WTR	11/22/2011 13:25	11/23/2011 9:30	11/23/2011 11:43	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-9	421304		CVNO23	STORM WTR	11/22/2011 13:25	11/23/2011 9:30	11/23/2011 11:43	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-10	421304		CVNH3-FL	STORM WTR	11/22/2011 13:53	11/23/2011 9:30	11/23/2011 11:45	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-10	421304		CVNO23	STORM WTR	11/22/2011 13:53	11/23/2011 9:30	11/23/2011 11:45	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-11	421304		CVNH3-FL	STORM WTR	11/22/2011 14:12	11/23/2011 9:30	11/23/2011 11:55	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-11	421304		CVNO23	STORM WTR	11/22/2011 14:12	11/23/2011 9:30	11/23/2011 11:55	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-12	421304		CVNH3-FL	STORM WTR	11/22/2011 14:38	11/23/2011 9:30	11/23/2011 11:58	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-12	421304		CVNO23	STORM WTR	11/22/2011 14:38	11/23/2011 9:30	11/23/2011 11:58	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-13	421304		CVNH3-FL	STORM WTR	11/22/2011 15:03	11/23/2011 9:30	11/23/2011 12:00	WG118673-1,-2,-3,-4,-5,-6,-7
L54694-13	421304		CVNO23	STORM WTR	11/22/2011 15:03	11/23/2011 9:30	11/23/2011 12:00	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11
L54694-14	421304		CVNH3-FL	STORM WTR	11/22/2011 13:05	11/23/2011 9:30	11/23/2011 12:02	WG118673-1,-2,-3,-4,-5,-6,-7

L54694-14	421304		CVNO23	STORM WTR	11/22/2011 13:05	11/23/2011 9:30	11/23/2011 12:02	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	
WG118673-1	MB		CVNH3-FL	BLANK WTR		11/23/2011 9:30	11/23/2011 10:36	WG118673-1,-2,-3,-4,-5,-6,-7	CONNUTS3
WG118673-1	MB		CVNO23	BLANK WTR		11/23/2011 9:30	11/23/2011 10:36	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	CONNUTS3
WG118673-2	SB		CVNH3-FL	BLANK WTR		11/23/2011 9:30	11/23/2011 10:38	WG118673-1,-2,-3,-4,-5,-6,-7	WG118673-1
WG118673-2	SB		CVNO23	BLANK WTR		11/23/2011 9:30	11/23/2011 10:38	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	WG118673-1
WG118673-3	LCS		CVNH3-FL	BLANK WTR		11/23/2011 10:40	11/23/2011 10:40	WG118673-1,-2,-3,-4,-5,-6,-7	LEVEL1
WG118673-3	LCS		CVNO23	BLANK WTR		11/23/2011 10:40	11/23/2011 10:40	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	LEVEL1
WG118673-4	LD		CVNH3-FL	STORM WTR		11/23/2011 9:30	11/23/2011 11:03	WG118673-1,-2,-3,-4,-5,-6,-7	L54693-5
WG118673-4	LD		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 11:03	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	L54693-5
WG118673-5	MS		CVNH3-FL	STORM WTR		11/23/2011 9:30	11/23/2011 11:05	WG118673-1,-2,-3,-4,-5,-6,-7	L54693-5
WG118673-5	MS		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 11:05	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	L54693-5
WG118673-6	LD		CVNH3-FL	STORM WTR		11/23/2011 9:30	11/23/2011 11:33	WG118673-1,-2,-3,-4,-5,-6,-7	L54694-6
WG118673-6	LD		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 11:33	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	L54694-6
WG118673-7	MS		CVNH3-FL	STORM WTR		11/23/2011 9:30	11/23/2011 11:35	WG118673-1,-2,-3,-4,-5,-6,-7	L54694-6
WG118673-7	MS		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 11:35	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	L54694-6
WG118673-8	MB		CVNO23	BLANK WTR		11/23/2011 9:30	11/23/2011 12:06		CONNUTS3
WG118673-9	LCS		CVNO23	BLANK WTR		11/23/2011 12:08	11/23/2011 12:08		LEVEL1
WG118673-10	LD		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 12:41		L54624-2
WG118673-10	LD		CVORTHOP	STORM WTR		11/23/2011 9:30	11/29/2011 10:39	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	L54624-2
WG118673-11	MS		CVNO23	STORM WTR		11/23/2011 9:30	11/23/2011 12:43	WG118673-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11	L54624-2
WG118673-11	MS		CVORTHOP	STORM WTR		11/23/2011 9:30	11/29/2011 10:41		L54624-2
WG118673-12	MB		CVORTHOP	BLANK WTR		11/23/2011 9:30	11/29/2011 10:04		CONNUTS3

WG118673-13	SB	CVORTHOP	BLANK WTR	11/23/2011 9:30	11/29/2011 10:06	WG118673-10,-11,-17,-18,-12,-13,-14,-15,-16	WG118673-12
WG118673-14	LCS	CVORTHOP	BLANK WTR	11/29/2011 10:08	11/29/2011 10:08		LEVEL1
WG118673-15	LD	CVORTHOP	STORM WTR	11/23/2011 9:30	11/29/2011 10:12		L54285-1
WG118673-16	MS	CVORTHOP	STORM WTR	11/23/2011 9:30	11/29/2011 10:14		L54285-1
WG118673-17	LD	CVORTHOP	STORM WTR	11/23/2011 9:30	11/29/2011 11:10		L54685-3
WG118673-18	MS	CVORTHOP	STORM WTR	11/23/2011 9:30	11/29/2011 11:12		L54685-3

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NPDES SW Permit, SWM, L54624, L54625

WG118682 TKN

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTKN	FRESH WTR	11/16/2011 7:30	11/23/2011 9:00	11/29/2011 12:30	WG118682-2,-3,-4,-5,-6,-7,-8,-1	
L54604-2	421422-CHSW-M		CVTKN	FRESH WTR	11/16/2011 8:23	11/23/2011 9:00	11/29/2011 12:32		
L54604-3	421422-CHSW-M		CVTKN	FRESH WTR	11/16/2011 9:25	11/23/2011 9:00	11/29/2011 12:34		
L54604-4	421422-CHSW-M		CVTKN	FRESH WTR	11/16/2011 8:02	11/23/2011 9:00	11/29/2011 12:36		
L54604-5	421422-CHSW-M		CVTKN	FRESH WTR	11/16/2011 8:40	11/23/2011 9:00	11/29/2011 12:38		
L54604-6	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 6:35	11/23/2011 9:00	11/29/2011 12:50		
L54604-7	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 5:25	11/23/2011 9:00	11/29/2011 12:52		
L54604-8	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 5:55	11/23/2011 9:00	11/29/2011 12:59		
L54604-9	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 7:30	11/23/2011 9:00	11/29/2011 13:01		
L54604-11	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 4:50	11/23/2011 9:00	11/29/2011 13:03		
L54604-12	421422-CHSW-M		CVTKN	FRESH WTR	11/17/2011 5:55	11/23/2011 9:00	11/29/2011 13:05		
L54624-1	421879-210	NPDES SW Fall City	CVTKN	STORM WTR	11/16/2011 12:15	11/23/2011 9:00	11/29/2011 13:07		
L54624-2	421879-210		CVTKN	STORM WTR	11/16/2011 17:56	11/23/2011 9:00	11/29/2011 13:09		
L54625-1	421879-210		CVTKN	STORM WTR	11/16/2011 10:57	11/23/2011 9:00	11/29/2011 13:22		
WG118682-1	MB		CVTKN	BLANK WTR		11/23/2011 9:00	11/29/2011 12:21		MB1
WG118682-2	SB		CVTKN	BLANK WTR		11/23/2011 9:00	11/29/2011 12:23		WG118682-1
WG118682-3	LCS		CVTKN	BLANK WTR		11/23/2011 9:00	11/29/2011 12:25		LEVEL1
WG118682-4	LCS		CVTKN	BLANK WTR		11/23/2011 9:00	11/29/2011 12:27		LEVEL2
WG118682-5	LD		CVTKN	FRESH WTR		11/23/2011 9:00	11/29/2011 12:55		L54604-7
WG118682-6	MS		CVTKN	FRESH WTR		11/23/2011 9:00	11/29/2011 12:57		L54604-7
WG118682-7	LD		CVTKN	STORM WTR		11/23/2011 9:00	11/29/2011 13:24		L54625-1
WG118682-8	MS		CVTKN	STORM WTR		11/23/2011 9:00	11/29/2011 13:26		L54625-1

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NPDES SW Permit, SWM, L54624, L54625

WG118601 Total Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54451-1	421430-300	OCS-Lake Haven Utility District routine testing	CVTOTP	EFFLUENT	11/7/2011 7:42	11/18/2011 8:10	11/21/2011 10:44	WG118601-2,-3,-4,-5,-6,-7,-9,-10,-11,-1,-12,-13,-14,-15,-16,-17,-18,-8	
L54451-3	421430-300		CVTOTP	EFFLUENT	11/7/2011 7:10	11/18/2011 8:10	11/21/2011 10:35		
L54565-1	421195-140	Lake Sawyer	CVTOTP	FRESH WTR	11/13/2011 14:30	11/18/2011 8:10	11/21/2011 10:58		
L54565-2	421195-140		CVTOTP	FRESH WTR	11/13/2011 14:20	11/18/2011 8:10	11/21/2011 11:09		
L54565-3	421195-140		CVTOTP	FRESH WTR	11/13/2011 14:40	11/18/2011 8:10	11/21/2011 12:48		
L54589-1	421195-150	Beaver Lake	CVTOTP	FRESH WTR	11/15/2011 10:15	11/18/2011 8:10	11/21/2011 11:20		
L54589-2	421195-150		CVTOTP	FRESH WTR	11/15/2011 10:05	11/18/2011 8:10	11/21/2011 11:19		
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOTP	FRESH WTR	11/16/2011 7:30	11/18/2011 8:10	11/21/2011 9:58		
L54604-2	421422-CHSW-M		CVTOTP	FRESH WTR	11/16/2011 8:23	11/18/2011 8:10	11/21/2011 10:00		
L54604-3	421422-CHSW-M		CVTOTP	FRESH WTR	11/16/2011 9:25	11/18/2011 8:10	11/21/2011 10:02		
L54604-4	421422-CHSW-M		CVTOTP	FRESH WTR	11/16/2011 8:02	11/18/2011 8:10	11/21/2011 10:18		
L54604-5	421422-CHSW-M		CVTOTP	FRESH WTR	11/16/2011 8:40	11/18/2011 8:10	11/21/2011 10:20		
L54604-6	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 6:35	11/18/2011 8:10	11/21/2011 12:12		
L54604-7	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 5:25	11/18/2011 8:10	11/21/2011 10:24		
L54604-8	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 5:55	11/18/2011 8:10	11/21/2011 10:27		
L54604-9	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 7:30	11/18/2011 8:10	11/21/2011 10:29		
L54604-11	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 4:50	11/18/2011 8:10	11/21/2011 10:33		
L54604-12	421422-CHSW-M		CVTOTP	FRESH WTR	11/17/2011 5:55	11/18/2011 8:10	11/21/2011 10:03		
L54624-1	421879-210	NPDES SW Fall City	CVTOTP	STORM WTR	11/16/2011 12:15	11/18/2011 8:10	11/21/2011 11:37		
L54624-2	421879-210		CVTOTP	STORM WTR	11/16/2011 17:56	11/18/2011 8:10	11/21/2011 11:46		
L54625-1	421879-210		CVTOTP	STORM WTR	11/16/2011 10:57	11/18/2011 8:10	11/21/2011 11:48		
L54626-2	421879-220	NPDES SW Sammamish	CVTOTP	STORM WTR	11/14/2011 10:00	11/18/2011 8:10	11/21/2011 11:50		
L54627-1	421879-220		CVTOTP	STORM WTR	11/15/2011 1:49	11/18/2011 8:10	11/21/2011 12:01		
L54661-1	421879-220		CVTOTP	STORM WTR	11/16/2011 12:44	11/18/2011 8:10	11/21/2011 11:52		
WG118601-1	MB		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 9:52		MB1 11/18/11
WG118601-2	SB		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 9:54		WG118601-1
WG118601-3	LCS		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 9:56		LEVEL1
WG118601-4	LD		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 10:05		L54604-12
WG118601-5	MS		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 10:09		L54604-12
WG118601-6	LD		CVTOTP	EFFLUENT		11/18/2011 8:10	11/21/2011 10:46		L54451-1
WG118601-7	MS		CVTOTP	EFFLUENT		11/18/2011 8:10	11/21/2011 10:49		L54451-1
WG118601-8	MB		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 12:10		MB2 11/18/11
WG118601-9	SB		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 10:55		WG118601-8
WG118601-10	LCS		CVTOTP	BLANK WTR		11/18/2011 8:10	11/21/2011 10:57		LEVEL1
WG118601-11	LD		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 11:11		L54565-2
WG118601-12	MS		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 11:15		L54565-2
WG118601-13	LD		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 11:22		L54589-1
WG118601-14	MS		CVTOTP	FRESH WTR		11/18/2011 8:10	11/21/2011 11:26		L54589-1
WG118601-15	LD		CVTOTP	STORM WTR		11/18/2011 8:10	11/21/2011 11:39		L54624-1
WG118601-16	MS		CVTOTP	STORM WTR		11/18/2011 8:10	11/21/2011 11:42		L54624-1
WG118601-17	LD		CVTOTP	STORM WTR		11/18/2011 8:10	11/21/2011 12:03		L54627-1
WG118601-18	MS		CVTOTP	STORM WTR		11/18/2011 8:10	11/21/2011 12:06		L54627-1

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NPDES SW Permit, SWM, L54624, L54625

WG118621 TSS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54191-1	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:31	WG118621-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-	
L54191-2	422027		CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:31		
L54191-3	422027		CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:32		
L54191-4	422027		CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:33		
L54191-5	422027		CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:33		
L54191-6	422027		CVTSS	STORM WTR	11/17/2011 0:00	11/18/2011 7:30	11/21/2011 12:34		
L54285-1	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	11/16/2011 12:14	11/18/2011 7:30	11/21/2011 12:27		
L54285-2	421195-180		CVTSS	STORM WTR	11/16/2011 12:43	11/18/2011 7:30	11/21/2011 12:29		
L54285-3	421195-180		CVTSS	STORM WTR	11/16/2011 13:10	11/18/2011 7:30	11/21/2011 12:30		
L54285-4	421195-180		CVTSS	STORM WTR	11/16/2011 13:43	11/18/2011 7:30	11/21/2011 12:30		
L54351-1	421422-ENLS	SWD-ENLS Enumclaw Wastewater Permit	CVTSS	IW WTR	11/15/2011 7:49	11/18/2011 7:30	11/21/2011 12:34		
L54534-1	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/2011 14:46	11/18/2011 7:30	11/21/2011 11:47		
L54534-2	421235		CVTSS	FRESH WTR	11/14/2011 14:41	11/18/2011 7:30	11/21/2011 11:47		
L54534-3	421235		CVTSS	FRESH WTR	11/14/2011 13:57	11/18/2011 7:30	11/21/2011 11:48		
L54534-4	421235		CVTSS	FRESH WTR	11/14/2011 14:03	11/18/2011 7:30	11/21/2011 11:48		
L54534-6	421235		CVTSS	FRESH WTR	11/14/2011 13:34	11/18/2011 7:30	11/21/2011 11:48		
L54534-7	421235		CVTSS	FRESH WTR	11/14/2011 13:29	11/18/2011 7:30	11/21/2011 11:49		
L54534-8	421235		CVTSS	FRESH WTR	11/14/2011 12:40	11/18/2011 7:30	11/21/2011 11:52		
L54534-9	421235		CVTSS	FRESH WTR	11/14/2011 11:54	11/18/2011 7:30	11/21/2011 11:52		
L54534-11	421235		CVTSS	FRESH WTR	11/14/2011 11:06	11/18/2011 7:30	11/21/2011 11:53		
L54534-12	421235		CVTSS	FRESH WTR	11/14/2011 11:05	11/18/2011 7:30	11/21/2011 11:53		
L54534-13	421235		CVTSS	FRESH WTR	11/14/2011 11:02	11/18/2011 7:30	11/21/2011 11:53		
L54534-15	421235		CVTSS	FRESH WTR	11/14/2011 9:59	11/18/2011 7:30	11/21/2011 11:53		
L54534-16	421235		CVTSS	FRESH WTR	11/14/2011 9:56	11/18/2011 7:30	11/21/2011 11:54		
L54534-19	421235		CVTSS	FRESH WTR	11/15/2011 9:00	11/18/2011 7:30	11/21/2011 11:55		
L54534-20	421235		CVTSS	FRESH WTR	11/15/2011 8:54	11/18/2011 7:30	11/21/2011 11:57		
L54534-22	421235		CVTSS	FRESH WTR	11/15/2011 9:35	11/18/2011 7:30	11/21/2011 11:57		
L54534-23	421235		CVTSS	FRESH WTR	11/15/2011 9:29	11/18/2011 7:30	11/21/2011 11:57		
L54565-1	421195-140	Lake Sawyer	CVTSS	FRESH WTR	11/13/2011 14:30	11/18/2011 7:30	11/21/2011 12:37		
L54565-2	421195-140		CVTSS	FRESH WTR	11/13/2011 14:20	11/18/2011 7:30	11/21/2011 12:38		
L54565-3	421195-140		CVTSS	FRESH WTR	11/13/2011 14:40	11/18/2011 7:30	11/21/2011 12:39		
L54573-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/16/2011 8:05	11/18/2011 7:30	11/21/2011 11:58		
L54574-1	421422-CFGW		CVTSS	GRND WTR	11/15/2011 7:50	11/18/2011 7:30	11/21/2011 11:59		
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/14/2011 7:50	11/18/2011 7:30	11/21/2011 12:00		
L54576-2	421422-VAGW		CVTSS	GRND WTR	11/14/2011 7:00	11/18/2011 7:30	11/21/2011 12:03		
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/14/2011 10:43	11/18/2011 7:30	11/21/2011 12:04		
L54578-3	421422-CFGW		CVTSS	GRND WTR	11/15/2011 10:14	11/18/2011 7:30	11/21/2011 12:04		
L54579-1	421422-CFGW		CVTSS	GRND WTR	11/15/2011 10:14	11/18/2011 7:30	11/21/2011 12:05		
L54579-3	421422-CFGW		CVTSS	GRND WTR	11/18/2011 6:05	11/18/2011 7:30	11/21/2011 12:39		
L54604-1	421422-CHSW-M		CVTSS	FRESH WTR	11/16/2011 7:30	11/18/2011 7:30	11/21/2011 12:06		
L54604-2	421422-CHSW-M		CVTSS	FRESH WTR	11/16/2011 8:23	11/18/2011 7:30	11/21/2011 12:07		
L54604-3	421422-CHSW-M		CVTSS	FRESH WTR	11/16/2011 9:25	11/18/2011 7:30	11/21/2011 12:07		
L54604-4	421422-CHSW-M		CVTSS	FRESH WTR	11/16/2011 8:02	11/18/2011 7:30	11/21/2011 12:08		

L54604-5	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/2011 8:40	11/18/2011 7:30	11/21/2011 12:08	21	
L54604-6	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 6:35	11/18/2011 7:30	11/21/2011 12:08		
L54604-7	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 5:25	11/18/2011 7:30	11/21/2011 12:09		
L54604-8	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 5:55	11/18/2011 7:30	11/21/2011 12:09		
L54604-9	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 7:30	11/18/2011 7:30	11/21/2011 12:09		
L54604-11	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 4:50	11/18/2011 7:30	11/21/2011 12:11		
L54604-12	421422-CHSW-M		CVTSS	FRESH WTR	11/17/2011 5:55	11/18/2011 7:30	11/21/2011 12:12		
L54624-1	421879-210	NPDES SW Fall City	CVTSS	STORM WTR	11/16/2011 12:15	11/18/2011 7:30	11/21/2011 12:12		
L54624-2	421879-210		CVTSS	STORM WTR	11/16/2011 17:56	11/18/2011 7:30	11/21/2011 12:13		
L54625-1	421879-210		CVTSS	STORM WTR	11/16/2011 10:57	11/18/2011 7:30	11/21/2011 12:14		
L54626-2	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/14/2011 10:00	11/18/2011 7:30	11/21/2011 12:16		
L54627-1	421879-220		CVTSS	STORM WTR	11/15/2011 1:49	11/18/2011 7:30	11/21/2011 12:17		
L54661-1	421879-220		CVTSS	STORM WTR	11/16/2011 12:44	11/18/2011 7:30	11/21/2011 12:20		
L54675-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	11/17/2011 8:09	11/18/2011 7:30	11/21/2011 12:22		
L54675-2	421422-CHSW-P2		CVTSS	FRESH WTR	11/17/2011 7:26	11/18/2011 7:30	11/21/2011 12:23		
L54675-3	421422-CHSW-P2		CVTSS	FRESH WTR	11/17/2011 8:28	11/18/2011 7:30	11/21/2011 12:24		
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/16/2011 13:00	11/18/2011 7:30	11/21/2011 12:25		
L54681-2	423589-330-4		CVTSS	STORM WTR	11/16/2011 13:43	11/18/2011 7:30	11/21/2011 12:26		
L54681-3	423589-330-4		CVTSS	STORM WTR	11/16/2011 13:15	11/18/2011 7:30	11/21/2011 12:26		
L54681-4	423589-330-4		CVTSS	STORM WTR	11/16/2011 13:00	11/18/2011 7:30	11/21/2011 12:27		
WG118621-1	MB		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 11:46		MB1 111118
WG118621-2	LCS		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 11:46		LEVEL1
WG118621-3	LD		CVTSS	FRESH WTR		11/18/2011 7:30	11/21/2011 11:58		L54534-23
WG118621-4	LD		CVTSS	GRND WTR		11/18/2011 7:30	11/21/2011 11:59		L54574-1
WG118621-5	MB		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:02		MB2 111118
WG118621-6	LCS		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:03		LEVEL1
WG118621-7	LD		CVTSS	GRND WTR		11/18/2011 7:30	11/21/2011 12:05		L54578-3
WG118621-8	LD		CVTSS	FRESH WTR		11/18/2011 7:30	11/21/2011 12:10		L54604-9
WG118621-9	LD		CVTSS	STORM WTR		11/18/2011 7:30	11/21/2011 12:13		L54624-1
WG118621-10	MB		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:18		MB3 111118
WG118621-11	LCS		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:19		LEVEL1
WG118621-12	LD		CVTSS	STORM WTR		11/18/2011 7:30	11/21/2011 12:21		L54661-1
WG118621-13	LD		CVTSS	FRESH WTR		11/18/2011 7:30	11/21/2011 12:23		L54675-2
WG118621-14	LD		CVTSS	STORM WTR		11/18/2011 7:30	11/21/2011 12:25		L54681-1
WG118621-15	LD		CVTSS	STORM WTR		11/18/2011 7:30	11/21/2011 12:28		L54285-1
WG118621-16	LD		CVTSS	STORM WTR		11/18/2011 7:30	11/21/2011 12:32		L54191-2
WG118621-17	LD		CVTSS	IW WTR		11/18/2011 7:30	11/21/2011 12:35		L54351-1
WG118621-18	MB		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:36		MB4 111118
WG118621-19	LCS		CVTSS	BLANK WTR		11/18/2011 7:30	11/21/2011 12:36		LEVEL1
WG118621-20	LD		CVTSS	FRESH WTR		11/18/2011 7:30	11/21/2011 12:37		L54565-1
WG118621-21	LD		CVTSS	GRND WTR		11/18/2011 7:30	11/21/2011 12:40		L54579-3

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NPDES SW Permit, SWM, L54624, L54625

WG118602 Turbidity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTURB	FRESH WTR	11/16/2011 7:30	11/18/2011 11:14	11/18/2011 11:14	WG118602-1,-2,-3,-4	
L54604-2	421422-CHSW-M		CVTURB	FRESH WTR	11/16/2011 8:23	11/18/2011 11:17	11/18/2011 11:17		
L54604-3	421422-CHSW-M		CVTURB	FRESH WTR	11/16/2011 9:25	11/18/2011 11:19	11/18/2011 11:19		
L54604-4	421422-CHSW-M		CVTURB	FRESH WTR	11/16/2011 8:02	11/18/2011 11:21	11/18/2011 11:21		
L54604-5	421422-CHSW-M		CVTURB	FRESH WTR	11/16/2011 8:40	11/18/2011 11:23	11/18/2011 11:23		
L54604-6	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 6:35	11/18/2011 11:28	11/18/2011 11:28		
L54604-7	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 5:25	11/18/2011 11:33	11/18/2011 11:33		
L54604-8	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 5:55	11/18/2011 11:40	11/18/2011 11:40		
L54604-9	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 7:30	11/18/2011 11:43	11/18/2011 11:43		
L54604-11	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 4:50	11/18/2011 11:45	11/18/2011 11:45		
L54604-12	421422-CHSW-M		CVTURB	FRESH WTR	11/17/2011 5:55	11/18/2011 11:47	11/18/2011 11:47		
L54624-1	421879-210	NPDES SW Fall City	CVTURB	STORM WTR	11/16/2011 12:15	11/18/2011 11:55	11/18/2011 11:55		
L54624-2	421879-210		CVTURB	STORM WTR	11/16/2011 17:56	11/18/2011 11:57	11/18/2011 11:57		
L54625-1	421879-210		CVTURB	STORM WTR	11/16/2011 10:57	11/18/2011 11:59	11/18/2011 11:59		
L54675-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTURB	FRESH WTR	11/17/2011 8:09	11/18/2011 11:50	11/18/2011 11:50		
L54675-2	421422-CHSW-P2		CVTURB	FRESH WTR	11/17/2011 7:26	11/18/2011 11:51	11/18/2011 11:51		
L54675-3	421422-CHSW-P2		CVTURB	FRESH WTR	11/17/2011 8:28	11/18/2011 11:53	11/18/2011 11:53		
WG118602-1	LCS		CVTURB	BLANK WTR		11/18/2011 11:13	11/18/2011 11:13		LEVEL1
WG118602-2	LD		CVTURB	FRESH WTR		11/18/2011 11:36	11/18/2011 11:36		L54604-7
WG118602-3	LD		CVTURB	STORM WTR		11/18/2011 12:00	11/18/2011 12:00		L54625-1
WG118602-4	LCS		CVTURB	BLANK WTR		11/18/2011 12:01	11/18/2011 12:01		LEVEL2

WG118565 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54625-2	421879-210	NPDES SW Fall City	MCFC-MF	STORM WTR	11/16/2011 10:46	11/16/2011 13:45	11/17/2011 14:00		
WG118565-1	PC		MCFC-MF	BLANK WTR		11/16/2011 13:45	11/17/2011 14:00		QC-PERFORMED:16-NOV-11
WG118565-2	NC		MCFC-MF	BLANK WTR		11/16/2011 13:45	11/17/2011 14:00	WG118565-1,-2,-3,-4	QC-PERFORMED:16-NOV-11
WG118565-3	BF		MCFC-MF	BLANK WTR		11/16/2011 13:45	11/17/2011 14:00		QC-PERFORMED:16-NOV-11
WG118565-4	AF		MCFC-MF	BLANK WTR		11/16/2011 13:45	11/17/2011 14:00		QC-PERFORMED:16-NOV-11

WG118594 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-3	421879-210	NPDES SW Fall City	MCFC-MF	STORM WTR	11/17/2011 12:39	11/17/2011 14:10	11/18/2011 12:50	WG118609-1,-2,WG118612-3,-4	
L54624-4	421879-210		MCFC-MF	STORM WTR	11/17/2011 12:24	11/17/2011 14:10	11/18/2011 12:50		
WG118609-1	PC		MCSWFC-MF	BLANK WTR		11/17/2011 10:40	11/18/2011 10:20		QC-PERFORMED:17-NOV-11
WG118609-2	NC		MCSWFC-MF	BLANK WTR		11/17/2011 10:40	11/18/2011 10:20		QC-PERFORMED:17-NOV-11
WG118612-3	BF		MCSWTC-MF	BLANK WTR		11/17/2011 10:40	11/18/2011 10:20		QC-PERFORMED: 17-NOV-11
WG118612-4	AF		MCSWTC-MF	BLANK WTR		11/17/2011 10:40	11/18/2011 10:20		QC-PERFORMED: 17-NOV-11

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NPDES SW Permit, SWM, L54624, L54625

WG118616 Total Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	MTHARD-ICPMS	FRESH WTR	11/16/2011 7:30	11/18/2011 10:30	11/22/2011 14:03		
L54604-1	421422-CHSW-M		MTICPMS	FRESH WTR	11/16/2011 7:30	11/18/2011 10:30	11/21/2011 10:13		
L54604-2	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/16/2011 8:23	11/18/2011 10:30	11/22/2011 14:03		
L54604-2	421422-CHSW-M		MTICPMS	FRESH WTR	11/16/2011 8:23	11/18/2011 10:30	11/21/2011 10:19		
L54604-3	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/16/2011 9:25	11/18/2011 10:30	11/22/2011 14:03		
L54604-3	421422-CHSW-M		MTICPMS	FRESH WTR	11/16/2011 9:25	11/18/2011 10:30	11/21/2011 10:38		
L54604-4	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/16/2011 8:02	11/18/2011 10:30	11/22/2011 14:03		
L54604-4	421422-CHSW-M		MTICPMS	FRESH WTR	11/16/2011 8:02	11/18/2011 10:30	11/21/2011 10:44		
L54604-5	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/16/2011 8:40	11/18/2011 10:30	11/22/2011 14:03		
L54604-5	421422-CHSW-M		MTICPMS	FRESH WTR	11/16/2011 8:40	11/18/2011 10:30	11/21/2011 10:50		
L54604-6	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 6:35	11/18/2011 10:30	11/22/2011 14:03		
L54604-6	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 6:35	11/18/2011 10:30	11/21/2011 10:57		
L54604-7	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 5:25	11/18/2011 10:30	11/22/2011 14:03		
L54604-7	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 5:25	11/18/2011 10:30	11/21/2011 11:15		
L54604-8	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 5:55	11/18/2011 10:30	11/22/2011 14:03		
L54604-8	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 5:55	11/18/2011 10:30	11/21/2011 11:22		
L54604-9	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 7:30	11/18/2011 10:30	11/22/2011 14:03		
L54604-9	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 7:30	11/18/2011 10:30	11/21/2011 11:28		
L54604-11	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 4:50	11/18/2011 10:30	11/22/2011 14:03		
L54604-11	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 4:50	11/18/2011 10:30	11/21/2011 11:34		
L54604-12	421422-CHSW-M		MTHARD-ICPMS	FRESH WTR	11/17/2011 5:55	11/18/2011 10:30	11/22/2011 14:03		
L54604-12	421422-CHSW-M		MTICPMS	FRESH WTR	11/17/2011 5:55	11/18/2011 10:30	11/21/2011 11:40		
L54624-1	421879-210	NPDES SW Fall City	MTHARD-ICPMS	STORM WTR	11/16/2011 12:15	11/18/2011 10:30	11/22/2011 14:03	WG118616-1,-2,-3,-4	
L54624-1	421879-210		MTICPMS	STORM WTR	11/16/2011 12:15	11/18/2011 10:30	11/21/2011 11:46		
L54624-2	421879-210		MTHARD-ICPMS	STORM WTR	11/16/2011 17:56	11/18/2011 10:30	11/22/2011 14:03		
L54624-2	421879-210		MTICPMS	STORM WTR	11/16/2011 17:56	11/18/2011 10:30	11/21/2011 11:53		
L54625-1	421879-210		MTHARD-ICPMS	STORM WTR	11/16/2011 10:57	11/18/2011 10:30	11/22/2011 14:03		
L54625-1	421879-210		MTICPMS	STORM WTR	11/16/2011 10:57	11/18/2011 10:30	11/21/2011 11:59		
L54627-1	421879-220	NPDES SW Sammamish	MTHARD-ICPMS	STORM WTR	11/15/2011 1:49	11/18/2011 10:30	11/22/2011 14:03		
L54627-1	421879-220		MTICPMS	STORM WTR	11/15/2011 1:49	11/18/2011 10:30	11/21/2011 12:05		
L54661-1	421879-220		MTHARD-ICPMS	STORM WTR	11/16/2011 12:44	11/18/2011 10:30	11/22/2011 14:03		
L54661-1	421879-220		MTICPMS	STORM WTR	11/16/2011 12:44	11/18/2011 10:30	11/21/2011 12:11		
L54675-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	MTICPMS	FRESH WTR	11/17/2011 8:09	11/18/2011 10:30	11/21/2011 12:30		
L54675-2	421422-CHSW-P2		MTICPMS	FRESH WTR	11/17/2011 7:26	11/18/2011 10:30	11/21/2011 12:37		
L54675-3	421422-CHSW-P2		MTICPMS	FRESH WTR	11/17/2011 8:28	11/18/2011 10:30	11/21/2011 12:43		
WG118616-1	MB		MTHARD-ICPMS	BLANK WTR		11/18/2011 10:30	11/22/2011 14:03		METHOD BLANK
WG118616-1	MB		MTICPMS	BLANK WTR		11/18/2011 10:30	11/21/2011 10:01		METHOD BLANK
WG118616-2	SB		MTHARD-ICPMS	BLANK WTR		11/18/2011 10:30	11/22/2011 14:03		WG118616-1 MS-20
WG118616-2	SB		MTICPMS	BLANK WTR		11/18/2011 10:30	11/21/2011 10:07		WG118616-1 MS-20
WG118616-3	LD		MTHARD-ICPMS	FRESH WTR		11/18/2011 10:30	11/22/2011 14:03		L54604-2 RPD-LIQ
WG118616-3	LD		MTICPMS	FRESH WTR		11/18/2011 10:30	11/21/2011 10:26		L54604-2 RPD-LIQ
WG118616-4	MS		MTHARD-ICPMS	FRESH WTR		11/18/2011 10:30	11/22/2011 14:03		L54604-2 MS-20

WG118616-4	MS	MTICPMS	FRESH WTR	11/18/2011 10:30	11/21/2011 10:32		L54604-2 MS-20

WG118629 Total Mercury

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54599-1	421422-VAGW-APP3	SWD-VAGW-Appendix III GW Analytes	MTHG-MID	GRND WTR	11/10/2011 7:15	11/21/2011 8:05	11/21/2011 13:54	WG118629-1,-2,-3,-4	
L54599-2	421422-VAGW-APP3		MTHG-MID	GRND WTR	11/9/2011 7:25	11/21/2011 8:05	11/21/2011 13:56		
L54600-1	421422-VAGW-APP3		MTHG-MID	GRND WTR	11/9/2011 9:36	11/21/2011 8:05	11/21/2011 13:58		
L54600-2	421422-VAGW-APP3		MTHG-MID	GRND WTR	11/9/2011 8:36	11/21/2011 8:05	11/21/2011 13:59		
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	MTHG-MID	FRESH WTR	11/16/2011 7:30	11/21/2011 8:05	11/21/2011 14:01		
L54604-2	421422-CHSW-M		MTHG-MID	FRESH WTR	11/16/2011 8:23	11/21/2011 8:05	11/21/2011 14:07		
L54604-3	421422-CHSW-M		MTHG-MID	FRESH WTR	11/16/2011 9:25	11/21/2011 8:05	11/21/2011 14:08		
L54604-4	421422-CHSW-M		MTHG-MID	FRESH WTR	11/16/2011 8:02	11/21/2011 8:05	11/21/2011 13:48		
L54604-5	421422-CHSW-M		MTHG-MID	FRESH WTR	11/16/2011 8:40	11/21/2011 8:05	11/21/2011 14:10		
L54604-6	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 6:35	11/21/2011 8:05	11/21/2011 14:12		
L54604-7	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 5:25	11/21/2011 8:05	11/21/2011 14:14		
L54604-8	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 5:55	11/21/2011 8:05	11/21/2011 14:16		
L54604-9	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 7:30	11/21/2011 8:05	11/21/2011 14:17		
L54604-11	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 4:50	11/21/2011 8:05	11/21/2011 14:19		
L54604-12	421422-CHSW-M		MTHG-MID	FRESH WTR	11/17/2011 5:55	11/21/2011 8:05	11/21/2011 14:21		
L54624-1	421879-210	NPDES SW Fall City	MTHG-MID	STORM WTR	11/16/2011 12:15	11/21/2011 8:05	11/21/2011 14:23		
WG118629-1	MB		MTHG-MID	BLANK WTR		11/21/2011 8:05	11/21/2011 13:45		METHOD BLANK
WG118629-2	SB		MTHG-MID	BLANK WTR		11/21/2011 8:05	11/21/2011 13:47		WG118629-1 HG-LMID
WG118629-3	MS		MTHG-MID	FRESH WTR		11/21/2011 8:05	11/21/2011 13:50		L54604-4 HG-LMID
WG118629-4	MSD		MTHG-MID	FRESH WTR		11/21/2011 8:05	11/21/2011 13:52		WG118629-3 L54604-4 HG-LMID-MSD

WG118653 Dissolved Mercury

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54573-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/16/2011 8:05	11/22/2011 8:50	11/22/2011 14:03		
L54574-1	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/15/2011 7:50	11/22/2011 8:50	11/22/2011 14:05		
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/14/2011 7:50	11/22/2011 8:50	11/22/2011 14:07		
L54576-2	421422-VAGW		MTHG-MID-DISS	GRND WTR	11/14/2011 7:00	11/22/2011 8:50	11/22/2011 14:09		
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/14/2011 10:43	11/22/2011 8:50	11/22/2011 14:11		
L54578-3	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/15/2011 10:14	11/22/2011 8:50	11/22/2011 14:16		
L54579-1	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/15/2011 10:14	11/22/2011 8:50	11/22/2011 14:18		
L54579-3	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/18/2011 6:05	11/22/2011 8:50	11/22/2011 14:20		
L54582-3	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/18/2011 10:35	11/22/2011 8:50	11/22/2011 13:58		
L54584-1	421422-CFGW		MTHG-MID-DISS	GRND WTR	11/18/2011 9:26	11/22/2011 8:50	11/22/2011 14:21		
L54588-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	MTHG-MID-DISS	GRND WTR	11/21/2011 7:45	11/22/2011 8:50	11/22/2011 14:23	WG118653-1,-2,-3,-4	
L54599-1	421422-VAGW-APP3	SWD-VAGW-Appendix III GW Analytes	MTHG-MID-DISS	GRND WTR	11/10/2011 7:15	11/22/2011 8:50	11/22/2011 14:25		
L54599-2	421422-VAGW-APP3		MTHG-MID-DISS	GRND WTR	11/9/2011 7:25	11/22/2011 8:50	11/22/2011 14:27		
L54600-1	421422-VAGW-APP3		MTHG-MID-DISS	GRND WTR	11/9/2011 9:36	11/22/2011 8:50	11/22/2011 14:29		
L54600-2	421422-VAGW-APP3		MTHG-MID-DISS	GRND WTR	11/9/2011 8:36	11/22/2011 8:50	11/22/2011 14:30		
L54624-1	421879-210	NPDES SW Fall City	MTHG-MID-DISS	STORM WTR	11/16/2011 12:15	11/22/2011 8:50	11/22/2011 14:32		
WG118653-1	MB		MTHG-MID-DISS	BLANK WTR		11/22/2011 8:50	11/22/2011 13:54		METHOD BLANK
WG118653-2	SB		MTHG-MID-DISS	BLANK WTR		11/22/2011 8:50	11/22/2011 13:56		WG118653-1 HG-LMID
WG118653-3	MS		MTHG-MID-DISS	GRND WTR		11/22/2011 8:50	11/22/2011 14:00		L54582-3 HG-LMID
WG118653-4	MSD		MTHG-MID-DISS	GRND WTR		11/22/2011 8:50	11/22/2011 14:01		WG118653-3 L54582-3 HG-LMID-MSD

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NPDES SW Permit, SWM, L54624, L54625

WG118664 Dissolved Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54285-1	421195-180	Mercer Island Stormwater Monitoring	MTICPMS-DISS	STORM WTR	11/16/2011 12:14	11/21/2011 10:00	11/21/2011 14:19		
L54285-2	421195-180		MTICPMS-DISS	STORM WTR	11/16/2011 12:43	11/21/2011 10:00	11/21/2011 14:25		
L54285-3	421195-180		MTICPMS-DISS	STORM WTR	11/16/2011 13:10	11/21/2011 10:00	11/21/2011 14:31		
L54285-4	421195-180		MTICPMS-DISS	STORM WTR	11/16/2011 13:43	11/21/2011 10:00	11/21/2011 14:38		
L54579-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	MTICPMS-DISS	GRND WTR	11/18/2011 6:05	11/21/2011 10:00	11/21/2011 14:44		
L54582-3	421422-CFGW		MTICPMS-DISS	GRND WTR	11/18/2011 10:35	11/21/2011 10:00	11/21/2011 15:03		
L54584-1	421422-CFGW		MTICPMS-DISS	GRND WTR	11/18/2011 9:26	11/21/2011 10:00	11/21/2011 15:22		
L54624-1	421879-210	NPDES SW Fall City	MTICPMS-DISS	STORM WTR	11/16/2011 12:15	11/21/2011 10:00	11/21/2011 15:28		
L54624-2	421879-210		MTICPMS-DISS	STORM WTR	11/16/2011 17:56	11/21/2011 10:00	11/21/2011 15:35	WG118664-1,-2,-3,-4	
L54625-1	421879-210		MTICPMS-DISS	STORM WTR	11/16/2011 10:57	11/21/2011 10:00	11/21/2011 15:41		
L54626-2	421879-220	NPDES SW Sammamish	MTICPMS-DISS	STORM WTR	11/14/2011 10:00	11/21/2011 10:00	11/21/2011 15:47		
WG118664-1	MB		MTICPMS-DISS	BLANK WTR		11/21/2011 10:00	11/21/2011 14:06		METHOD BLANK
WG118664-2	SB		MTICPMS-DISS	BLANK WTR		11/21/2011 10:00	11/21/2011 14:12		
WG118664-3	LD		MTICPMS-DISS	GRND WTR		11/21/2011 10:00	11/21/2011 14:50		WG118664-1 MS-20 L54579-3 RPD-LIQ
WG118664-4	MS		MTICPMS-DISS	GRND WTR		11/21/2011 10:00	11/21/2011 14:57		L54579-3 MS-20

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NPDES SW Permit, SWM, L54624, L54625

WG118618 Herbicides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-1	421879-210		ORHERB-NPDES	STORM WTR	11/16/2011 12:15	11/20/2011 12:00	12/1/2011 18:12		
L54624-2	421879-210	NPDES SW Fall City	ORHERB-NPDES	STORM WTR	11/16/2011 17:56	11/20/2011 12:00	12/1/2011 16:45		
L54625-1	421879-210		ORHERB-NPDES	STORM WTR	11/16/2011 10:57	11/20/2011 12:00	12/1/2011 16:16		
WG118618-1	MB		ORHERB-NPDES	BLANK WTR		11/20/2011 12:00	12/1/2011 9:34		MB111120
WG118618-2	SB		ORHERB-NPDES	BLANK WTR		11/20/2011 12:00	12/1/2011 10:03	WG118618-1,-2,-3,-4,-5	WG118618-1
WG118618-3	SBD		ORHERB-NPDES	BLANK WTR		11/20/2011 12:00	12/1/2011 10:32		WG118618-2
									WG118618-1
WG118618-4	MS		ORHERB-NPDES	STORM WTR		11/20/2011 12:00	12/1/2011 17:14		L54624-2
WG118618-5	MSD		ORHERB-NPDES	STORM WTR		11/20/2011 12:00	12/1/2011 17:43		WG118618-4 L54624-2

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NPDES SW Permit, SWM, L54624, L54625

WG118647 Organophosphorus Pesticides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-1	421879-210	NPDES SW Fall City	OROPPEST-NPDES	STORM WTR	11/16/2011 12:15	11/22/2011 7:00	12/7/2011 22:16	WG118647-4,-1,-2,-3	
L54624-2	421879-210		OROPPEST-NPDES	STORM WTR	11/16/2011 17:56	11/22/2011 7:00	12/7/2011 21:47		
L54625-1	421879-210		OROPPEST-NPDES	STORM WTR	11/16/2011 10:57	11/22/2011 7:00	12/7/2011 21:18		
WG118647-1	MB		OROPPEST-NPDES	BLANK WTR		11/22/2011 7:00	12/7/2011 19:21		MB111122
WG118647-2	SB		OROPPEST-NPDES	BLANK WTR		11/22/2011 7:00	12/7/2011 19:50		WG118647-1
WG118647-3	MS		OROPPEST-NPDES	STORM WTR		11/22/2011 7:00	12/7/2011 20:19		L54625-1
WG118647-4	MSD		OROPPEST-NPDES	STORM WTR		11/22/2011 7:00	12/7/2011 20:49		WG118647-3 L54625-1

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NPDES SW Permit, SWM, L54624, L54625

WG118626 Semi Volatile Organics

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-1	421879-210	NPDES SW Fall City	ORPAHPHTH-SUR	STORM WTR	11/16/2011 12:15	11/20/2011 7:00	12/9/2011 13:29	WG118626-4,-1,-2,-3	
L54624-2	421879-210		ORPAHPHTH-SUR	STORM WTR	11/16/2011 17:56	11/20/2011 7:00	12/9/2011 14:08		
L54625-1	421879-210		ORPAHPHTH-SUR	STORM WTR	11/16/2011 10:57	11/20/2011 7:00	12/9/2011 11:31		
WG118626-1	MB		ORPAHPHTH-SUR	BLANK WTR		11/20/2011 7:00	12/9/2011 10:13		MB111120
WG118626-2	SB		ORPAHPHTH-SUR	BLANK WTR		11/20/2011 7:00	12/9/2011 10:51		WG118626-1
WG118626-3	MS		ORPAHPHTH-SUR	STORM WTR		11/20/2011 7:00	12/9/2011 12:10		L54624-1
WG118626-4	MSD		ORPAHPHTH-SUR	STORM WTR		11/20/2011 7:00	12/9/2011 12:49		WG118626-3 L54624-1

WG118628 WTPH-Dx

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-3	421879-210	NPDES SW Fall City	ORWTPH-DX	STORM WTR	11/17/2011 12:39	11/21/2011 8:00	11/29/2011 14:09	WG118628-4,-3,-2,-1	
L54624-4	421879-210		ORWTPH-DX	STORM WTR	11/17/2011 12:24	11/21/2011 8:00	11/29/2011 14:32		
L54625-2	421879-210		ORWTPH-DX	STORM WTR	11/16/2011 10:46	11/21/2011 8:00	11/29/2011 14:55		
L54626-4	421879-220	NPDES SW Sammamish	ORWTPH-DX	STORM WTR	11/15/2011 10:18	11/21/2011 8:00	11/29/2011 15:18		
L54627-4	421879-220		ORWTPH-DX	STORM WTR	11/16/2011 14:05	11/21/2011 8:00	11/29/2011 15:42		
L54661-3	421879-220		ORWTPH-DX	STORM WTR	11/17/2011 10:49	11/21/2011 8:00	11/29/2011 16:05		
WG118628-1	MB		ORWTPH-DX	BLANK WTR		11/21/2011 8:00	11/29/2011 12:36		MB111121
WG118628-2	SB		ORWTPH-DX	BLANK WTR		11/21/2011 8:00	11/29/2011 12:59		WG118628-1 SB-MO
WG118628-3	SB		ORWTPH-DX	BLANK WTR		11/21/2011 8:00	11/29/2011 13:22		WG118628-1 SB-DSL
WG118628-4	LD		ORWTPH-DX	STORM WTR		11/21/2011 8:00	11/29/2011 13:46		L54625-2

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NPDES SW Permit, SWM, L54624, L54625

WG118613 WTPH-G

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L54624-3	421879-210	NPDES SW Fall City	ORWTPH-G	STORM WTR	11/17/2011 12:39	11/21/2011 14:20	11/21/2011 14:20	WG118613-3,-2,-1	
L54624-4	421879-210		ORWTPH-G	STORM WTR	11/17/2011 12:24	11/21/2011 14:54	11/21/2011 14:54		
L54625-2	421879-210		ORWTPH-G	STORM WTR	11/16/2011 10:46	11/21/2011 15:29	11/21/2011 15:29		
WG118613-1	MB		ORWTPH-G	BLANK WTR		11/21/2011 12:02	11/21/2011 12:02		MB111118
WG118613-2	SB		ORWTPH-G	BLANK WTR		11/21/2011 12:36	11/21/2011 12:36		WG118613-1
WG118613-3	LD		ORWTPH-G	STORM WTR		11/21/2011 13:45	11/21/2011 13:45		L54624-3

Workgroup: WG118679 BOD

MB:WG118679-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG118679-2 MB:WG118679-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	195	98		80--120

Workgroup: WG118683 BOD

MB:WG118683-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG118683-2 MB:WG118683-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	210	106		80--120

Workgroup: WG118654 Anions

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.1	0.087	87		70--130

CS:WG118654-1 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	0.2	0.18	91		70--130

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Method Blank)

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

MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sulfate	0.1	0.2	mg/L	<MDL	

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	<MDL	2	2.15	107		80--120

SB:WG118654-3 MB:WG118654-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	<MDL	5	5.29	106		80--120

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	3	3	100		85--115

LCS:WG118654-4 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	15	14	93		85--115

LD:WG118654-5 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	0.652	1		0--20

MS:WG118654-6 L54423-1 Matrix: STORM WTR Listtype:CVCL Method:SM4110B CL Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.658	2	2.64	99		75--125

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	3.02	2		0--20

LD:WG118654-7 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	9.14	1		0--20

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.97	2	13.6	106		75--125

MS:WG118654-8 L54576-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-VAGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	9.23	5	14.5	104		75--125

LD:WG118654-9 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2.33	8		0--20

MS:WG118654-10 L54252-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423484-802-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	2.53	2	11.7	92		75--125

Workgroup: WG118657 Conductivity

LCS:WG118657-1 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	74.6	101		90--110

LCS:WG118657-2 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	704	98		90--110

LD:WG118657-3 L54604-9 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	127	127	0		0--10

LCS:WG118657-4 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	75.6	102		90--110

LCS:WG118657-5 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	713	99		90--110

LD:WG118657-6 L54624-1 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	82	81.9	0		0--10

LD:WG118657-7 L54576-2 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	192	193	0		0--10

LCS:WG118657-8 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	75.9	103		90--110

LCS:WG118657-9 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	711	99		90--110

LCS:WG118657-10 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	78.6	106		90--110

LCS:WG118657-11 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	712	99		90--110

Workgroup: WG118673 Dissolved Nutrients

MB:WG118673-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG118673-1 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	

SB:WG118673-2 MB:WG118673-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.0986	99		80--120

SB:WG118673-2 MB:WG118673-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.8	100		80--120

LCS:WG118673-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.104	104		85--115

LCS:WG118673-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.803	100		85--115

LD:WG118673-4 L54693-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421303B Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	<MDL			0--20

LD:WG118673-4 L54693-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421303B Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.427	0.43	1		0--20

MS:WG118673-5 L54693-5 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421303B Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.103	103		75--125

MS:WG118673-5 L54693-5 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421303B Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.427	0.8	1.2	97		75--125

LD:WG118673-6 L54694-6 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	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	<MDL			0--20

LD:WG118673-6 L54694-6 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	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.224	0.224	0		0--20

MS:WG118673-7 L54694-6 Matrix: STORM WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.104	104		75--125

MS:WG118673-7 L54694-6 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421304 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.224	0.8	0.99	96		75--125

MB:WG118673-8 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	

LCS:WG118673-9 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.798	100		85--115

LD:WG118673-10 L54624-2 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.022	0.022			0--20

LD:WG118673-10 L54624-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0314	0.0318	1		0--20

MS:WG118673-11 L54624-2 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.022	0.8	0.796	97		75--125

MS:WG118673-11 L54624-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0314	0.04	0.0693	95		75--125

MB:WG118673-12 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG118673-13 MB:WG118673-12 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0391	98		80--120

LCS:WG118673-14 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0403	101		85--115

LD:WG118673-15 L54285-1 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	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.121	0.122	0		0--20

MS:WG118673-16 L54285-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-180 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.121	0.04	0.16	98		75--125

LD:WG118673-17 L54685-3 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.00507	0.0053	4		0--20

MS:WG118673-18 L54685-3 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.00507	0.04	0.0445	98		75--125

Workgroup: WG118682 TKN

MB:WG118682-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	

SB:WG118682-2 MB:WG118682-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	5	5.08	102		80--120

LCS:WG118682-3 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.5	0.599	120		80--120

LCS:WG118682-4 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	5	4.95	99		80--120

LD:WG118682-5 L54604-7 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.979	0.941	4		0--20

MS:WG118682-6 L54604-7 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.979	5	5.78	96		70--130

LD:WG118682-7 L54625-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	1.57	1.58	1		0--20

MS:WG118682-8 L54625-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	1.57	5	6.4	97		70--130

Workgroup: WG118601 Total Nutrients

MB:WG118601-1 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:WG118601-2 MB:WG118601-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0992	99		80--120

LCS:WG118601-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.103	103		85--115

LD:WG118601-4 L54604-12 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0112	0.0105	7		0--20

MS:WG118601-5 L54604-12 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0112	0.1	0.119	108		75--125

LD:WG118601-6 L54451-1 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	Lab Limit
Total Phosphorus	0.15	0.3	mg/L	4	4.14	3		0--20

MS:WG118601-7 L54451-1 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.15	0.3	mg/L	4	3	7.16	105		75--125

MB:WG118601-8 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	

SB:WG118601-9 MB:WG118601-8 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.106	106		80--120

LCS:WG118601-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.101	101		85--115

LD:WG118601-11 L54565-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-140 Pkey:STD
(Lab Duplicate)

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

MS:WG118601-12 L54565-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-140 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.107	107		75--125

LD:WG118601-13 L54589-1 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0779	0.0735	6		0--20

MS:WG118601-14 L54589-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-150 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0779	0.1	0.173	95		75--125

LD:WG118601-15 L54624-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.249	0.255	2		0--20

MS:WG118601-16 L54624-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.249	0.1	0.364	115		75--125

LD:WG118601-17 L54627-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.16	0.184	14		0--20

MS:WG118601-18 L54627-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-220 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.16	0.1	0.257	97		75--125

Workgroup: WG118621 TSS

MB:WG118621-1 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:WG118621-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG118621-3 L54534-23 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	2.2	2.4	9		0--25

LD:WG118621-4 L54574-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	7.2	7.4	3		0--25

MB:WG118621-5 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:WG118621-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	91	91		80--120

LD:WG118621-7 L54578-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1.3	2.5	mg/L	24.3	24.5	1		0--25

LD:WG118621-8 L54604-9 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	194	215	10		0--25

LD:WG118621-9 L54624-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	120	120	0		0--25

MB:WG118621-10 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:WG118621-11 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG118621-12 L54661-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1.3	2.5	mg/L	34.8	44.8	25		0--25

LD:WG118621-13 L54675-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	19	25	27	*	0--25

LD:WG118621-14 L54681-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1.3	2.5	mg/L	6.75	6	12		0--25

LD:WG118621-15 L54285-1 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	Lab Limit
Total Suspended Solids	1.7	3.3	mg/L	27	26.7	1		0--25

LD:WG118621-16 L54191-2 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	12.4	14.2	14		0--25

LD:WG118621-17 L54351-1 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	Lab Limit
Total Suspended Solids	10	20	mg/L	404	366	10		0--25

MB:WG118621-18 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:WG118621-19 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG118621-20 L54565-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421195-140 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	1	1			0--25

LD:WG118621-21 L54579-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

Workgroup: WG118602 Turbidity

LCS:WG118602-1 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	10	9.79	98		90--110

LD:WG118602-2 L54604-7 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Turbidity	0.4	1	NTU	340	334	2		0--25

LD:WG118602-3 L54625-1 Matrix: STORM WTR Listtype:CVTURB Method:SM2130-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	9.82	10.1	3		0--25

LCS:WG118602-4 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	100	97.7	98		90--110

Workgroup: WG118565 Fecal coliform

PC:WG118565-1 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:WG118565-2 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:WG118565-3 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			CFU/100ml	0	

AF:WG118565-4 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			CFU/100ml	0	

Workgroup: WG118594 Fe cal coliform

PC:WG118609-1 Matrix: BLANK WTR Listtype:MCSWFC-MF Method:SM9222D Project: Pkey:STD
(Positive Control)

Parameter	MDL	RDL	Units	PC Value	Qual
Fecal Coliform			CFU/100ml		PASS

NC:WG118609-2 Matrix: BLANK WTR Listtype:MCSWFC-MF Method:SM9222D Project: Pkey:STD
(Negative Control)

Parameter	MDL	RDL	Units	NC Value	Qual
Fecal Coliform			CFU/100ml		PASS

BF:WG118612-3 Matrix: BLANK WTR Listtype:MCSWTC-MF Method:SM9222B Project: Pkey:STD
(Before Membrane Filtration Blank)

Parameter	MDL	RDL	Units	BF Value	Qual
Total Coliform			CFU/100ml	0	

AF:WG118612-4 Matrix: BLANK WTR Listtype:MCSWTC-MF Method:SM9222B Project: Pkey:STD
(After Membrane Filtration Blank)

Parameter	MDL	RDL	Units	AF Value	Qual
Total Coliform			CFU/100ml	0	

Workgroup: WG118616 Total Metals

MB:WG118616-1 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:WG118616-1 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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118616-2 MB:WG118616-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	30.6	92		85--115

SB:WG118616-2 MB:WG118616-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.8	94		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	4580	92		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4640	93		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	21.2	106		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4860	97		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4590	92		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.5	93		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	19.5	98		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4980	100		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	19.7	99		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	19.8	99		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	19.4	97		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.9	100		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	19.2	96		85--115
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	19.4	97		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.2	96		85--115
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.5	92		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20	100		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		85--115

LD:WG118616-3 L54604-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	49.6	50	1		0--20

LD:WG118616-3 L54604-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	7000	7050	1		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	4330	4330	0		0--20
Aluminum, Total, ICP-MS	2	10	ug/L	45.3	50.5	11		0--20
Potassium, Total, ICP-MS	100	500	ug/L	1360	1380	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	12700	12900	1		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	0.514	0.536	4		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	<MDL			0--20
Iron, Total, ICP-MS	10	50	ug/L	223	227	2		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	6.15	6.18	0		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.065	0.068			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.39	0.38			0--20
Copper, Total, ICP-MS	0.4	2	ug/L	0.61	0.65			0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.83	0.8			0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.32	0.32			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	0.3	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	0.05	0.25	ug/L	5.96	5.8	3		0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG118616-4 L54604-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	49.6	33.1	81.9	98		75--125

MS:WG118616-4 L54604-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.8	94		75--125
Sodium, Total, ICP-MS	100	100	ug/L	7000	5000	12000	100		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	4330	5000	9300	99		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	45.3	20	62	83		75--125
Potassium, Total, ICP-MS	100	500	ug/L	1360	5000	6420	101		75--125
Calcium, Total, ICP-MS	50	50	ug/L	12700	5000	17500	95		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	0.514	20	18.4	90		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	18.9	94		75--125
Iron, Total, ICP-MS	10	50	ug/L	223	5000	5400	103		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	6.15	20	23.9	89		75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.065	20	18.2	91		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.39	20	20	98		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	0.61	20	20.1	98		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.83	20	19.9	95		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.32	20	19.3	95		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	19.7	98		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.3	97		75--125
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	18.8	94		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	19.4	97		75--125
Barium, Total, ICP-MS	0.05	0.25	ug/L	5.96	20	24.8	94		75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.8	94		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.4	92		75--125

Workgroup: WG118629 (Total Mercury

MB:WG118629-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	

SB:WG118629-2 MB:WG118629-1 Matrix: BLANK WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	1	0.942	94		85--115

MSD:WG118629-4 MS:WG118629-3 L54604-4 Matrix: FRESH WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-CHSW-M Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.05	0.1	ug/L	<MDL	1	0.962	96		75--125	1	0.955	96		1		0--20

Workgroup: WG118653 Dissolved Mercury

MB:WG118653-1 Matrix: BLANK WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	

SB:WG118653-2 MB:WG118653-1 Matrix: BLANK WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	1	0.948	95		85--115

MSD:WG118653-4 MS:WG118653-3 L54582-3 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-CFGW Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Dissolved, CVAA	0.05	0.1	ug/L	<MDL	1	0.974	97		75--125	1	0.978	98		0		0--20

Workgroup: WG118664 Dissolved Metals

MB:WG118664-1 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-MS	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-MS	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	0.4	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	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118664-2 MB:WG118664-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.4	102		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4840	97		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4890	98		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	4690	94		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4530	91		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	17.4	87		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.3	91		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4680	94		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.9	94		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	95		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	19.9	100		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	21.2	106		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	95		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	20.2	101		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.8	99		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.7	94		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	17.8	89		85--115
Thallium, Dissolved, ICP-MS	0.04	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	94		85--115

LD:WG118664-3 L54579-3 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	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	2240	2190	2		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	1900	1860	2		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	390	400			0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	5920	5750	3		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.11	0.11			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.21	0.22			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.24	0.22			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	0.29	0.29			0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	0.59	0.6			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.1	2			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	0.15			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	0.05	0.25	ug/L	2.47	2.35	5		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG118664-4 L54579-3 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	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.9	95		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	2240	5000	6920	94		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	1900	5000	6590	94		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	390	5000	5320	99		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	5920	5000	10300	88		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.11	20	18.2	90		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.21	20	18.9	94		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4860	97		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.24	20	18.7	92		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18	90		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.29	20	20	99		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	0.59	20	20.8	101		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.1	20	23	104		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	20	20.5	102		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.6	108		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.3	101		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	101		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.7	93		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	2.47	20	20.1	88		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.6	98		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.4	97		75--125

Workgroup: WG118618 Herbicides

MB:WG118618-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
MCPP	0.5	1	ug/L	<MDL	
2,4-D	0.5	1	ug/L	<MDL	
Triclopyr	0.5	1	ug/L	<MDL	

SBD:WG118618-3 SB:WG118618-2 MB:WG118618-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	BD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	1	ug/L	<MDL	5	2.05	41		21--147	5	2.33	47		13		0--40
2,4-D	0.5	1	ug/L	<MDL	5	0.79	16		10--175	5	1.52	30		64	*	0--40
Triclopyr	0.5	1	ug/L	<MDL	5	1.01	20	*	59--151	5	1.78	36	*	55	*	0--40

MSD:WG118618-5 MS:WG118618-4 L54624-2 Matrix: STORM WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.52	1.03	ug/L	<MDL	5.15	3.49	68		20--162	5.05	3.24	64		7		0--40
2,4-D	0.52	1.03	ug/L	<MDL	5.15	2.79	54		10--196	5.05	2.55	50		9		0--40
Triclopyr	0.52	1.03	ug/L	<MDL	5.15	2.6	51		30--150	5.05	2.7	53		4		0--40

Surrogate:	2,4-Dichlorophenylacetic acid	2,6-Dichlorophenylacetic acid
(Lab Limits)	**11--153**	**40--148**
L54624-1	63	61
L54624-2	68	63
L54625-1	63	65
WG118618-1	36	46
WG118618-2	42	53
WG118618-3	48	57
WG118618-4	70	76
WG118618-5	68	77

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Workgroup: WG118647 Organophosphorus Pesticides

MB:WG118647-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diazinon	0.043	0.05	ug/L	<MDL	
Malathion	0.048	0.05	ug/L	<MDL	
Chlorpyrifos	0.034	0.05	ug/L	<MDL	
Dichlobenil	0.05	0.1	ug/L	<MDL	
Prometon	0.05	0.1	ug/L	<MDL	

SB:WG118647-2 MB:WG118647-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diazinon	0.043	0.05	ug/L	<MDL	0.24	0.169	71		52--129
Malathion	0.048	0.05	ug/L	<MDL	0.24	0.209	87		25--161
Chlorpyrifos	0.034	0.05	ug/L	<MDL	0.24	0.219	91		57--127
Dichlobenil	0.05	0.1	ug/L	<MDL	0.24	0.211	88		70--98
Prometon	0.05	0.1	ug/L	<MDL	0.24	0.093	39	*	40--160

MSD:WG118647-4 MS:WG118647-3 L54625-1 Matrix: STORM WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	0.041	0.0472	ug/L	<MDL	0.226	0.189	83		67--148	0.226	0.204	90		8		0--40
Malathion	0.045	0.0472	ug/L	<MDL	0.226	0.231	102		52--190	0.226	0.232	103		1		0--40
Chlorpyrifos	0.032	0.0472	ug/L	<MDL	0.226	0.229	101		57--141	0.226	0.18	79		24		0--40
Dichlobenil	0.047	0.0943	ug/L	<MDL	0.226	0.173	77		40--160	0.226	0.18	80		4		0--40
Prometon	0.047	0.0943	ug/L	<MDL	0.226	0.277	122		40--160	0.226	0.339	150		20		0--40

Surrogate:	Chlor pyrifos-D10
(Lab Limits)	41--166
L54624-1	86
L54624-2	87
L54625-1	70
WG118647-1	66
WG118647-2	83
WG118647-3	79
WG118647-4	71

Workgroup: WG118626 Semi Volatile Organics

MB:WG118626-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.01	0.02	ug/L	<MDL	
Acenaphthylene	0.01	0.02	ug/L	<MDL	
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	
Acenaphthene	0.01	0.02	ug/L	<MDL	
Fluorene	0.01	0.02	ug/L	<MDL	
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	
Pentachlorophenol	0.1	0.2	ug/L	<MDL	
Phenanthrene	0.01	0.02	ug/L	<MDL	
Anthracene	0.01	0.02	ug/L	<MDL	
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.036	B
Fluoranthene	0.01	0.02	ug/L	<MDL	
Pyrene	0.01	0.02	ug/L	<MDL	
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	
Chrysene	0.01	0.02	ug/L	<MDL	
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.398	B
Di-N-Octyl Phthalate	0.025	0.05	ug/L	0.152	B
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	

SB:WG118626-2 MB:WG118626-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Naphthalene	0.01	0.02	ug/L	<MDL	2.5	0.697	28	*	32--93
Acenaphthylene	0.01	0.02	ug/L	<MDL	2.5	1.93	77		49--107
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.18	87		31--119
Acenaphthene	0.01	0.02	ug/L	<MDL	2.5	1.64	66		43--103
Fluorene	0.01	0.02	ug/L	<MDL	2.5	2.21	88		43--127
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.6	104		26--141
Pentachlorophenol	0.1	0.2	ug/L	<MDL	2.5	1.32	53		10--137
Phenanthrene	0.01	0.02	ug/L	<MDL	2.5	2.47	99		57--114
Anthracene	0.01	0.02	ug/L	<MDL	2.5	2.33	93		59--122
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.036	2.5	3.11	123		52--145
Fluoranthene	0.01	0.02	ug/L	<MDL	2.5	2.89	115		57--123
Pyrene	0.01	0.02	ug/L	<MDL	2.5	3.09	124		51--139
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	2.5	2.99	120		49--145
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	2.5	3	120		67--130
Chrysene	0.01	0.02	ug/L	<MDL	2.5	2.83	113		58--114
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.398	2.5	3.39	120		48--128
Di-N-Octyl Phthalate	0.025	0.05	ug/L	0.152	2.5	2.99	114		51--126
Benzo(b,j,k)fluoranthene	0.01	0.02	ug/L	<MDL	7.5	7.81	104		49--139
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	2.5	2.48	99		55--132
Indeno(1,2,3-Cd)Pyrene	0.01	0.02	ug/L	<MDL	2.5	2.47	99		53--122
Dibenzo(a,h)anthracene	0.01	0.02	ug/L	<MDL	2.5	2.45	98		47--134
Benzo(g,h,i)perylene	0.01	0.02	ug/L	<MDL	2.5	2.55	102		32--130
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	2.5	0.828	33		25--104

MSD:WG118626-4 MS:WG118626-3 L54624-1 Matrix: STORM WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project:421879-210 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Naphthalene	0.0094	0.0189	ug/L	0.0474	2.36	1.32	54		37--95	2.36	1.51	62		13		0--40
Acenaphthylene	0.0094	0.0189	ug/L	<MDL	2.36	2.43	103		46--122	2.36	2.55	108		5		0--40
Dimethyl Phthalate	0.024	0.0472	ug/L	<MDL	2.36	2.44	103		34--134	2.36	2.47	105		2		0--40
Acenaphthene	0.0094	0.0189	ug/L	<MDL	2.36	2.1	89		47--105	2.36	2.15	91		2		0--40
Fluorene	0.0094	0.0189	ug/L	<MDL	2.36	2.56	109		44--137	2.36	2.56	108		0		0--40
Diethyl Phthalate	0.024	0.0472	ug/L	<MDL	2.36	2.67	113		33--140	2.36	2.66	113		0		0--40
Pentachlorophenol	0.094	0.189	ug/L	0.813	2.36	3.02	94		44--145	2.36	3.08	96		2		0--40
Phenanthrene	0.0094	0.0189	ug/L	0.0703	2.36	2.46	102		62--116	2.36	2.45	101		1		0--40
Anthracene	0.0094	0.0189	ug/L	<MDL	2.36	2.34	99		32--140	2.36	2.36	100		1		0--40
Di-N-Butyl Phthalate	0.024	0.0472	ug/L	0.172	2.36	2.78	110		44--134	2.36	2.77	110		0		0--40
Fluoranthene	0.0094	0.0189	ug/L	0.0929	2.36	2.39	98		49--123	2.36	2.4	98		0		0--40
Pyrene	0.0094	0.0189	ug/L	0.18	2.36	3.01	120		37--147	2.36	2.88	115		4		0--40
Benzyl Butyl Phthalate	0.047	0.0943	ug/L	0.442	2.36	3.26	120		39--151	2.36	3.21	118		2		0--40
Benzo(a)anthracene	0.0094	0.0189	ug/L	<MDL	2.36	2.79	118		50--120	2.36	2.79	118		0		0--40
Chrysene	0.0094	0.0189	ug/L	0.0824	2.36	2.55	104		42--115	2.36	2.53	104		1		0--40
Bis(2-Ethylhexyl)Phthalate	0.024	0.0472	ug/L	3.23	2.36	5.48	96		11--188	2.36	6.33	132		14		0--40
Di-N-Octyl Phthalate	0.024	0.0472	ug/L	1.01	2.36	3.88	122		48--150	2.36	4.1	131		5		0--40
Benzo(b,j,k)fluoranthene	0.0094	0.0189	ug/L	<MDL	7.08	7.42	105		42--123	7.08	7.42	105		0		0--40
Benzo(a)pyrene	0.0094	0.0189	ug/L	<MDL	2.36	2.22	94		45--121	2.36	2.24	95		1		0--40
Indeno(1,2,3-Cd)Pyrene	0.0094	0.0189	ug/L	<MDL	2.36	1.78	76		39--122	2.36	1.94	82		8		0--40
Dibenzo(a,h)anthracene	0.0094	0.0189	ug/L	<MDL	2.36	1.81	77		31--121	2.36	1.95	83		8		0--40
Benzo(g,h,i)perylene	0.0094	0.0189	ug/L	0.131	2.36	1.82	72		22--125	2.36	2.06	82		12		0--40
2-Methylnaphthalene	0.0094	0.0189	ug/L	<MDL	2.36	1.7	72		40--121	2.36	1.55	66		9		0--40

Surrogate: (Lab Limits)	2,4,6-Tribromo phenol 20--142	2-Fluoro biphenyl 30--128	2-Fluoro phenol 30--110	d14-Ter phenyl 51--133	d4-2-Chloro phenol 42--113	d5-Nitro benzene 48--116	5-Phenol 31--143
L54624-1	118	63	68	107	66	92	82
L54624-2	117	57	63	98	62	85	76
L54625-1	119	49	57	108	56	75	68
WG118626-1	55	61	51	106	57	82	69
WG118626-2	87	55	18 *	102	25 *	43 *	41
WG118626-3	109	70	66	105	66	87	80
WG118626-4	115	77	70	105	69	92	83

Workgroup: WG118628 WTPH-Dx

MB:WG118628-1 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:WG118628-2 MB:WG118628-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	1.02	102		50--150

SB:WG118628-3 MB:WG118628-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	1.01	101		50--150

LD:WG118628-4 L54625-2 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Diesel Range (>C12-C24)	0.21	0.21	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.21	0.21	mg/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	2-Fluoro biphenyl 50--150	Penta cosane 50--150
L54624-3	93	94
L54624-4	99	101
L54625-2	91	91
L54626-4	89	92
L54627-4	90	90
L54661-3	90	93
WG118628-1	96	93
WG118628-2	98	96
WG118628-3	104	95
WG118628-4	87	90

Workgroup: WG118613 WTPH-G

MB:WG118613-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	

SB:WG118613-2 MB:WG118613-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	500	473	95		50--150

LD:WG118613-3 L54624-3 Matrix: STORM WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Gasoline Range (C7-C12)	250	250	ug/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	4-Bromo fluoro benzene 50--150	I8-Toluene 50--150
L54624-3	97	98
L54624-4	98	98
L54625-2	98	99
WG118613-1	98	99
WG118613-2	96	100
WG118613-3	97	99

Trace Metals Data Anomaly Form

Date(s) Occurred: *11/22/11*

WG #(s): *WG118653*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L54624-1*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☒ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☐ X II-O ☐ PE)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.

☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: Anthony Ocana		
Reviewer: Kevin Cummings		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: Fritz Grothkopp		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☒ Other: *Total Kjeldahl Nitrogen (TKN)*

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201
Autoanalyzer:	☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system) ☒ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer
Dissolved Oxygen:	☐ YSI 5100 ☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU
Ion Chromatography:	☐ Dionex 120
pH Probe:	☐ Metrohm 736GP ☐ Accument XL60
Salinometer:	☐ Portosal 8410A
Spectrophotometer:	☐ Hitachi U3000 UV/VIS ☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890
TOC Analyzer:	☐ OI 1020A ☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN
Other:	☐ Description:

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☐ Holding time exceeded by:
11 ☐ Insufficient sample amount.
12 ☒ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for project 421879-210 were preserved past the fifteen minute holding time for TKN.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *SH*
☒ Text added: *Preserved past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were presrved for TKN as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The TKN data for these samples and the associated matrix QC were qualified with an "SH" and the text "Preserved past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and preservation may have introduced bias to the TKN results for these samples. The extent of any bias is unknown and so the TKN data should be used with caution.*

	Signatures	Signature Dates
Reported By: *David C Hunn*		
Reviewer: *Duc Nguyen*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott*	_____	_____
(For QA1 only)	_____	_____
cc: LPM: *Fritz Grothkopp*		

Conventionals Data Anomaly Form

Date(s) Occurred: *2010 - 2011*

WG #(s): *Multiple*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *Multiple*

Project #(s): *421879-210 & 421879-220*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☒ Nutrients: *Orthophosphate Phosphorus (ORTHOP)*
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☒ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☐ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3000 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☐ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Spike Recoveries

10 ☒ Holding time exceeded by: *> 15 minutes*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *Storm samples for projects 421879-210 and 421879-220 were filtered past the fifteen minute holding time for ORTHOP.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *H*
☒ Text added: *Filtered past the 15 minute hold time.*
☐ Other

Corrective Action Description: *The samples were filtered for ORTHOP as soon as possible once the composite samples were split, which was more than 15 minutes after the end of the composite period. The ORTHOP data for these samples and the associated matrix QC were qualified with an "H" and the text "Filtered past the 15 minute holdtime."*

VI. Potential Effects on Data Quality

Based upon the expected performance of this method:

☐ None; corrective action entirely corrected anomaly (explanation optional):

☒ Potential effect explanation (explanation mandatory): *The extended time between collection and filtration may have introduced bias to the ORTHOP results for these samples. The extent of any bias is unknown and so the ORTHOP data should be used with caution.*

	Signatures	Signature Dates
Reported By: *Terry Siebens*		
Reviewer: *Dave Hunn*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM: *Fritz Grothkopp*	_____	_____

Trace Organics Data Anomaly Form

Date(s) Occurred: *12-07-2011*

WG #(s): *118647*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☒ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ HERB
☐ Other:
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☐ J ☐ K ☐ L ☐ M ☒ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☐ Other:

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☐ Blank Contamination
2 ☒ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD %Differences
8 ☐ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description: *2) The recovery of Prometon exceeded the lower QC limit in the SB.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Sample(s) Diluted
☐ Data qualified with the following flags:
☐ Other
☐ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description: *2) An Asterisk was applied to the QC report.*

VI. Potential Effects on Data Quality (mandatory):

2) No quantitative bias is suggested as indicated by acceptable recoveries in the MS and MSD.

	Signatures	Signature Dates
Reported By: Felix Zboralski	_____	_____
Reviewer: Mike Doubrava	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Trace Organics Data Anomaly Form

Date(s) Occurred: *09-DEC-11*

WG #(s): *WG118626*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *42421879-210 Fall City*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☐ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ HERB
☒ Other: *PAHPHTH-SUR*
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☒ J ☐ K ☐ L ☐ M ☐ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☐ Other:

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☒ Blank Contamination
2 ☒ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD %Differences
8 ☒ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description:

1. WG118626-1 MB had reportable levels of Di-N-Butyl Phthalate, Bis(2-EthylHexyl)Phthalate, and Di-N-Octyl Phthalate.

2. WG118626-2 SB had 1 of 23 spiked analytes exceed QC lab limits.

8. 3 of 49 surrogates exceed QC Lab Limits.

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Sample(s) Diluted
☒ Data qualified with the following flags: *B*
☐ Other
☐ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description:

1. Samples with less than ten times the blank level contamination were flagged "B" for Di-N-Butyl Phthalate and Bis-2(EH)phthalate.

2. The 1 compound in the SB which exceeded the QC Lab limits was asterisked on the QC Lab Report.

8. The 3 surrogates which exceeded the QC Lab limits were asterisked on the QC Lab Report.

VI. Potential Effects on Data Quality (mandatory):

1. The "B" flagged data may be biased high if the concentration in the samples was less than ten times the blank concentration. If the sample value was greater than ten times the MB, data should be used unbiased.

2. Naphthalene had a low recovery in the SB and acceptable recoveries in the MS/MSD and % RPD. No flags were generated and data should be used unbiased.

8. No measurable bias.

	Signatures	Signature Dates
Reported By: Mike Doubrava	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

August 7, 2012

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L55874-2, 4, 5, 6, 7, collected June 22, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on June 22, 2012. The sample was analyzed in the Trace Metals, Conventionals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #14986 was prepared and sent via e-mail on August 3, 2012.

Sample Collection:
Samples L55874-1 and 3 did not meet the required criteria for a flow paced composite sample.

Conventionals:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

The results for Total Kjeldahl Nitrogen (TKN) have been flagged with an "SH" qualifier to indicate that the sample was not preserved within 15 minutes of the collection of the last aliquot into the composite sample.

The results for Orthophosphate Phosphorus (ORTHOP) analysis have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

The spike blank (SB) recovery for BOD was slightly below the lower control limit at 77%. This may indicate a potential low bias for the result.

Trace Metals:

The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exception.

The results for dissolved metals and mercury have been flagged with an "H" qualifier to indicate that the sample was not preserved (filtered) within 15 minutes of the collection of the last aliquot into the composite sample.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification with the following exceptions.

Di-n-butyl phthalate and bis (2-ethylhexyl) phthalate were detected in the method blank for semivolatile analysis. All entries in the data report and the QC report have been flagged with a "B" qualifier.

Triclopyr recovery was below the lower control limit in both the spike blank and spike blank duplicate for the Herbicide analysis. The RPD for 2,4-D was outside the upper control limit. Triclopyr and 2,4-D were not detected in the sample. The Triclopyr was flagged with a "JG" qualifier to indicate possible low bias for the result. No other corrective action was taken.

Prometon recovery was below the lower control limit in the spike blank. The RPD for Prometon exceeded the upper control limit. The sample results were flagged with a "JG" qualifier to indicate possible low bias for the result. No other corrective action was taken.

Microbiology:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Subcontract Parameters: MBAS
The data have passed all QA/QC checks for accuracy and completeness.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

	Project:	421879-210					Project:	421879-210					Project:	421879-210				
	Locator:	FCSW02					Locator:	FCSW01					Locator:	FCSW02				
	Descrip:	FALL CITY HD RESID					Descrip:	FALL CITY HD COMME					Descrip:	FALL CITY HD RESID				
	Sample:	L55874-2					Sample:	L55874-4					Sample:	L55874-5				
	Matrix:	LG STORM WTR					Matrix:	LG STORM WTR					Matrix:	LG STORM WTR				
	ColDate:	6/22/12 16:06					ColDate:	6/22/12 15:42					ColDate:	6/22/12 15:28				
	TimeSpan:	2.12					TimeSpan:						TimeSpan:					
	TotalSolid:						TotalSolid:						TotalSolid:					
	ClientLoc:						ClientLoc:						ClientLoc:					
	SampDepth:						SampDepth:						SampDepth:					
	WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**					
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**
CV EPA 351.2																	
Total Kjeldahl Nitrogen	0.407	SH	0.1	0.2	mg/L												
CV SM 5540C																	
Methylene Blue Act. Substance		<MDL	0.025	0.025	mg/L												
CV SM2130-B																	
Turbidity	8.21		0.2	0.5	NTU												
CV SM2510-B																	
Conductivity	16		1	5	umhos/cm												
CV SM2540-D																	
Total Suspended Solids	15.3		0.5	1	mg/L												
CV SM4110B CL																	
Chloride	0.206		0.05	0.1	mg/L												
CV SM4500-NO3-F																	
Nitrite + Nitrate Nitrogen	0.0819		0.01	0.04	mg/L												
CV SM4500-P-B,F																	
Total Phosphorus	0.0794		0.005	0.01	mg/L												
CV SM4500-P-F																	
Orthophosphate Phosphorus	0.0356	H	0.002	0.005	mg/L												
CV SM5210-B																	
Biochemical Oxygen Demand	2.39	TA	2	2	mg/L												
MC SM 9222D 20TH																	
Fecal Coliform							1500				CFU/100ml		1400				CFU/100ml
MT EPA 200.8*SW846 6020A																	
Cadmium, Dissolved, ICP-MS		<MDL,H	0.05	0.25	ug/L												
Cadmium, Total, ICP-MS		<MDL	0.05	0.25	ug/L												
Calcium, Total, ICP-MS	1960		50	50	ug/L												
Copper, Dissolved, ICP-MS	4.41	H	0.4	2	ug/L												
Copper, Total, ICP-MS	6.68		0.4	2	ug/L												
Lead, Dissolved, ICP-MS	0.94	H	0.1	0.5	ug/L												
Lead, Total, ICP-MS	3.36		0.1	0.5	ug/L												
Magnesium, Total, ICP-MS	242		50	50	ug/L												
Zinc, Dissolved, ICP-MS	2.59	H	0.5	2.5	ug/L												
Zinc, Total, ICP-MS	6.89		0.5	2.5	ug/L												
MT EPA 200.8/SW846 6020A*SM2340B																	
Hardness, Calc	5.89		0.331	0.331	mg CaCO3/L												
OR SW846 3520C*SW846 8270D																	
2-Methylnaphthalene		<MDL	0.0094	0.0189	ug/L												
Acenaphthene		<MDL	0.0094	0.0189	ug/L												
Acenaphthylene		<MDL	0.0094	0.0189	ug/L												
Anthracene		<MDL	0.0094	0.0189	ug/L												
Benzo(a)anthracene		<MDL	0.0094	0.0189	ug/L												
Benzo(a)pyrene		<MDL	0.0094	0.0189	ug/L												

King County Environmental Lab Analytical Report

	Project:	421879-210					Project:	421879-210					Project:	421879-210		
	Locator:	FCSW02					Locator:	FCSW01					Locator:	FCSW02		
	Descrip:	FALL CITY HD RESID					Descrip:	FALL CITY HD COMME					Descrip:	FALL CITY HD RESID		
	Sample:	L55874-2					Sample:	L55874-4					Sample:	L55874-5		
	Matrix:	LG STORM WTR					Matrix:	LG STORM WTR					Matrix:	LG STORM WTR		
	ColDate:	6/22/12 16:06					ColDate:	6/22/12 15:42					ColDate:	6/22/12 15:28		
	TimeSpan:	2.12					TimeSpan:						TimeSpan:			
	TotalSolid:						TotalSolid:						TotalSolid:			
	ClientLoc:						ClientLoc:						ClientLoc:			
	SampDepth:						SampDepth:						SampDepth:			
	WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**			
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**
Benzo(b,j,k)fluoranthene		<MDL	0.094	0.189	ug/L										
Benzo(g,h,i)perylene		<MDL	0.047	0.0943	ug/L										
Benzyl Butyl Phthalate	0.163		0.047	0.0943	ug/L										
Bis(2-Ethylhexyl)Phthalate	4.43		0.024	0.0472	ug/L										
Chrysene		<MDL	0.0094	0.0189	ug/L										
Dibenzo(a,h)anthracene		<MDL	0.047	0.0943	ug/L										
Diethyl Phthalate	0.141		0.024	0.0472	ug/L										
Dimethyl Phthalate		<MDL	0.024	0.0472	ug/L										
Di-N-Butyl Phthalate	0.0494		0.024	0.0472	ug/L										
Di-N-Octyl Phthalate	0.386		0.024	0.0472	ug/L										
Fluoranthene	0.0366		0.0094	0.0189	ug/L										
Fluorene		<MDL	0.0094	0.0189	ug/L										
Indeno(1,2,3-Cd)Pyrene		<MDL	0.047	0.0943	ug/L										
Naphthalene		<MDL	0.0094	0.0189	ug/L										
Pentachlorophenol		<MDL	0.12	0.236	ug/L										
Phenanthrene	0.0268		0.0094	0.0189	ug/L										
Pyrene	0.201		0.0094	0.0189	ug/L										
OR SW846 3520C*SW846 8270D SIM															
Chlorpyrifos		<MDL	0.032	0.0472	ug/L										
Diazinon		<MDL	0.041	0.0472	ug/L										
Dichlobenil		<MDL	0.047	0.0943	ug/L										
Malathion		<MDL	0.045	0.0472	ug/L										
Prometon		<MDL,JG	0.047	0.0943	ug/L										
OR SW846 3535A/8151A*8270D SIM															
2,4-D		<MDL	0.5	0.99	ug/L										
MCPP		<MDL	0.5	0.99	ug/L										
Triclopyr		<MDL,JG	0.5	0.99	ug/L										
OR WDOE NWTPH-DX															
Diesel Range (>C12-C24)							<MDL	0.19	0.19	mg/L		<MDL	0.19	0.19	mg/L
Lube Oil Range (>C24)						0.709		0.19	0.19	mg/L		<MDL	0.19	0.19	mg/L
OR WDOE NWTPH-GX															
Gasoline Range (C7-C12)							<MDL	100	250	ug/L		<MDL	100	250	ug/L

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L55874-6	Sample:	L55874-7
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	6/22/12 12:00	ColDate:	6/23/12 14:30
TimeSpan:		TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV EPA 351.2										
Total Kjeldahl Nitrogen										
CV SM 5540C										
Methylene Blue Act. Substance										
CV SM2130-B										
Turbidity										
CV SM2510-B										
Conductivity										
CV SM2540-D										
Total Suspended Solids										
CV SM4110B CL										
Chloride										
CV SM4500-NO3-F										
Nitrite + Nitrate Nitrogen							<MDL	0.01	0.04	mg/L
CV SM4500-P-B,F										
Total Phosphorus										
CV SM4500-P-F										
Orthophosphate Phosphorus							<MDL	0.002	0.005	mg/L
CV SM5210-B										
Biochemical Oxygen Demand										
MC SM 9222D 20TH										
Fecal Coliform	830				CFU/100ml					
MT EPA 200.8*SW846 6020A										
Cadmium, Dissolved, ICP-MS										
Cadmium, Total, ICP-MS										
Calcium, Total, ICP-MS										
Copper, Dissolved, ICP-MS										
Copper, Total, ICP-MS										
Lead, Dissolved, ICP-MS										
Lead, Total, ICP-MS										
Magnesium, Total, ICP-MS										
Zinc, Dissolved, ICP-MS										
Zinc, Total, ICP-MS										
MT EPA 200.8/SW846 6020A*SM2340B										
Hardness, Calc										
OR SW846 3520C*SW846 8270D										
2-Methylnaphthalene										
Acenaphthene										
Acenaphthylene										
Anthracene										
Benzo(a)anthracene										
Benzo(a)pyrene										

King County Environmental Lab Analytical Report

Project:	421879-210	Project:	421879-210
Locator:	RSW1UP	Locator:	FFBLANK
Descrip:	148TH AVE SE UPSTR	Descrip:	FIELD FILTER BLANK
Sample:	L55874-6	Sample:	L55874-7
Matrix:	LG STORM WTR	Matrix:	LN BLANK WTR
ColDate:	6/22/12 12:00	ColDate:	6/23/12 14:30
TimeSpan:		TimeSpan:	
TotalSolid:		TotalSolid:	
ClientLoc:		ClientLoc:	
SampDepth:		SampDepth:	
WET Weight Basis		**WET Weight Basis**	

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Benzo(b,j,k)fluoranthene										
Benzo(g,h,i)perylene										
Benzyl Butyl Phthalate										
Bis(2-Ethylhexyl)Phthalate										
Chrysene										
Dibenzo(a,h)anthracene										
Diethyl Phthalate										
Dimethyl Phthalate										
Di-N-Butyl Phthalate										
Di-N-Octyl Phthalate										
Fluoranthene										
Fluorene										
Indeno(1,2,3-Cd)Pyrene										
Naphthalene										
Pentachlorophenol										
Phenanthrene										
Pyrene										
OR SW846 3520C*SW846 8270D SIM										
Chlorpyrifos										
Diazinon										
Dichlobenil										
Malathion										
Prometon										
OR SW846 3535A/8151A*8270D SIM										
2,4-D										
MCPP										
Triclopyr										
OR WDOE NWTPH-DX										
Diesel Range (>C12-C24)		<MDL	0.19	0.19	mg/L					
Lube Oil Range (>C24)		<MDL	0.19	0.19	mg/L					
OR WDOE NWTPH-GX										
Gasoline Range (C7-C12)		<MDL	100	250	ug/L					

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Total Kjeldahl Nitrogen	Methylene Blue Act. Substance	Turbidity	Conductivity	Total Suspended Solids	Chloride	Nitrite + Nitrate Nitrogen	Total Phosphorus	Orthophosphate Phosphorus	Biochemical Oxygen Demand	Calcium, Total, ICP-MS	Copper, Dissolved, ICP-MS	Copper, Total, ICP-MS	Lead, Dissolved, ICP-MS	Lead, Total, ICP-MS	Magnesium, Total, ICP-MS	Zinc, Dissolved, ICP-MS	Zinc, Total, ICP-MS	Hardness, Calc
			mg/L	mg/L	NTU	umhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg CaCO3/L
FCSW02	421879-210	L55874-2	0.407		8.21	16	15.3	0.206	0.0819	0.0794	0.0356	2.39	1960	4.41	6.68	0.94	3.36	242	2.59	6.89	5.89
FCSW01	421879-210	L55874-4																			
FCSW02	421879-210	L55874-5																			
RSW1UP	421879-210	L55874-6																			
* Not converted to dry weight basis																					
If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code																					

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Benzyl Butyl Phthalate	Bis(2-Ethylhexyl)Phthalate	Di-N-Butyl Phthalate	Di-N-Octyl Phthalate	Diethyl Phthalate	Fluoranthene	Phenanthrene	Pyrene	Fecal Coliform	Lube Oil Range (>C24)
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	CFU/100ml	mg/L
FCSW02	421879-210	L55874-2	0.163	4.43	0.0494	0.386	0.141	0.0366	0.0268	0.201		
FCSW01	421879-210	L55874-4									1500	0.709
FCSW02	421879-210	L55874-5									1400	
RSW1UP	421879-210	L55874-6									830	
* Not converted to dry weight basis												
If a parameter/analyze appears twice in the column header,												

King County Environmental Lab Analytical Text Value Report

Project	Sample	Parameter	Textvalue
421879-210	L55874-2	Biochemical Oxygen Demand	Low spike blank recovery. Result may be biased low

Login: P55874 | NPDES Stormwater Permit Monitoring | Personnel: _____

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by		Date 6/22/12	Time 1640
Received by		Date 6/22/12	Time 1640
Sample Numbers	55874-4,5		[All]

Sample Number	P55874-1	P55874-2	P55874-3
QC Link			
Locator	FCSW01	FCSW02	RSW1UP
Short Loc Desc	NPDES-SW1	NPDES-SW2	RSW1UP
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	148TH AVE SE UPSTREAM
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	comp, LD Rural/Residential
Start Date/Time	6/22/12 12:49 1100	6/22/12 1100 1606	
End Date/Time	6/22/12 12:45 19:03	6/22/12 1145 1813	
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LG BOD LAB TEMP 5.6	3 LG BOD LAB TEMP 5.6	3 LG BOD
	3 LG CL	3 LG CL	3 LG CL
	3 LG COND	3 LG COND	3 LG COND
	3 LG MBAS	3 LG MBAS	3 LG MBAS
	3 LG NO23	3 LG NO23	3 LG NO23
	3 LG ORTHOP	3 LG ORTHOP	3 LG ORTHOP
	3 LG TKN	3 LG TKN	3 LG TKN
	3 LG TOTP	3 LG TOTP	3 LG TOTP
	3 LG TSS	3 LG TSS	3 LG TSS
	3 LG TURB	3 LG TURB	3 LG TURB
	6 LG CA-ICPMS	6 LG CA-ICPMS	6 LG CA-ICPMS
	6 LG CD-ICPMS	6 LG CD-ICPMS	6 LG CD-ICPMS
	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS
	6 LG CU-ICPMS	6 LG CU-ICPMS	6 LG CU-ICPMS
	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS
	6 LG HG-CVAA, DISS-M	6 LG ICPMS-HARDNESS	6 LG ICPMS-HARDNESS
	6 LG HG-CVAA-M	6 LG MG-ICPMS	6 LG MG-ICPMS
	6 LG ICPMS-HARDNESS	6 LG PB-ICPMS	6 LG PB-ICPMS
	6 LG MG-ICPMS	6 LG PB-ICPMS, DISS	6 LG PB-ICPMS, DISS
	6 LG PB-ICPMS	6 LG ZN-ICPMS	6 LG ZN-ICPMS
	6 LG PB-ICPMS, DISS	6 LG ZN-ICPMS, DISS	6 LG ZN-ICPMS, DISS
	6 LG ZN-ICPMS	7 LG HERB-NPDES	7 LG HERB-NPDES
	6 LG ZN-ICPMS, DISS	7 LG OPPEST-NPDES	7 LG OPPEST-NPDES
	7 LG HERB-NPDES	7 LG PAHPHTH-SUR	7 LG PAHPHTH-SUR
	7 LG OPPEST-NPDES		
	7 LG PAHPHTH-SUR		

6/23/12 1430
6/23/12 1430
55874 1,2,7

Login: P55874 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

Sample Number	P55874-4	P55874-5	P55874-6
QC Link			
Locator	FCSW01	FCSW02	RSW1UP
Short Loc Desc	NPDES-SW1	NPDES-SW2	RSW1UP
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	148TH AVE SE UPSTREAM
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	grab, HD Commercial	grab, HD Residential	grab, LD Rural/Residential
Start Date/Time	6/22/12 1542	6/22/12 / 1523	
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G BB JD 10 Aliquots taken Flow weighted	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G BB JD 0 grab pulls 0 aliquots 0 flows	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G

Project: 421879-210

Sample Number	P55874-7		
QC Link			
Locator	FFBLANK		
Short Loc Desc	FFBLANK		
Locator Desc	FIELD FILTER BLANK		
Site	METRO		
Comments	filter blank, orthop		
Start Date/Time	6/23/12 1430		
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LN NO23 3 LN ORTHOP		

Login: P55874 | NPDES Storm - Roads Renton | Personnel: [illegible]

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by	Date	Time
[illegible]	6-22-12 [illegible]	[illegible]
Received by	**Date**	**Time**
[illegible]	6/22/12	1320
Sample Numbers		[All]
[illegible]		

Sample Number	P55874-1	P55874-2	P55874-3
QC Link			
Locator	FCSW01	FCSW02	RSW1UP
Short Loc Desc	NPDES-SW1	NPDES-SW2	RSW1UP
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	148TH AVE SE UPSTREAM
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	comp, LD Rural/Residential
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod			
	3 LG BOD	3 LG BOD	3 LG BOD
	3 LG CL	3 LG CL	3 LG CL
	3 LG COND	3 LG COND	3 LG COND
	3 LG MBAS	3 LG MBAS	3 LG MBAS
	3 LG NO23	3 LG NO23	3 LG NO23
	3 LG ORTHOP	3 LG ORTHOP	3 LG ORTHOP
	3 LG TKN	3 LG TKN	3 LG TKN
	3 LG TOTP	3 LG TOTP	3 LG TOTP
	3 LG TSS	3 LG TSS	3 LG TSS
	3 LG TURB	3 LG TURB	3 LG TURB
	6 LG CA-ICPMS	6 LG CA-ICPMS	6 LG CA-ICPMS
	6 LG CD-ICPMS	6 LG CD-ICPMS	6 LG CD-ICPMS
	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS
	6 LG CU-ICPMS	6 LG CU-ICPMS	6 LG CU-ICPMS
	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS
	6 LG HG-CVAA, DISS-M	6 LG ICPMS-HARDNESS	6 LG ICPMS-HARDNESS
	6 LG HG-CVAA-M	6 LG MG-ICPMS	6 LG MG-ICPMS
	6 LG ICPMS-HARDNESS	6 LG PB-ICPMS	6 LG PB-ICPMS
	6 LG MG-ICPMS	6 LG PB-ICPMS, DISS	6 LG PB-ICPMS, DISS
	6 LG PB-ICPMS	6 LG ZN-ICPMS	6 LG ZN-ICPMS
	6 LG PB-ICPMS, DISS	6 LG ZN-ICPMS, DISS	6 LG ZN-ICPMS, DISS
	6 LG ZN-ICPMS	7 LG HERB-NPDES	7 LG HERB-NPDES
	6 LG ZN-ICPMS, DISS	7 LG OPPEST-NPDES	7 LG OPPEST-NPDES
	7 LG HERB-NPDES	7 LG PAHPHTH-SUR	7 LG PAHPHTH-SUR
	7 LG OPPEST-NPDES		
	7 LG PAHPHTH-SUR		

Login: P55874 NPDES Storm - Roads Renton Personnel: Crawford

55874-6

Project: 421879-210

Sample Number	P55874-4	P55874-5	P55874-6
QC Link			
Locator	FCSW01	FCSW02	RSW1UP
Short Loc Desc	NPDES-SW1	NPDES-SW2	RSW1UP
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	148TH AVE SE UPSTREAM
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	grab, HD Commercial	grab, HD Residential	grab, LD Rural/Residential
Start Date/Time			5-22-17 @ 12:00
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G

Login: P55874 NPDES Storm - Roads Renton Personnel: _____

Project: 421879-210

Sample Number	P55874-7		
QC Link			
Locator	FFBLANK		
Short Loc Desc	FFBLANK		
Locator Desc	FIELD FILTER BLANK		
Site	METRO		
Comments	filter blank, orthop		
Start Date/Time			
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LN NO23 3 LN ORTHOP		

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Jun 29 2012
King County DNR Environmental
Subcontract Analysis Coordinator
322 W Ewing St. LAB-NR-0100
Seattle, WA 98119
Attention: Sample Manager

Dear Sample Manager:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
L55874-1	Water	12-A009119	CONV
L55874-2	Water	12-A009120	CONV

Your samples were received on Monday, June 25, 2012. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

cc: Fritz Grothkopp
Project #: 1047106

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

Rec'd from Lynne 7/24/12

WG122194 KS 7/25/12

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

King County DNR Environmental
Subcontract Analysis Coordinator
Seattle, WA 98119
Attention: Sample Manager
Project #: 1047106
All results reported on an as received basis.

Date Received: 06/25/12
Date Reported: 6/29/12

AMTEST Identification Number 12-A009119
Client Identification L55874-1
Sampling Date 06/23/12

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	0.053	mg/l		0.025	SM 5540C	SS	06/25/12

AMTEST Identification Number 12-A009120
Client Identification L55874-2
Sampling Date 06/23/12

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Surfactants	< 0.025	mg/l		0.025	SM 5540C	SS	06/25/12

Kathy Fugiel
President

AMTEST LABORATORIES

QC Summary for sample numbers: 12-A009119 to 12-A009120

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
Blank	Surfactants	mg/l	< 0.025	0.048	
12-A009150	Surfactants	mg/l	< 0.025	< 0.025	

→ not KCEL sample K.S. 7/25/12 no MS sample

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Surfactants	mg/l	0.125	0.125	100. %
Surfactants	mg/l	0.125	0.135	108. %
Surfactants	mg/l	0.125	0.125	100. %

BLANKS

ANALYTE	UNITS	RESULT
Surfactants	mg/l	< 0.025
Surfactants	mg/l	< 0.025
Surfactants	mg/l	< 0.025

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

AMTEST LABORATORIES

Professional Analytical Services

Sample Acceptance/Compliance Check Form

Client: King County DNR Environmental COC # _____ Batch Number 1277849

Project Name: _____ Date Received: 6/25/12 Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.1 degrees C — sample in transit 1:25 - possibly not long enough to have cooled

	YES	NO	N/A
Were the Custody Seals intact?	☑	☐	☐
Was a Chain-of-Custody provided?	☑	☐	☐
Was the Chain-of-Custody filled out properly?	☑	☐	☐
Did the sample containers arrive intact and in good condition?	☑	☐	☐
Did the sample container labels agree with the custody papers?	☑	☐	☐
Were the correct sample containers used?	☑	☐	☐
Were the containers supplied by AmTest?	☐	☑	☐
Are the samples within specified holding times?	☑	☐	☐
Were bubbles absent from any 40 mL VOA vials?	☐	☐	☑
Was a Trip Blank received?	☐	☐	☑
Was the client contacted about any sample or COC problems?	☐	☐	☑
Are the samples FDA regulated?	☐	☐	☑
Were the coolers/boxes decontaminated with a 10% Bleach solution?	☐	☐	☑

Explain any discrepancies or problems with the samples (include sample numbers):

Sample labels and COC do not state time sampled.

NOTE: This form is used for all samples received by AmTest. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by method/SOP.

Client: King County DNR Environmental COC # _____ Batch Number 1277849

Project Name: _____ Date Received: 6/25/12 Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.1 degrees C

	YES	NO	N/A

CHAIN OF CUSTODY RECORD

Project Number: 1047106
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-12-16
Shipment Method: Courier
Fax data to: Sample Manager
Fax Number: (206) 684-2390
e-mail: sample.login@metrokc.gov

Mail Data/Invoices to:
King County DNR Environmental Laboratory
Subcontract Analysis Coordinator
322 W. Ewing Street, LAB-NR-0100
Seattle, WA 98119
attn: Sample Manager

	Sample ID	Collect Date	Matrix	QC Required	Requested Parameters: MBAS												No. of Containers	Comments
9119	L55874-1	6/23/2012	Storm Water	Level 2	X												1	
9120	L55874-2	6/23/2012	Storm Water	Level 2	X												1	

Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 2

Requested TAT: 14 Days
Data Package Due: 7/1/2012

Please return signed original CoC with data package.

RELINQUISHED BY		Date	RECEIVED BY		Date
Signature	[signature]	6/25/12	Signature	[signature]	6/25/12
Printed Name	Lynne Cox	Time 0915	Printed Name	Jeffrey Hirst	Time 10:40
Organization	King County DNR, Environmental Laboratory		Organization	AmTest	

T= 7.1 °C

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121778 BOD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-2	421879-210	NPDES SW Monitoring	CVBOD	STORM WTR	6/22/2012 16:06	6/25/2012 9:00	6/25/2012 13:11	WG121778-1,-2	
WG121778-1	MB		CVBOD	BLANK WTR		6/25/2012 9:00	6/25/2012 13:05		MB1 06/25/12
WG121778-2	SB		CVBOD	BLANK WTR		6/25/2012 9:00	6/25/2012 13:06		WG121778-1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121734 Anions

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55811-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVCL	GRND WTR	6/26/2012 7:20	6/26/2012 12:05	6/27/2012 7:59	WG121734-1,-2,-3,-4,-5,-6	
L55811-4	421422-PUGW		CVSO4	GRND WTR	6/26/2012 7:20	6/26/2012 12:05	6/27/2012 7:59		
L55828-1	421422-PUGW		CVCL	GRND WTR	6/19/2012 7:05	6/26/2012 12:05	6/26/2012 17:47		
L55828-1	421422-PUGW		CVSO4	GRND WTR	6/19/2012 7:05	6/26/2012 12:05	6/26/2012 18:17		
L55828-3	421422-PUGW		CVCL	GRND WTR	6/19/2012 7:40	6/26/2012 12:05	6/27/2012 1:23		
L55828-3	421422-PUGW		CVSO4	GRND WTR	6/19/2012 7:40	6/26/2012 12:05	6/27/2012 2:24		
L55829-1	421422-PUGW		CVCL	GRND WTR	6/21/2012 7:15	6/26/2012 12:05	6/26/2012 19:18		
L55829-1	421422-PUGW		CVSO4	GRND WTR	6/21/2012 7:15	6/26/2012 12:05	6/26/2012 19:18		
L55829-3	421422-PUGW		CVCL	GRND WTR	6/26/2012 7:05	6/26/2012 12:05	6/27/2012 9:00		
L55829-3	421422-PUGW		CVSO4	GRND WTR	6/26/2012 7:05	6/26/2012 12:05	6/27/2012 9:31		
L55830-1	421422-PUGW		CVCL	GRND WTR	6/21/2012 8:46	6/26/2012 12:05	6/26/2012 22:21		
L55830-1	421422-PUGW		CVSO4	GRND WTR	6/21/2012 8:46	6/26/2012 12:05	6/26/2012 22:21		
L55830-3	421422-PUGW		CVCL	GRND WTR	6/21/2012 9:56	6/26/2012 12:05	6/27/2012 2:55		
L55830-3	421422-PUGW		CVSO4	GRND WTR	6/21/2012 9:56	6/26/2012 12:05	6/27/2012 3:56		
L55834-1	421422-PUGW		CVCL	GRND WTR	6/25/2012 8:20	6/26/2012 12:05	6/27/2012 4:26		
L55834-1	421422-PUGW		CVSO4	GRND WTR	6/25/2012 8:20	6/26/2012 12:05	6/27/2012 4:57		
L55834-3	421422-PUGW		CVCL	GRND WTR	6/25/2012 12:08	6/26/2012 12:05	6/27/2012 5:57		
L55834-3	421422-PUGW		CVSO4	GRND WTR	6/25/2012 12:08	6/26/2012 12:05	6/27/2012 6:58		
L55874-2	421879-210	NPDES SW Monitoring	CVCL	STORM WTR	6/22/2012 16:06	6/26/2012 12:05	6/27/2012 21:11		
L55918-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVCL	GRND WTR	6/26/2012 8:36	6/26/2012 12:05	6/27/2012 10:01		
L55918-1	421422-PUGW		CVSO4	GRND WTR	6/26/2012 8:36	6/26/2012 12:05	6/27/2012 10:32		
L55918-3	421422-PUGW		CVCL	GRND WTR	6/26/2012 9:16	6/26/2012 12:05	6/27/2012 11:02		
L55918-3	421422-PUGW		CVSO4	GRND WTR	6/26/2012 9:16	6/26/2012 12:05	6/27/2012 12:33		
L55918-4	421422-PUGW		CVCL	GRND WTR	6/27/2012 9:38	6/27/2012 15:00	6/27/2012 22:42		
L55918-4	421422-PUGW		CVSO4	GRND WTR	6/27/2012 9:38	6/27/2012 15:00	6/27/2012 22:42		
L55927-1	421422-CHGW-OS	SWD-CHGW-OS Cedar Hills Groundwater Off-Site	CVCL	GRND WTR	6/20/2012 8:00	6/26/2012 12:05	6/26/2012 16:46		
L55927-1	421422-CHGW-OS		CVSO4	GRND WTR	6/20/2012 8:00	6/26/2012 12:05	6/26/2012 17:16		
WG121734-1	CS		CVCL	BLANK WTR		6/26/2012 12:05	6/26/2012 14:14		RDL_LEVEL
WG121734-1	CS		CVSO4	BLANK WTR		6/26/2012 12:05	6/26/2012 14:14		RDL_LEVEL
WG121734-2	MB		CVCL	BLANK WTR		6/26/2012 12:05	6/26/2012 15:15		MB1 6/26/12
WG121734-2	MB		CVSO4	BLANK WTR		6/26/2012 12:05	6/26/2012 15:15		MB1 6/26/12
WG121734-3	SB		CVCL	BLANK WTR		6/26/2012 12:05	6/26/2012 15:45		WG121734-2
WG121734-3	SB		CVSO4	BLANK WTR		6/26/2012 12:05	6/26/2012 15:45		WG121734-2
WG121734-4	LCS		CVCL	BLANK WTR		6/26/2012 12:05	6/26/2012 16:15		LEVEL1
WG121734-4	LCS		CVSO4	BLANK WTR		6/26/2012 12:05	6/26/2012 16:15		LEVEL1
WG121734-5	LD		CVCL	GRND WTR		6/26/2012 12:05	6/26/2012 22:51		L55830-1
WG121734-5	LD		CVSO4	GRND WTR		6/26/2012 12:05	6/26/2012 22:51		L55830-1
WG121734-6	MS		CVCL	GRND WTR		6/26/2012 12:05	6/26/2012 23:22		L55830-1
WG121734-6	MS		CVSO4	GRND WTR		6/26/2012 12:05	6/26/2012 23:22		L55830-1
WG121734-7	MB		CVCL	BLANK WTR		6/27/2012 15:00	6/27/2012 21:41		MB1 6/27/12
WG121734-7	MB		CVSO4	BLANK WTR		6/27/2012 15:00	6/27/2012 21:41		MB1 6/27/12

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121827 Conductivity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55811-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVCOND	GRND WTR	6/26/2012 7:20	6/28/2012 19:31	6/28/2012 19:31	WG121827-2,-3,-4,-1,-5,-6,-7	
L55829-1	421422-PUGW		CVCOND	GRND WTR	6/21/2012 7:15	6/28/2012 19:40	6/28/2012 19:40		
L55829-3	421422-PUGW		CVCOND	GRND WTR	6/26/2012 7:05	6/28/2012 19:50	6/28/2012 19:50		
L55830-1	421422-PUGW		CVCOND	GRND WTR	6/21/2012 8:46	6/28/2012 20:00	6/28/2012 20:00		
L55830-3	421422-PUGW		CVCOND	GRND WTR	6/21/2012 9:56	6/28/2012 20:10	6/28/2012 20:10		
L55834-1	421422-PUGW		CVCOND	GRND WTR	6/25/2012 8:20	6/28/2012 20:22	6/28/2012 20:22		
L55834-3	421422-PUGW		CVCOND	GRND WTR	6/25/2012 12:08	6/28/2012 20:35	6/28/2012 20:35		
L55874-2	421879-210	NPDES SW Monitoring	CVCOND	STORM WTR	6/22/2012 16:06	6/28/2012 18:45	6/28/2012 18:45		
L55918-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVCOND	GRND WTR	6/26/2012 8:36	6/28/2012 18:48	6/28/2012 18:48		
L55918-3	421422-PUGW		CVCOND	GRND WTR	6/26/2012 9:16	6/28/2012 18:59	6/28/2012 18:59		
L55918-4	421422-PUGW		CVCOND	GRND WTR	6/27/2012 9:38	6/28/2012 19:20	6/28/2012 19:20		
L55923-2	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	CVCOND	FRESH WTR	6/28/2012 8:07	6/28/2012 21:32	6/28/2012 21:32		
L55930-1	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVCOND	FRESH WTR	6/21/2012 10:38	6/28/2012 20:46	6/28/2012 20:46		
L55930-3	421422-VASW-2		CVCOND	FRESH WTR	6/21/2012 11:20	6/28/2012 20:58	6/28/2012 20:58		
L55930-4	421422-VASW-2		CVCOND	FRESH WTR	6/21/2012 12:48	6/28/2012 21:10	6/28/2012 21:10		
WG121827-1	LCS		CVCOND	BLANK WTR		6/28/2012 18:34	6/28/2012 18:34		LEVEL1
WG121827-2	LCS		CVCOND	BLANK WTR		6/28/2012 18:35	6/28/2012 18:35		LEVEL2
WG121827-3	LD		CVCOND	STORM WTR		6/28/2012 18:47	6/28/2012 18:47		L55874-2
WG121827-4	LD		CVCOND	GRND WTR		6/28/2012 19:10	6/28/2012 19:10		L55918-3
WG121827-5	LD		CVCOND	FRESH WTR		6/28/2012 21:20	6/28/2012 21:20		L55930-4
WG121827-6	LCS		CVCOND	BLANK WTR		6/28/2012 21:43	6/28/2012 21:43		LEVEL1
WG121827-7	LCS		CVCOND	BLANK WTR		6/28/2012 21:44	6/28/2012 21:44		LEVEL2

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121737 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55757-1	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	FRESH WTR	6/18/2012 14:53	6/26/2012 12:00	6/26/2012 14:43	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-1	422019		CVNO23	FRESH WTR	6/18/2012 14:53	6/26/2012 12:00	6/26/2012 14:43	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-1	422019		CVORTHOP	FRESH WTR	6/18/2012 14:53	6/26/2012 12:00	6/26/2012 14:43		
L55757-2	422019		CVNH3-FL	FRESH WTR	6/18/2012 13:40	6/26/2012 12:00	6/26/2012 14:45	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-2	422019		CVNO23	FRESH WTR	6/18/2012 13:40	6/26/2012 12:00	6/26/2012 14:45	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-2	422019		CVORTHOP	FRESH WTR	6/18/2012 13:40	6/26/2012 12:00	6/26/2012 14:45		
L55757-3	422019		CVNH3-FL	FRESH WTR	6/18/2012 13:04	6/26/2012 12:00	6/26/2012 14:47	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-3	422019		CVNO23	FRESH WTR	6/18/2012 13:04	6/26/2012 12:00	6/26/2012 14:47	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-3	422019		CVORTHOP	FRESH WTR	6/18/2012 13:04	6/26/2012 12:00	6/26/2012 14:47		
L55757-4	422019		CVNH3-FL	FRESH WTR	6/18/2012 12:39	6/26/2012 12:00	6/26/2012 14:58	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-4	422019		CVNO23	FRESH WTR	6/18/2012 12:39	6/26/2012 12:00	6/26/2012 14:58	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-4	422019		CVORTHOP	FRESH WTR	6/18/2012 12:39	6/26/2012 12:00	6/26/2012 14:58		
L55757-5	422019		CVNH3-FL	FRESH WTR	6/18/2012 12:15	6/26/2012 12:00	6/26/2012 15:00	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-5	422019		CVNO23	FRESH WTR	6/18/2012 12:15	6/26/2012 12:00	6/26/2012 15:00	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-5	422019		CVORTHOP	FRESH WTR	6/18/2012 12:15	6/26/2012 12:00	6/26/2012 15:00		
L55757-6	422019		CVNH3-FL	FRESH WTR	6/18/2012 11:45	6/26/2012 12:00	6/26/2012 15:02	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-6	422019		CVNO23	FRESH WTR	6/18/2012 11:45	6/26/2012 12:00	6/26/2012 15:02	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-6	422019		CVORTHOP	FRESH WTR	6/18/2012 11:45	6/26/2012 12:00	6/26/2012 15:02		
L55757-7	422019		CVNH3-FL	FRESH WTR	6/18/2012 11:22	6/26/2012 12:00	6/26/2012 15:04	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-7	422019		CVNO23	FRESH WTR	6/18/2012 11:22	6/26/2012 12:00	6/26/2012 15:04	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-7	422019		CVORTHOP	FRESH WTR	6/18/2012 11:22	6/26/2012 12:00	6/26/2012 15:04		
L55757-8	422019		CVNH3-FL	FRESH WTR	6/18/2012 10:54	6/26/2012 12:00	6/26/2012 15:06	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-8	422019		CVNO23	FRESH WTR	6/18/2012 10:54	6/26/2012 12:00	6/26/2012 15:06	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-8	422019		CVORTHOP	FRESH WTR	6/18/2012 10:54	6/26/2012 12:00	6/26/2012 15:06		
L55757-9	422019		CVNH3-FL	FRESH WTR	6/18/2012 10:25	6/26/2012 12:00	6/26/2012 15:08	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-9	422019		CVNO23	FRESH WTR	6/18/2012 10:25	6/26/2012 12:00	6/26/2012 15:08	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-9	422019		CVORTHOP	FRESH WTR	6/18/2012 10:25	6/26/2012 12:00	6/26/2012 15:08		
L55757-10	422019		CVNH3-FL	FRESH WTR	6/18/2012 9:54	6/26/2012 12:00	6/26/2012 15:10	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-10	422019		CVNO23	FRESH WTR	6/18/2012 9:54	6/26/2012 12:00	6/26/2012 15:10	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-10	422019		CVORTHOP	FRESH WTR	6/18/2012 9:54	6/26/2012 12:00	6/26/2012 15:10		
L55757-11	422019		CVNH3-FL	FRESH WTR	6/18/2012 9:25	6/26/2012 12:00	6/26/2012 15:12	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-11	422019		CVNO23	FRESH WTR	6/18/2012 9:25	6/26/2012 12:00	6/26/2012 15:12	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-11	422019		CVORTHOP	FRESH WTR	6/18/2012 9:25	6/26/2012 12:00	6/26/2012 15:12		

L55757-12	422019		CVNH3-FL	FRESH WTR	6/18/2012 9:35	6/26/2012 12:00	6/26/2012 15:27	WG121737-1,-2,-3,-4,-5,-6,-7	
L55757-12	422019		CVNO23	FRESH WTR	6/18/2012 9:35	6/26/2012 12:00	6/26/2012 15:27	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55757-12	422019		CVORTHOP	FRESH WTR	6/18/2012 9:35	6/26/2012 12:00	6/26/2012 15:27		
L55789-3	423589-030-1	LDWG-Water Column PCB Analysis	CVNH3-FL	FRESH WTR	6/18/2012 14:23	6/26/2012 12:00	6/26/2012 15:29	WG121737-1,-2,-3,-4,-5,-6,-7	
L55789-3	423589-030-1		CVNO23	FRESH WTR	6/18/2012 14:23	6/26/2012 12:00	6/26/2012 15:29	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55789-3	423589-030-1		CVORTHOP	FRESH WTR	6/18/2012 14:23	6/26/2012 12:00	6/26/2012 15:29		
L55790-3	423589-030-1		CVNH3-FL	SALT WTR	6/18/2012 14:21	6/26/2012 12:00	6/26/2012 15:31	WG121737-1,-2,-3,-4,-5,-6,-7	
L55790-3	423589-030-1		CVNO23	SALT WTR	6/18/2012 14:21	6/26/2012 12:00	6/26/2012 15:31	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55790-3	423589-030-1		CVORTHOP	SALT WTR	6/18/2012 14:21	6/26/2012 12:00	6/26/2012 15:31		
L55874-2	421879-210	NPDES SW Monitoring	CVNO23	STORM WTR	6/22/2012 16:06	6/26/2012 12:00	6/26/2012 15:56		
L55874-2	421879-210		CVORTHOP	STORM WTR	6/22/2012 16:06	6/26/2012 12:00	6/26/2012 15:56		
L55901-4	421250BN	Ambient Intertidal Beaches-North	CVNH3-FL	FRESH WTR	6/20/2012 10:49	6/26/2012 12:00	6/26/2012 15:43	WG121737-1,-2,-3,-4,-5,-6,-7	
L55901-4	421250BN		CVNO23	FRESH WTR	6/20/2012 10:49	6/26/2012 12:00	6/26/2012 15:43	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55901-4	421250BN		CVORTHOP	FRESH WTR	6/20/2012 10:49	6/26/2012 12:00	6/26/2012 15:43		
L55903-8	421250BS		CVNH3-FL	SALT WTR	6/20/2012 12:53	6/26/2012 12:00	6/26/2012 15:45	WG121737-1,-2,-3,-4,-5,-6,-7	
L55903-8	421250BS		CVNO23	SALT WTR	6/20/2012 12:53	6/26/2012 12:00	6/26/2012 15:45	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55903-8	421250BS		CVORTHOP	SALT WTR	6/20/2012 12:53	6/26/2012 12:00	6/26/2012 15:45		
L55907-1	421195-280	Des Moines Creek Basin Support	CVNH3-FL	FRESH WTR	6/20/2012 11:25	6/26/2012 12:00	6/26/2012 15:33	WG121737-1,-2,-3,-4,-5,-6,-7	
L55907-1	421195-280		CVNO23	FRESH WTR	6/20/2012 11:25	6/26/2012 12:00	6/26/2012 15:33	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55907-1	421195-280		CVORTHOP	FRESH WTR	6/20/2012 11:25	6/26/2012 12:00	6/26/2012 15:33		
L55907-4	421195-280		CVNH3-FL	FRESH WTR	6/20/2012 12:03	6/26/2012 12:00	6/26/2012 15:41	WG121737-1,-2,-3,-4,-5,-6,-7	
L55907-4	421195-280		CVNO23	FRESH WTR	6/20/2012 12:03	6/26/2012 12:00	6/26/2012 15:41	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	
L55907-4	421195-280		CVORTHOP	FRESH WTR	6/20/2012 12:03	6/26/2012 12:00	6/26/2012 15:41		
WG121737-1	MB		CVNH3-FL	BLANK WTR		6/26/2012 12:00	6/26/2012 14:05	WG121737-1,-2,-3,-4,-5,-6,-7	MB 1 6/26/12
WG121737-1	MB		CVNO23	BLANK WTR		6/26/2012 12:00	6/26/2012 14:05	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	MB 1 6/26/12
WG121737-1	MB		CVORTHOP	BLANK WTR		6/26/2012 12:00	6/26/2012 14:05		MB 1 6/26/12
WG121737-2	SB		CVNH3-FL	BLANK WTR		6/26/2012 12:00	6/26/2012 14:08	WG121737-1,-2,-3,-4,-5,-6,-7	WG121737-1
WG121737-2	SB		CVNO23	BLANK WTR		6/26/2012 12:00	6/26/2012 14:08	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	WG121737-1
WG121737-2	SB		CVORTHOP	BLANK WTR		6/26/2012 12:00	6/26/2012 14:08		WG121737-1
WG121737-3	LCS		CVNH3-FL	BLANK WTR		6/26/2012 14:10	6/26/2012 14:10	WG121737-1,-2,-3,-4,-5,-6,-7	LEVEL1
WG121737-3	LCS		CVNO23	BLANK WTR		6/26/2012 14:10	6/26/2012 14:10	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	LEVEL1
WG121737-3	LCS		CVORTHOP	BLANK WTR		6/26/2012 14:10	6/26/2012 14:10		LEVEL1
WG121737-4	LD		CVNH3-FL	FRESH WTR		6/26/2012 12:00	6/26/2012 15:14	WG121737-1,-2,-3,-4,-5,-6,-7	L55757-11
WG121737-4	LD		CVNO23	FRESH WTR		6/26/2012 12:00	6/26/2012 15:14	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	L55757-11
WG121737-4	LD		CVORTHOP	FRESH WTR		6/26/2012 12:00	6/26/2012 15:14		L55757-11

WG121737-5	MS	CVNH3-FL	FRESH WTR	6/26/2012 12:00	6/26/2012 15:16	WG121737-1,-2,-3,-4,-5,-6,-7	L55757-11
WG121737-5	MS	CVNO23	FRESH WTR	6/26/2012 12:00	6/26/2012 15:16	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	L55757-11
WG121737-5	MS	CVORTHOP	FRESH WTR	6/26/2012 12:00	6/26/2012 15:16		L55757-11
WG121737-6	LD	CVNH3-FL	FRESH WTR	6/26/2012 12:00	6/26/2012 15:35	WG121737-1,-2,-3,-4,-5,-6,-7	L55907-1
WG121737-6	LD	CVNO23	FRESH WTR	6/26/2012 12:00	6/26/2012 15:35	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	L55907-1
WG121737-6	LD	CVORTHOP	FRESH WTR	6/26/2012 12:00	6/26/2012 15:35		L55907-1
WG121737-7	MS	CVNH3-FL	FRESH WTR	6/26/2012 12:00	6/26/2012 15:37	WG121737-1,-2,-3,-4,-5,-6,-7	L55907-1
WG121737-7	MS	CVNO23	FRESH WTR	6/26/2012 12:00	6/26/2012 15:37	WG121737-1,-2,-3,-4,-5,-6,-7,-8,-9	L55907-1
WG121737-7	MS	CVORTHOP	FRESH WTR	6/26/2012 12:00	6/26/2012 15:37		L55907-1
WG121737-8	LD	CVNO23	STORM WTR	6/26/2012 12:00	6/26/2012 16:06		L55874-2
WG121737-8	LD	CVORTHOP	STORM WTR	6/26/2012 12:00	6/26/2012 16:06		L55874-2
WG121737-9	MS	CVNO23	STORM WTR	6/26/2012 12:00	6/26/2012 16:08		L55874-2
WG121737-9	MS	CVORTHOP	STORM WTR	6/26/2012 12:00	6/26/2012 16:08		L55874-2

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121823 Dissolved Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55757-13	422019	WRIA 7 Streams Ambient Monitoring	CVNH3-FL	BLANK WTR	6/18/2012 9:20	6/29/2012 8:45	6/29/2012 11:24	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55757-13	422019		CVNO23	BLANK WTR	6/18/2012 9:20	6/29/2012 8:45	6/29/2012 11:24		
L55757-13	422019		CVORTHOP	BLANK WTR	6/18/2012 9:20	6/29/2012 8:45	6/29/2012 11:24	WG121823-1,-2,-3	
L55788-17	421250ON	Ambient Offshore Water Column-North	CVNH3-FL	SALT WTR	6/18/2012 11:08	6/29/2012 8:45	6/29/2012 11:39	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-17	421250ON		CVNO23	SALT WTR	6/18/2012 11:08	6/29/2012 8:45	6/29/2012 11:39	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-18	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:07	6/29/2012 8:45	6/29/2012 11:41	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-18	421250ON		CVNO23	SALT WTR	6/18/2012 11:07	6/29/2012 8:45	6/29/2012 11:41	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-19	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:05	6/29/2012 8:45	6/29/2012 11:51	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-19	421250ON		CVNO23	SALT WTR	6/18/2012 11:05	6/29/2012 8:45	6/29/2012 11:51	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-20	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:01	6/29/2012 8:45	6/29/2012 11:53	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-20	421250ON		CVNO23	SALT WTR	6/18/2012 11:01	6/29/2012 8:45	6/29/2012 11:53	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-21	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:52	6/29/2012 8:45	6/29/2012 11:55	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-21	421250ON		CVNO23	SALT WTR	6/18/2012 11:52	6/29/2012 8:45	6/29/2012 11:55	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-22	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:51	6/29/2012 8:45	6/29/2012 11:57	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-22	421250ON		CVNO23	SALT WTR	6/18/2012 11:51	6/29/2012 8:45	6/29/2012 11:57	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-23	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:51	6/29/2012 8:45	6/29/2012 11:59	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	

L55788-23	421250ON		CVNO23	SALT WTR	6/18/2012 11:51	6/29/2012 8:45	6/29/2012 11:59	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-24	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:50	6/29/2012 8:45	6/29/2012 12:01	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-24	421250ON		CVNO23	SALT WTR	6/18/2012 11:50	6/29/2012 8:45	6/29/2012 12:01	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-25	421250ON		CVNH3-FL	SALT WTR	6/18/2012 11:49	6/29/2012 8:45	6/29/2012 12:03	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-25	421250ON		CVNO23	SALT WTR	6/18/2012 11:49	6/29/2012 8:45	6/29/2012 12:03	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-26	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:18	6/29/2012 8:45	6/29/2012 12:06	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-26	421250ON		CVNO23	SALT WTR	6/18/2012 12:18	6/29/2012 8:45	6/29/2012 12:06	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-27	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:17	6/29/2012 8:45	6/29/2012 12:26	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-27	421250ON		CVNO23	SALT WTR	6/18/2012 12:17	6/29/2012 8:45	6/29/2012 12:26	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-28	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:44	6/29/2012 8:45	6/29/2012 12:29	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-28	421250ON		CVNO23	SALT WTR	6/18/2012 12:44	6/29/2012 8:45	6/29/2012 12:29	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-29	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:42	6/29/2012 8:45	6/29/2012 12:31	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-29	421250ON		CVNO23	SALT WTR	6/18/2012 12:42	6/29/2012 8:45	6/29/2012 12:31	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55788-30	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:41	6/29/2012 8:45	6/29/2012 12:33	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55788-30	421250ON		CVNO23	SALT WTR	6/18/2012 12:41	6/29/2012 8:45	6/29/2012 12:33	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3

L55788-31	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:40	6/29/2012 8:45	6/29/2012 12:35	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-31	421250ON		CVNO23	SALT WTR	6/18/2012 12:40	6/29/2012 8:45	6/29/2012 12:35	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-32	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:39	6/29/2012 8:45	6/29/2012 12:37	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-32	421250ON		CVNO23	SALT WTR	6/18/2012 12:39	6/29/2012 8:45	6/29/2012 12:37	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-33	421250ON		CVNH3-FL	SALT WTR	6/18/2012 12:38	6/29/2012 8:45	6/29/2012 12:39	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55788-33	421250ON		CVNO23	SALT WTR	6/18/2012 12:38	6/29/2012 8:45	6/29/2012 12:39	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55788-34	421250ON		CVNH3-FL	BLANK WTR	6/18/2012 9:30	6/29/2012 8:45	6/29/2012 11:09	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	FFB
L55788-34	421250ON		CVNO23	BLANK WTR	6/18/2012 9:30	6/29/2012 8:45	6/29/2012 11:09	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	FFB
L55788-34	421250ON		CVORTHOP	BLANK WTR	6/18/2012 9:30	6/29/2012 8:45	6/29/2012 11:09	WG121823-1,-2,-3	FFB
L55789-1	423589-030-1	LDWG-Water Column PCB Analysis	CVNH3-FL	FRESH WTR	6/18/2012 13:09	6/29/2012 8:45	6/29/2012 12:49	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55789-1	423589-030-1		CVNO23	FRESH WTR	6/18/2012 13:09	6/29/2012 8:45	6/29/2012 12:49	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55789-2	423589-030-1		CVNH3-FL	FRESH WTR	6/18/2012 13:42	6/29/2012 8:45	6/29/2012 12:51	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55789-2	423589-030-1		CVNO23	FRESH WTR	6/18/2012 13:42	6/29/2012 8:45	6/29/2012 12:51	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55789-4	423589-030-1		CVNH3-FL	BLANK WTR	6/18/2012 14:11	6/29/2012 8:45	6/29/2012 11:11	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	FFB
L55789-4	423589-030-1		CVNO23	BLANK WTR	6/18/2012 14:11	6/29/2012 8:45	6/29/2012 11:11	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	FFB
L55789-4	423589-030-1		CVORTHOP	BLANK WTR	6/18/2012 14:11	6/29/2012 8:45	6/29/2012 11:11	WG121823-1,-2,-3	FFB
L55790-1	423589-030-1		CVNH3-FL	SALT WTR	6/18/2012 13:07	6/29/2012 8:45	6/29/2012 12:54	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	

L55790-1	423589-030-1		CVNO23	SALT WTR	6/18/2012 13:07	6/29/2012 8:45	6/29/2012 12:54	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55790-2	423589-030-1		CVNH3-FL	SALT WTR	6/18/2012 13:40	6/29/2012 8:45	6/29/2012 12:56	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55790-2	423589-030-1		CVNO23	SALT WTR	6/18/2012 13:40	6/29/2012 8:45	6/29/2012 12:56	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55791-2	421250-700	Marine Phytoplankton Study	CVNH3-FL	SALT WTR	6/18/2012 10:34	6/29/2012 8:45	6/29/2012 12:58	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55791-2	421250-700		CVNO23	SALT WTR	6/18/2012 10:34	6/29/2012 8:45	6/29/2012 12:58	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55791-4	421250-700		CVNH3-FL	SALT WTR	6/19/2012 11:47	6/29/2012 8:45	6/29/2012 13:00	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55791-4	421250-700		CVNO23	SALT WTR	6/19/2012 11:47	6/29/2012 8:45	6/29/2012 13:00	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55791-6	421250-700		CVNH3-FL	BLANK WTR	6/19/2012 8:27	6/29/2012 8:45	6/29/2012 11:22	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	FFB
L55791-6	421250-700		CVNO23	BLANK WTR	6/19/2012 8:27	6/29/2012 8:45	6/29/2012 11:22	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	FFB
L55791-6	421250-700		CVORTHOP	BLANK WTR	6/19/2012 8:27	6/29/2012 8:45	6/29/2012 11:22	WG121823-1,-2,-3	FFB
L55792-1	421250OS	Ambient Offshore Water Column-South	CVNH3-FL	SALT WTR	6/19/2012 8:49	6/29/2012 8:45	6/29/2012 13:02	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-1	421250OS		CVNO23	SALT WTR	6/19/2012 8:49	6/29/2012 8:45	6/29/2012 13:02	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-2	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:48	6/29/2012 8:45	6/29/2012 13:04	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-2	421250OS		CVNO23	SALT WTR	6/19/2012 8:48	6/29/2012 8:45	6/29/2012 13:04	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-3	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:47	6/29/2012 8:45	6/29/2012 13:18	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-3	421250OS		CVNO23	SALT WTR	6/19/2012 8:47	6/29/2012 8:45	6/29/2012 13:18	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	

L55792-4	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:46	6/29/2012 8:45	6/29/2012 13:21	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-4	421250OS		CVNO23	SALT WTR	6/19/2012 8:46	6/29/2012 8:45	6/29/2012 13:21	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-5	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:45	6/29/2012 8:45	6/29/2012 13:23	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-5	421250OS		CVNO23	SALT WTR	6/19/2012 8:45	6/29/2012 8:45	6/29/2012 13:23	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-6	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:43	6/29/2012 8:45	6/29/2012 13:25	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-6	421250OS		CVNO23	SALT WTR	6/19/2012 8:43	6/29/2012 8:45	6/29/2012 13:25	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-7	421250OS		CVNH3-FL	SALT WTR	6/19/2012 8:40	6/29/2012 8:45	6/29/2012 13:35	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-7	421250OS		CVNO23	SALT WTR	6/19/2012 8:40	6/29/2012 8:45	6/29/2012 13:35	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-8	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:20	6/29/2012 8:45	6/29/2012 13:37	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-8	421250OS		CVNO23	SALT WTR	6/19/2012 9:20	6/29/2012 8:45	6/29/2012 13:37	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-9	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:18	6/29/2012 8:45	6/29/2012 13:48	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-9	421250OS		CVNO23	SALT WTR	6/19/2012 9:18	6/29/2012 8:45	6/29/2012 13:48	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-10	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:18	6/29/2012 8:45	6/29/2012 13:50	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-10	421250OS		CVNO23	SALT WTR	6/19/2012 9:18	6/29/2012 8:45	6/29/2012 13:50	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-11	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:17	6/29/2012 8:45	6/29/2012 13:52	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15

L55792-11	421250OS		CVNO23	SALT WTR	6/19/2012 9:17	6/29/2012 8:45	6/29/2012 13:52	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-12	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:44	6/29/2012 8:45	6/29/2012 13:54	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-12	421250OS		CVNO23	SALT WTR	6/19/2012 9:44	6/29/2012 8:45	6/29/2012 13:54	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-13	421250OS		CVNH3-FL	SALT WTR	6/19/2012 9:42	6/29/2012 8:45	6/29/2012 13:56	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-13	421250OS		CVNO23	SALT WTR	6/19/2012 9:42	6/29/2012 8:45	6/29/2012 13:56	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-14	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:17	6/29/2012 8:45	6/29/2012 13:58	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-14	421250OS		CVNO23	SALT WTR	6/19/2012 10:17	6/29/2012 8:45	6/29/2012 13:58	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-15	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:16	6/29/2012 8:45	6/29/2012 14:00	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-15	421250OS		CVNO23	SALT WTR	6/19/2012 10:16	6/29/2012 8:45	6/29/2012 14:00	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-16	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:15	6/29/2012 8:45	6/29/2012 14:02	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-16	421250OS		CVNO23	SALT WTR	6/19/2012 10:15	6/29/2012 8:45	6/29/2012 14:02	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-17	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:14	6/29/2012 8:45	6/29/2012 14:04	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-17	421250OS		CVNO23	SALT WTR	6/19/2012 10:14	6/29/2012 8:45	6/29/2012 14:04	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-18	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:13	6/29/2012 8:45	6/29/2012 14:06	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-18	421250OS		CVNO23	SALT WTR	6/19/2012 10:13	6/29/2012 8:45	6/29/2012 14:06	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3

L55792-19	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:11	6/29/2012 8:45	6/29/2012 14:17	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-19	421250OS		CVNO23	SALT WTR	6/19/2012 10:11	6/29/2012 8:45	6/29/2012 14:17	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-20	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:08	6/29/2012 8:45	6/29/2012 14:19	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	FREP@L55792-21
L55792-20	421250OS		CVNO23	SALT WTR	6/19/2012 10:08	6/29/2012 8:45	6/29/2012 14:19	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	FREP@L55792-21
L55792-21	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:08	6/29/2012 8:45	6/29/2012 14:21	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-21	421250OS		CVNO23	SALT WTR	6/19/2012 10:08	6/29/2012 8:45	6/29/2012 14:21	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-22	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:54	6/29/2012 8:45	6/29/2012 14:23	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-22	421250OS		CVNO23	SALT WTR	6/19/2012 10:54	6/29/2012 8:45	6/29/2012 14:23	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-23	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:53	6/29/2012 8:45	6/29/2012 14:25	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-23	421250OS		CVNO23	SALT WTR	6/19/2012 10:53	6/29/2012 8:45	6/29/2012 14:25	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-24	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:52	6/29/2012 8:45	6/29/2012 14:27	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-24	421250OS		CVNO23	SALT WTR	6/19/2012 10:52	6/29/2012 8:45	6/29/2012 14:27	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-25	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:51	6/29/2012 8:45	6/29/2012 14:29	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55792-25	421250OS		CVNO23	SALT WTR	6/19/2012 10:51	6/29/2012 8:45	6/29/2012 14:29	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55792-26	421250OS		CVNH3-FL	SALT WTR	6/19/2012 10:51	6/29/2012 8:45	6/29/2012 14:31	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	

L55792-26	421250OS		CVNO23	SALT WTR	6/19/2012 10:51	6/29/2012 8:45	6/29/2012 14:31	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-27	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:47	6/29/1930 11:40	6/29/2012 14:48	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-27	421250OS		CVNO23	SALT WTR	6/19/2012 11:47	6/29/1930 11:40	6/29/2012 14:48	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-28	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:46	6/29/1930 11:40	6/29/2012 14:50	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-28	421250OS		CVNO23	SALT WTR	6/19/2012 11:46	6/29/1930 11:40	6/29/2012 14:50	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-29	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:45	6/29/1930 11:40	6/29/2012 14:52	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-29	421250OS		CVNO23	SALT WTR	6/19/2012 11:45	6/29/1930 11:40	6/29/2012 14:52	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-30	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:44	6/29/1930 11:40	6/29/2012 14:54	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-30	421250OS		CVNO23	SALT WTR	6/19/2012 11:44	6/29/1930 11:40	6/29/2012 14:54	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-31	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:43	6/29/1930 11:40	6/29/2012 14:56	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-31	421250OS		CVNO23	SALT WTR	6/19/2012 11:43	6/29/1930 11:40	6/29/2012 14:56	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-32	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:41	6/29/1930 11:40	6/29/2012 14:59	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-32	421250OS		CVNO23	SALT WTR	6/19/2012 11:41	6/29/1930 11:40	6/29/2012 14:59	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3
L55792-33	421250OS		CVNH3-FL	SALT WTR	6/19/2012 11:37	6/29/1930 11:40	6/29/2012 15:01	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15
L55792-33	421250OS		CVNO23	SALT WTR	6/19/2012 11:37	6/29/1930 11:40	6/29/2012 15:01	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3

L55792-34	421250OS		CVNH3-FL	BLANK WTR	6/19/2012 10:32	6/29/2012 8:45	6/29/2012 11:28	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	FFB
L55792-34	421250OS		CVNO23	BLANK WTR	6/19/2012 10:32	6/29/2012 8:45	6/29/2012 11:28	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	FFB
L55792-34	421250OS		CVORTHOP	BLANK WTR	6/19/2012 10:32	6/29/2012 8:45	6/29/2012 11:28	WG121823-1,-2,-3	FFB
L55874-7	421879-210	NPDES SW Monitoring	CVNO23	BLANK WTR	6/23/2012 14:30	6/29/2012 8:45	6/29/2012 11:26	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55874-7	421879-210		CVORTHOP	BLANK WTR	6/23/2012 14:30	6/29/2012 8:45	6/29/2012 11:26	WG121823-1,-2,-3	
L55901-10	421250BN	Ambient Intertidal Beaches-North	CVNH3-FL	BLANK WTR	6/20/2012 8:28	6/29/2012 8:45	6/29/2012 11:30	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55901-10	421250BN		CVNO23	BLANK WTR	6/20/2012 8:28	6/29/2012 8:45	6/29/2012 11:30	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55901-10	421250BN		CVORTHOP	BLANK WTR	6/20/2012 8:28	6/29/2012 8:45	6/29/2012 11:30	WG121823-1,-2,-3	
L55902-10	421250BS		CVNH3-FL	BLANK WTR	6/20/2012 9:06	6/29/2012 8:45	6/29/2012 11:32	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55902-10	421250BS		CVNO23	BLANK WTR	6/20/2012 9:06	6/29/2012 8:45	6/29/2012 11:32	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55902-10	421250BS		CVORTHOP	BLANK WTR	6/20/2012 9:06	6/29/2012 8:45	6/29/2012 11:32	WG121823-1,-2,-3	
L55903-9	421250BS		CVNH3-FL	BLANK WTR	6/20/2012 7:00	6/29/2012 8:45	6/29/2012 11:34	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55903-9	421250BS		CVNO23	BLANK WTR	6/20/2012 7:00	6/29/2012 8:45	6/29/2012 11:34	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55903-9	421250BS		CVORTHOP	BLANK WTR	6/20/2012 7:00	6/29/2012 8:45	6/29/2012 11:34	WG121823-1,-2,-3	
L55907-5	421195-280	Des Moines Creek Basin Support	CVNH3-FL	FILTER WTR	6/20/2012 11:32	6/29/2012 8:45	6/29/2012 11:36	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	
L55907-5	421195-280		CVNO23	BLANK WTR	6/20/2012 11:32	6/29/2012 8:45	6/29/2012 11:36	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	
L55907-5	421195-280		CVORTHOP	BLANK WTR	6/20/2012 11:32	6/29/2012 8:45	6/29/2012 11:36	WG121823-1,-2,-3	
WG121823-1	MB		CVNH3-FL	BLANK WTR		6/29/2012 8:45	6/29/2012 11:01	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	MB1 6/29/12
WG121823-1	MB		CVNO23	BLANK WTR		6/29/2012 8:45	6/29/2012 11:01	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	MB1 6/29/12
WG121823-1	MB		CVORTHOP	BLANK WTR		6/29/2012 8:45	6/29/2012 11:01	WG121823-1,-2,-3	MB1 6/29/12

WG121823-2	SB	CVNH3-FL	BLANK WTR	6/29/2012 8:45	6/29/2012 11:03	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	WG121823-1
WG121823-2	SB	CVNO23	BLANK WTR	6/29/2012 8:45	6/29/2012 11:03	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	WG121823-1
WG121823-2	SB	CVORTHOP	BLANK WTR	6/29/2012 8:45	6/29/2012 11:03	WG121823-1,-2,-3	WG121823-1
WG121823-3	LCS	CVNH3-FL	BLANK WTR	6/29/2012 11:05	6/29/2012 11:05	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG121823-3	LCS	CVNO23	BLANK WTR	6/29/2012 11:05	6/29/2012 11:05	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	LEVEL1
WG121823-3	LCS	CVORTHOP	BLANK WTR	6/29/2012 11:05	6/29/2012 11:05	WG121823-1,-2,-3	LEVEL1
WG121823-4	LD	CVNH3-FL	SALT WTR	6/29/2012 8:45	6/29/2012 12:08	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55788-26
WG121823-4	LD	CVNO23	SALT WTR	6/29/2012 8:45	6/29/2012 12:08	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55788-26
WG121823-5	MS	CVNH3-FL	SALT WTR	6/29/2012 8:45	6/29/2012 12:10	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55788-26
WG121823-5	MS	CVNO23	SALT WTR	6/29/2012 8:45	6/29/2012 12:10	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55788-26
WG121823-6	MB	CVNH3-FL	BLANK WTR	6/29/2012 8:45	6/29/2012 12:20	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	MB2 6/29/01
WG121823-6	MB	CVNO23	BLANK WTR	6/29/2012 8:45	6/29/2012 12:20	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	MB2 6/29/01
WG121823-7	LCS	CVNH3-FL	BLANK WTR	6/29/2012 12:22	6/29/2012 12:22	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG121823-7	LCS	CVNO23	BLANK WTR	6/29/2012 12:22	6/29/2012 12:22	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	LEVEL1
WG121823-8	LD	CVNH3-FL	SALT WTR	6/29/2012 8:45	6/29/2012 13:06	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55792-2
WG121823-8	LD	CVNO23	SALT WTR	6/29/2012 8:45	6/29/2012 13:06	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55792-2
WG121823-9	MS	CVNH3-FL	SALT WTR	6/29/2012 8:45	6/29/2012 13:08	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55792-2

WG121823-9	MS	CVNO23	SALT WTR	6/29/2012 8:45	6/29/2012 13:08	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55792-2
WG121823-10	MB	CVNH3-FL	BLANK WTR	6/29/2012 8:45	6/29/2012 13:29	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	MB3 6/29/12
WG121823-10	MB	CVNO23	BLANK WTR	6/29/2012 8:45	6/29/2012 13:29	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	MB3 6/29/12
WG121823-11	LCS	CVNH3-FL	BLANK WTR	6/29/2012 13:31	6/29/2012 13:31	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG121823-11	LCS	CVNO23	BLANK WTR	6/29/2012 13:31	6/29/2012 13:31	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	LEVEL1
WG121823-12	MB	CVNH3-FL	BLANK WTR	6/29/1930 11:40	6/29/2012 14:36	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	MB5 6/29/12
WG121823-12	MB	CVNO23	BLANK WTR	6/29/1930 11:40	6/29/2012 14:36	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	MB5 6/29/12
WG121823-13	LCS	CVNH3-FL	BLANK WTR	6/29/2012 14:46	6/29/2012 14:46	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	LEVEL1
WG121823-13	LCS	CVNO23	BLANK WTR	6/29/2012 14:46	6/29/2012 14:46	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	LEVEL1
WG121823-14	LD	CVNH3-FL	SALT WTR	6/29/1930 11:40	6/29/2012 15:03	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55792-33
WG121823-14	LD	CVNO23	SALT WTR	6/29/1930 11:40	6/29/2012 15:03	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55792-33
WG121823-15	MS	CVNH3-FL	SALT WTR	6/29/1930 11:40	6/29/2012 15:05	WG121823-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15	L55792-33
WG121823-15	MS	CVNO23	SALT WTR	6/29/1930 11:40	6/29/2012 15:05	WG121823-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-1,-2,-3	L55792-33

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121970 TKN

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55827-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTKN	FRESH WTR	6/18/2012 7:56	7/5/2012 10:00	7/6/2012 11:38	WG121970-1,-2,-3,-4,-5,-6,-7,-8	
L55827-2	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 8:44	7/5/2012 10:00	7/6/2012 11:40		
L55827-3	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 9:12	7/5/2012 10:00	7/6/2012 11:42		
L55827-5	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 9:37	7/5/2012 10:00	7/6/2012 11:44		
L55827-6	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 4:50	7/5/2012 10:00	7/6/2012 11:46		
L55827-7	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 8:00	7/5/2012 10:00	7/6/2012 11:59		
L55827-8	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 7:25	7/5/2012 10:00	7/6/2012 12:01		
L55827-9	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 4:50	7/5/2012 10:00	7/6/2012 12:03		
L55827-10	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 6:00	7/5/2012 10:00	7/6/2012 12:05		
L55827-11	421422-CHSW-M		CVTKN	FRESH WTR	6/18/2012 6:40	7/5/2012 10:00	7/6/2012 12:07		
L55827-12	421422-CHSW-M		CVTKN	FRESH WTR	6/19/2012 9:09	7/5/2012 10:00	7/6/2012 12:09		
L55874-2	421879-210	NPDES SW Monitoring	CVTKN	STORM WTR	6/22/2012 16:06	7/5/2012 10:00	7/6/2012 12:34		
L55923-2	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	CVTKN	FRESH WTR	6/28/2012 8:07	7/5/2012 10:00	7/6/2012 12:11		
L55930-1	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTKN	FRESH WTR	6/21/2012 10:38	7/5/2012 10:00	7/6/2012 12:18		
L55930-3	421422-VASW-2		CVTKN	FRESH WTR	6/21/2012 11:20	7/5/2012 10:00	7/6/2012 12:30		
L55930-4	421422-VASW-2		CVTKN	FRESH WTR	6/21/2012 12:48	7/5/2012 10:00	7/6/2012 12:32		
WG121970-1	MB		CVTKN	BLANK WTR		7/5/2012 10:00	7/6/2012 11:30		MB1
WG121970-2	SB		CVTKN	BLANK WTR		7/5/2012 10:00	7/6/2012 11:32		WG121970-1
WG121970-3	LCS		CVTKN	BLANK WTR		7/5/2012 10:00	7/6/2012 11:34		LEVEL1
WG121970-4	LCS		CVTKN	BLANK WTR		7/5/2012 10:00	7/6/2012 11:36		LEVEL2
WG121970-5	LD		CVTKN	FRESH WTR		7/5/2012 10:00	7/6/2012 12:13		L55923-2
WG121970-6	MS		CVTKN	FRESH WTR		7/5/2012 10:00	7/6/2012 12:15		L55923-2
WG121970-7	LD		CVTKN	STORM WTR		7/5/2012 10:00	7/6/2012 12:36		L55874-2
WG121970-8	MS		CVTKN	STORM WTR		7/5/2012 10:00	7/6/2012 12:38		L55874-2

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121744 Total Nutrients

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55669-1	421874-100	City of Shoreline Monthly Water Quality Monitoring	CVTOTN	FRESH WTR	6/26/2012 11:19	6/27/2012 9:00	6/28/2012 11:37	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55669-1	421874-100		CVTOTP	FRESH WTR	6/26/2012 11:19	6/27/2012 9:00	6/28/2012 11:37	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	
L55669-2	421874-100		CVTOTN	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 11:42	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55669-2	421874-100		CVTOTP	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 11:42	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	
L55669-3	421874-100		CVTOTN	FRESH WTR	6/26/2012 10:55	6/27/2012 9:00	6/28/2012 11:44	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55669-3	421874-100		CVTOTP	FRESH WTR	6/26/2012 10:55	6/27/2012 9:00	6/28/2012 11:44	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	
L55669-4	421874-100		CVTOTN	FRESH WTR	6/26/2012 10:35	6/27/2012 9:00	6/28/2012 11:46	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55669-4	421874-100		CVTOTP	FRESH WTR	6/26/2012 10:35	6/27/2012 9:00	6/28/2012 11:46	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	

L55669-5	421874-100		CVTOTN	FRESH WTR	6/26/2012 9:20	6/27/2012 9:00	6/28/2012 11:48	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55669-5	421874-100		CVTOTP	FRESH WTR	6/26/2012 9:20	6/27/2012 9:00	6/28/2012 11:48	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55669-6	421874-100		CVTOTN	FRESH WTR	6/26/2012 9:53	6/27/2012 9:00	6/28/2012 11:50	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55669-6	421874-100		CVTOTP	FRESH WTR	6/26/2012 9:53	6/27/2012 9:00	6/28/2012 11:50	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55669-7	421874-100		CVTOTN	FRESH WTR	6/26/2012 10:07	6/27/2012 9:00	6/28/2012 11:52	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55669-7	421874-100		CVTOTP	FRESH WTR	6/26/2012 10:07	6/27/2012 9:00	6/28/2012 11:52	WG121744-11,-12,-
L55874-2	421879-210	NPDES SW Monitoring	CVTOTP	STORM WTR	6/22/2012 16:06	6/27/2012 9:00	6/28/2012 9:07	13,-14,-15,-16,-17,-2,-
L55911-1	421235	MAJOR LAKES (wtr col)	CVTOTN	FRESH WTR	6/26/2012 8:30	6/29/2012 8:45	6/29/2012 13:10	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-1	421235		CVTOTP	FRESH WTR	6/26/2012 8:30	6/29/2012 8:45	6/29/2012 13:10	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-2	421235		CVTOTN	FRESH WTR	6/26/2012 8:26	6/27/2012 9:00	6/28/2012 9:18	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-2	421235		CVTOTP	FRESH WTR	6/26/2012 8:26	6/27/2012 9:00	6/28/2012 9:18	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24

L55911-3	421235		CVTOTN	FRESH WTR	6/26/2012 9:17	6/27/2012 9:00	6/28/2012 9:27	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-3	421235		CVTOTP	FRESH WTR	6/26/2012 9:17	6/27/2012 9:00	6/28/2012 9:27	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-4	421235		CVTOTN	FRESH WTR	6/26/2012 9:13	6/27/2012 9:00	6/28/2012 9:29	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-4	421235		CVTOTP	FRESH WTR	6/26/2012 9:13	6/27/2012 9:00	6/28/2012 9:29	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-5	421235		CVTOTN	FRESH WTR	6/26/2012 9:09	6/27/2012 9:00	6/28/2012 9:30	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-5	421235		CVTOTP	FRESH WTR	6/26/2012 9:09	6/27/2012 9:00	6/28/2012 9:30	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-6	421235		CVTOTN	FRESH WTR	6/26/2012 9:05	6/27/2012 9:00	6/28/2012 9:32	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-6	421235		CVTOTP	FRESH WTR	6/26/2012 9:05	6/27/2012 9:00	6/28/2012 9:32	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-8	421235		CVTOTN	FRESH WTR	6/26/2012 9:46	6/27/2012 9:00	6/28/2012 9:34	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22

L55911-8	421235		CVTOTP	FRESH WTR	6/26/2012 9:46	6/27/2012 9:00	6/28/2012 9:34	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-9	421235		CVTOTN	FRESH WTR	6/26/2012 9:42	6/27/2012 9:00	6/28/2012 9:36	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-9	421235		CVTOTP	FRESH WTR	6/26/2012 9:42	6/27/2012 9:00	6/28/2012 9:36	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-10	421235		CVTOTN	FRESH WTR	6/26/2012 10:50	6/27/2012 9:00	6/28/2012 9:38	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-10	421235		CVTOTP	FRESH WTR	6/26/2012 10:50	6/27/2012 9:00	6/28/2012 9:38	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-11	421235		CVTOTN	FRESH WTR	6/26/2012 10:18	6/27/2012 9:00	6/28/2012 9:40	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-11	421235		CVTOTP	FRESH WTR	6/26/2012 10:18	6/27/2012 9:00	6/28/2012 9:40	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-12	421235		CVTOTN	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:41	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-12	421235		CVTOTP	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:41	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24

L55911-13	421235		CVTOTN	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:43	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-13	421235		CVTOTP	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:43	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-14	421235		CVTOTN	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:52	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-14	421235		CVTOTP	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:52	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-15	421235		CVTOTN	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:54	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-15	421235		CVTOTP	FRESH WTR	6/26/2012 10:17	6/27/2012 9:00	6/28/2012 9:54	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-16	421235		CVTOTN	FRESH WTR	6/26/2012 10:16	6/27/2012 9:00	6/28/2012 9:56	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-16	421235		CVTOTP	FRESH WTR	6/26/2012 10:16	6/27/2012 9:00	6/28/2012 9:56	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-17	421235		CVTOTN	FRESH WTR	6/26/2012 10:15	6/27/2012 9:00	6/28/2012 9:58	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22

L55911-17	421235		CVTOTP	FRESH WTR	6/26/2012 10:15	6/27/2012 9:00	6/28/2012 9:58	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-19	421235		CVTOTN	FRESH WTR	6/26/2012 11:38	6/27/2012 9:00	6/28/2012 10:00	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-19	421235		CVTOTP	FRESH WTR	6/26/2012 11:38	6/27/2012 9:00	6/28/2012 10:00	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-20	421235		CVTOTN	FRESH WTR	6/26/2012 11:38	6/27/2012 9:00	6/28/2012 10:02	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-20	421235		CVTOTP	FRESH WTR	6/26/2012 11:38	6/27/2012 9:00	6/28/2012 10:02	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-21	421235		CVTOTN	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:20	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-21	421235		CVTOTP	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:20	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-22	421235		CVTOTN	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:25	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-22	421235		CVTOTP	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:25	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24

L55911-23	421235		CVTOTN	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:27	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-23	421235		CVTOTP	FRESH WTR	6/26/2012 11:37	6/27/2012 9:00	6/28/2012 10:27	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-25	421235		CVTOTN	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 10:29	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-25	421235		CVTOTP	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 10:29	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-26	421235		CVTOTN	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 10:31	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-26	421235		CVTOTP	FRESH WTR	6/26/2012 11:35	6/27/2012 9:00	6/28/2012 10:31	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-27	421235		CVTOTN	FRESH WTR	6/26/2012 11:34	6/27/2012 9:00	6/28/2012 10:33	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-27	421235		CVTOTP	FRESH WTR	6/26/2012 11:34	6/27/2012 9:00	6/28/2012 10:33	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-29	421235		CVTOTN	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:35	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22

L55911-29	421235		CVTOTP	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:35	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-30	421235		CVTOTN	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:44	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-30	421235		CVTOTP	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:44	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-31	421235		CVTOTN	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:46	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-31	421235		CVTOTP	FRESH WTR	6/26/2012 13:11	6/27/2012 9:00	6/28/2012 10:46	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-32	421235		CVTOTN	FRESH WTR	6/26/2012 13:10	6/27/2012 9:00	6/28/2012 10:47	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-32	421235		CVTOTP	FRESH WTR	6/26/2012 13:10	6/27/2012 9:00	6/28/2012 10:47	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-33	421235		CVTOTN	FRESH WTR	6/26/2012 13:09	6/27/2012 9:00	6/28/2012 10:49	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-33	421235		CVTOTP	FRESH WTR	6/26/2012 13:09	6/27/2012 9:00	6/28/2012 10:49	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24

L55911-37	421235		CVTOTN	FRESH WTR	6/25/2012 10:18	6/27/2012 9:00	6/28/2012 10:51	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-37	421235		CVTOTP	FRESH WTR	6/25/2012 10:18	6/27/2012 9:00	6/28/2012 10:51	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-38	421235		CVTOTN	FRESH WTR	6/25/2012 10:32	6/27/2012 9:00	6/28/2012 10:53	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-38	421235		CVTOTP	FRESH WTR	6/25/2012 10:32	6/27/2012 9:00	6/28/2012 10:53	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-39	421235		CVTOTN	FRESH WTR	6/25/2012 10:40	6/27/2012 9:00	6/28/2012 10:55	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-39	421235		CVTOTP	FRESH WTR	6/25/2012 10:40	6/27/2012 9:00	6/28/2012 10:55	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-40	421235		CVTOTN	FRESH WTR	6/25/2012 10:42	6/27/2012 9:00	6/28/2012 10:57	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-40	421235		CVTOTP	FRESH WTR	6/25/2012 10:42	6/27/2012 9:00	6/28/2012 10:57	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-41	421235		CVTOTN	FRESH WTR	6/25/2012 10:46	6/27/2012 9:00	6/28/2012 10:58	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22

L55911-41	421235		CVTOTP	FRESH WTR	6/25/2012 10:46	6/27/2012 9:00	6/28/2012 10:58	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-42	421235		CVTOTN	FRESH WTR	6/25/2012 10:55	6/27/2012 9:00	6/28/2012 11:00	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-42	421235		CVTOTP	FRESH WTR	6/25/2012 10:55	6/27/2012 9:00	6/28/2012 11:00	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-44	421235		CVTOTN	FRESH WTR	6/25/2012 11:48	6/27/2012 9:00	6/28/2012 11:09	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-44	421235		CVTOTP	FRESH WTR	6/25/2012 11:48	6/27/2012 9:00	6/28/2012 11:09	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-45	421235		CVTOTN	FRESH WTR	6/25/2012 11:46	6/27/2012 9:00	6/28/2012 11:11	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-45	421235		CVTOTP	FRESH WTR	6/25/2012 11:46	6/27/2012 9:00	6/28/2012 11:11	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24
L55911-46	421235		CVTOTN	FRESH WTR	6/25/2012 11:42	6/27/2012 9:00	6/28/2012 11:13	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22
L55911-46	421235		CVTOTP	FRESH WTR	6/25/2012 11:42	6/27/2012 9:00	6/28/2012 11:13	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24

L55911-47	421235		CVTOTN	FRESH WTR	6/25/2012 11:39	6/27/2012 9:00	6/28/2012 11:20	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55911-47	421235		CVTOTP	FRESH WTR	6/25/2012 11:39	6/27/2012 9:00	6/28/2012 11:20	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	
L55911-48	421235		CVTOTN	FRESH WTR	6/25/2012 11:34	6/27/2012 9:00	6/28/2012 11:26	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55911-48	421235		CVTOTP	FRESH WTR	6/25/2012 11:34	6/27/2012 9:00	6/28/2012 11:26	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	
L55911-49	421235		CVTOTN	FRESH WTR	6/25/2012 11:27	6/27/2012 9:00	6/28/2012 11:35	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	
L55911-49	421235		CVTOTP	FRESH WTR	6/25/2012 11:27	6/27/2012 9:00	6/28/2012 11:35	WG121744-11,-12,-	
L55923-2	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	CVTOTP	FRESH WTR	6/28/2012 8:07	6/29/2012 8:45	6/29/2012 13:16	13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-	
WG121744-1	MB		CVTOTN	BLANK WTR		6/27/2012 9:00	6/28/2012 9:01	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	MB1 120627
WG121744-1	MB		CVTOTP	BLANK WTR		6/27/2012 9:00	6/28/2012 9:01	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	MB1 120627
WG121744-2	SB		CVTOTN	BLANK WTR		6/27/2012 9:00	6/28/2012 9:03	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	WG121744-1

WG121744-2	SB	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 9:03	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	WG121744-1
WG121744-3	LCS	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 9:05	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	LEVEL1
WG121744-3	LCS	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 9:05	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,	LEVEL1
WG121744-4	LD	CVTOTP	STORM WTR	6/27/2012 9:00	6/28/2012 9:08		L55874-2
WG121744-5	MS	CVTOTP	STORM WTR	6/27/2012 9:00	6/28/2012 9:10		L55874-2
WG121744-6	MB	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 10:07	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	MB2 120627
WG121744-6	MB	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 10:07	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	MB2 120627
WG121744-7	SB	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 10:09	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	WG121744-6
WG121744-7	SB	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 10:09	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	WG121744-6
WG121744-8	LCS	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 10:18	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	LEVEL1
WG121744-8	LCS	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 10:18	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	LEVEL1

WG121744-9	LD	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 10:22	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-21
WG121744-9	LD	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 10:22	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55911-21
WG121744-10	MS	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 10:24	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-21
WG121744-10	MS	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 10:24	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55911-21
WG121744-11	MB	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 11:15	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	MB3 120627
WG121744-11	MB	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 11:15	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	MB3 120627
WG121744-12	SB	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 11:17	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	WG121744-11
WG121744-12	SB	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 11:17	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	WG121744-11
WG121744-13	LCS	CVTOTN	BLANK WTR	6/27/2012 9:00	6/28/2012 11:19	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	LEVEL1

WG121744-13	LCS	CVTOTP	BLANK WTR	6/27/2012 9:00	6/28/2012 11:19	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	LEVEL1
WG121744-14	LD	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 11:22	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-47
WG121744-14	LD	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 11:22	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55911-47
WG121744-15	MS	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 11:24	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-47
WG121744-15	MS	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 11:24	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55911-47
WG121744-16	LD	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 11:39	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55669-1
WG121744-16	LD	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 11:39	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55669-1
WG121744-17	MS	CVTOTN	FRESH WTR	6/27/2012 9:00	6/28/2012 11:41	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55669-1
WG121744-17	MS	CVTOTP	FRESH WTR	6/27/2012 9:00	6/28/2012 11:41	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55669-1

WG121744-18	MB	CVTOTN	BLANK WTR	6/29/2012 8:45	6/29/2012 13:05	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	MB1 120629
WG121744-18	MB	CVTOTP	BLANK WTR	6/29/2012 8:45	6/29/2012 13:05	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	MB1 120629
WG121744-19	SB	CVTOTN	BLANK WTR	6/29/2012 8:45	6/29/2012 13:07	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	WG121744-18
WG121744-19	SB	CVTOTP	BLANK WTR	6/29/2012 8:45	6/29/2012 13:07	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	WG121744-18
WG121744-20	LCS	CVTOTN	BLANK WTR	6/29/2012 8:45	6/29/2012 13:09	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	LEVEL1
WG121744-20	LCS	CVTOTP	BLANK WTR	6/29/2012 8:45	6/29/2012 13:09	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	LEVEL1
WG121744-21	LD	CVTOTN	FRESH WTR	6/29/2012 8:45	6/29/2012 13:12	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-1
WG121744-21	LD	CVTOTP	FRESH WTR	6/29/2012 8:45	6/29/2012 13:12	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55911-1
WG121744-22	MS	CVTOTN	FRESH WTR	6/29/2012 8:45	6/29/2012 13:14	WG121744-11,-12,-13,-14,-15,-16,-17,-1,-2,-3,-6,-7,-8,-9,-10,-18,-19,-20,-21,-22	L55911-1
WG121744-22	MS	CVTOTP	FRESH WTR	6/29/2012 8:45	6/29/2012 13:14	WG121744-11,-12,-13,-14,-15,-16,-17,-2,-	L55911-1

WG121744-23	LD	CVTOTP	FRESH WTR	6/29/2012 8:45	6/29/2012 13:18	3,-4,-5,-6,-7,-8,-9,-10,-1,-18,-19,-20,-21,-22,-23,-24	L55923-2
WG121744-24	MS	CVTOTP	FRESH WTR	6/29/2012 8:45	6/29/2012 13:20		L55923-2

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121711 TSS

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55698-1	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	6/21/2012 0:00	6/25/2012 10:40	6/25/2012 15:01	WG121711-1,-2,-3,-4,-5	
L55828-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	6/19/2012 7:05	6/25/2012 10:40	6/25/2012 14:51		
L55828-3	421422-PUGW		CVTSS	GRND WTR	6/19/2012 7:40	6/25/2012 10:40	6/25/2012 14:51		
L55829-1	421422-PUGW		CVTSS	GRND WTR	6/21/2012 7:15	6/25/2012 10:40	6/25/2012 14:51		
L55830-1	421422-PUGW		CVTSS	GRND WTR	6/21/2012 8:46	6/25/2012 10:40	6/25/2012 14:52		
L55830-3	421422-PUGW		CVTSS	GRND WTR	6/21/2012 9:56	6/25/2012 10:40	6/25/2012 14:54		
L55874-2	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	6/22/2012 16:06	6/25/2012 10:40	6/25/2012 15:00		
L55927-1	421422-CHGW-OS	SWD-CHGW-OS Cedar Hills Groundwater Off-Site	CVTSS	GRND WTR	6/20/2012 8:00	6/25/2012 10:40	6/25/2012 14:50		
L55930-1	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTSS	FRESH WTR	6/21/2012 10:38	6/25/2012 10:40	6/25/2012 14:56		
L55930-3	421422-VASW-2		CVTSS	FRESH WTR	6/21/2012 11:20	6/25/2012 10:40	6/25/2012 14:57		
L55930-4	421422-VASW-2		CVTSS	FRESH WTR	6/21/2012 12:48	6/25/2012 10:40	6/25/2012 14:58		
WG121711-1	MB		CVTSS	BLANK WTR		6/25/2012 10:40	6/25/2012 14:48		MB1 6/25/12
WG121711-2	LCS		CVTSS	BLANK WTR		6/25/2012 10:40	6/25/2012 14:49		LEVEL1
WG121711-3	LD		CVTSS	GRND WTR		6/25/2012 10:40	6/25/2012 14:53		L55830-1
WG121711-4	LD		CVTSS	FRESH WTR		6/25/2012 10:40	6/25/2012 14:56		L55930-1
WG121711-5	LD		CVTSS	SEWER WTR		6/25/2012 10:40	6/25/2012 15:02		L55698-1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121718 Turbidity

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-2	421879-210	NPDES SW Monitoring	CVTURB	STORM WTR	6/22/2012 16:06	6/25/2012 13:54	6/25/2012 13:54	WG121718-1	
WG121718-1	LCS		CVTURB	BLANK WTR		6/25/2012 13:51	6/25/2012 13:51		LEVEL1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121698 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-6	421879-210	NPDES SW Monitoring	MCFC-MF	STORM WTR	6/22/2012 12:00	6/22/2012 13:50	6/23/2012 15:00	WG121698-1,-2,-3,-4,-5	
WG121698-1	LD		MCFC-MF	STORM WTR		6/22/2012 13:50	6/23/2012 15:00		L55874-6
WG121698-2	PC		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-3	NC		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-4	BF		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-5	AF		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121705 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-4	421879-210	NPDES SW Monitoring	MCFC-MF	STORM WTR	6/22/2012 15:42	6/22/2012 16:50	6/23/2012 15:35	WG121698-1,-2,-3,-4,-	
L55874-5	421879-210		MCFC-MF	STORM WTR	6/22/2012 15:28	6/22/2012 16:50	6/23/2012 15:35	5	
WG121698-1	LD		MCFC-MF	STORM WTR		6/22/2012 13:50	6/23/2012 15:00		L55874-6
WG121698-2	PC		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-3	NC		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-4	BF		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12
WG121698-5	AF		MCFC-MF	BLANK WTR		6/22/2012 13:50	6/23/2012 15:00		QC-PERFORMED:22-JUN-12

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG122050 Total Metals and Hardness

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55673-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	7/12/2012 5:00	7/17/2012 11:00	7/19/2012 12:36	WG122050-1,-2,-3,-4	
L55673-2	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 5:00	7/17/2012 11:00	7/18/2012 12:51		
L55673-3	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 5:45	7/17/2012 11:00	7/19/2012 12:36		
L55673-3	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 5:45	7/17/2012 11:00	7/18/2012 12:57		
L55673-5	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 6:20	7/17/2012 11:00	7/19/2012 12:36		
L55673-5	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 6:20	7/17/2012 11:00	7/18/2012 13:03		
L55673-7	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 7:00	7/17/2012 11:00	7/19/2012 12:36		
L55673-7	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 7:00	7/17/2012 11:00	7/18/2012 13:10		
L55673-8	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 7:58	7/17/2012 11:00	7/19/2012 12:36		
L55673-8	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 7:58	7/17/2012 11:00	7/18/2012 13:16		
L55673-9	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 8:32	7/17/2012 11:00	7/19/2012 12:36		
L55673-9	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 8:32	7/17/2012 11:00	7/18/2012 13:22		
L55673-10	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 10:01	7/17/2012 11:00	7/19/2012 12:36		
L55673-10	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 10:01	7/17/2012 11:00	7/18/2012 13:41		
L55673-11	421422-CHSW-Q		MTHARD-ICPMS	FRESH WTR	7/12/2012 8:58	7/17/2012 11:00	7/19/2012 12:36		
L55673-11	421422-CHSW-Q		MTICPMS	FRESH WTR	7/12/2012 8:58	7/17/2012 11:00	7/18/2012 13:47		
L55874-2	421879-210	NPDES SW Monitoring	MTHARD-ICPMS	STORM WTR	6/22/2012 16:06	7/17/2012 11:00	7/19/2012 12:36		
L55874-2	421879-210		MTICPMS	STORM WTR	6/22/2012 16:06	7/17/2012 11:00	7/18/2012 11:55		
L55913-1	421184-110	OCS-City of Enumclaw	MTICPMS	EFFLUENT	7/1/2012 7:30	7/17/2012 11:00	7/18/2012 11:42		
L55913-3	421184-110		MTICPMS	INFLUENT	7/1/2012 7:40	7/17/2012 11:00	7/18/2012 11:48		
L55923-2	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	MTHARD-ICPMS	FRESH WTR	6/28/2012 8:07	7/17/2012 11:00	7/19/2012 12:36		
L55923-2	421422-DUSW		MTICPMS	FRESH WTR	6/28/2012 8:07	7/17/2012 11:00	7/18/2012 11:23		
L55929-1	421430-300	OCS-Lake Haven Utility District routine testing	MTICPMS	EFFLUENT	7/4/2012 7:05	7/17/2012 11:00	7/18/2012 13:54		
L55986-1	423484-850-4	Brightwater -Treatment Plant Construction	MTICPMS	STORM WTR	7/3/2012 10:30	7/17/2012 11:00	7/18/2012 12:07		
L55986-2	423484-850-4		MTICPMS	STORM WTR	7/3/2012 11:39	7/17/2012 11:00	7/18/2012 12:26		
L55986-4	423484-850-4		MTICPMS	STORM WTR	7/3/2012 11:25	7/17/2012 11:00	7/18/2012 12:32		
L55986-6	423484-850-4		MTICPMS	STORM WTR	7/3/2012 10:58	7/17/2012 11:00	7/18/2012 12:38		
L55986-7	423484-850-4		MTICPMS	STORM WTR	7/3/2012 10:53	7/17/2012 11:00	7/18/2012 12:45		
L55994-1	421422-CHGW-NP	SWD-CHGW-NP Cedar Hills Groundwater Non-Potable	MTICPMS	GRND WTR	7/9/2012 10:34	7/17/2012 11:00	7/18/2012 12:01		
L56051-1	421155	Quality Assurance	MTICPMS	FRESH WTR	6/18/2012 0:00	7/17/2012 11:00	7/18/2012 14:00		
WG122050-1	MB		MTHARD-ICPMS	BLANK WTR		7/17/2012 11:00	7/19/2012 12:36		METHOD BLANK
WG122050-1	MB		MTICPMS	BLANK WTR		7/17/2012 11:00	7/18/2012 11:11		METHOD BLANK
WG122050-2	SB		MTHARD-ICPMS	BLANK WTR		7/17/2012 11:00	7/19/2012 12:36		WG122050-1 MS-20
WG122050-2	SB		MTICPMS	BLANK WTR		7/17/2012 11:00	7/18/2012 11:17		WG122050-1 MS-20
WG122050-3	LD		MTHARD-ICPMS	FRESH WTR		7/17/2012 11:00	7/19/2012 12:36		L55923-2 RPD-LIQ
WG122050-3	LD		MTICPMS	FRESH WTR		7/17/2012 11:00	7/18/2012 11:29		L55923-2 RPD-LIQ
WG122050-4	MS		MTHARD-ICPMS	FRESH WTR		7/17/2012 11:00	7/19/2012 12:36		L55923-2 MS-20
WG122050-4	MS		MTICPMS	FRESH WTR		7/17/2012 11:00	7/18/2012 11:36		L55923-2 MS-20

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121816 Dissolved Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55811-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	6/26/2012 7:20	7/2/2012 11:00	7/2/2012 14:35	WG121816-1,-2,-3,-4,-5,-6	
L55827-12	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	MTICPMS-DISS	FRESH WTR	6/19/2012 9:09	7/2/2012 11:00	7/2/2012 14:42		
L55828-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	6/19/2012 7:40	7/2/2012 11:00	7/2/2012 14:48		
L55829-1	421422-PUGW		MTICPMS-DISS	GRND WTR	6/21/2012 7:15	7/2/2012 11:00	7/2/2012 14:54		
L55829-3	421422-PUGW		MTICPMS-DISS	GRND WTR	6/26/2012 7:05	7/2/2012 11:00	7/2/2012 15:01		
L55830-1	421422-PUGW		MTICPMS-DISS	GRND WTR	6/21/2012 8:46	7/2/2012 11:00	7/2/2012 15:20		
L55830-3	421422-PUGW		MTICPMS-DISS	GRND WTR	6/21/2012 9:56	7/2/2012 11:00	7/2/2012 15:26		
L55834-1	421422-PUGW		MTICPMS-DISS	GRND WTR	6/25/2012 8:20	7/2/2012 11:00	7/2/2012 15:32		
L55834-3	421422-PUGW		MTICPMS-DISS	GRND WTR	6/25/2012 12:08	7/2/2012 11:00	7/2/2012 15:39		
L55874-2	421879-210	NPDES SW Monitoring	MTICPMS-DISS	STORM WTR	6/22/2012 16:06	7/2/2012 11:00	7/2/2012 15:45		
L55918-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	MTICPMS-DISS	GRND WTR	6/26/2012 8:36	7/2/2012 11:00	7/2/2012 16:04		
L55918-3	421422-PUGW		MTICPMS-DISS	GRND WTR	6/26/2012 9:16	7/2/2012 11:00	7/2/2012 16:10		
L55918-4	421422-PUGW		MTICPMS-DISS	GRND WTR	6/27/2012 9:38	7/2/2012 11:00	7/2/2012 16:16		
L55923-2	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	MTICPMS-DISS	FRESH WTR	6/28/2012 8:07	7/2/2012 11:00	7/2/2012 16:35		
L55930-1	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	MTICPMS-DISS	FRESH WTR	6/21/2012 10:38	7/2/2012 11:00	7/2/2012 16:42		
L55930-3	421422-VASW-2		MTICPMS-DISS	FRESH WTR	6/21/2012 11:20	7/2/2012 11:00	7/2/2012 16:48		
L55930-4	421422-VASW-2		MTICPMS-DISS	FRESH WTR	6/21/2012 12:48	7/2/2012 11:00	7/2/2012 16:54		
WG121816-1	MB		MTICPMS-DISS	BLANK WTR		7/2/2012 11:00	7/2/2012 14:23		METHOD BLANK
WG121816-2	SB		MTICPMS-DISS	BLANK WTR		7/2/2012 11:00	7/2/2012 14:29		WG121816-1 MS-20
WG121816-3	LD		MTICPMS-DISS	STORM WTR		7/2/2012 11:00	7/2/2012 15:51		L55874-2 RPD-LIQ
WG121816-4	MS		MTICPMS-DISS	STORM WTR		7/2/2012 11:00	7/2/2012 15:58		L55874-2 MS-20
WG121816-5	LD		MTICPMS-DISS	FRESH WTR		7/2/2012 11:00	7/2/2012 17:01		L55930-4 RPD-LIQ
WG121816-6	MS		MTICPMS-DISS	FRESH WTR		7/2/2012 11:00	7/2/2012 17:07		L55930-4 MS-20

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121743 Herbicides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-2	421879-210	NPDES SW Monitoring	ORHERB-NPDES	STORM WTR	6/22/2012 16:06	6/27/2012 7:00	7/3/2012 16:48	WG121743-3,-2,-1	
WG121743-1	MB		ORHERB-NPDES	BLANK WTR		6/27/2012 7:00	7/3/2012 13:49		MB120627
WG121743-2	SB		ORHERB-NPDES	BLANK WTR		6/27/2012 7:00	7/3/2012 14:14		WG121743-1
WG121743-3	SBD		ORHERB-NPDES	BLANK WTR		6/27/2012 7:00	7/3/2012 14:40		WG121743-2
									WG121743-1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121755 Orthophosphate Pesticides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-2	421879-210	NPDES SW Monitoring	OROPPEST-NPDES	STORM WTR	6/22/2012 16:06	6/27/2012 9:25	7/9/2012 17:49	WG121755-3,-2,-1	
WG121755-1	MB		OROPPEST-NPDES	BLANK WTR		6/27/2012 9:25	7/9/2012 16:25		MB062712
WG121755-2	SB		OROPPEST-NPDES	BLANK WTR		6/27/2012 9:25	7/9/2012 16:53		WG121755-1
WG121755-3	SBD		OROPPEST-NPDES	BLANK WTR		6/27/2012 9:25	7/9/2012 17:21		WG121755-2
									WG121755-1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121756 Semi Volatile Organics

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-2	421879-210	NPDES SW Monitoring	ORPAHPHTH-SUR	STORM WTR	6/22/2012 16:06	6/27/2012 9:25	7/9/2012 14:26	WG121756-3,-1	
WG121756-1	MB		ORPAHPHTH-SUR	BLANK WTR		6/27/2012 9:25	7/9/2012 12:36		MB120627
WG121756-3	SB		ORPAHPHTH-SUR	BLANK WTR		6/27/2012 9:25	7/9/2012 13:51		WG121756-1

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121754 WTPH-Dx

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-4	421879-210	NPDES SW Monitoring	ORWTPH-DX	STORM WTR	6/22/2012 15:42	6/27/2012 9:25	7/10/2012 17:35	WG121754-4,-3,-2,-1	
L55874-5	421879-210		ORWTPH-DX	STORM WTR	6/22/2012 15:28	6/27/2012 9:25	7/10/2012 17:59		
L55874-6	421879-210		ORWTPH-DX	STORM WTR	6/22/2012 12:00	6/27/2012 9:25	7/10/2012 18:22		
WG121754-1	MB		ORWTPH-DX	BLANK WTR		6/27/2012 9:25	7/10/2012 16:00		MB120627
WG121754-2	SB		ORWTPH-DX	BLANK WTR		6/27/2012 9:25	7/10/2012 16:25		WG121754-1 SB-MO
WG121754-3	SB		ORWTPH-DX	BLANK WTR		6/27/2012 9:25	7/10/2012 16:48		WG121754-1 SB-DSL
WG121754-4	LD		ORWTPH-DX	STORM WTR		6/27/2012 9:25	7/10/2012 17:12		L55874-4

King County Environmental Laboratory Batch Report

NPDES SWM Permit, L55874

WG121724 WTPH-G

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55874-4	421879-210	NPDES SW Monitoring	ORWTPH-G	STORM WTR	6/22/2012 15:42	6/26/2012 14:02	6/26/2012 14:02	WG121724-3,-2,-1	
L55874-5	421879-210		ORWTPH-G	STORM WTR	6/22/2012 15:28	6/26/2012 14:35	6/26/2012 14:35		
L55874-6	421879-210		ORWTPH-G	STORM WTR	6/22/2012 12:00	6/26/2012 15:07	6/26/2012 15:07		
WG121724-1	MB		ORWTPH-G	BLANK WTR		6/26/2012 11:52	6/26/2012 11:52		MB120626
WG121724-2	SB		ORWTPH-G	BLANK WTR		6/26/2012 12:25	6/26/2012 12:25		WG121724-1
WG121724-3	LD		ORWTPH-G	STORM WTR		6/26/2012 13:30	6/26/2012 13:30		L55874-4

Workgroup: WG121778 BOD

MB:WG121778-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Biochemical Oxygen Demand	2	2	mg/L	<MDL	

SB:WG121778-2 MB:WG121778-1 Matrix: BLANK WTR Listtype:CVBOD Method:SM5210-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Biochemical Oxygen Demand	2	2	mg/L	<MDL	198	153	77	*	80--120

Workgroup: WG121734 Anions

CS:WG121734-1 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	0.1	0.106	106		70--130

CS:WG121734-1 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Check Standard)

Parameter	MDL	RDL	Units	True Value	CS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	0.2	0.17	85		70--130

MB:WG121734-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Method Blank)

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

MB:WG121734-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sulfate	0.1	0.2	mg/L	<MDL	

SB:WG121734-3 MB:WG121734-2 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	<MDL	2	1.99	100		80--120

SB:WG121734-3 MB:WG121734-2 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	<MDL	5	4.97	99		80--120

LCS:WG121734-4 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Chloride	0.05	0.1	mg/L	3	2.92	97		85--115

LCS:WG121734-4 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Sulfate	0.1	0.2	mg/L	15	15.2	102		85--115

LD:WG121734-5 L55830-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	7.53	7.17	5		0--20

LD:WG121734-5 L55830-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Sulfate	0.5	1	mg/L	20.3	20.3	0		0--20

MS:WG121734-6 L55830-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Chloride	0.25	0.5	mg/L	7.53	10	17.2	97		75--125

MS:WG121734-6 L55830-1 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Sulfate	0.5	1	mg/L	20.3	25	46.1	103		75--125

MB:WG121734-7 Matrix: BLANK WTR Listtype:CVCL Method:SM4110B CL Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Chloride	0.05	0.1	mg/L	0.106	B

MB:WG121734-7 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Sulfate	0.1	0.2	mg/L	<MDL	

Workgroup: WG121827 Conductivity

LCS:WG121827-1 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	74.5	101		90--110

LCS:WG121827-2 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	688	96		90--110

LD:WG121827-3 L55874-2 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	16	15.2	5		0--10

LD:WG121827-4 L55918-3 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	586	584	0		0--10

LD:WG121827-5 L55930-4 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-VASW-2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Conductivity	1	5	umhos/cm	213	213	0		0--10

LCS:WG121827-6 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	73.9	74.7	101		90--110

LCS:WG121827-7 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Conductivity	1	5	umhos/cm	717.5	682	95		90--110

Workgroup: WG121737 Dissolved Nutrients

MB:WG121737-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG121737-1 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:WG121737-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG121737-2 MB:WG121737-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.091	91		80--120

SB:WG121737-2 MB:WG121737-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.789	99		80--120

SB:WG121737-2 MB:WG121737-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0406	102		80--120

LCS:WG121737-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.102	102		85--115

LCS:WG121737-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.799	100		85--115

LCS:WG121737-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0406	101		85--115

LD:WG121737-4 L55757-11 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	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.005	0.0051			0--20

LD:WG121737-4 L55757-11 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	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0531	0.053	0		0--20

LD:WG121737-4 L55757-11 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	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.002	<MDL			0--20

MS:WG121737-5 L55757-11 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.005	0.1	0.101	96		75--125

MS:WG121737-5 L55757-11 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0531	0.8	0.839	98		75--125

MS:WG121737-5 L55757-11 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:422019 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.002	0.04	0.0412	98		75--125

LD:WG121737-6 L55907-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-280 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0134	0.0136	1		0--20

LD:WG121737-6 L55907-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-280 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.485	0.484	0		0--20

LD:WG121737-6 L55907-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-280 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.039	0.0396	2		0--20

MS:WG121737-7 L55907-1 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421195-280 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0134	0.1	0.106	92		75--125

MS:WG121737-7 L55907-1 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421195-280 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.485	0.8	1.27	98		75--125

MS:WG121737-7 L55907-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-280 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.039	0.04	0.0785	99		75--125

LD:WG121737-8 L55874-2 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0819	0.0823	0		0--20

LD:WG121737-8 L55874-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0356	0.0359	1		0--20

MS:WG121737-9 L55874-2 Matrix: STORM WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.0819	0.8	0.848	96		75--125

MS:WG121737-9 L55874-2 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421879-210 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.0356	0.04	0.0757	100		75--125

Workgroup: WG121823 Dissolved Nutrients

MB:WG121823-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG121823-1 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:WG121823-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	

SB:WG121823-2 MB:WG121823-1 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	0.1	0.0999	100		80--120

SB:WG121823-2 MB:WG121823-1 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	<MDL	0.8	0.775	97		80--120

SB:WG121823-2 MB:WG121823-1 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	<MDL	0.04	0.0389	97		80--120

LCS:WG121823-3 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.102	102		85--115

LCS:WG121823-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.799	100		85--115

LCS:WG121823-3 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Orthophosphate Phosphorus	0.002	0.005	mg/L	0.04	0.0393	98		85--115

LD:WG121823-4 L55788-26 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0437	0.0443	1		0--20

LD:WG121823-4 L55788-26 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.193	0.197	2		0--20

MS:WG121823-5 L55788-26 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0437	0.1	0.137	93		75--125

MS:WG121823-5 L55788-26 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250ON Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.193	0.8	0.907	89		75--125

MB:WG121823-6 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG121823-6 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	

LCS:WG121823-7 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.101	101		85--115

LCS:WG121823-7 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.803	100		85--115

LD:WG121823-8 L55792-2 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0322	0.0323	0		0--20

LD:WG121823-8 L55792-2 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.204	0.204	0		0--20

MS:WG121823-9 L55792-2 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250OS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0322	0.1	0.141	108		75--125

MS:WG121823-9 L55792-2 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250OS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.204	0.8	0.992	98		75--125

MB:WG121823-10 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG121823-10 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	

LCS:WG121823-11 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.101	101		85--115

LCS:WG121823-11 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.769	96		85--115

MB:WG121823-12 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Ammonia Nitrogen	0.005	0.01	mg/L	<MDL	

MB:WG121823-12 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	

LCS:WG121823-13 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.1	0.102	102		85--115

LCS:WG121823-13 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.8	0.787	98		85--115

LD:WG121823-14 L55792-33 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0534	0.0531	1		0--20

LD:WG121823-14 L55792-33 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.235	0.233	1		0--20

MS:WG121823-15 L55792-33 Matrix: SALT WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421250OS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Ammonia Nitrogen	0.005	0.01	mg/L	0.0534	0.1	0.164	110		75--125

MS:WG121823-15 L55792-33 Matrix: SALT WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421250OS Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Nitrite + Nitrate Nitrogen	0.01	0.04	mg/L	0.235	0.8	1.04	100		75--125

Workgroup: WG121970 TKN

MB:WG121970-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	

SB:WG121970-2 MB:WG121970-1 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	<MDL	5	4.93	99		80--120

LCS:WG121970-3 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.5	0.547	109		80--120

LCS:WG121970-4 Matrix: BLANK WTR Listtype:CVTKN Method:EPA 351.2 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	5	4.72	94		80--120

LD:WG121970-5 L55923-2 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.226	0.244	8		0--20

MS:WG121970-6 L55923-2 Matrix: FRESH WTR Listtype:CVTKN Method:EPA 351.2 Project:421422-DUSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.226	5	5.06	97		70--130

LD:WG121970-7 L55874-2 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.407	0.42	3		0--20

MS:WG121970-8 L55874-2 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Kjeldahl Nitrogen	0.1	0.2	mg/L	0.407	5	5.2	96		70--130

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Workgroup: WG121744 Total Nutrients

MB:WG121744-1 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:WG121744-1 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:WG121744-2 MB:WG121744-1 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.952	95		80--120

SB:WG121744-2 MB:WG121744-1 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0974	97		80--120

LCS:WG121744-3 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	0.974	97		85--115

LCS:WG121744-3 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.097	97		85--115

LD:WG121744-4 L55874-2 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0794	0.0874	10		0--20

MS:WG121744-5 L55874-2 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0794	0.1	0.179	99		75--125

MB:WG121744-6 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:WG121744-6 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	

SB:WG121744-7 MB:WG121744-6 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.927	93		80--120

SB:WG121744-7 MB:WG121744-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.0949	95		80--120

LCS:WG121744-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	0.995	100		85--115

LCS:WG121744-8 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0985	99		85--115

LD:WG121744-9 L55911-21 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	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.268	0.261	3		0--20

LD:WG121744-9 L55911-21 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0083	0.0081			0--20

MS:WG121744-10 L55911-21 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.268	1	1.24	97		75--125

MS:WG121744-10 L55911-21 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0083	0.1	0.102	93		75--125

MB:WG121744-11 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:WG121744-11 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:WG121744-12 MB:WG121744-11 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	0.934	93		80--120

SB:WG121744-12 MB:WG121744-11 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.094	94		80--120

LCS:WG121744-13 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	1.03	103		85--115

LCS:WG121744-13 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0984	98		85--115

LD:WG121744-14 L55911-47 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	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.36	0.354	2		0--20

LD:WG121744-14 L55911-47 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0072	0.0062			0--20

MS:WG121744-15 L55911-47 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.36	1	1.38	102		75--125

MS:WG121744-15 L55911-47 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0072	0.1	0.103	96		75--125

LD:WG121744-16 L55669-1 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	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1.69	1.87	10		0--20

LD:WG121744-16 L55669-1 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0385	0.0443	14		0--20

MS:WG121744-17 L55669-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1.69	1	2.71	102		75--125

MS:WG121744-17 L55669-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421874-100 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0385	0.1	0.134	95		75--125

MB:WG121744-18 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:WG121744-18 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:WG121744-19 MB:WG121744-18 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	<MDL	1	1.02	102		80--120

SB:WG121744-19 MB:WG121744-18 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	<MDL	0.1	0.1	100		80--120

LCS:WG121744-20 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	1	0.964	96		85--115

LCS:WG121744-20 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.1	0.0952	95		85--115

LD:WG121744-21 L55911-1 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	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.27	0.28	4		0--20

LD:WG121744-21 L55911-1 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0124	0.0131	5		0--20

MS:WG121744-22 L55911-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Nitrogen	0.05	0.1	mg/L	0.27	1	1.22	95		75--125

MS:WG121744-22 L55911-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0124	0.1	0.107	94		75--125

LD:WG121744-23 L55923-2 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	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0084	0.0102	19		0--20

MS:WG121744-24 L55923-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-DUSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Phosphorus	0.005	0.01	mg/L	0.0084	0.1	0.104	95		75--125

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Workgroup: WG121711 TSS

MB:WG121711-1 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:WG121711-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Suspended Solids	5	10	mg/L	100	89	89		80--120

LD:WG121711-3 L55830-1 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	Lab Limit
Total Suspended Solids	1	2	mg/L	9.8	9.6	2		0--25

LD:WG121711-4 L55930-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-VASW-2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	1	2	mg/L	59.2	59.4	0		0--25

LD:WG121711-5 L55698-1 Matrix: SEWER WTR Listtype:CVTSS Method:SM2540-D Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Suspended Solids	10	20	mg/L	356	360	1		0--25

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Workgroup: WG121718 Turbidity

LCS:WG121718-1 Matrix: BLANK WTR Listtype:CVTURB Method:SM2130-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Turbidity	0.2	0.5	NTU	10	9.71	97		90--110

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Workgroup: WG121698 Fecal coliform

LD:WG121698-1 L55874-6 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precision	Qual
Fecal Coliform			CFU/100ml	830	810	0.01	0.34	N9

PC:WG121698-2 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:WG121698-3 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:WG121698-4 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			CFU/100ml	0	

AF:WG121698-5 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			CFU/100ml	0	

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Workgroup: WG121705 Fecal coliform

LD:WG121698-1 L55874-6 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precision	Qual
Fecal Coliform			CFU/100ml	830	810	0.01	0.34	N9

PC:WG121698-2 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:WG121698-3 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:WG121698-4 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			CFU/100ml	0	

AF:WG121698-5 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			CFU/100ml	0	

Workgroup: WG122050 Total Metals

MB:WG122050-1 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:WG122050-1 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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG122050-2 MB:WG122050-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	34	103		85--115

SB:WG122050-2 MB:WG122050-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	104		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5110	102		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5220	104		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	17.6	88		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4950	99		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5030	101		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.4	102		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.5	103		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	5250	105		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	99		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.8	104		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	20.3	101		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	21.8	109		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	21.4	107		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.1	105		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.9	104		85--115
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.4	102		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	20	100		85--115
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21	105		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.6	108		85--115

LD:WG122050-3 L55923-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	103	103	0		0--20

LD:WG122050-3 L55923-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-DUSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	4740	4690	1		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	7650	7710	1		0--20
Aluminum, Total, ICP-MS	2	10	ug/L	111	110	1		0--20
Potassium, Total, ICP-MS	100	500	ug/L	3390	3470	2		0--20
Calcium, Total, ICP-MS	50	50	ug/L	28600	28400	1		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	0.413	0.418	1		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.22	0.22			0--20
Iron, Total, ICP-MS	10	50	ug/L	115	113	2		0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	39.1	39.4	1		0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.091	0.087			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.22	1.21	0		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	1.3	1.3			0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	1.8	1.8			0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.2	0.2			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
Tin, Total, ICP-MS	0.3	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	0.05	0.25	ug/L	24.1	24.3	1		0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG122050-4 L55923-2 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-DUSW Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Hardness, Calc	0.331	0.331	mg CaCO3/L	103	33.1	131	86		75--125

MS:WG122050-4 L55923-2 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-DUSW Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	102		75--125
Sodium, Total, ICP-MS	100	100	ug/L	4740	5000	9730	100		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	7650	5000	12200	92		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	111	20	130		4xRule	75--125
Potassium, Total, ICP-MS	100	500	ug/L	3390	5000	7850	89		75--125
Calcium, Total, ICP-MS	50	50	ug/L	28600	5000	32500		4xRule	75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	0.413	20	20.9	103		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.22	20	20.9	103		75--125
Iron, Total, ICP-MS	10	50	ug/L	115	5000	5210	102		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	39.1	20	58.1	95		75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.091	20	20.7	103		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	1.22	20	21.1	99		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	1.3	20	21.2	99		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	1.8	20	22.5	104		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.2	20	20.3	101		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.7	99		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.7	104		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.5	102		75--125
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	19.8	99		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	20.2	101		75--125
Barium, Total, ICP-MS	0.05	0.25	ug/L	24.1	20	44.5	102		75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.5	103		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	106		75--125

Workgroup: WG121816 Dissolved Metals

MB:WG121816-1 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-MS	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-MS	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	0.4	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	0.3	1.5	ug/L	<MDL	
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG121816-2 MB:WG121816-1 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	True Value	SB Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5580	112		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	5740	115		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	21.6	108		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	5310	106		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.1	95		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.6	103		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5150	103		85--115
Manganese, Dissolved, ICP-MS	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	21.6	108		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	20.6	103		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.2	101		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.2	106		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.9	109		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	21.5	108		85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.3	102		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.6	98		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.4	102		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.7	99		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	96		85--115

LD:WG121816-3 L55874-2 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Copper, Dissolved, ICP-MS	0.4	2	ug/L	4.41	4.32	2		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.59	2.3	11		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	0.94	0.97	3		0--20

MS:WG121816-4 L55874-2 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421879-210 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Copper, Dissolved, ICP-MS	0.4	2	ug/L	4.41	20	25.1	103		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2.59	20	23.6	105		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	0.94	20	21.9	105		75--125

LD:WG121816-5 L55930-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-VASW-2 Pkey:STD (Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	6600	6780	3		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	12300	12500	2		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	2.5	2.3			0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1080	1070	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	15600	14800	5		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.412	0.415	1		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.3	0.31			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	138	135	2		0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	278	285	3		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.059	0.062			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.5	0.48			0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.4	1.3			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	1.95	1.94	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
Tin, Dissolved, ICP-MS	0.3	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	0.05	0.25	ug/L	0.55	0.524	5		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG121816-6 L55930-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-VASW-2 Pkey:STD (Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	6600	5000	11500	97		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	12300	5000	17200	98		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	2.5	20	24.7	111		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1080	5000	6220	103		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	15600	5000	20700	103		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.412	20	19.4	95		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.3	20	20.7	102		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	138	5000	5340	104		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	278	20	289		4xRule	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.059	20	18.2	91		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.5	20	21	103		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	20.3	102		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	1.4	20	21.9	103		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	1.95	20	23.5	108		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	23	115		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.2	106		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.7	104		75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.5	102		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	22	110		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.55	20	20.4	99		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.5	108		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.7	108		75--125

Workgroup: WG121743 Herbicides

MB:WG121743-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
MCPP	0.5	1	ug/L	<MDL	
2,4-D	0.5	1	ug/L	<MDL	
Triclopyr	0.5	1	ug/L	<MDL	

SBD:WG121743-3 SB:WG121743-2 MB:WG121743-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	SBD Value	% Rec.	Qual	RPD	Qual	Lab Limit
MCPP	0.5	1	ug/L	<MDL	5	2.88	58		21--147	5	3.82	76		28		0--40
2,4-D	0.5	1	ug/L	<MDL	5	2.22	44		10--175	5	1.45	29		42	*	0--40
Triclopyr	0.5	1	ug/L	<MDL	5	2.16	43	*	59--151	5	1.56	31	*	32		0--40

Surrogate:	2,4-Dichlorophenylacetic acid	omophenol
(Lab Limits)	11--153	40--160
L55874-2	75	78
WG121743-1	63	62
WG121743-2	55	61
WG121743-3	77	77

Workgroup: WG121755 Orthophosphate Pesticides

MB:WG121755-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diazinon	0.043	0.05	ug/L	<MDL	
Malathion	0.048	0.05	ug/L	<MDL	
Chlorpyrifos	0.034	0.05	ug/L	<MDL	
Dichlobenil	0.05	0.1	ug/L	<MDL	
Prometon	0.05	0.1	ug/L	<MDL	

SBD:WG121755-3 SB:WG121755-2 MB:WG121755-1 Matrix: BLANK WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	SBD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	0.043	0.05	ug/L	<MDL	0.24	0.187	78		52--129	0.24	0.19	79		2		0--40
Malathion	0.048	0.05	ug/L	<MDL	0.24	0.198	82		25--161	0.24	0.191	80		3		0--40
Chlorpyrifos	0.034	0.05	ug/L	<MDL	0.24	0.232	97		57--127	0.24	0.213	89		9		0--40
Dichlobenil	0.05	0.1	ug/L	<MDL	0.24	0.186	78		70--98	0.24	0.193	80		4		0--40
Prometon	0.05	0.1	ug/L	<MDL	0.24	0.086	36	*	40--160	0.24	0.139	58		48	*	0--40

Surrogate: (Lab Limits)	Chlorpyrifos-D10 41--166
L55874-2	96
WG121755-1	74
WG121755-2	89
WG121755-3	83

Workgroup: WG121756 Semi Volatile Organics

MB:WG121756-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.01	0.02	ug/L	<MDL	
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	
Acenaphthylene	0.01	0.02	ug/L	<MDL	
Acenaphthene	0.01	0.02	ug/L	<MDL	
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	
Fluorene	0.01	0.02	ug/L	<MDL	
Pentachlorophenol	0.13	0.25	ug/L	<MDL	
Phenanthrene	0.01	0.02	ug/L	<MDL	
Anthracene	0.01	0.02	ug/L	<MDL	
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.026	B
Fluoranthene	0.01	0.02	ug/L	<MDL	
Pyrene	0.01	0.02	ug/L	<MDL	
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	
Chrysene	0.01	0.02	ug/L	<MDL	
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.213	B
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.1	0.2	ug/L	<MDL	
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.05	0.1	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.05	0.1	ug/L	<MDL	
Benzo(g,h,i)perylene	0.05	0.1	ug/L	<MDL	

SB:WG121756-3 MB:WG121756-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Naphthalene	0.01	0.02	ug/L	<MDL	2.5	1.52	61		32--93
2-Methylnaphthalene	0.01	0.02	ug/L	<MDL	2.5	1.6	64		25--104
Dimethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.39	96		31--119
Acenaphthylene	0.01	0.02	ug/L	<MDL	2.5	2	80		49--107
Acenaphthene	0.01	0.02	ug/L	<MDL	2.5	1.94	77		43--103
Diethyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.51	101		26--141
Fluorene	0.01	0.02	ug/L	<MDL	2.5	2.08	83		43--127
Pentachlorophenol	0.13	0.25	ug/L	<MDL	2.5	2.67	107		10--137
Phenanthrene	0.01	0.02	ug/L	<MDL	2.5	2.34	94		57--114
Anthracene	0.01	0.02	ug/L	<MDL	2.5	2.38	95		59--122
Di-N-Butyl Phthalate	0.025	0.05	ug/L	0.026	2.5	2.89	115		52--145
Fluoranthene	0.01	0.02	ug/L	<MDL	2.5	2.94	118		57--123
Pyrene	0.01	0.02	ug/L	<MDL	2.5	2.37	95		51--139
Benzyl Butyl Phthalate	0.05	0.1	ug/L	<MDL	2.5	3.07	123		49--145
Benzo(a)anthracene	0.01	0.02	ug/L	<MDL	2.5	2.63	105		67--130
Chrysene	0.01	0.02	ug/L	<MDL	2.5	2.68	107		58--114
Bis(2-Ethylhexyl)Phthalate	0.025	0.05	ug/L	0.213	2.5	3.11	116		48--128
Di-N-Octyl Phthalate	0.025	0.05	ug/L	<MDL	2.5	2.92	117		51--126
Benzo(b,j,k)fluoranthene	0.1	0.2	ug/L	<MDL	7.5	8.66	115		49--139
Benzo(a)pyrene	0.01	0.02	ug/L	<MDL	2.5	2.57	103		55--132
Indeno(1,2,3-Cd)Pyrene	0.05	0.1	ug/L	<MDL	2.5	2.03	81		53--122
Dibenzo(a,h)anthracene	0.05	0.1	ug/L	<MDL	2.5	1.98	79		47--134
Benzo(g,h,i)perylene	0.05	0.1	ug/L	<MDL	2.5	2.44	97		32--130

Surrogate: (Lab Limits)	2,4,6-Tribromo phenol 20--142	2-Fluoro biphenyl 30--128	2-Fluoro phenol 30--110	d14-Ter phenyl 51--133	d4-2-Chloro phenol 42--113	d5-Nitro benzene 48--116	15-Phenol 31--143
L55874-2	91	49	66	92	54	55	51
WG121756-1	52	79	70	109	76	83	84
WG121756-3	80	72	99	111	87	99	69

Workgroup: WG121754 WTPH-Dx

MB:WG121754-1 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:WG121754-2 MB:WG121754-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.914	91		50--150

SB:WG121754-3 MB:WG121754-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.757	76		50--150

LD:WG121754-4 L55874-4 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Diesel Range (>C12-C24)	0.19	0.19	mg/L	<MDL	<MDL			0--40
Lube Oil Range (>C24)	0.19	0.19	mg/L	0.709	0.794	11		0--40

Surrogate: (Lab Limits)	2-Fluoro biphenyl 50--150	Penta cosane 50--150
L55874-4	73	88
L55874-5	77	91
L55874-6	77	93
WG121754-1	62	89
WG121754-2	78	95
WG121754-3	83	93
WG121754-4	71	90

King County Environmental Laboratory Analytical QC Report

NPDES SWM Permit, L55874

Workgroup: WG121724 WTPH-G

MB:WG121724-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	

SB:WG121724-2 MB:WG121724-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	500	433	87		50--150

LD:WG121724-3 L55874-4 Matrix: STORM WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	4-Bromo fluoro benzene 50--150	8-Toluene 50--150
L55874-4	99	96
L55874-5	100	96
L55874-6	99	96
WG121724-1	101	97
WG121724-2	96	97
WG121724-3	99	97

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4xRule indicates no MS/MSD recovery was calculated due to the 4x rule.

Trace Metals Data Anomaly Form

Date(s) Occurred: *6/22/2012*

WG #(s): *WG121816*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L55874-2, WG121816-(3-4)*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **QA1** ☐ **QA2** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Digestion

☐ Total ☐ TCLP ☐ Other:
☒ Dissolved ☐ SEM ☐ Subcontracted:

II. Instrument

CVAA-Mercury (☐ M-7500B ☐ M-7500J) CVAF-Mercury ☐
ICP (☐ B ☐ E) ICP-MS (☐ XII-E ☒ X II-O)

III. Type of Sample/Analytical Anomaly

1 ☐ Method Blank (MB) Contamination
2 ☐ Spiked Blank (SB) Recoveries
3 ☐ Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries
4 ☐ MS/MSD Relative Percent Difference (RPD)
5 ☐ Sample/Lab Duplicate (LD) RPD
6 ☐ Laboratory Control Sample/Standard Reference Material (LCS/SRM) Recoveries
☐ Certified values developed by a method other than that which was used for the analysis.

7 ☐ Internal Standard (ISTD) Recoveries
8 ☐ Elements over range:

9 ☐ Field Blank, Equipment Blank or Field/Lab Filter Blank Contamination.
10 ☒ Holding time exceeded by: *Greater than 15 minutes.*
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container, or preservation.
13 ☐ Other

Anomaly Description: *Samples were either filtered in the field or at the King County environmental lab outside of the 15 minute holding time.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.

☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☐ Exposure Deleted
☒ Data qualified with the following flags: *H*
☐ Other

☐ Sample(s) re-prepared and re-analyzed
☐ Post Digestion Spike(s) (PDS) performed
☐ Serial Dilution(s) (SD) performed

Corrective Action Description: *Affected samples will be flagged with 'H'*

VI. Potential Effects on Data Quality (explanation mandatory):

It is unknown at this time what impact being filtered outside the 15 minute holding time has on sample results.

	Signatures	Signature Dates
Reported By: Derrick Sanders		
Reviewer: Steve Talbot		
Supervisor: *Brian Prosch*		
QA Officer: *Colin Elliott* **(For QA1 only)**		
cc: LPM: Katherine Bourbonais		

Trace Organics Data Anomaly Form

Date(s) Occurred: *09-JUL-12*

WG #(s): *WG121756*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210 NPDES Monitoring*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☐ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ HERB
☒ Other: *PAHPHTH*
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☐ J ☐ K ☐ L ☐ M ☐ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☒ Other: *7890E*

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☒ Blank Contamination
2 ☐ SB/SBD Spike Recoveries
3 ☐ MS/MSD Spike Recoveries
4 ☐ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☐ ISTD %Differences
8 ☐ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☐ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☒ Other

Anomaly Description:

1. WG121756-1 MB had reportable levels Di-N-Butyl Phthalate and Bis(2 Ethyl Hexyl) Phthalate.

18. WG121756-2 SB was not reported and removed from the workgroup.

IV. Type of Project Anomaly

- ☐ SAP/Work Plan specified MDLs not met.
- ☐ SAP/Work Plan specified QC frequency or QC type not met.
- ☐ SAP/Work Plan specified methodology not used.
- ☐ Sample exceeds regulatory and/or hazardous waste limits.
- ☐ Sample data results are unusual or inconsistent with expected results.
- ☐ Other

Anomaly Description:

V. Corrective Action Taken

- ☐ Sample(s) re-analyzed
- ☐ Sample(s) reported "AS IS"
- ☐ Sample(s) Diluted
- ☒ Data qualified with the following flags: *B*
- ☐ Other
- ☐ Sample(s) re-prepared and re-analyzed
- ☐ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description:

1. Samples with less than ten times the blank level contamination was flagged "B" for Bis-2(EH)phthalate.

18. WG121756-2 SB was contaminated during extraction. The contamination was so severe that no data or recoveries could be used for the workgroup. WG121756-2 was deleted from the workgroup and WG121756-3 was re-designated the SB.

VI. Potential Effects on Data Quality (mandatory):

1. The "B" flagged data may be biased high if the concentration in the samples was less than ten times the blank concentration.

18. The SB and surrogate recoveries were all within QC criteria to generate accuracy statistics. Since no SBD was available, the precision unknown for the workgroup.

	Signatures	Signature Dates
Reported By: Mike Doubrava	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Trace Organics Data Anomaly Form

Date(s) Occurred: *7-9-2012*

WG #(s): *121755*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA	☐ BNALL	☐ EDC	☐ EDC-LVI
☐ CLPESTPCB	☐ PEST	☐ PCB	☒ OPPEST
☐ VOA-GCMS	☐ NWTPH-GX	☐ NWTPH-DX	☐ NWTPH-HCID
☐ BUTYL TIN	☐ HERB		
☐ Other:			
☐ Subcontracted:			

II. Instrument

GC/ICP/MS:	☐ P					
GC/MS:	☐ A	☐ J	☐ K	☐ L	☐ M	☒ N
GC ECD:	☐ F	☐ B	☐ C			
GC FID:	☐ I	☐ D	☐ Q TCD/ECD			
Extraction/Cleanup:	☐ PFE		☐ GPC			
	☐ Other:					

III. Type of Sample/Analytical Anomaly

☐ Values Outside of Control Limits:

1 ☐ Blank Contamination	8 ☐ Surrogate Spike Recoveries
2 ☒ SB/SBD Spike Recoveries	9 ☒ SB/SBD RPD
3 ☐ MS/MSD Spike Recoveries	10 ☐ MS/MSD RPD
4 ☐ LCS/SRM Recoveries	11 ☐ Sample/LD RPD
5 ☐ Initial Calibration	12 ☐ Continuing Calibration Checks
6 ☐ Performance Checks	13 ☐ Tuning Criteria
7 ☐ ISTD %Differences	14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description: *2) The recovery of Prometon is below the established QC limit in the SB.*
9) The RPD for Prometon exceeds the 40 % QC limit .

IV. Type of Project Anomaly

- ☐ SAP/Work Plan specified MDLs not met.
- ☐ SAP/Work Plan specified QC frequency or QC type not met.
- ☐ SAP/Work Plan specified methodology not used.
- ☐ Sample exceeds regulatory and/or hazardous waste limits.
- ☐ Sample data results are unusual or inconsistent with expected results.
- ☐ Other

Anomaly Description:

V. Corrective Action Taken

- ☐ Sample(s) re-analyzed
- ☐ Sample(s) re-prepared and re-analyzed
- ☒ Sample(s) reported "AS IS"
- ☒ Asterisk(s) applied to QC Report outlier(s)
- ☐ Sample(s) Diluted
- ☒ Data qualified with the following flags: *JG, **
- ☐ Other

Corrective Action Description: *2) The analyte was flagged accordingly on the QC summary.*
9) The analyte was flagged accordingly on the QC summary report.

VI. Potential Effects on Data Quality (mandatory):

2) The quantitation bias for Prometon is unknown given that the SBD is within established QC recovery limits.
9) The high RPD suggests a greater variability in the quantitation result for Prometon. All associated samples and were therefore flagged "JG" due to the low recovery in the SB.

	Signatures	Signature Dates
Reported By: Felix Zboralski	_____	_____
Reviewer: Michael Muramoto	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		

Conventionals Data Anomaly Form

Date(s) Occurred: *06/30/12*

WG #(s): *WG121778*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *WG121778-2, and L55874-2*

Project #(s): *421879-210*

Matrix: ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☒ Demands: *Biological Oxygen Demand (BOD)*
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

II. Instrument

Analytical Balance:	☐ Mettler Toledo XP205	☐ Ohaus Voyager Pro
	☐ Mettler Toledo AT201	
Autoanalyzer:	☐ Astoria2+2 (freshwater system)	☐ Astoria2+2 (saltwater system)
	☐ Astoria2 (total nutrients system)	☐ Astoria2 (cyanide system)
Autotitrator:	☐ Brinkmann Tiamo 855 Autotitrator with integrated 712 Conductometer	
Dissolved Oxygen:	☒ YSI 5100	☐ Brinkmann Bottletop Buret 25
Fluorometer:	☐ Turner 10-AU	
Ion Chromatography:	☐ Dionex 120	
pH Probe:	☐ Metrohm 736GP	☐ Accument XL60
Salinometer:	☐ Portosal 8410A	
Spectrophotometer:	☐ Hitachi U3000 UV/VIS	☐ Hitachi U3900 UV/VIS
	☐ Hach DR 890	
TOC Analyzer:	☐ OI 1020A	☐ OI TOC Analyzer
Turbidimeter:	☐ Hach 2100AN	
Other:	☐ Description:	

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☐ Initial Calibration	4 ☐ MB Anomaly	7 ☐ MS RPD
2 ☐ Continuing Calibration Checks	5 ☐ LCS/SRM Recoveries	8 ☐ Sample/LD RPD
3 ☒ SB Spike Recoveries	6 ☐ Sample/LD/LT RSD	9 ☐ MS Recoveries

10 ☐ Holding time exceeded by:
11 ☐ Insufficient sample amount.
12 ☐ Inappropriate storage, container or preservation.
☐ Other

Anomaly Description: *The BOD spike blank (WG121778-2) recovery was low at 77%, which was outside the method acceptance limits of 80 to 120%.*

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed ☐ Sample(s) re-prepared and re-analyzed
☒ Sample(s) reported "AS IS"
☒ Data qualified with the following flags: *"TA"*
☒ Text added: *"Low spike blank recovery. Result may be biased low."*
☐ Other

Corrective Action Description: *The holding time for BOD samples is 48 hours, however, results for BOD are determined five days after set-up. Thus results are not available soon enough to re-analyze within holding time. It is standard procedure to prepare three aliquots for each BOD sample. One aliquot is used to determine the DO at the time of the initial preparation and then it is discarded. The remaining two aliquots are incubated for the normal five day period and then their DO content is determined. For the SB in question, the DO of these two final aliquots were re-read confirming the initial result.*

The BOD result for WG121778-2 (SB1 120625) has been qualified with an "" on the QC Report for failing to meet the 80 to 120% acceptance limits established for this method.*

Because of the low spike blank recovery, sample L55874-2 was TA qualified with the textvalue "Low spike blank recovery. Result may be biased low."

VI. Potential Effects on Data Quality (explanation mandatory): *With low spike blank recovery, the BOD result for sample L55874-2 may be biased low. BOD resuls for this sample should be used with caution.*

	Signatures	Signature Dates
Reported By: *Duc Nguyen*	_____	_____
Reviewer: *Debbie Osada*	_____	_____
Supervisor: *Brian Prosch*	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM: *Fritz Grothkopp*		

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

August 24, 2012

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L55968-3, 4, L55969-2 collected July 20, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on July 20, 2012. The sample was analyzed in the Trace Metals, Conventionals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15011 was prepared and sent via e-mail on August 24, 2012.

Sample Collection:
Samples L55968-1, 2 and L55969-1 did not meet the required criteria for a flow paced composite sample and were discarded.

Conventionals:
There were no conventionals samples in this set.

Trace Metals:
There were no trace metals samples in this set.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Microbiology:
The data have passed all internal QA/QC checks for accuracy and completeness and may be used without qualification.

Subcontract Parameters: MBAS
There were no subcontract samples in this set.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

	Project:	421879-210					Project:	421879-210					Project:	421879-210									
	Locator:	FCSW01					Locator:	FCSW02					Locator:	RSW1UP									
	Descrip:	FALL CITY HD COMME					Descrip:	FALL CITY HD RESID					Descrip:	148TH AVE SE UPSTR									
	Sample:	L55968-3					Sample:	L55968-4					Sample:	L55969-2									
	Matrix:	LG STORM WTR					Matrix:	LG STORM WTR					Matrix:	LG STORM WTR									
	ColDate:	7/20/12 13:45					ColDate:	7/20/12 13:05					ColDate:	7/20/12 9:22									
	TimeSpan:						TimeSpan:						TimeSpan:										
	TotalSolid:						TotalSolid:						TotalSolid:										
	ClientLoc:						ClientLoc:						ClientLoc:										
	SampDepth:						SampDepth:						SampDepth:										
	WET Weight Basis						**WET Weight Basis**						**WET Weight Basis**										
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**		**Value**	**Qual**	**MDL**	**RDL**	**Units**						
MC SM 9222D 20TH																							
Fecal Coliform	800				CFU/100ml		33000				CFU/100ml		3400				CFU/100ml						
OR WDOE NWTPH-DX																							
Diesel Range (>C12-C24)	0.256	TA	0.19	0.19	mg/L			<MDL	0.19	0.19	mg/L			<MDL	0.19	0.19	mg/L						
Lube Oil Range (>C24)	0.547		0.19	0.19	mg/L			<MDL	0.19	0.19	mg/L			<MDL	0.19	0.19	mg/L						
OR WDOE NWTPH-GX																							
Gasoline Range (C7-C12)		<MDL	100	250	ug/L			<MDL	100	250	ug/L			<MDL	100	250	ug/L						

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: LIQUID
User select: WET Weight Basis

LOCATOR	PROJECT	SAMPLE	Fecal Coliform	Diesel Range (>C12-C24)	Lube Oil Range (>C24)
			CFU/100ml	mg/L	mg/L
FCSW01	421879-210	L55968-3	800	0.256	0.547
FCSW02	421879-210	L55968-4	33000		
RSW1UP	421879-210	L55969-2	3400		
* Not converted to dry weight basis					

If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code

Login: P55968 NPDES Stormwater Permit Monitoring - Fall City Personnel: J. Powell

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by J. Powell	Date 7/20/2012	Time 1453
Received by [illegible]	Date 7/20/12	Time 1453
Sample Numbers L55968 1-5		[All]

Sample Number	P55968-1	P55968-2	P55968-3
QC Link			
Locator	FCSW01	FCSW02	FCSW01
Short Loc Desc	NPDES-SW1	NPDES-SW2	NPDES-SW1
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	FALL CITY HD COMMERCIAL
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	comp, HD Commercial	comp, HD Residential	grab, HD Commercial
Start Date/Time	20-JUL-12	20-JUL-12	20-JUL-12 1345
End Date/Time	20-JUL-12	20-JUL-12	
Time Span			
Sample Depth			
Dept, Matrix, Prod			
	3 LG BOD	3 LG BOD	5 LG FC-MF
	3 LG CL	3 LG CL	7 LG WTPH-DX
	3 LG COND	3 LG COND	7 LG WTPH-G
	3 LG MBAS	3 LG MBAS	
	3 LG NO23	3 LG NO23	
	3 LG ORTHOP	3 LG ORTHOP	
	3 LG TKN	3 LG TKN	
	3 LG TOTP	3 LG TOTP	
	3 LG TSS	3 LG TSS	
	3 LG TURB	3 LG TURB	
	6 LG CA-ICPMS	6 LG CA-ICPMS	
	6 LG CD-ICPMS	6 LG CD-ICPMS	
	6 LG CD-ICPMS, DISS	6 LG CD-ICPMS, DISS	
	6 LG CU-ICPMS	6 LG CU-ICPMS	
	6 LG CU-ICPMS, DISS	6 LG CU-ICPMS, DISS	
	6 LG HG-CVAA, DISS-M	6 LG ICPMS-HARDNESS	
	6 LG HG-CVAA-M	6 LG MG-ICPMS	
	6 LG ICPMS-HARDNESS	6 LG PB-ICPMS	
	6 LG MG-ICPMS	6 LG PB-ICPMS, DISS	
	6 LG PB-ICPMS	6 LG ZN-ICPMS	
	6 LG PB-ICPMS, DISS	6 LG ZN-ICPMS, DISS	
	6 LG ZN-ICPMS	7 LG HERB-NPDES	
	6 LG ZN-ICPMS, DISS	7 LG OPPEST-NPDES	
	7 LG HERB-NPDES	7 LG PAHPHTH-SUR	
	7 LG OPPEST-NPDES		
	7 LG PAHPHTH-SUR		

deleted deleted

Login: P55968 NPDES Stormwater Permit Monitoring - Fall City Personnel: _____

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
Jerad Powers	7/20/12	1453
Received by	*Date*	*Time*
[illegible]	7/20/12	1453
Sample Numbers		*(All)*
L55968 3 EA		

Sample Number	P55968-4	P55968-5	
QC Link			
Locator	FCSW02	FFBLANK	
Short Loc Desc	NPDES-SW2	FFBLANK	
Locator Desc	FALL CITY HD RESIDENTIAL	FIELD FILTER BLANK	
Site	KING COUNTY	METRO	
Comments	grab, HD Residential	filter blank, orthop	
Start Date/Time	20-JUL-12 / 1505	20-JUL-12 / 1540	
End Date/Time			
Time Span			
Sample Depth			
Dept, Matrix, Prod	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP	

Deleted

Login: P55969 NPDES Stormwater Permit Monitoring - Renton Personnel: Crawford

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by	*Date* 7-20-12	*Time* 12:40
Received by	*Date* 7/20/12	*Time* 1240
Sample Numbers 55969-2		*[All]*

Sample Number	P55969-1	P55969-2	P55969-3
QC Link			
Locator	RSW1UP	RSW1UP	FFBLANK
Short Loc Desc	RSW1UP	RSW1UP	FFBLANK
Locator Desc	148TH AVE SE UPSTREAM	148TH AVE SE UPSTREAM	FIELD FILTER BLANK
Site	KING COUNTY	KING COUNTY	METRO
Comments	comp, LD Rural/Residential	grab, LD Rural/Residential	filter blank, orthop
Start Date/Time		7-20-12 09:22	
End Date/Time		09:22	
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 LG BOD 3 LG CL 3 LG COND 3 LG MBAS 3 LG NO23 3 LG ORTHOP 3 LG TKN 3 LG TOTP 3 LG TSS 3 LG TURB 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 HERB-NPDES 7 LG OPPEST-NPDES 7 LG PAHPHTH-SUR	5 LG FC-MF 7 LG WTPH-DX 7 LG WTPH-G	3 LN NO23 3 LN ORTHOP

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L55968, L55969

WG122113 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55969-2	421879-210	NPDES SW Monitoring	MCFC-MF	STORM WTR	7/20/2012 9:22	7/20/2012 14:20	7/21/2012 13:15	WG122113-1,-2,-3,-4	
WG122113-1	PC		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-2	NC		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-3	BF		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-4	AF		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L55968, L55969

WG122116 Fecal coliform

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55968-3	421879-210	NPDES SW Monitoring	MCFC-MF	STORM WTR	7/20/2012 13:45	7/20/2012 15:10	7/21/2012 13:15	WG122113-1,-2,-3,-4,WG122116-1	
L55968-4	421879-210		MCFC-MF	STORM WTR	7/20/2012 13:05	7/20/2012 15:10	7/21/2012 13:15		
WG122113-1	PC		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-2	NC		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-3	BF		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122113-4	AF		MCFC-MF	BLANK WTR		7/20/2012 14:20	7/21/2012 13:15		QC-PERFORMED:20-JUL-12
WG122116-1	LD		MCFC-MF	STORM WTR		7/20/2012 15:10	7/21/2012 13:15		L55968-3

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L55968, L55969

WG122151 WTPH-Dx

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55968-3	421879-210	NPDES SW Monitoring	ORWTPH-DX	STORM WTR	7/20/2012 13:45	7/24/2012 8:05	8/2/2012 15:34	WG122151-1,-2,-3,-4	
L55968-4	421879-210		ORWTPH-DX	STORM WTR	7/20/2012 13:05	7/24/2012 8:05	8/2/2012 15:57		
L55969-2	421879-210		ORWTPH-DX	STORM WTR	7/20/2012 9:22	7/24/2012 8:05	8/2/2012 16:21		
WG122151-1	MB		ORWTPH-DX	BLANK WTR		7/24/2012 8:05	8/2/2012 14:00		MB120724
WG122151-2	SB		ORWTPH-DX	BLANK WTR		7/24/2012 8:05	8/2/2012 14:24		WG122151-1 SB-MO
WG122151-3	SB		ORWTPH-DX	BLANK WTR		7/24/2012 8:05	8/2/2012 14:47		WG122151-1 SB-DSL
WG122151-4	LD		ORWTPH-DX	STORM WTR		7/24/2012 8:05	8/2/2012 15:10		L55968-3

King County Environmental Laboratory Batch Report

NPDES SW Permit, SWM, L55968, L55969

WG122193 WTPH-G

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L55968-3	421879-210	NPDES SW Monitoring	ORWTPH-G	STORM WTR	7/20/2012 13:45	7/25/2012 14:45	7/25/2012 14:45	WG122193-1,-2,-3	
L55968-4	421879-210		ORWTPH-G	STORM WTR	7/20/2012 13:05	7/25/2012 14:16	7/25/2012 14:16		
L55969-2	421879-210		ORWTPH-G	STORM WTR	7/20/2012 9:22	7/25/2012 15:15	7/25/2012 15:15		
WG122193-1	MB		ORWTPH-G	BLANK WTR		7/25/2012 12:18	7/25/2012 12:18		MB120725
WG122193-2	SB		ORWTPH-G	BLANK WTR		7/25/2012 12:47	7/25/2012 12:47		WG122193-1
WG122193-3	LD		ORWTPH-G	STORM WTR		7/25/2012 13:46	7/25/2012 13:46		L55968-4

Workgroup: WG122113 Fecal coliform

PC:WG122113-1 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:WG122113-2 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:WG122113-3 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			CFU/100ml	0	

AF:WG122113-4 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			CFU/100ml	0	

Workgroup: WG122116 Fecal coliform

LD:WG122116-1 L55968-3 Matrix: STORM WTR Listtype:MCFC-MF Method:SM 9222D 20TH Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	Rlog	Precision	Qual
Fecal Coliform			CFU/100ml	800	500	0.2	0.37	N10

PC:WG122113-1 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:WG122113-2 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:WG122113-3 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			CFU/100ml	0	

AF:WG122113-4 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			CFU/100ml	0	

Workgroup: WG122151 WTPH-Dx

MB:WG122151-1 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:WG122151-2 MB:WG122151-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Lube Oil Range (>C24)	0.2	0.2	mg/L	<MDL	1	0.906	91		50--150

SB:WG122151-3 MB:WG122151-1 Matrix: BLANK WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Diesel Range (>C12-C24)	0.2	0.2	mg/L	<MDL	1	0.807	81		50--150

LD:WG122151-4 L55968-3 Matrix: STORM WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Diesel Range (>C12-C24)	0.19	0.19	mg/L	0.256	0.253	1		0--40
Lube Oil Range (>C24)	0.19	0.19	mg/L	0.547	0.533	3		0--40

Surrogate: (Lab Limits)	2-Fluoro biphenyl 50--150	Penta cosane 50--150
L55968-3	80	95
L55968-4	82	95
L55969-2	83	96
WG122151-1	67	94
WG122151-2	71	95
WG122151-3	85	94
WG122151-4	80	97

Workgroup: WG122193 WTPH-G

MB:WG122193-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	

SB:WG122193-2 MB:WG122193-1 Matrix: BLANK WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	500	505	101		50--150

LD:WG122193-3 L55968-4 Matrix: STORM WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Gasoline Range (C7-C12)	100	250	ug/L	<MDL	<MDL			0--40

Surrogate: (Lab Limits)	4-Bromo fluoro benzene 50--150	I8-Toluene 50--150
L55968-3	107	103
L55968-4	107	103
L55969-2	108	103
WG122193-1	105	101
WG122193-2	102	101
WG122193-3	108	102

King County

Water and Land Resources Division
Environmental Laboratory
Department of Natural Resources and Parks
322 West Ewing Street
Seattle, WA 98119-1507
206-684-2300 Fax 206-684-2395
TTY Relay: 711

October 16, 2012

TO: Dean Wilson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Annual Sediments, Samples L56268-1, 2, 3 collected August 7, 2012

Attached is the comprehensive and matrix report for the freshwater sediment samples delivered to the laboratory on August 7, 2012. The samples were analyzed in the Conventionals, Trace Metals and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15060 was prepared and sent via e-mail on October 15, 2012.

Conventionals:
The data have passed all internal QA/QC checks for accuracy and completeness.

Trace Metals:
The data have passed all internal QA/QC checks for accuracy and completeness.

Trace Organics:
The data have passed all internal QA/QC checks for accuracy and completeness with the following exceptions.

Pyrene, bis (2-ethylhexyl) phthalate, di-n-octyl phthalate, dibenzo(a,h)anthracene and benzo(g,h,i)perylene were detected in the method blank (MB) for BNASMS analysis. The results have been flagged with a "B" qualifier in the QC report. Samples with less than 10 times the concentration of these analytes were also flagged with a "B" qualifier.

2,4-Dimethyl phenol recovery was below the lower control limit in the low spike blank (SB) for BNASMS analysis. The result was flagged with a "*" in the QC report. No other corrective action was taken.

Bis (2-ethylhexyl) phthalate recovery was outside the upper control limit for in the matrix spike (MS) for BNASMS analysis. Butyl benzyl phthalate recovery was outside the upper control limit in the matrix spike duplicate (MSD) for BNASMS analysis. Bis (2-ethylhexyl) phthalate RPD was outside the upper control limit in the MS/MSD for BNASMS analysis. The results were flagged with an "*" in the QC report. The results for bis (2-ethylhexyl) phthalate have been flagged in MS sample (L56268-1) with a "J" qualifier to indicate estimated results.

Dibenzo(a,h)anthracene recovery in the SRM duplicate (SRMD) was outside the upper control range. The result have been flagged with an "*" in the QC report. No other corrective action was taken.

If you have any questions or need additional information, please call me at 684-2327.

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW02	RSW1UP
Descrip:	FALL CITY HD COMME	FALL CITY HD RESID	148TH AVE SE UPSTR
Sample:	L56268-1	L56268-2	L56268-3
Matrix:	SE FRSHWTRSED	SE FRSHWTRSED	SE FRSHWTRSED
ColDate:	8/7/12 13:40	8/7/12 12:45	8/7/12 15:00
TimeSpan:			
TotalSolid:	56.4	25.2	70.8
ClientLoc:			
SampDepth:			
	DRY Weight Basis	**DRY Weight Basis**	**DRY Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
CV ASTM D422															
Clay*	5.9		0.8	1.7	%	12.7		1.8	3.6	%	10.4		0.7	1.4	%
Fines*	19.3		0.8	1.7	%	39.9		1.8	3.6	%	52.2		0.7	1.4	%
Gravel*	15		0.2	1.7	%	14.8		0.4	3.6	%	12		0.1	1.4	%
p+0.00*	11.6		0.2	1.7	%	8.4		0.4	3.6	%	3.1		0.1	1.4	%
p+1.00*	11.5		0.2	1.7	%	7.2		0.4	3.6	%	3		0.1	1.4	%
p+10.0(equal/more than)*	5		0.8	1.7	%	10.9		1.8	3.6	%	7		0.7	1.4	%
p+2.00*	13		0.2	1.7	%	7.7		0.4	3.6	%	6.5		0.1	1.4	%
p+3.00*	15.8		0.2	1.7	%	9.1		0.4	3.6	%	10.4		0.1	1.4	%
p+4.00*	10.5		0.2	1.7	%	12		0.4	3.6	%	13.2		0.1	1.4	%
p+5.00*	5		0.8	1.7	%	14.5		1.8	3.6	%	18.1		0.7	1.4	%
p+6.00*	2.5		0.8	1.7	%	3.6	RDL	1.8	3.6	%	13.2		0.7	1.4	%
p+7.00*	3.3		0.8	1.7	%	7.2		1.8	3.6	%	7		0.7	1.4	%
p+8.00*	2.5		0.8	1.7	%	1.8	<RDL	1.8	3.6	%	3.5		0.7	1.4	%
p+9.00*	0.8	<RDL	0.8	1.7	%	1.8	<RDL	1.8	3.6	%	3.5		0.7	1.4	%
p-1.00*	10.7		0.2	1.7	%	5.4		0.4	3.6	%	5.2		0.1	1.4	%
p-2.00(less than)*	2.5		0.2	1.7	%	8.6		0.4	3.6	%	4.8		0.1	1.4	%
p-2.00*	1.8		0.2	1.7	%	0.8	<RDL	0.4	3.6	%	1.9		0.1	1.4	%
Sand*	62.3		0.2	1.7	%	44.4		0.4	3.6	%	36.2		0.1	1.4	%
Silt*	13.4		0.8	1.7	%	27.2		1.8	3.6	%	41.8		0.7	1.4	%
CV SM2540-G															
Total Solids*	56.4		0.005	0.01	%	25.2		0.005	0.01	%	70.8		0.005	0.01	%
CV SW846 9060-PSEP96															
Total Organic Carbon	52300		5500	11100	mg/Kg	144000		11000	22400	mg/Kg	78100		9300	18500	mg/Kg
MT SW846 3050B*SW846 6010C															
Cadmium, Total, ICP	0.35	<RDL	0.17	0.871	mg/Kg	0.99	<RDL	0.4	2	mg/Kg	0.52	<RDL	0.14	0.71	mg/Kg
Copper, Total, ICP	49.1		0.35	1.74	mg/Kg	60.7		0.79	4.01	mg/Kg	30.2		0.28	1.43	mg/Kg
Lead, Total, ICP	56.2		1.7	8.71	mg/Kg	360		4	20	mg/Kg	27.1		1.4	7.1	mg/Kg
Zinc, Total, ICP	229		0.44	2.18	mg/Kg	185		0.99	5	mg/Kg	116		0.35	1.78	mg/Kg
MT SW846 7471B															
Mercury, Total, CVAA	0.043	<RDL	0.0087	0.0871	mg/Kg										
OR SW846 3545A*SW846 8270D SIM															
Chlorpyrifos		<MDL	28	56.7	ug/Kg		<MDL	63	127	ug/Kg		<MDL	23	45.2	ug/Kg
Diazinon		<MDL	17	28.4	ug/Kg		<MDL	38	63.5	ug/Kg		<MDL	14	22.6	ug/Kg
Malathion		<MDL	46	85.1	ug/Kg		<MDL	100	190	ug/Kg		<MDL	37	67.8	ug/Kg
OR SW846 3550B*SW846 8082A															
Aroclor 1016		<MDL	3.5	14.2	ug/Kg										
Aroclor 1221		<MDL	7.1	14.2	ug/Kg										
Aroclor 1232		<MDL	7.1	14.2	ug/Kg										
Aroclor 1242		<MDL	3.5	14.2	ug/Kg										
Aroclor 1248		<MDL	3.5	14.2	ug/Kg										

King County Environmental Lab Analytical Report

	Project:	421879-210				Project:	421879-210				Project:	421879-210			
	Locator:	FCSW01				Locator:	FCSW02				Locator:	RSW1UP			
	Descrip:	FALL CITY HD COMME				Descrip:	FALL CITY HD RESID				Descrip:	148TH AVE SE UPSTR			
	Sample:	L56268-1				Sample:	L56268-2				Sample:	L56268-3			
	Matrix:	SE FRSHWTRSED				Matrix:	SE FRSHWTRSED				Matrix:	SE FRSHWTRSED			
	ColDate:	8/7/12 13:40				ColDate:	8/7/12 12:45				ColDate:	8/7/12 15:00			
	TimeSpan:					TimeSpan:					TimeSpan:				
	TotalSolid:	56.4				TotalSolid:	25.2				TotalSolid:	70.8			
	ClientLoc:					ClientLoc:					ClientLoc:				
	SampDepth:					SampDepth:					SampDepth:				
	DRY Weight Basis					**DRY Weight Basis**					**DRY Weight Basis**				
Parameters	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**	**Value**	**Qual**	**MDL**	**RDL**	**Units**
Aroclor 1254	9.6	<RDL	3.5	14.2	ug/Kg										
Aroclor 1260		<MDL	3.5	14.2	ug/Kg										
Total Aroclors	9.6	<RDL	3.5	14.2	ug/Kg										
OR SW846 3550B*SW846 8270D															
1,2,4-Trichlorobenzene		<MDL	0.94	1.9	ug/Kg		<MDL	1.3	2.54	ug/Kg		<MDL	0.75	1.51	ug/Kg
1,2-Dichlorobenzene		<MDL	9.45	9.45	ug/Kg		<MDL	12.7	12.7	ug/Kg		<MDL	7.53	7.53	ug/Kg
1,4-Dichlorobenzene		<MDL	14.2	14.2	ug/Kg		<MDL	19	19	ug/Kg		<MDL	11.3	11.3	ug/Kg
2,4-Dimethylphenol		<MDL	9.4	19	ug/Kg		<MDL	13	25.4	ug/Kg		<MDL	7.5	15.1	ug/Kg
2-Methylnaphthalene	42.7		9.4	19	ug/Kg	19	<RDL	13	25.4	ug/Kg		<MDL	7.5	15.1	ug/Kg
2-Methylphenol	20.6		9.4	19	ug/Kg	58.3		13	25.4	ug/Kg		<MDL	7.5	15.1	ug/Kg
3-,4-Methylphenol	605		48	94.5	ug/Kg	24100		320	635	ug/Kg		<MDL	38	75.3	ug/Kg
Acenaphthene		<MDL	9.4	19	ug/Kg	37.4		13	25.4	ug/Kg	33.8		7.5	15.1	ug/Kg
Acenaphthylene		<MDL	9.4	19	ug/Kg		<MDL	13	25.4	ug/Kg		<MDL	7.5	15.1	ug/Kg
Anthracene	17	<RDL	9.4	19	ug/Kg	131		13	25.4	ug/Kg	182		7.5	15.1	ug/Kg
Benzo(a)anthracene	102		9.4	19	ug/Kg	1110		13	25.4	ug/Kg	4350		38	75.3	ug/Kg
Benzo(a)pyrene	316		48	94.5	ug/Kg	1520		63	127	ug/Kg	5540		7.5	15.1	ug/Kg
Benzo(b,j,k)fluoranthene	177		48	94.5	ug/Kg	3060		63	127	ug/Kg	14100		38	75.3	ug/Kg
Benzo(g,h,i)perylene	173		48	94.5	ug/Kg	980		63	127	ug/Kg	2810		7.5	15.1	ug/Kg
Benzoic Acid	113	<RDL	94.5	473	ug/Kg	394	<RDL	127	635	ug/Kg	83.2	<RDL	75.3	377	ug/Kg
Benzyl Alcohol		<MDL	23.6	23.6	ug/Kg		<MDL	31.7	31.7	ug/Kg		<MDL	18.8	18.8	ug/Kg
Benzyl Butyl Phthalate	468		14.2	14.2	ug/Kg		<MDL	19	19	ug/Kg	125		11.3	11.3	ug/Kg
Bis(2-Ethylhexyl)Phthalate	11600	J	94	190	ug/Kg	6390		25	50.8	ug/Kg	487		16	30.1	ug/Kg
Chrysene	87.9		9.4	19	ug/Kg	1650		13	25.4	ug/Kg	7460		38	75.3	ug/Kg
Dibenzo(a,h)anthracene	92	<RDL,B3	48	94.5	ug/Kg	291		63	127	ug/Kg	669		7.5	15.1	ug/Kg
Dibenzofuran		<MDL	9.4	19	ug/Kg	21	<RDL	13	25.4	ug/Kg	16.5		7.5	15.1	ug/Kg
Diethyl Phthalate		<MDL	20	37.8	ug/Kg		<MDL	25	50.8	ug/Kg		<MDL	16	30.1	ug/Kg
Dimethyl Phthalate		<MDL	19	19	ug/Kg		<MDL	25.4	25.4	ug/Kg		<MDL	15.1	15.1	ug/Kg
Di-N-Butyl Phthalate	44.7		20	37.8	ug/Kg		<MDL	25	50.8	ug/Kg	16	<RDL	16	30.1	ug/Kg
Di-N-Octyl Phthalate	1450		94.5	94.5	ug/Kg		<MDL	127	127	ug/Kg		<MDL	15.1	15.1	ug/Kg
Fluoranthene	160		9.4	19	ug/Kg	2560		13	25.4	ug/Kg	13600		38	75.3	ug/Kg
Fluorene		<MDL	9.4	19	ug/Kg	52.4		13	25.4	ug/Kg	40.8		7.5	15.1	ug/Kg
Hexachlorobenzene		<MDL	0.94	1.9	ug/Kg	35.5		1.3	2.54	ug/Kg		<MDL	0.75	1.51	ug/Kg
Hexachlorobutadiene		<MDL	4.8	9.45	ug/Kg		<MDL	6.3	12.7	ug/Kg		<MDL	3.8	7.53	ug/Kg
Indeno(1,2,3-Cd)Pyrene	73	<RDL	48	94.5	ug/Kg	865		63	127	ug/Kg	2700		7.5	15.1	ug/Kg
Naphthalene	17	<RDL	9.4	19	ug/Kg	25	<RDL	13	25.4	ug/Kg		<MDL	7.5	15.1	ug/Kg
N-Nitrosodiphenylamine		<MDL	23.6	23.6	ug/Kg		<MDL	31.7	31.7	ug/Kg		<MDL	18.8	18.8	ug/Kg
Pentachlorophenol	371		142	142	ug/Kg	413		190	190	ug/Kg	258		113	113	ug/Kg
Phenanthrene	125		9.4	19	ug/Kg	1290		13	25.4	ug/Kg	2560		7.5	15.1	ug/Kg
Phenol		<MDL	48	142	ug/Kg	452		63	190	ug/Kg		<MDL	38	113	ug/Kg
Pyrene	411		9.4	19	ug/Kg	3150		13	25.4	ug/Kg	13700		38	75.3	ug/Kg
Total HPAHS	1590		9.4	19	ug/Kg	15200		13	25.4	ug/Kg	64900		7.5	15.1	ug/Kg

King County Environmental Lab Analytical Report

Project:	421879-210	421879-210	421879-210
Locator:	FCSW01	FCSW02	RSW1UP
Descrip:	FALL CITY HD COMME	FALL CITY HD RESID	148TH AVE SE UPSTR
Sample:	L56268-1	L56268-2	L56268-3
Matrix:	SE FRSHWTRSED	SE FRSHWTRSED	SE FRSHWTRSED
ColDate:	8/7/12 13:40	8/7/12 12:45	8/7/12 15:00
TimeSpan:			
TotalSolid:	56.4	25.2	70.8
ClientLoc:			
SampDepth:			
	DRY Weight Basis	**DRY Weight Basis**	**DRY Weight Basis**

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
Total LPAHs	159		9.4	19	ug/Kg	1530		13	25.4	ug/Kg	2810		7.5	15.1	ug/Kg
* Not converted to dry weight basis															

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: SOLID/TISSUE
User select: DRY Weight Basis

LOCATOR	PROJECT	SAMPLE	*Clay	*Fines	*Gravel	*Sand	*Silt	*p+0.00	*p+1.00	*p+10.0(equal/more than)	*p+2.00	*p+3.00	*p+4.00	*p+5.00	*p+6.00	*p+7.00	*p+8.00	*p+9.00	*p-1.00	*p-2.00	*p-2.00(less than)	*Total Solids	Total Organic Carbon	Cadmium, Total, ICP	Copper, Total, ICP	Lead, Total, ICP	Zinc, Total, ICP	Mercury, Total, CVAA
			%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
FCSW01	421879-210	L56268-1	5.9	19.3	15	62.3	13.4	11.6	11.5	5	13	15.8	10.5	5	2.5	3.3	2.5	0.8	10.7	1.8	2.5	56.4	52300	0.35	49.1	56.2	229	0.043
FCSW02	421879-210	L56268-2	12.7	39.9	14.8	44.4	27.2	8.4	7.2	10.9	7.7	9.1	12	14.5	3.6	7.2	1.8	1.8	5.4	0.8	8.6	25.2	144000	0.99	60.7	360	185	
RSW1UP	421879-210	L56268-3	10.4	52.2	12	36.2	41.8	3.1	3	7	6.5	10.4	13.2	18.1	13.2	7	3.5	3.5	5.2	1.9	4.8	70.8	78100	0.52	30.2	27.1	116	

* Not converted to dry weight basis

If a parameter/analyze appears twice in the column header, it implies that they were analyzed by two different method code

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: SOLID/TISSUE
User select: DRY Weight Basis

LOCATOR	PROJECT	SAMPLE	Aroclor 1254	Total Aroclors	2-Methylnaphthalene	2-Methylphenol	3-,4-Methylphenol	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b,j,k)fluoranthene	Benzo(g,h,i)perylene	Benzoic Acid	Benzyl Butyl Phthalate	Bis(2-Ethylhexyl)Phthalate	Chrysene	Di-N-Butyl Phthalate	Di-N-Octyl Phthalate	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene
			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
FCSW01	421879-210	L56268-1	9.6	9.6	42.7	20.6	605		17	102	316	177	173	113	468	11600	87.9	44.7	1450	92		160
FCSW02	421879-210	L56268-2			19	58.3	24100	37.4	131	1110	1520	3060	980	394		6390	1650			291	21	2560
RSW1UP	421879-210	L56268-3						33.8	182	4350	5540	14100	2810	83.2	125	487	7460	16		669	16.5	13600
* Not converted to dry weight basis																						
If a parameter/analyze appears twice in the colur																						

King County Environmental Lab Analytical MATRIX Report

Owner: SEEDPAK
Matrix Class: SOLID/TISSUE
User select: DRY Weight Basis

LOCATOR	PROJECT	SAMPLE	Fluorene	Hexachlorobenzene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Total HPAHS	Total LPAHs
			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
FCSW01	421879-210	L56268-1			73	17	371	125		411	1590	159
FCSW02	421879-210	L56268-2	52.4	35.5	865	25	413	1290	452	3150	15200	1530
RSW1UP	421879-210	L56268-3	40.8		2700		258	2560		13700	64900	2810
* Not converted to dry weight basis												
If a parameter/analyze appears twice in the colur												

King County Environmental Lab Analytical Text Value Report

Project	Sample	Parameter	Textvalue
421879-210	L56268-1	Benzo(a)pyrene	D:5*27-AUG-12 19:06
421879-210	L56268-1	Benzo(b,j,k)fluoranthene	D:5*27-AUG-12 19:06
421879-210	L56268-1	Benzo(g,h,i)perylene	D:5*27-AUG-12 19:06
421879-210	L56268-1	Bis(2-Ethylhexyl)Phthalate	D:5*27-AUG-12 19:06
421879-210	L56268-1	Di-N-Octyl Phthalate	D:5*27-AUG-12 19:06
421879-210	L56268-1	Dibenzo(a,h)anthracene	D:5*27-AUG-12 19:06
421879-210	L56268-1	Indeno(1,2,3-Cd)Pyrene	D:5*27-AUG-12 19:06
421879-210	L56268-2	3-,4-Methylphenol	D:5*28-AUG-12 11:47
421879-210	L56268-2	Benzo(a)pyrene	D:5*28-AUG-12 11:47
421879-210	L56268-2	Benzo(b,j,k)fluoranthene	D:5*28-AUG-12 11:47
421879-210	L56268-2	Benzo(g,h,i)perylene	D:5*28-AUG-12 11:47
421879-210	L56268-2	Di-N-Octyl Phthalate	D:5*28-AUG-12 11:47
421879-210	L56268-2	Dibenzo(a,h)anthracene	D:5*28-AUG-12 11:47
421879-210	L56268-2	Indeno(1,2,3-Cd)Pyrene	D:5*28-AUG-12 11:47
421879-210	L56268-3	Benzo(a)anthracene	D:5*28-AUG-12 12:25
421879-210	L56268-3	Benzo(b,j,k)fluoranthene	D:5*28-AUG-12 12:25
421879-210	L56268-3	Chrysene	D:5*28-AUG-12 12:25
421879-210	L56268-3	Fluoranthene	D:5*28-AUG-12 12:25
421879-210	L56268-3	Pyrene	D:5*28-AUG-12 12:25

Login: P56268 NPDES SWM Sediments Personnel: JD

Project: 421879-210

CHAIN OF CUSTODY

Relinquished by		Date 8/7/12	Time 1640
Received by		Date 8/7/12	Time 1640
Sample Numbers	56258 1-3		[All]

Sample Number	P56268-1	P56268-2	P56268-3
QC Link			
Locator	FCSW01	FCSW02	RSW1UP
Short Loc Desc	NPDES-SW1	NPDES-SW2	RSW1UP
Locator Desc	FALL CITY HD COMMERCIAL	FALL CITY HD RESIDENTIAL	148TH AVE SE UPSTREAM
Site	KING COUNTY	KING COUNTY	KING COUNTY
Comments	HD Commercial	HD Residential	HD Residential
Start Date/Time	8/7/12 1340	1245	1500
End Date/Time	1346	1310	1508
Time Span			
Sample Depth			
Dept, Matrix, Prod	3 SE PSD 3 SE TOC 3 SE TOTS 6 SE CD-ICP 6 SE CU-ICP 6 SE HG-CVAA-M 6 SE PB-ICP 6 SE ZN-ICP 7 SE BNASMS 7 SE OPPEST-NPDES 7 SE PCBLL	3 SE PSD 3 SE TOC 3 SE TOTS 6 SE CD-ICP 6 SE CU-ICP 6 SE PB-ICP 6 SE ZN-ICP 7 SE BNASMS 7 SE OPPEST-NPDES	3 SE PSD 3 SE TOC 3 SE TOTS 6 SE CD-ICP 6 SE CU-ICP 6 SE PB-ICP 6 SE ZN-ICP 7 SE BNASMS 7 SE OPPEST-NPDES

SAMP METHOD	20123	20123	25010
	oil sheen on water 2 petite ponar grabs brown strong sewage smell silt sand organic material (twigs)	Medium sewage smell brown silt sand leaves 5 petite ponar grabs	Brown Dirt no 2° plant material no odor spoon dig ~ 20

(1 / 1)

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122687 PSD

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	CVPSD	FRSHWTRSED	8/7/2012 13:40	8/21/2012 14:00	8/23/2012 11:30	WG122687-1,-2	
L56268-2	421879-210		CVPSD	FRSHWTRSED	8/7/2012 12:45	8/21/2012 14:00	8/23/2012 11:30		
L56268-3	421879-210		CVPSD	FRSHWTRSED	8/7/2012 15:00	8/21/2012 14:00	8/23/2012 11:30		
WG122687-1	LD		CVPSD	FRSHWTRSED		8/21/2012 14:00	8/23/2012 11:30		L56268-1
WG122687-2	LT		CVPSD	FRSHWTRSED		8/21/2012 14:00	8/23/2012 11:30		WG122687-1 L56268-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122476 TOC

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	CVTOC	FRSHWTRSED	8/7/2012 13:40	8/8/2012 11:40	8/10/2012 9:56	WG122476-2,-3,-4,-5,-6,-1	
L56268-2	421879-210		CVTOC	FRSHWTRSED	8/7/2012 12:45	8/8/2012 11:40	8/10/2012 11:23		
L56268-3	421879-210		CVTOC	FRSHWTRSED	8/7/2012 15:00	8/8/2012 11:40	8/10/2012 11:46		
WG122476-1	MB		CVTOC	OTHR SOLID		8/8/2012 11:40	8/10/2012 8:39		MB1 120810
WG122476-2	LCS		CVTOC	OTHR SOLID		8/8/2012 11:40	8/10/2012 8:55		LEVEL1
WG122476-3	SB		CVTOC	OTHR SOLID		8/8/2012 11:40	8/10/2012 9:26		WG122476-1
WG122476-4	LD		CVTOC	FRSHWTRSED		8/8/2012 11:40	8/10/2012 10:18		L56268-1
WG122476-5	LT		CVTOC	FRSHWTRSED		8/8/2012 11:40	8/10/2012 10:39		WG122476-4 L56268-1
WG122476-6	MS		CVTOC	FRSHWTRSED		8/8/2012 11:40	8/10/2012 11:00		L56268-1

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122534 Total Solids

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56056-3	421184-100	OCS-City of Buckley	CVTOTS	SLUDGE	8/7/2012 9:00	8/10/2012 11:20	8/14/2012 14:43	WG122534-1,-2,-3,-4	
L56268-1	421879-210	NPDES SW Monitoring	CVTOTS	FRSHWTRSED	8/7/2012 13:40	8/10/2012 11:20	8/14/2012 14:44		
L56268-2	421879-210		CVTOTS	FRSHWTRSED	8/7/2012 12:45	8/10/2012 11:20	8/14/2012 14:45		
L56268-3	421879-210		CVTOTS	FRSHWTRSED	8/7/2012 15:00	8/10/2012 11:20	8/14/2012 14:45		
WG122534-1	MB		CVTOTS	OTHR SOLID		8/10/2012 11:20	8/14/2012 14:43		MB1 120810
WG122534-2	LD		CVTOTS	SLUDGE		8/10/2012 11:20	8/14/2012 14:44		L56056-3
WG122534-3	LD		CVTOTS	FRSHWTRSED		8/10/2012 11:20	8/14/2012 14:46		L56268-3
WG122534-4	LT		CVTOTS	FRSHWTRSED		8/10/2012 11:20	8/14/2012 14:46		WG122534-3 L56268-3

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122694 Total Mercury

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	MTHG-MIDS	FRSHWTRSED	8/7/2012 13:40	8/21/2012 13:00	8/22/2012 15:41	WG122694-1,-10,-2,-3,-4,-5,-6,-7,-8,-9	
L56272-1	421196-160	Roads Spill Response	MTHG-MIDS	SOIL	8/9/2012 13:35	8/21/2012 13:00	8/22/2012 15:58		
L56272-2	421196-160		MTHG-MIDS	SOIL	8/9/2012 13:50	8/21/2012 13:00	8/22/2012 16:00		
L56272-3	421196-160		MTHG-MIDS	SOIL	8/9/2012 14:10	8/21/2012 13:00	8/22/2012 15:49		
L56272-4	421196-160		MTHG-MIDS	SOIL	8/9/2012 14:40	8/21/2012 13:00	8/22/2012 16:01		
L56272-5	421196-160		MTHG-MIDS	SOIL	8/9/2012 15:20	8/21/2012 13:00	8/22/2012 16:03		
L56272-6	421196-160		MTHG-MIDS	SOIL	8/9/2012 15:35	8/21/2012 13:00	8/22/2012 16:05		
L56272-7	421196-160		MTHG-MIDS	SOIL	8/9/2012 0:00	8/21/2012 13:00	8/22/2012 16:07		
L56273-1	421196-160		MTHG-MIDS	SOIL	8/9/2012 12:30	8/21/2012 13:00	8/22/2012 16:09		
L56273-2	421196-160		MTHG-MIDS	SOIL	8/9/2012 12:55	8/21/2012 13:00	8/22/2012 16:10		
WG122694-1	LCS		MTHG-MIDS	FRSHWTRSED		8/21/2012 13:00	8/22/2012 15:32		WQB1 HG-SMID
WG122694-2	LCSD		MTHG-MIDS	FRSHWTRSED		8/21/2012 13:00	8/22/2012 15:34		WG122694-1 WQB1 HG-SMID-RPD
WG122694-3	LCS		MTHG-MIDS	SOIL		8/21/2012 13:00	8/22/2012 15:36		ERASOIL HG-SMID
WG122694-4	MB		MTHG-MIDS	SOLIDBLANK		8/21/2012 13:00	8/22/2012 15:38		METHOD BLANK
WG122694-5	SB		MTHG-MIDS	SOLIDBLANK		8/21/2012 13:00	8/22/2012 15:40		WG122694-4 HG-SMID
WG122694-6	MS		MTHG-MIDS	FRSHWTRSED		8/21/2012 13:00	8/22/2012 15:43		L56268-1 HG-SMID
WG122694-7	MSD		MTHG-MIDS	FRSHWTRSED		8/21/2012 13:00	8/22/2012 15:45		WG122694-6 L56268-1 HG-SMID-MSD
WG122694-8	LD		MTHG-MIDS	FRSHWTRSED		8/21/2012 13:00	8/22/2012 15:47		L56268-1 RPD-SOL
WG122694-9	MS		MTHG-MIDS	SOIL		8/21/2012 13:00	8/22/2012 15:54		L56272-3 HG-SMID
WG122694-10	MSD		MTHG-MIDS	SOIL		8/21/2012 13:00	8/22/2012 15:56		WG122694-9 L56272-3 HG-SMID-MSD

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG123100 Total Metals

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	MTICP-SED	FRSHWTRSED	8/7/2012 13:40	9/17/2012 13:00	9/18/2012 11:12	WG123100-1,-2,-3,-4,-5	
L56268-2	421879-210		MTICP-SED	FRSHWTRSED	8/7/2012 12:45	9/17/2012 13:00	9/18/2012 11:18		
L56268-3	421879-210		MTICP-SED	FRSHWTRSED	8/7/2012 15:00	9/17/2012 13:00	9/18/2012 11:23		
L56387-2	423258-500-1	Brightwater Reclaimed Water Quality Testing	MTICP-SED	FRSHWTRSED	8/28/2012 9:30	9/17/2012 13:00	9/18/2012 11:29		
WG123100-1	SB		MTICP-SED	SOLIDBLANK		9/17/2012 13:00	9/18/2012 10:56		WG123100-2 ICPH
WG123100-2	MB		MTICP-SED	SOLIDBLANK		9/17/2012 13:00	9/18/2012 11:01		METHOD BLANK
WG123100-3	LD		MTICP-SED	FRSHWTRSED		9/17/2012 13:00	9/18/2012 11:34		L56387-2 RPD-SOL
WG123100-4	MS		MTICP-SED	FRSHWTRSED		9/17/2012 13:00	9/18/2012 11:40		L56387-2 ICPH
WG123100-5	LCS		MTICP-SED	FRSHWTRSED		9/17/2012 13:00	9/18/2012 11:07		BUFFSED

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122691 Semi Volatile Organics

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	ORBNASMS	FRSHWTRSED	8/7/2012 13:40	8/21/2012 11:00	8/28/2012 13:03	WG122691-7,-1,-2,-3,-6,-8,-4,-5	
L56268-2	421879-210		ORBNASMS	FRSHWTRSED	8/7/2012 12:45	8/21/2012 11:00	8/28/2012 13:42		
L56268-3	421879-210		ORBNASMS	FRSHWTRSED	8/7/2012 15:00	8/21/2012 11:00	8/28/2012 14:20		
WG122691-1	MB		ORBNASMS	OTHR SOLID		8/21/2012 11:00	8/27/2012 10:47		MB120821
WG122691-2	SB		ORBNASMS	OTHR SOLID		8/21/2012 11:00	8/27/2012 11:25		WG122691-1
WG122691-3	SB		ORBNASMS	OTHR SOLID		8/21/2012 11:00	8/27/2012 12:04		WG122691-1
WG122691-4	MS		ORBNASMS	FRSHWTRSED		8/21/2012 11:00	8/28/2012 9:52		L56268-1
WG122691-5	MSD		ORBNASMS	FRSHWTRSED		8/21/2012 11:00	8/28/2012 10:30		WG122691-4 L56268-1
WG122691-6	SRM		ORBNASMS	FRSHWTRSED		8/21/2012 11:00	8/27/2012 16:31		
WG122691-7	SRMD		ORBNASMS	FRSHWTRSED		8/21/2012 11:00	8/27/2012 17:09		WG122691-6
WG122691-8	LD		ORBNASMS	FRSHWTRSED		8/21/2012 11:00	8/28/2012 14:59		L56268-2

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122531 Orthophosphate Pesticides

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	OROPPEST-NPDES	FRSHWTRSED	8/7/2012 13:40	9/5/2012 8:00	9/12/2012 14:30	WG122531-5,-4,-3,-2,-1	
L56268-2	421879-210		OROPPEST-NPDES	FRSHWTRSED	8/7/2012 12:45	9/5/2012 8:00	9/12/2012 14:04		
L56268-3	421879-210		OROPPEST-NPDES	FRSHWTRSED	8/7/2012 15:00	9/5/2012 8:00	9/12/2012 13:38		
WG122531-1	MB		OROPPEST-NPDES	OTHR SOLID		9/5/2012 8:00	9/12/2012 10:13		MB120814
WG122531-2	SB		OROPPEST-NPDES	OTHR SOLID		9/5/2012 8:00	9/12/2012 10:38		WG122531-1
WG122531-3	SBD		OROPPEST-NPDES	OTHR SOLID		9/5/2012 8:00	9/12/2012 11:04		WG122531-2 WG122531-1
WG122531-4	MS		OROPPEST-NPDES	FRSHWTRSED		9/5/2012 8:00	9/12/2012 12:47		L56268-3
WG122531-5	MSD		OROPPEST-NPDES	FRSHWTRSED		9/5/2012 8:00	9/12/2012 13:12		WG122531-4 L56268-3

King County Environmental Laboratory Batch Report

NPDES SW Permit, Sediments, L56268

WG122690 PCB

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Anal Date	QC Association	Comments
L56268-1	421879-210	NPDES SW Monitoring	ORPCB	FRSHWTRSED	8/7/2012 13:40	8/21/2012 11:00	8/28/2012 11:49	WG122690-1,-2,-3,-4,-5,-6,-7	
WG122690-1	MB		ORPCB	OTHR SOLID		8/21/2012 11:00	8/28/2012 9:46		MB120821
WG122690-2	SB		ORPCB	OTHR SOLID		8/21/2012 11:00	8/28/2012 10:01		WG122690-1
WG122690-3	MS		ORPCB	FRSHWTRSED		8/21/2012 11:00	8/28/2012 10:17		L56268-1
WG122690-4	MSD		ORPCB	FRSHWTRSED		8/21/2012 11:00	8/28/2012 10:32		WG122690-3 L56268-1
WG122690-5	SRM		ORPCB	FRSHWTRSED		8/21/2012 11:00	8/28/2012 11:18		
WG122690-6	SRMD		ORPCB	FRSHWTRSED		8/21/2012 11:00	8/28/2012 11:34		WG122690-5
WG122690-7	LD		ORPCB	FRSHWTRSED		8/21/2012 11:00	8/28/2012 10:47		L56268-1

Workgroup: WG122687 PSD

LT:WG122687-2 LD:WG122687-1 L56268-1 Matrix: FRSHWTRSED Listtype:CVPSD Method:ASTM D422 Project:421879-210 Pkey:SED
(Lab Triplicate, Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	LT Value	RSD	Qual	Lab Limit
Gravel	0.2	1.6	%	15	17.8	20.8	16		0--20
Sand	0.2	1.6	%	62.3	61.1	59.3	3		0--20
Silt	0.8	1.6	%	13.4	13.1	13.6	2		0--20
Clay	0.8	1.6	%	5.9	5.7	5.9	2		0--20

Workgroup: WG122476 TOC

MB:WG122476-1 Matrix: OTHR SOLID Listtype:CVTOC Method:SW846 9060-PSEP96 Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	500	1000	mg/Kg	<MDL	

LCS:WG122476-2 Matrix: OTHR SOLID Listtype:CVTOC Method:SW846 9060-PSEP96 Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Total Organic Carbon	2500	4940	mg/Kg	33510	33500	100		80--120

SB:WG122476-3 MB:WG122476-1 Matrix: OTHR SOLID Listtype:CVTOC Method:SW846 9060-PSEP96 Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Total Organic Carbon	500	1000	mg/Kg	<MDL	2500	2550	102		80--120

LT:WG122476-5 LD:WG122476-4 L56268-1 Matrix: FRSHWTRSED Listtype:CVTOC Method:SW846 9060-PSEP96 Project:421879-210 Pkey:SED
(Lab Triplicate, Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	LT Value	RSD	Qual	Lab Limit
Total Organic Carbon	4600	9290	mg/Kg	29500	27400	27500	4		0--20

MS:WG122476-6 L56268-1 Matrix: FRSHWTRSED Listtype:CVTOC Method:SW846 9060-PSEP96 Project:421879-210 Pkey:SED
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Total Organic Carbon	3100	6260	mg/Kg	29500	2500	60400	120		75--125

Workgroup: WG122534 Total Solids

MB:WG122534-1 Matrix: OTHR SOLID Listtype:CVTOTS Method:SM2540-G Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Solids	0.005	0.01	%	<MDL	

LD:WG122534-2 L56056-3 Matrix: SLUDGE Listtype:CVTOTS Method:SM2540-G Project:421184-100 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Total Solids	0.005	0.01	%	14.5	14.6	0		0--20

LT:WG122534-4 LD:WG122534-3 L56268-3 Matrix: FRSHWTRSED Listtype:CVTOTS Method:SM2540-G Project:421879-210 Pkey:SED
(Lab Triplicate, Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	LT Value	RSD	Qual	Lab Limit
Total Solids	0.005	0.01	%	70.8	70.3	71.9	1		0--20

Workgroup: WG122694 Total Mercury

LCSD:WG122694-2 LCS:WG122694-1 Matrix: FRSHWTRSED Listtype:MTHG-MIDS Method:SW846 7471B Project: Pkey:SED
(Lab Control Sample Duplicate, Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit	True Value	LCSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.025	0.249	mg/Kg	1.09	0.972	89		80--120	1.09	0.96	88		1		0--20

LCS:WG122694-3 Matrix: SOIL Listtype:MTHG-MIDS Method:SW846 7471B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Mercury, Total, CVAA	0.51	5.05	mg/Kg	25.1	25.3	101		71--129

MB:WG122694-4 Matrix: SOLIDBLANK Listtype:MTHG-MIDS Method:SW846 7471B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Mercury, Total, CVAA	0.0048	0.0476	mg/Kg	<MDL	

SB:WG122694-5 MB:WG122694-4 Matrix: SOLIDBLANK Listtype:MTHG-MIDS Method:SW846 7471B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Mercury, Total, CVAA	0.0048	0.0476	mg/Kg	<MDL	0.0952	0.0867	91		85--115

MSD:WG122694-7 MS:WG122694-6 L56268-1 Matrix: FRSHWTRSED Listtype:MTHG-MIDS Method:SW846 7471B Project:421879-210 Pkey:SED
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.005	0.0496	mg/Kg	0.024	0.0992	0.123	101		75--125	0.0981	0.115	93		7		0--20

LD:WG122694-8 L56268-1 Matrix: FRSHWTRSED Listtype:MTHG-MIDS Method:SW846 7471B Project:421879-210 Pkey:SED
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.0049	0.0491	mg/Kg	0.024	0.023			0--20

MSD:WG122694-10 MS:WG122694-9 L56272-3 Matrix: SOIL Listtype:MTHG-MIDS Method:SW846 7471B Project:421196-160 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Mercury, Total, CVAA	0.0048	0.0485	mg/Kg	0.0902	0.097	0.192	105		75--125	0.0954	0.189	104		1		0--20

Workgroup: WG123100 Total Metals

MB:WG123100-2 Matrix: SOLIDBLANK Listtype:MTICP-SED Method:SW846 3050B*SW846 6010C Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Aluminum, Total, ICP	4.8	23.8	mg/Kg	<MDL	
Calcium, Total, ICP	2.4	11.9	mg/Kg	<MDL	
Cadmium, Total, ICP	0.095	0.476	mg/Kg	<MDL	
Chromium, Total, ICP	0.14	0.714	mg/Kg	<MDL	
Copper, Total, ICP	0.19	0.952	mg/Kg	<MDL	
Iron, Total, ICP	2.4	11.9	mg/Kg	<MDL	
Magnesium, Total, ICP	1.4	7.14	mg/Kg	<MDL	
Manganese, Total, ICP	0.095	0.476	mg/Kg	<MDL	
Nickel, Total, ICP	0.24	1.19	mg/Kg	<MDL	
Phosphorus, Total, ICP	2.4	11.9	mg/Kg	<MDL	
Lead, Total, ICP	0.95	4.76	mg/Kg	<MDL	
Zinc, Total, ICP	0.24	1.19	mg/Kg	<MDL	

SB:WG123100-1 MB:WG123100-2 Matrix: SOLIDBLANK Listtype:MTICP-SED Method:SW846 3050B*SW846 6010C Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Aluminum, Total, ICP	4.8	23.8	mg/Kg	<MDL	4810	5000	104		85--115
Calcium, Total, ICP	2.4	11.9	mg/Kg	<MDL	4810	5010	104		85--115
Cadmium, Total, ICP	0.095	0.476	mg/Kg	<MDL	47.6	47.7	100		85--115
Chromium, Total, ICP	0.14	0.714	mg/Kg	<MDL	47.6	48.6	102		85--115
Copper, Total, ICP	0.19	0.952	mg/Kg	<MDL	47.6	48.5	102		85--115
Iron, Total, ICP	2.4	11.9	mg/Kg	<MDL	4810	4970	103		85--115
Magnesium, Total, ICP	1.4	7.14	mg/Kg	<MDL	4810	4910	102		85--115
Manganese, Total, ICP	0.095	0.476	mg/Kg	<MDL	47.6	49.5	104		85--115
Nickel, Total, ICP	0.24	1.19	mg/Kg	<MDL	47.6	47.6	100		85--115
Phosphorus, Total, ICP	2.4	11.9	mg/Kg	<MDL	47.6	49.5	104		85--115
Lead, Total, ICP	0.95	4.76	mg/Kg	<MDL	47.6	47.6	100		85--115
Zinc, Total, ICP	0.24	1.19	mg/Kg	<MDL	47.6	47.4	99		85--115

LD:WG123100-3 L56387-2 Matrix: FRSHWTRSED Listtype:MTICP-SED Method:SW846 3050B*SW846 6010C Project:423258-500-1 Pkey:SED
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Aluminum, Total, ICP	4.8	24.2	mg/Kg	1330	1280	4		0--20
Calcium, Total, ICP	2.4	12.1	mg/Kg	1240	1190	4		0--20
Cadmium, Total, ICP	0.097	0.483	mg/Kg	0.11	0.13			0--20
Chromium, Total, ICP	0.14	0.725	mg/Kg	2.96	2.78	6		0--20
Copper, Total, ICP	0.19	0.967	mg/Kg	7.23	6.8	6		0--20
Iron, Total, ICP	2.4	12.1	mg/Kg	1260	1210	4		0--20
Magnesium, Total, ICP	1.4	7.25	mg/Kg	391	373	5		0--20
Manganese, Total, ICP	0.097	0.483	mg/Kg	15.8	15	6		0--20
Nickel, Total, ICP	0.24	1.21	mg/Kg	3.42	3.16	8		0--20
Phosphorus, Total, ICP	2.4	12.1	mg/Kg	147	137	7		0--20
Lead, Total, ICP	0.97	4.83	mg/Kg	2.5	2.1			0--20
Zinc, Total, ICP	0.24	1.21	mg/Kg	16.2	15.5	4		0--20

MS:WG123100-4 L56387-2 Matrix: FRSHWTRSED Listtype:MTICP-SED Method:SW846 3050B*SW846 6010C Project:423258-500-1 Pkey:SED
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit
Aluminum, Total, ICP	4.8	24.2	mg/Kg	1330	4990	6780	109		75--125
Calcium, Total, ICP	2.4	12.1	mg/Kg	1240	4990	6410	104		75--125
Cadmium, Total, ICP	0.097	0.483	mg/Kg	0.11	49.4	49.1	99		75--125
Chromium, Total, ICP	0.14	0.725	mg/Kg	2.96	49.4	53.1	102		75--125
Copper, Total, ICP	0.19	0.967	mg/Kg	7.23	49.4	57.4	102		75--125
Iron, Total, ICP	2.4	12.1	mg/Kg	1260	4990	6400	103		75--125
Magnesium, Total, ICP	1.4	7.25	mg/Kg	391	4990	5480	102		75--125
Manganese, Total, ICP	0.097	0.483	mg/Kg	15.8	49.4	67.3	104		75--125
Nickel, Total, ICP	0.24	1.21	mg/Kg	3.42	49.4	52.6	99		75--125
Phosphorus, Total, ICP	2.4	12.1	mg/Kg	147	49.4	191	89		75--125
Lead, Total, ICP	0.97	4.83	mg/Kg	2.5	49.4	51.3	99		75--125
Zinc, Total, ICP	0.24	1.21	mg/Kg	16.2	49.4	63.8	96		75--125

LCS:WG123100-5 Matrix: FRSHWTRSED Listtype:MTICP-SED Method:SW846 3050B*SW846 6010C Project: Pkey:SED
(Lab Control Sample)

Parameter	MDL	RDL	Units	True Value	LCS Value	% Rec.	Qual	Lab Limit
Aluminum, Total, ICP	20	101	mg/Kg	61000	12400	20		10--41
Calcium, Total, ICP	10	50.7	mg/Kg	26410	24200	92		66--106
Cadmium, Total, ICP	0.41	2.03	mg/Kg	2.94	3.07	104		76--116
Chromium, Total, ICP	0.61	3.04	mg/Kg	121.9	70.4	58		40--80
Iron, Total, ICP	10	50.7	mg/Kg	39700	32600	82		54--94
Magnesium, Total, ICP	6.1	30.4	mg/Kg	12000	8700	72		50--90
Manganese, Total, ICP	0.41	2.03	mg/Kg	544	488	90		66--106
Nickel, Total, ICP	1	5.07	mg/Kg	42.9	36.6	85		62--102
Lead, Total, ICP	4.1	20.3	mg/Kg	150	140	93		71--111
Zinc, Total, ICP	1	5.07	mg/Kg	408	373	91		69--109

Workgroup: WG122691 Semi Volatile Organics

MB:WG122691-1 Matrix: OTHR SOLID Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Phenol	16	48	ug/Kg	<MDL	
1,4-Dichlorobenzene	4.8	4.8	ug/Kg	<MDL	
Benzyl Alcohol	8	8	ug/Kg	<MDL	
1,2-Dichlorobenzene	3.2	3.2	ug/Kg	<MDL	
2-Methylphenol	3.2	6.4	ug/Kg	<MDL	
3-,4-Methylphenol	16	32	ug/Kg	<MDL	
2,4-Dimethylphenol	3.2	6.4	ug/Kg	<MDL	
Benzoic Acid	32	160	ug/Kg	<MDL	
1,2,4-Trichlorobenzene	0.32	0.64	ug/Kg	<MDL	
Naphthalene	3.2	6.4	ug/Kg	<MDL	
Hexachlorobutadiene	1.6	3.2	ug/Kg	<MDL	
2-Methylnaphthalene	3.2	6.4	ug/Kg	<MDL	
Dimethyl Phthalate	6.4	6.4	ug/Kg	<MDL	
Acenaphthylene	3.2	6.4	ug/Kg	<MDL	
Acenaphthene	3.2	6.4	ug/Kg	<MDL	
Dibenzofuran	3.2	6.4	ug/Kg	<MDL	
Diethyl Phthalate	6.4	12.8	ug/Kg	<MDL	
Fluorene	3.2	6.4	ug/Kg	<MDL	
N-Nitrosodiphenylamine	8	8	ug/Kg	<MDL	
Hexachlorobenzene	0.32	0.64	ug/Kg	<MDL	
Pentachlorophenol	48	48	ug/Kg	<MDL	
Phenanthrene	3.2	6.4	ug/Kg	<MDL	
Anthracene	3.2	6.4	ug/Kg	<MDL	
Di-N-Butyl Phthalate	6.4	12.8	ug/Kg	<MDL	
Fluoranthene	3.2	6.4	ug/Kg	<MDL	
Pyrene	3.2	6.4	ug/Kg	12.5	B
Benzyl Butyl Phthalate	4.8	4.8	ug/Kg	<MDL	
Benzo(a)anthracene	3.2	6.4	ug/Kg	<MDL	
Chrysene	3.2	6.4	ug/Kg	<MDL	
Bis(2-Ethylhexyl)Phthalate	6.4	12.8	ug/Kg	18.7	B
Di-N-Octyl Phthalate	6.4	6.4	ug/Kg	20.3	B
Benzo(b,j,k)fluoranthene	3.2	6.4	ug/Kg	<MDL	
Benzo(a)pyrene	3.2	6.4	ug/Kg	<MDL	
Indeno(1,2,3-Cd)Pyrene	3.2	6.4	ug/Kg	<MDL	
Dibenzo(a,h)anthracene	3.2	6.4	ug/Kg	5.5	B
Benzo(g,h,i)perylene	3.2	6.4	ug/Kg	3.2	B
Total LPAHs	3.2	6.4	ug/Kg	<MDL	
Total HPAHS	3.2	6.4	ug/Kg	21.2	

SB:WG122691-2 MB:WG122691-1 Matrix: OTHR SOLID Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Phenol	16	48	ug/Kg	<MDL	480	259	54		26--136
1,4-Dichlorobenzene	4.8	4.8	ug/Kg	<MDL	480	309	64		40--103
Benzyl Alcohol	8	8	ug/Kg	<MDL	480	196	41		26--111
1,2-Dichlorobenzene	3.2	3.2	ug/Kg	<MDL	480	329	68		44--105
2-Methylphenol	3.2	6.4	ug/Kg	<MDL	480	194	40		20--123
3-,4-Methylphenol	16	32	ug/Kg	<MDL	480	225	47		22--119
2,4-Dimethylphenol	3.2	6.4	ug/Kg	<MDL	480	76.3	16	*	20--121
Benzoic Acid	32	160	ug/Kg	<MDL	480	179	37		20--92
1,2,4-Trichlorobenzene	0.32	0.64	ug/Kg	<MDL	480	307	64		39--94
Naphthalene	3.2	6.4	ug/Kg	<MDL	480	350	73		28--109
Hexachlorobutadiene	1.6	3.2	ug/Kg	<MDL	480	344	72		20--135
2-Methylnaphthalene	3.2	6.4	ug/Kg	<MDL	480	378	79		20--128
Dimethyl Phthalate	6.4	6.4	ug/Kg	<MDL	480	445	93		70--129
Acenaphthylene	3.2	6.4	ug/Kg	<MDL	480	403	84		45--132
Acenaphthene	3.2	6.4	ug/Kg	<MDL	480	385	80		43--126
Dibenzofuran	3.2	6.4	ug/Kg	<MDL	480	409	85		52--133
Diethyl Phthalate	6.4	12.8	ug/Kg	<MDL	480	498	104		75--131
Fluorene	3.2	6.4	ug/Kg	<MDL	480	393	82		57--150
N-Nitrosodiphenylamine	8	8	ug/Kg	<MDL	480	476	99		57--136
Hexachlorobenzene	0.32	0.64	ug/Kg	<MDL	480	431	90		53--150
Pentachlorophenol	48	48	ug/Kg	<MDL	480	384	80		25--135
Phenanthrene	3.2	6.4	ug/Kg	<MDL	480	483	101		47--141
Anthracene	3.2	6.4	ug/Kg	<MDL	480	454	95		48--149
Di-N-Butyl Phthalate	6.4	12.8	ug/Kg	<MDL	480	564	117		71--142
Fluoranthene	3.2	6.4	ug/Kg	<MDL	480	535	111		56--143
Pyrene	3.2	6.4	ug/Kg	12.5	480	549	112		60--144
Benzyl Butyl Phthalate	4.8	4.8	ug/Kg	<MDL	480	650	135		36--150
Benzo(a)anthracene	3.2	6.4	ug/Kg	<MDL	480	517	108		51--150
Chrysene	3.2	6.4	ug/Kg	<MDL	480	537	112		45--150
Bis(2-Ethylhexyl)Phthalate	6.4	12.8	ug/Kg	18.7	480	646	131		61--150
Di-N-Octyl Phthalate	6.4	6.4	ug/Kg	20.3	480	620	125		43--150
Benzo(b,j,k)fluoranthene	3.2	6.4	ug/Kg	<MDL	1440	1180	82		45--143
Benzo(a)pyrene	3.2	6.4	ug/Kg	<MDL	480	461	96		61--140
Indeno(1,2,3-Cd)Pyrene	3.2	6.4	ug/Kg	<MDL	480	581	121		42--150
Dibenzo(a,h)anthracene	3.2	6.4	ug/Kg	5.5	480	562	116		41--150
Benzo(g,h,i)perylene	3.2	6.4	ug/Kg	3.2	480	509	105		28--150

SB:WG122691-3 MB:WG122691-1 Matrix: OTHR SOLID Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Phenol	16	48	ug/Kg	<MDL	1920	1580	82		26--136
1,4-Dichlorobenzene	4.8	4.8	ug/Kg	<MDL	1920	1290	67		40--103
Benzyl Alcohol	8	8	ug/Kg	<MDL	1920	1220	64		26--111
1,2-Dichlorobenzene	3.2	3.2	ug/Kg	<MDL	1920	1360	71		44--105
2-Methylphenol	3.2	6.4	ug/Kg	<MDL	1920	1520	79		20--123
3-,4-Methylphenol	16	32	ug/Kg	<MDL	1920	1480	77		22--119
2,4-Dimethylphenol	3.2	6.4	ug/Kg	<MDL	1920	824	43		20--121
Benzoic Acid	32	160	ug/Kg	<MDL	1920	488	25		20--92
1,2,4-Trichlorobenzene	0.32	0.64	ug/Kg	<MDL	1920	1240	65		39--94
Naphthalene	3.2	6.4	ug/Kg	<MDL	1920	1470	77		28--109
Hexachlorobutadiene	1.6	3.2	ug/Kg	<MDL	1920	1330	69		20--135
2-Methylnaphthalene	3.2	6.4	ug/Kg	<MDL	1920	1430	74		20--128
Dimethyl Phthalate	6.4	6.4	ug/Kg	<MDL	1920	1830	95		70--129
Acenaphthylene	3.2	6.4	ug/Kg	<MDL	1920	1790	93		45--132
Acenaphthene	3.2	6.4	ug/Kg	<MDL	1920	1670	87		43--126
Dibenzofuran	3.2	6.4	ug/Kg	<MDL	1920	1780	93		52--133
Diethyl Phthalate	6.4	12.8	ug/Kg	<MDL	1920	2000	104		75--131
Fluorene	3.2	6.4	ug/Kg	<MDL	1920	1690	88		57--150
N-Nitrosodiphenylamine	8	8	ug/Kg	<MDL	1920	2050	107		57--136
Hexachlorobenzene	0.32	0.64	ug/Kg	<MDL	1920	1780	93		53--150
Pentachlorophenol	48	48	ug/Kg	<MDL	1920	1540	80		25--135
Phenanthrene	3.2	6.4	ug/Kg	<MDL	1920	1920	100		47--141
Anthracene	3.2	6.4	ug/Kg	<MDL	1920	1920	100		48--149
Di-N-Butyl Phthalate	6.4	12.8	ug/Kg	<MDL	1920	2140	112		71--142
Fluoranthene	3.2	6.4	ug/Kg	<MDL	1920	2060	107		56--143
Pyrene	3.2	6.4	ug/Kg	12.5	1920	2090	108		60--144
Benzyl Butyl Phthalate	4.8	4.8	ug/Kg	<MDL	1920	2430	127		36--150
Benzo(a)anthracene	3.2	6.4	ug/Kg	<MDL	1920	1990	104		51--150
Chrysene	3.2	6.4	ug/Kg	<MDL	1920	2070	108		45--150
Bis(2-Ethylhexyl)Phthalate	6.4	12.8	ug/Kg	18.7	1920	2370	123		61--150
Di-N-Octyl Phthalate	6.4	6.4	ug/Kg	20.3	1920	2320	120		43--150
Benzo(b,j,k)fluoranthene	3.2	6.4	ug/Kg	<MDL	5760	4540	79		45--143
Benzo(a)pyrene	3.2	6.4	ug/Kg	<MDL	1920	1890	99		61--140
Indeno(1,2,3-Cd)Pyrene	3.2	6.4	ug/Kg	<MDL	1920	2150	112		42--150
Dibenzo(a,h)anthracene	3.2	6.4	ug/Kg	5.5	1920	2060	107		41--150
Benzo(g,h,i)perylene	3.2	6.4	ug/Kg	3.2	1920	1870	97		28--150

MSD:WG122691-5 MS:WG122691-4 L56268-1 Matrix: FRSHWTRSED Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project:421879-210 Pkey:SED
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Phenol	270	800	ug/Kg	<MDL	3200	2860	89		21--142	3200	2730	85		4		0--35
1,4-Dichlorobenzene	80	80	ug/Kg	<MDL	3200	1850	58		20--105	3200	1580	49		16		0--35
Benzyl Alcohol	133	133	ug/Kg	<MDL	3200	2600	81		28--111	3200	2590	81		0		0--35
1,2-Dichlorobenzene	53.3	53.3	ug/Kg	<MDL	3200	2070	65		20--110	3200	1780	56		15		0--35
2-Methylphenol	53	107	ug/Kg	11.6	3200	3330	104		21--126	3200	3260	101		2		0--35
3-,4-Methylphenol	270	533	ug/Kg	341	3200	3790	108		24--129	3200	3680	104		3		0--35
2,4-Dimethylphenol	53	107	ug/Kg	<MDL	3200	3590	112		27--126	3200	3680	115		2		0--35
Benzoic Acid	533	2670	ug/Kg	64	3200	2430	74		20--150	3200	2390	73		2		0--35
1,2,4-Trichlorobenzene	5.3	10.7	ug/Kg	<MDL	3200	2200	69		22--95	3200	2120	66		4		0--35
Naphthalene	53	107	ug/Kg	9.7	3200	2850	89		20--112	3200	2700	84		6		0--35
Hexachlorobutadiene	27	53.3	ug/Kg	<MDL	3200	2390	75		20--133	3200	2260	71		6		0--35
2-Methylnaphthalene	53	107	ug/Kg	24.1	3200	2930	91		22--109	3200	2860	89		2		0--35
Dimethyl Phthalate	107	107	ug/Kg	<MDL	3200	2890	90		66--128	3200	2820	88		2		0--35
Acenaphthylene	53	107	ug/Kg	<MDL	3200	3080	96		44--134	3200	3070	96		0		0--35
Acenaphthene	53	107	ug/Kg	<MDL	3200	3000	94		37--129	3200	2920	91		3		0--35
Dibenzofuran	53	107	ug/Kg	<MDL	3200	3090	97		49--135	3200	3030	95		2		0--35
Diethyl Phthalate	110	213	ug/Kg	<MDL	3200	3120	97		71--130	3200	3080	96		1		0--35
Fluorene	53	107	ug/Kg	<MDL	3200	2920	91		52--150	3200	2820	88		3		0--35
N-Nitrosodiphenylamine	133	133	ug/Kg	<MDL	3200	3370	105		58--140	3200	3350	105		1		0--35
Hexachlorobenzene	5.3	10.7	ug/Kg	<MDL	3200	2920	91		51--149	3200	2840	89		3		0--35
Pentachlorophenol	800	800	ug/Kg	209	3200	4060	120		35--134	3200	4000	119		2		0--35
Phenanthrene	53	107	ug/Kg	70.3	3200	3170	97		51--136	3200	3140	96		1		0--35
Anthracene	53	107	ug/Kg	9.8	3200	3200	100		37--150	3200	3140	98		2		0--35
Di-N-Butyl Phthalate	110	213	ug/Kg	25.2	3200	3810	118		64--150	3200	3390	105		12		0--35
Fluoranthene	53	107	ug/Kg	90.4	3200	3180	97		53--144	3200	3150	95		1		0--35
Pyrene	53	107	ug/Kg	232	3200	3700	108		59--143	3200	3720	109		0		0--35
Benzyl Butyl Phthalate	80	80	ug/Kg	264	3200	4630	137		27--150	3200	5750	172	*	22		0--35
Benzo(a)anthracene	53	107	ug/Kg	57.6	3200	3480	107		52--149	3200	3400	104		2		0--35
Chrysene	53	107	ug/Kg	49.6	3200	3500	108		47--141	3200	3430	106		2		0--35
Bis(2-Ethylhexyl)Phthalate	110	213	ug/Kg	6520	3200	27500	656	*	54--150	3200	10500	125		89	*	0--35
Di-N-Octyl Phthalate	107	107	ug/Kg	816	3200	4770	124		43--150	3200	4820	125		1		0--35
Benzo(b,j,k)fluoranthene	53	107	ug/Kg	99.7	9600	7670	79		48--135	9600	7600	78		1		0--35
Benzo(a)pyrene	53	107	ug/Kg	178	3200	3350	99		62--136	3200	3250	96		3		0--35
Indeno(1,2,3-Cd)Pyrene	53	107	ug/Kg	41	3200	2970	92		41--150	3200	2930	90		1		0--35
Dibenzo(a,h)anthracene	53	107	ug/Kg	52	3200	2890	89		39--150	3200	2850	88		1		0--35
Benzo(g,h,i)perylene	53	107	ug/Kg	97.5	3200	2530	76		27--150	3200	2550	77		1		0--35

SRMD:WG122691-7 SRM:WG122691-6 Matrix: FRSHWTRSED Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project: Pkey:SED
(Std Reference Material Duplicate, Std Reference Material)

Parameter	MDL	RDL	Units	True Value	SRM Value	% Rec.	Qual	Lab Limit	True Value	SRMD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Phenanthrene	270	533	ug/Kg	5200	3970	76		49--124	5200	3430	66		15		0--35
Fluoranthene	270	533	ug/Kg	8800	7610	86		56--137	8800	6560	75		15		0--35
Pyrene	270	533	ug/Kg	9570	7780	81		58--123	9570	6810	71		13		0--35
Benzo(a)anthracene	270	533	ug/Kg	4660	4370	94		48--127	4660	3740	80		15		0--35
Chrysene	270	533	ug/Kg	4800	5220	109		64--150	4800	4500	94		15		0--35
Benzo(b,j,k)fluoranthene	270	533	ug/Kg	8150	6870	84		50--126	8150	5870	72		16		0--35
Benzo(a)pyrene	270	533	ug/Kg	4240	3910	92		48--119	4240	3410	80		14		0--35
Indeno(1,2,3-Cd)Pyrene	270	533	ug/Kg	2740	2340	85		40--130	2740	1970	72		17		0--35
Dibenzo(a,h)anthracene	270	533	ug/Kg	419	986	235		54--200	419	863	206	*	13		0--35
Benzo(g,h,i)perylene	270	533	ug/Kg	2800	2580	92		42--141	2800	2220	79		15		0--35

LD:WG122691-8 L56268-2 Matrix: FRSHWTRSED Listtype:ORBNASMS Method:SW846 3550B*SW846 8270D Project:421879-210 Pkey:SED
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Phenol	16	48	ug/Kg	114	131	14		0--35
1,4-Dichlorobenzene	4.8	4.8	ug/Kg	<MDL	<MDL			0--35
Benzyl Alcohol	8	8	ug/Kg	<MDL	<MDL			0--35
1,2-Dichlorobenzene	3.2	3.2	ug/Kg	<MDL	<MDL			0--35
2-Methylphenol	3.2	6.4	ug/Kg	14.7	16.1	9		0--35
3-,4-Methylphenol	80	160	ug/Kg	6070	6810	11		0--35
2,4-Dimethylphenol	3.2	6.4	ug/Kg	<MDL	<MDL			0--35
Benzoic Acid	32	160	ug/Kg	99.4	96			0--35
1,2,4-Trichlorobenzene	0.32	0.64	ug/Kg	<MDL	<MDL			0--35
Naphthalene	3.2	6.4	ug/Kg	6.2	6.44	3		0--35
Hexachlorobutadiene	1.6	3.2	ug/Kg	<MDL	<MDL			0--35
2-Methylnaphthalene	3.2	6.4	ug/Kg	4.7	5.3			0--35
Dimethyl Phthalate	6.4	6.4	ug/Kg	<MDL	<MDL			0--35
Acenaphthylene	3.2	6.4	ug/Kg	<MDL	<MDL			0--35
Acenaphthene	3.2	6.4	ug/Kg	9.42	10.3	9		0--35
Dibenzofuran	3.2	6.4	ug/Kg	5.4	6.3			0--35
Diethyl Phthalate	6.4	12.8	ug/Kg	<MDL	<MDL			0--35
Fluorene	3.2	6.4	ug/Kg	13.2	14.4	9		0--35
N-Nitrosodiphenylamine	8	8	ug/Kg	<MDL	<MDL			0--35
Hexachlorobenzene	0.32	0.64	ug/Kg	8.95	12	29		0--35
Pentachlorophenol	48	48	ug/Kg	104	104	0		0--35
Phenanthrene	3.2	6.4	ug/Kg	325	299	8		0--35
Anthracene	3.2	6.4	ug/Kg	32.9	33.9	3		0--35
Di-N-Butyl Phthalate	6.4	12.8	ug/Kg	<MDL	<MDL			0--35
Fluoranthene	3.2	6.4	ug/Kg	646	595	8		0--35
Pyrene	3.2	6.4	ug/Kg	795	731	8		0--35
Benzyl Butyl Phthalate	4.8	4.8	ug/Kg	<MDL	<MDL			0--35

Benzo(a)anthracene	3.2	6.4	ug/Kg	279	251	11	0--35
Chrysene	3.2	6.4	ug/Kg	415	357	15	0--35
Bis(2-Ethylhexyl)Phthalate	6.4	12.8	ug/Kg	1610	1380	16	0--35
Di-N-Octyl Phthalate	32	32	ug/Kg	<MDL	<MDL		0--35
Benzo(b,j,k)fluoranthene	16	32	ug/Kg	772	685	12	0--35
Benzo(a)pyrene	16	32	ug/Kg	384	343	11	0--35
Indeno(1,2,3-Cd)Pyrene	16	32	ug/Kg	218	173	23	0--35
Dibenzo(a,h)anthracene	16	32	ug/Kg	73.4	64.4	13	0--35
Benzo(g,h,i)perylene	16	32	ug/Kg	247	209	17	0--35
Total LPAHs	3.2	6.4	ug/Kg	386.72	364.04	6	0--35
Total HPAHS	3.2	6.4	ug/Kg	3829.4	3408.4	12	0--35

Surrogate: (Lab Limits)	**2,4,6-Tribromo phenol 45--150**	**2-Fluoro biphenyl 22--135**	**2-Fluoro phenol 20--136**	**d14-Ter phenyl 25--150**	**d4-2-Chloro phenol 20--127**	**d5-Nitro benzene 22--126**	**l5-Phenol 20--142**
L56268-1	88	90	72	133	74	74	86
L56268-2	84	80	52	116	61	59	76
L56268-3	99	80	65	118	64	63	66
WG122691-1	59	65	69	106	62	72	60
WG122691-2	82	69	74	114	65	67	61
WG122691-3	80	73	69	130	73	70	87
WG122691-4	88	84	75	161 *	77	73	97
WG122691-5	85	85	71	167 *	73	68	93
WG122691-6	75	74	57	96	65	60	82
WG122691-7	64	63	40	91	49	47	63
WG122691-8	89	81	56	125	62	60	77

Workgroup: WG122531 Orthophosphate Pesticides

MB:WG122531-1 Matrix: OTHR SOLID Listtype:OROPPEST-NPDES Method:SW846 3545A*SW846 8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Diazinon	9.6	16	ug/Kg	<MDL	
Malathion	26	48	ug/Kg	<MDL	
Chlorpyrifos	16	32	ug/Kg	<MDL	

SBD:WG122531-3 SB:WG122531-2 MB:WG122531-1 Matrix: OTHR SOLID Listtype:OROPPEST-NPDES Method:SW846 3545A*SW846 8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit	True Value	BD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	9.6	16	ug/Kg	<MDL	160	151	94		40--160	160	151	94		0		0--35
Malathion	26	48	ug/Kg	<MDL	160	196	122		40--160	160	204	127		4		0--35
Chlorpyrifos	16	32	ug/Kg	<MDL	160	153	96		40--160	160	158	99		3		0--35

MSD:WG122531-5 MS:WG122531-4 L56268-3 Matrix: FRSHWTRSED Listtype:OROPPEST-NPDES Method:SW846 3545A*SW846 8270D SIM Project:421879-210 Pkey:SED
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Diazinon	9.6	16	ug/Kg	<MDL	160	194	121		40--160	160	202	126		4		0--35
Malathion	26	48	ug/Kg	<MDL	160	239	150		40--160	160	234	146		2		0--35
Chlorpyrifos	16	32	ug/Kg	<MDL	160	172	107		40--160	160	151	94		13		0--35

Surrogate: (Lab Limits)	Chlor pyrifos-D10 40--160
L56268-1	148
L56268-2	108
L56268-3	111
WG122531-1	86
WG122531-2	105
WG122531-3	102
WG122531-4	111
WG122531-5	107

Workgroup: WG122690 PCB

MB:WG122690-1 Matrix: OTHR SOLID Listtype:ORPCB Method:SW846 3550B*SW846 8082A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Aroclor 1016	2	8	ug/Kg	<MDL	
Aroclor 1221	4	8	ug/Kg	<MDL	
Aroclor 1232	4	8	ug/Kg	<MDL	
Aroclor 1242	2	8	ug/Kg	<MDL	
Aroclor 1248	2	8	ug/Kg	<MDL	
Aroclor 1254	2	8	ug/Kg	<MDL	
Aroclor 1260	2	8	ug/Kg	<MDL	
Total Aroclors	4	8	ug/Kg	<MDL	

SB:WG122690-2 MB:WG122690-1 Matrix: OTHR SOLID Listtype:ORPCB Method:SW846 3550B*SW846 8082A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	True Value	SB Value	% Rec.	Qual	Lab Limit
Aroclor 1242	2	8	ug/Kg	<MDL	80	40.7	51		23--92
Aroclor 1260	2	8	ug/Kg	<MDL	80	56.1	70		52--103

MSD:WG122690-4 MS:WG122690-3 L56268-1 Matrix: FRSHWTRSED Listtype:ORPCB Method:SW846 3550B*SW846 8082A Project:421879-210 Pkey:SED
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	True Value	MS Value	% Rec.	Qual	Lab Limit	True Value	MSD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Aroclor 1242	2	8	ug/Kg	<MDL	80	51.7	65		57--111	80	60.1	75		15		0--35
Aroclor 1260	2	8	ug/Kg	<MDL	80	52.5	66		33--105	80	56.7	71		8		0--35

SRMD:WG122690-6 SRM:WG122690-5 Matrix: FRSHWTRSED Listtype:ORPCB Method:SW846 3550B*SW846 8082A Project: Pkey:SED
(Std Reference Material Duplicate, Std Reference Material)

Parameter	MDL	RDL	Units	True Value	SRM Value	% Rec.	Qual	Lab Limit	True Value	SRMD Value	% Rec.	Qual	RPD	Qual	Lab Limit
Aroclor 1260	13	53.3	ug/Kg	173	96.1	56		38--167	173	100	58		4		0--35

LD:WG122690-7 L56268-1 Matrix: FRSHWTRSED Listtype:ORPCB Method:SW846 3550B*SW846 8082A Project:421879-210 Pkey:SED
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	Lab Limit
Aroclor 1016	2	8	ug/Kg	<MDL	<MDL			0--35
Aroclor 1221	4	8	ug/Kg	<MDL	<MDL			0--35
Aroclor 1232	4	8	ug/Kg	<MDL	<MDL			0--35
Aroclor 1242	2	8	ug/Kg	<MDL	<MDL			0--35
Aroclor 1248	2	8	ug/Kg	<MDL	<MDL			0--35
Aroclor 1254	2	8	ug/Kg	5.4	5.2			0--35
Aroclor 1260	2	8	ug/Kg	<MDL	<MDL			0--35
Total Aroclors	2	8	ug/Kg	5.4	5.2			0--35

Surrogate: (Lab Limits)	2,4,5,6-Tetrachloro m-xylene 20--115	Decachlorobiphenyl 55--120
L56268-1	70	73
WG122690-1	48	75
WG122690-2	42	74
WG122690-3	63	66
WG122690-4	73	75
WG122690-5	58	73
WG122690-6	63	76
WG122690-7	70	72

Trace Organics Data Anomaly Form

Date(s) Occurred: *27, 28-AUG-12*

WG #(s): *WG122691*

☒ **All samples in WKGP(s)** **or** ☐ **Sample #(s):**

Project #(s): *421879-210 NPDES SW Monitoring*

Matrix: ☐ **Liquid** ☒ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

I. Analysis/Extraction

☐ BNA ☐ BNALL ☐ EDC ☐ EDC-LVI
☐ CLPESTPCB ☐ PEST ☐ PCB ☐ OPPEST
☐ VOA-GCMS ☐ NWTPH-GX ☐ NWTPH-DX ☐ NWTPH-HCID
☐ BUTYL TIN ☐ HERB
☒ Other: *BNASMS*
☐ Subcontracted:

II. Instrument

GC/ICP/MS: ☐ P
GC/MS: ☐ A ☐ J ☐ K ☐ L ☐ M ☐ N
GC ECD: ☐ F ☐ B ☐ C
GC FID: ☐ I ☐ D ☐ Q TCD/ECD
Extraction/Cleanup: ☐ PFE ☐ GPC
☒ Other: *7890E*

III. Type of Sample/Analytical Anomaly

☒ Values Outside of Control Limits:

1 ☒ Blank Contamination
2 ☒ SB/SBD Spike Recoveries
3 ☒ MS/MSD Spike Recoveries
4 ☒ LCS/SRM Recoveries
5 ☐ Initial Calibration
6 ☐ Performance Checks
7 ☒ ISTD %Differences
8 ☒ Surrogate Spike Recoveries
9 ☐ SB/SBD RPD
10 ☒ MS/MSD RPD
11 ☐ Sample/LD RPD
12 ☐ Continuing Calibration Checks
13 ☐ Tuning Criteria
14 ☐ Interferences in Sample Matrix

15 ☐ Holding time exceeded by:
16 ☐ Insufficient sample amount.
17 ☐ Inappropriate storage, container or preservation.
18 ☐ Other

Anomaly Description:

1. WG122691-1 MB had reportable levels of Pyrene, Bis (2-EthylHexyl)Phthalate, Di-N-Octyl Phthalate, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene.

2. WG122691-2 SB low had 1/37 spiked compounds exceed QC Lab Limits.

3. WG122691-4 MS and WG122691-5 MSD had 2/37 spiked compounds exceed QC Lab Limits.

4.WG122691-6 SRM and WG122691-7 SRMD had Dibenzo(a,h)anthracene recoveries exceed QC Lab Limits.

7. L56268-1, L56268-2, and WG122691-8 had ISTD #6, D12-Perylene, exceed QC criteria for % difference compared to daily standard.

8. 2/77 spiked surrogate compounds exceeded Lab QC Limits.

10. WG122691-4 MS and WG122691-5 MSD had 1/37 spiked compounds exceed % RPD Limits.

IV. Type of Project Anomaly

☐ SAP/Work Plan specified MDLs not met.
☐ SAP/Work Plan specified QC frequency or QC type not met.
☐ SAP/Work Plan specified methodology not used.
☐ Sample exceeds regulatory and/or hazardous waste limits.
☐ Sample data results are unusual or inconsistent with expected results.
☐ Other

Anomaly Description:

V. Corrective Action Taken

☐ Sample(s) re-analyzed
☒ Sample(s) reported "AS IS"
☒ Sample(s) Diluted
☒ Data qualified with the following flags: *B, J*
☐ Other
☐ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

Corrective Action Description:

1. Samples with less than ten times the blank level contamination were flagged "B" for Pyrene, Bis (2-EthylHexyl)Phthalate, Di-N-Octyl Phthalate, Dibenzo(a,h)anthracene, and Benzo(g,h,i)perylene.

2. The compounds were asterisked on the Lab QC Report.

3. The compounds were asterisked on the Lab QC Report.

4. The compounds were asterisked on the Lab QC Report.

7. L56268-1, L56268-2, and WG122691-8 were diluted X 5.

8. The compounds were asterisked on the Lab QC Report.

10. The compound which exceeded %RPD criteria was asterisked on the Lab QC Report.

VI. Potential Effects on Data Quality (mandatory):

1. *The "B" flagged data may be biased high because the concentration in the samples was less than ten times the blank concentration.*

2. *The asterisked compound was reported without qualification since the SB high, MS and MSD were all reported within QC Lab Limits and should be used unbiased.*

3. *Since the native concentration was approximately 2 times higher than the spike concentration and the RPD exceed 35%, the MS/MSD and L56268-1 were "J" flagged for Bis(2EH)Phthalate indicating values used as an estimate and bias is undetermined. The asterisked compound with no flags was reported without qualification since the SB low, SB high, MS and %RPD were reported within QC Lab Limits and data should be used unbiased.*

4. *The asterisked compounds were reported without qualification. The SB/MS/MSD were all within QC Lab Limits for Dibenzo(a,h)anthracene and data should be used unbiased.*

7. *For L56268-1, L56268-2, and WG122691-8, the X 5 dilution was reported for all compounds quantitated using ISTD #6, D12-Perylene. The values reported were well above the calculated MLDs for the dilution. Data should be used with no bias.*

8. *The asterisked compounds were reported without qualification and data should be used unbiased.*

10. *See # 3.*

	Signatures	Signature Dates
Reported By: Mike Doubrava	_____	_____
Reviewer: Dave Fada	_____	_____
Supervisor: Diane McElhany	_____	_____
QA Officer: *Colin Elliott* **(For QA1 only)**	_____	_____
cc: LPM:		