# Appendix A
# King County Stormwater Monitoring S8.D QAPP

# 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:<br>SH added<br>B2 and B3 added<br>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**

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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<br>206-296-8252 | Project Manager | King County WLRD, Science |
| Dave Funke<br>206-296-8066 | Engineer | King County WLRD, Science |
| Jim Crawford<br>206-296-8276 | Engineer | King County Roads |
| Fritz Grothkopp<br>206-684-2327 | Laboratory Project Manager | King County Environmental Lab |
| Colin Elliott<br>206-684-2343 | Quality Assurance Officer | King County Environmental Lab |
| Diane McElhany<br>206-684-2304 | Metals Laboratory Supervisor | King County Environmental Lab |
| Brian Prosch<br>206-684-2331 | Conventionals Laboratory Supervisor | King County Environmental Lab |
| Eric Thompson<br>206-684-2340 | Microbiology Laboratory Supervisor | King County Environmental Lab |
| Jeff Droker<br>206-684-2309 | Environmental Lab Scientist | King County Environmental Lab |
| Fran Sweeney<br>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.

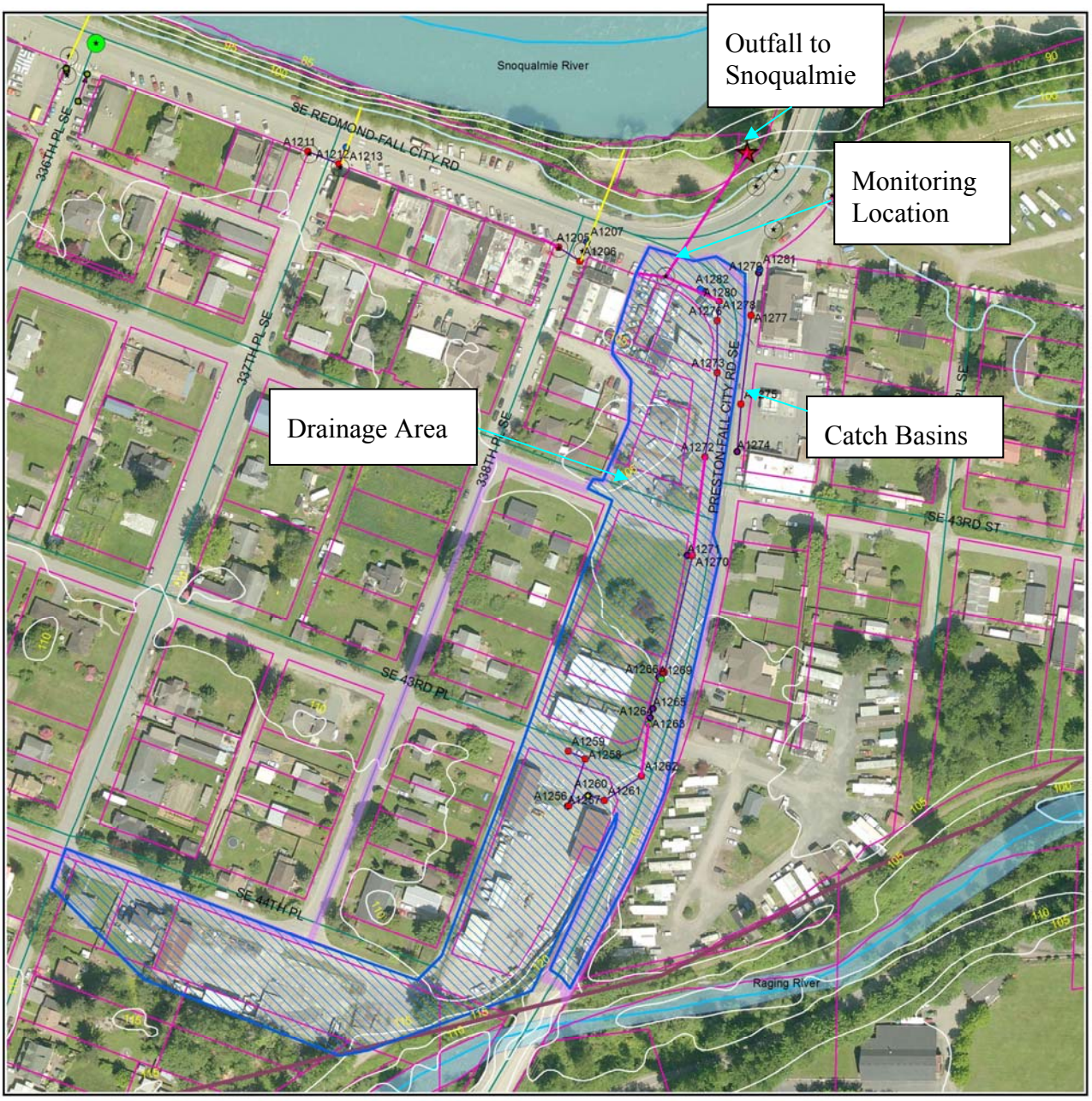


**Figure 1. Fall City Commercial Monitoring Area.**

## 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 335$^{th}$ place SE and 44$^{th}$ 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<br>208,006N | 1,378,430E<br>208,006N | 1,308,856E<br>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 148$^{th}$ 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<br>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%<br>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:<br>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<br>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 º 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$^{o}$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 |

# 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

Department of Natural Resources and Parks
Water and Land Resources Division
**Science Section**
King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
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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.

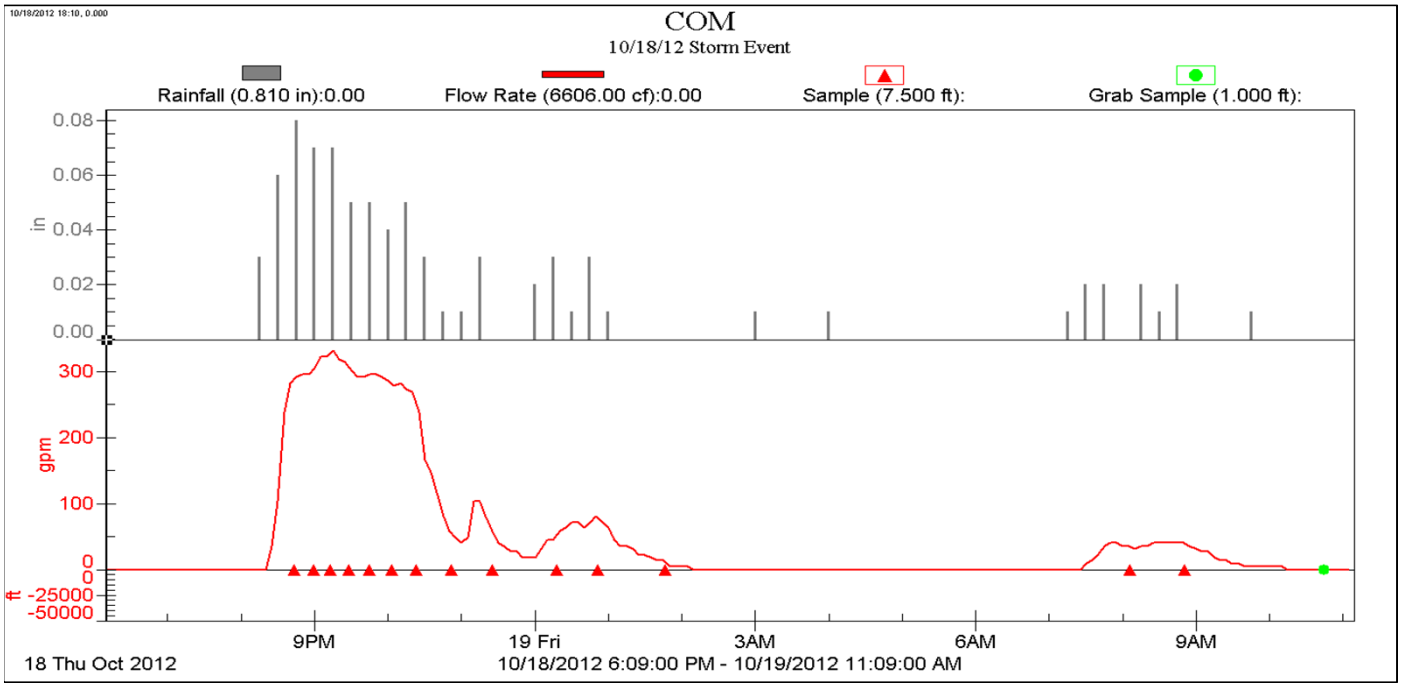
# Appendix B
# Targeted and Sampled Storm Events at COM, HDR, and LDR monitoring sites

| | Monitoring Station | | | | | | |
|---|---|---|---|---|---|---|---|
| | COM | | HDR | | LDR | | |
| Date | Grab | Comp | Grab | Comp | Grab | Comp | Notes/Explanation |
| 10/13/2012 | | | | | | | COM & HDR: Forecast called for 0.29-inches. Actual rainfall totaled 0.16-inches followed by a 7-hour break so the sample was discareded. |
| 10/18/2012 | X | X | X | X | | X | |
| 10/27/2012 | | | | | | | COM: Forecast called for 0.6-inches. Actual rainfall totaled 0.13-inches.<br>Composite sample consisted of only 3 aliquots so sample was discarded.<br>HDR: No rise in water level and the auto-sampler never enabled. |
| 11/11/2012 | | | | | | | COM: Storm resulted in very little runoff at the site. Only 1 aliquot was collected so sample was discarded.<br>HDR: No rise in water level and the auto-sampler never enabled.<br>LDR: Problems with the sampler tubing resulted in a false start. |
| 11/23/2012 | X | X | X | X | X | | LDR: Rainfall totals were larger than forecast, resulting in a sample that represented less than 75 percent of the hydrograph. Sample was discarded. |
| 11/28/2012 | | | | | X | | LDR: Rainfall totaled 0.07". Composite sample discarded since did not meet storm size criterion. |
| 12/6/2012 | | | | | | | COM & HDR: Forecasted to be 0.9-inch storm. Actual rainfall totaled 0.13-inches which was not intense enough for grabs or composites. |
| 12/9/2012 | X | X | | | | | HDR: Water level did not rise enough to enable the auto-sampler. Only 70 cf of flow recorded at the site. No sample was collected. |
| 12/11/2012 | | | X | X | X | | COM: 0.28-inch event followed by a 9-hour break and another 0.28-inches. 23 aliquots collected during the first 0.28-inches, with 2 aliquots collected during the second 0.28-inches. Since the 2 aliquots were collected during a separate storm the sample was discarded.<br>LDR: Storm did not end up meeting storm size criterion so sample was discarded. |
| 12/13/2012 | X | X | | | | | HDR: Water level did not rise enough to enable the auto-sampler. Very little flow recorded at the site. No sample was collected. |
| 12/15/2012 | X | X | | | | | HDR: Water level did not rise enough to enable the auto-sampler. Very little flow recorded at the site. No sample was collected. |
| 1/3/2013 | | | | | | X | |
| 1/23/2013 | X | X | X | X | | | |
| 2/5/2013 | X | X | X | | X | | HDR: Composite sample only represented 36 percent of the hydrograph and was therefore discarded.<br>LDR: Sampler triggered early, collecting aliquots that were not representative of storm flow. Considered a false start and sample was discarded. |
| 2/16/2013 | | | | | | | COM & HDR: Rainfall was much greater than forecast, resulting in a sample that only represented 53 and 66 percent of the hydrograph, respectively. Sample was discarded. |
| 2/25/2013 | | ***X*** | | | | | COM: Storm totaled 0.19-inches. Composite sample submitted as one of three allowed from non-qualifying rain event.<br>HDR: Very little runoff at the site, therefore only 1 aliquot was collected. The sample was discarded. |
| 3/2/2013 | X | X | | | | X | HDR: Very little runoff at the site, therefore only 2 aliquots were collected. The sample was discarded. |
| 3/6/2013 | X | X | | | X | | HDR: No rise in water level and the auto-sampler never enabled. No flow recorded at the site.<br>LDR: Rainfall totals were larger than forecast, resulting in a composite sample that did not represent 75 percent of the hydrograph. Sample was discarded. |
| 3/13/2013 | X | X | X | | X | ***X*** | HDR: A small response in water level but it was not enough to enable the auto-sampler. No composite sample was collected.<br>LDR: Storm totaled 0.1-inches. Composite sample submitted as one of three allowed from non-qualifying rain event. |

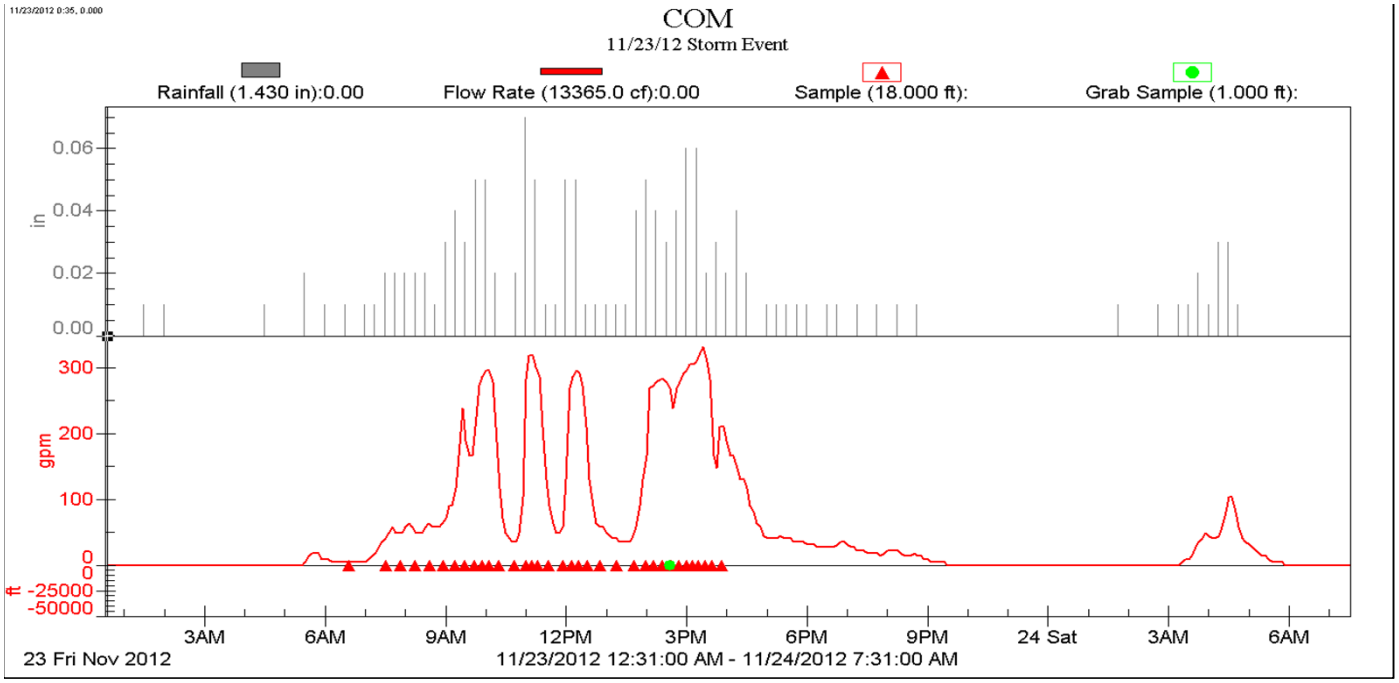
| | COM | | HDR | | LDR | |
|---|---|---|---|---|---|---|
| | Grab | Comp | Grab | Comp | Grab | Comp |
| Total Targeted | 17 | 17 | 17 | 17 | 10 | 10 |
| Total Collected | 10 | 11 | 6 | 4 | 6 | 4 |
| Total Qualifying | 3 | 10 | 3 | 4 | 6 | 3 |

| | | | |
|---|---|---|---|
| | Not a qualifyinig event at site. | | Targeted, no sample collected (see notes) |
| X | Qualifying sample collected | ***X*** | Sample collected, not qualifying (see notes) |

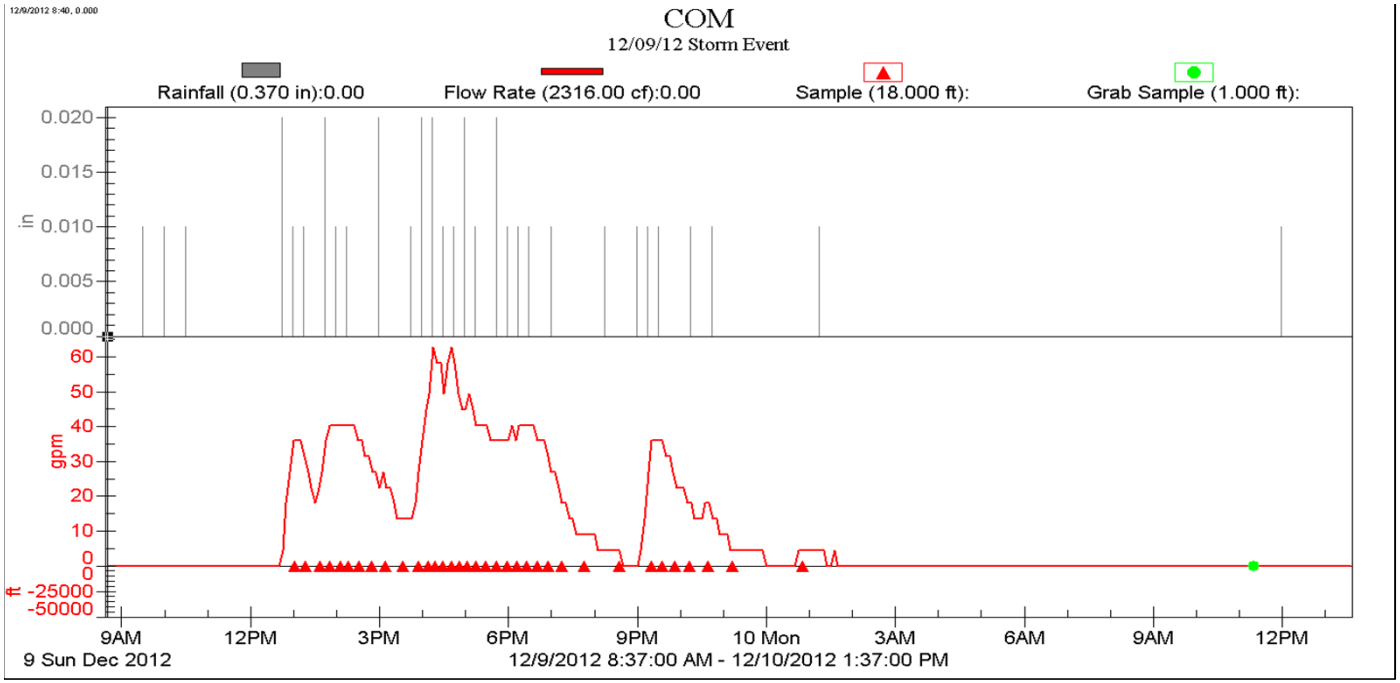
# Appendix C
# Storm Event Files



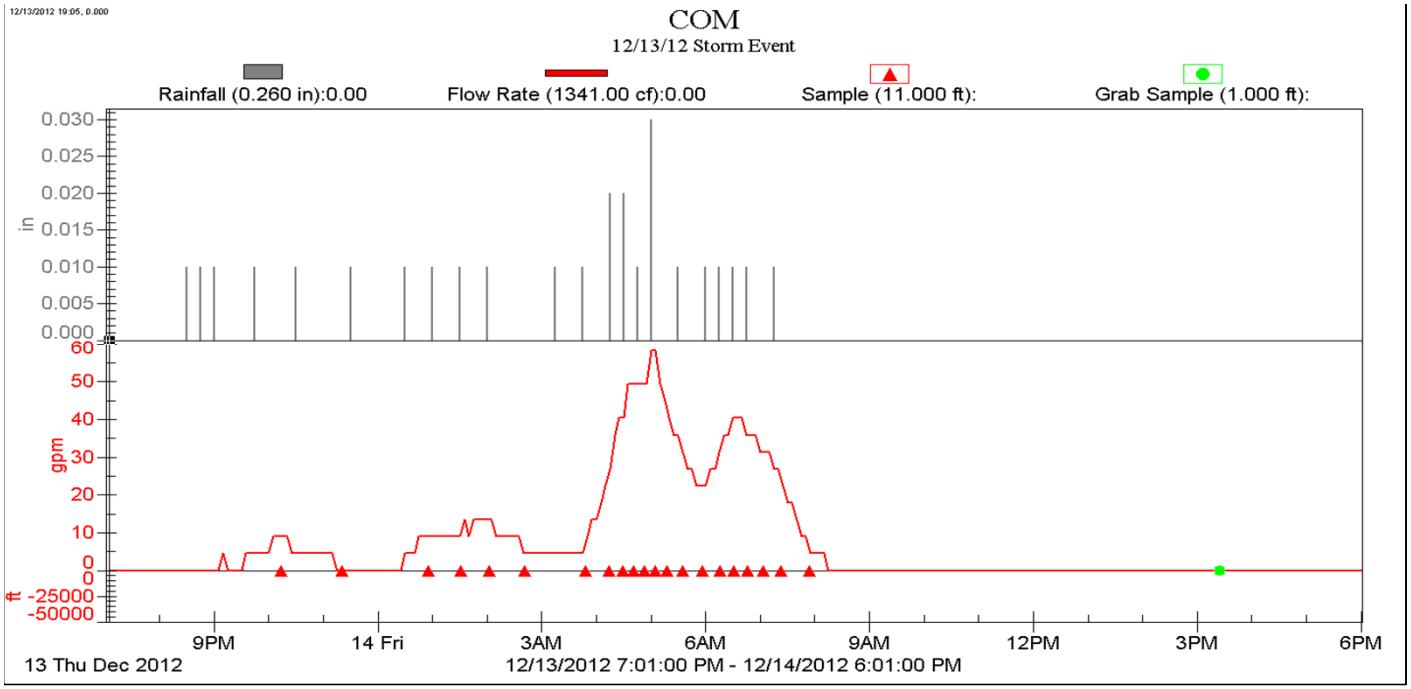

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.81 | | No. of Aliquots | ≥ 10 | 14 | |
| Precipitation Duration (hrs) | NA | 13.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.06 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 49.75 | | Composite Start date/time | NA | 10/18/2012 20:20 | |
| 24 hr Runoff volume (cf) | NA | 6606 | | Composite end date/time | NA | 10/19/2012 8:51 | |
| Runoff volume sampled (cf) | NA | 6462 | | Sampling Duration (hr) | ≥ 1 | 12.52 | |
| Percent runoff sampled (%) | ≥ 75 | 98 | | Grab Sample Date/Time | NA | 10/19/2012 10:45 | |
| Average flow during sampling (cfs) | NA | 0.127 | | | | | |
| **NOTES:** | | | | | | | |



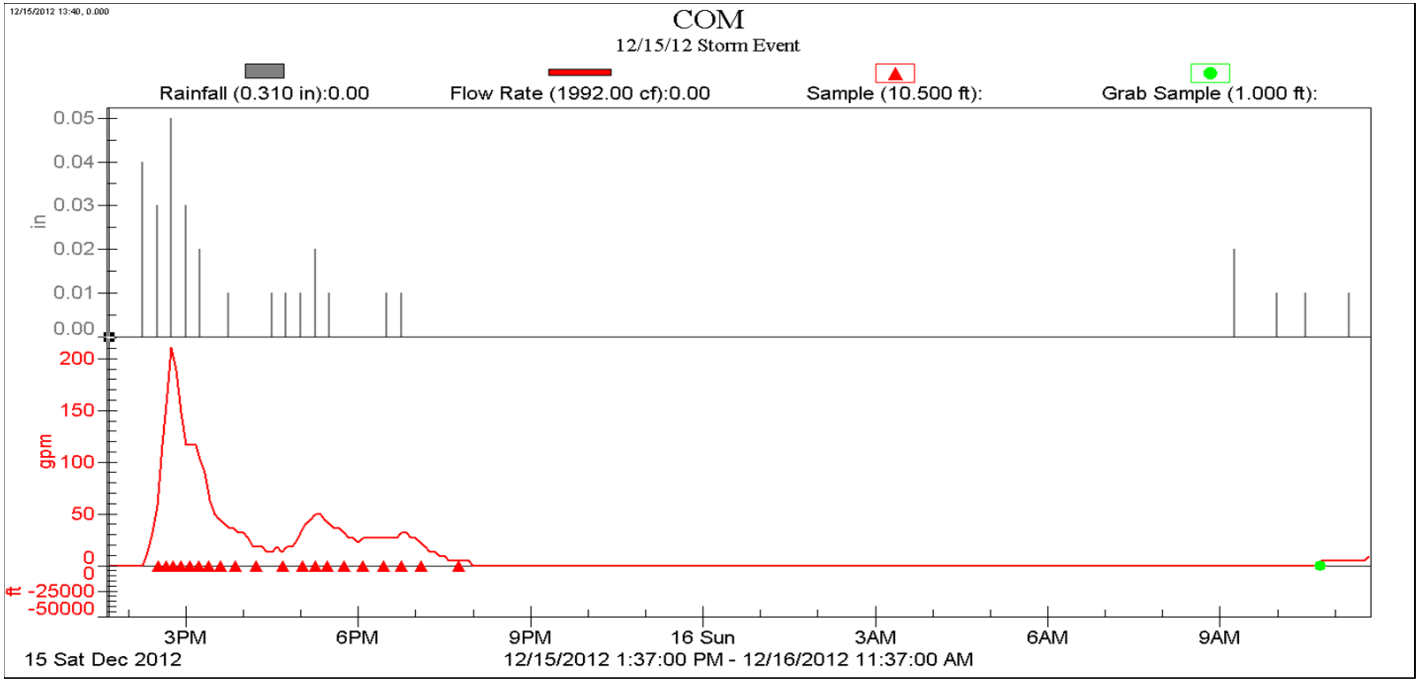

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 1.43 | | No. of Aliquots | ≥ 10 | 35 | |
| Precipitation Duration (hrs) | NA | 27.25 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.05 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 35.23 | | Composite Start date/time | NA | 11/23/2012 5:25 | |
| 24 hr Runoff volume (cf) | NA | 13302 | | Composite end date/time | NA | 11/23/2012 15:51 | |
| Runoff volume sampled (cf) | NA | 11079 | | Sampling Duration (hr) | ≥ 1 | 10.43 | |
| Percent runoff sampled (%) | ≥ 75 | 83 | | Grab Sample Date/Time | NA | 11/23/2012 14:35 | |
| Average flow during sampling (cfs) | NA | 0.255 | | | | | |
| **NOTES:** | | | | | | | |



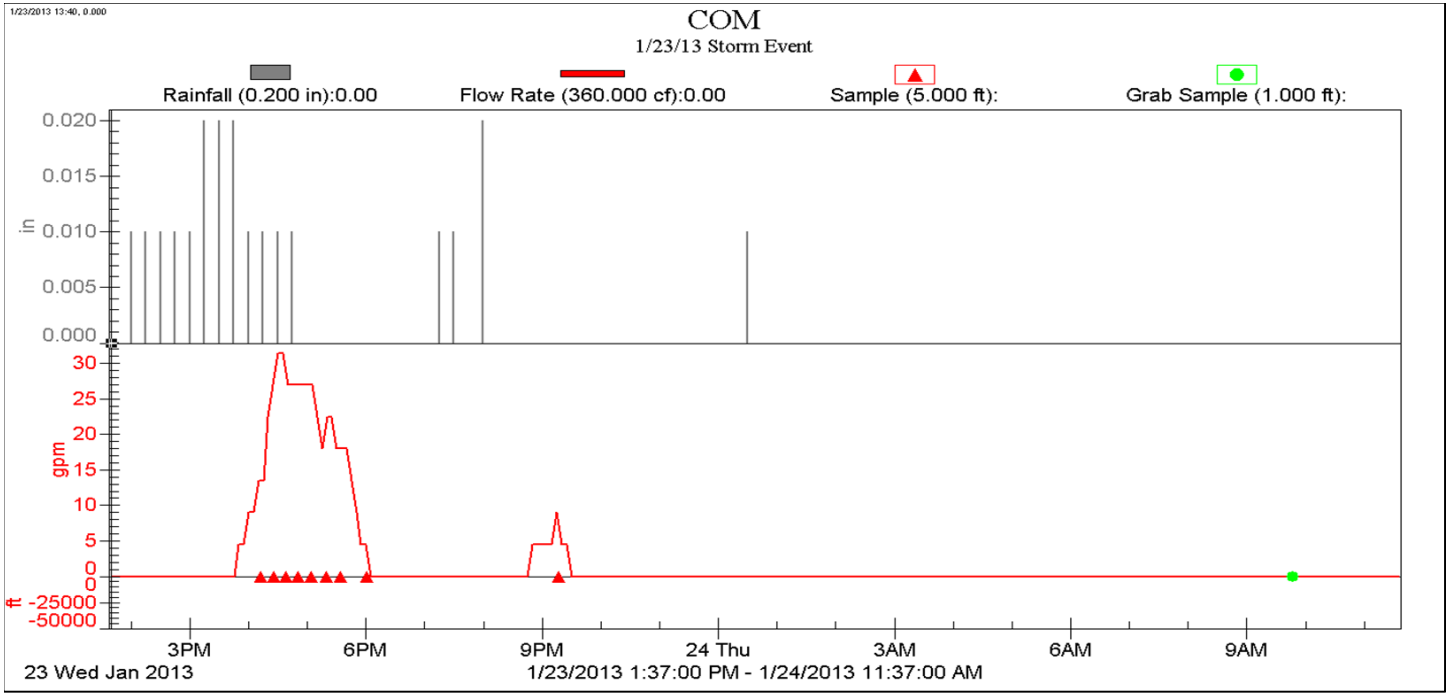

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.37 | | No. of Aliquots | ≥ 10 | 35 | |
| Precipitation Duration (hrs) | NA | 15.75 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 43.75 | | Composite Start date/time | NA | 12/9/2012 12:40 | |
| 24 hr Runoff volume (cf) | NA | 2316 | | Composite end date/time | NA | 12/10/2012 0:50 | |
| Runoff volume sampled (cf) | NA | 2298 | | Sampling Duration (hr) | ≥ 1 | 12.17 | |
| Percent runoff sampled (%) | ≥ 75 | 99 | | Grab Sample Date/Time | NA | 12/10/2012 11:20 | |
| Average flow during sampling (cfs) | NA | 0.049 | | | | | |
| **NOTES:** | | | | | | | |



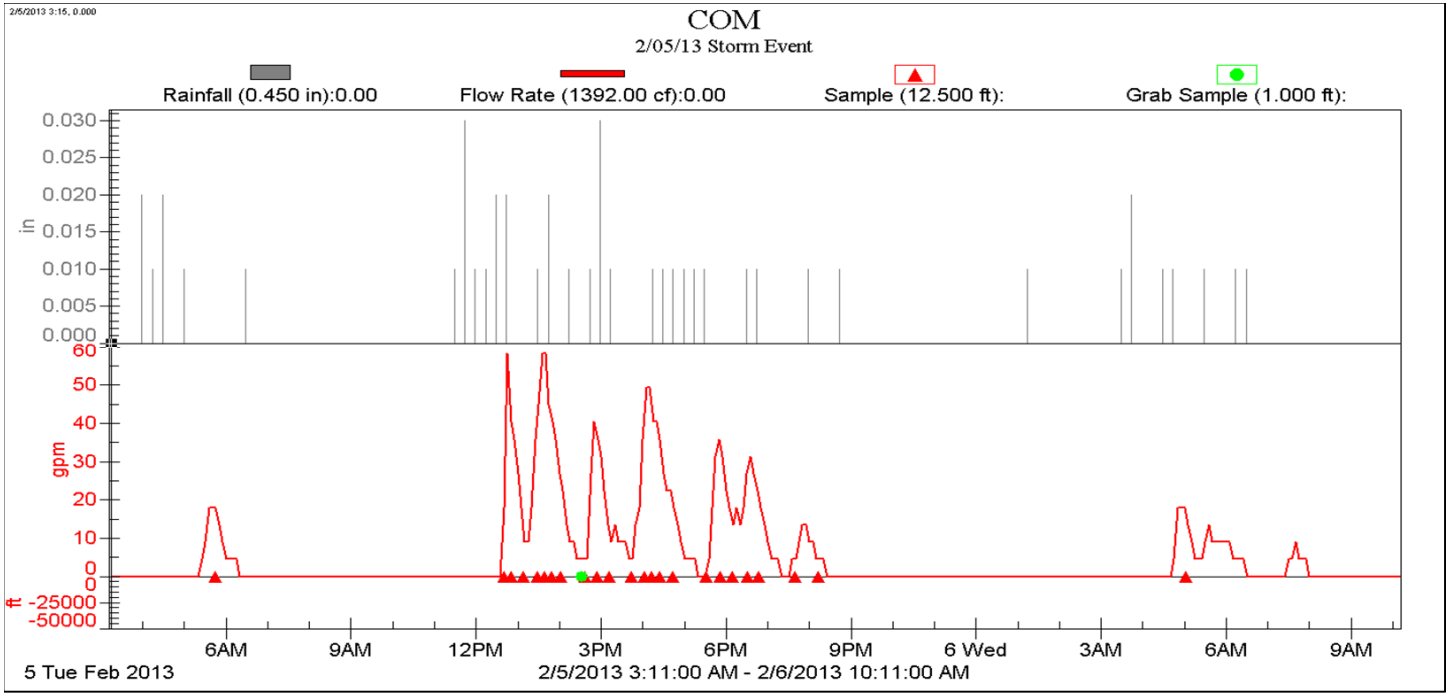

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.26 | | No. of Aliquots | ≥ 10 | 21 | |
| Precipitation Duration (hrs) | NA | 10.75 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 32.00 | | Composite Start date/time | NA | 12/13/2012 21:05 | |
| 24 hr Runoff volume (cf) | NA | 1341 | | Composite end date/time | NA | 12/14/2012 7:54 | |
| Runoff volume sampled (cf) | NA | 1332 | | Sampling Duration (hr) | ≥ 1 | 10.82 | |
| Percent runoff sampled (%) | ≥ 75 | 99 | | Grab Sample Date/Time | NA | 12/14/2012 15:25 | |
| Average flow during sampling (cfs) | NA | 0.031 | | | | | |
| **NOTES:** | | | | | | | |



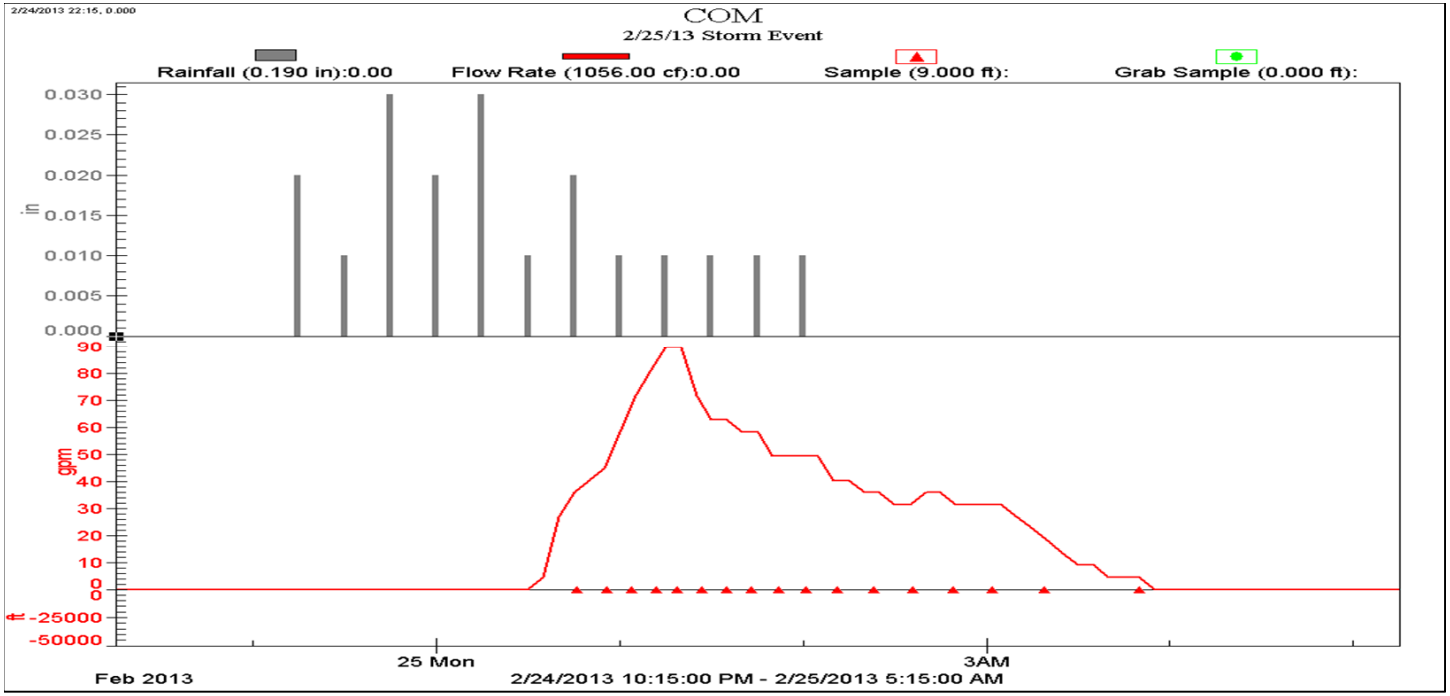

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.31 | | No. of Aliquots | ≥ 10 | 20 | |
| Precipitation Duration (hrs) | NA | 4.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.07 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 31.75 | | Composite Start date/time | NA | 12/15/2012 14:15 | |
| 24 hr Runoff volume (cf) | NA | 1992 | | Composite end date/time | NA | 12/15/2012 19:45 | |
| Runoff volume sampled (cf) | NA | 1950 | | Sampling Duration (hr) | ≥ 1 | 5.50 | |
| Percent runoff sampled (%) | ≥ 75 | 98 | | Grab Sample Date/Time | NA | 12/16/2012 10:45 | |
| Average flow during sampling (cfs) | NA | 0.089 | | | | | |
| **NOTES:** | | | | | | | |




| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.20 | | No. of Aliquots | ≥ 10 | 9 | |
| Precipitation Duration (hrs) | NA | 10.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 312.50 | | Composite Start date/time | NA | 1/23/2013 15:45 | |
| 24 hr Runoff volume (cf) | NA | 360 | | Composite end date/time | NA | 1/23/2013 21:17 | |
| Runoff volume sampled (cf) | NA | 357 | | Sampling Duration (hr) | ≥ 1 | 5.53 | |
| Percent runoff sampled (%) | ≥ 75 | 99 | | Grab Sample Date/Time | NA | 1/24/2013 9:47 | |
| Average flow during sampling (cfs) | NA | 0.012 | | | | | |
| **NOTES:** | | | | | | | |

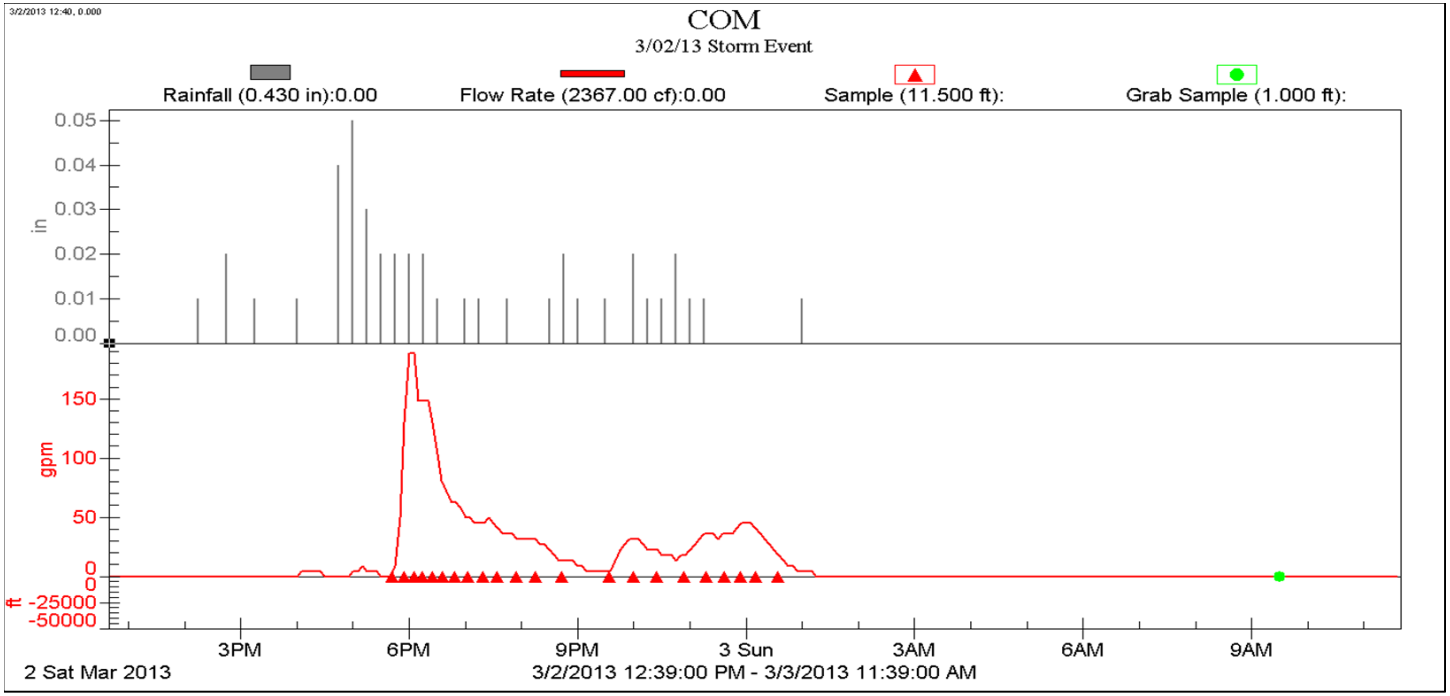



| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.45 | | No. of Aliquots | ≥ 10 | 24 | |
| Precipitation Duration (hrs) | NA | 26.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 32.25 | | Composite Start date/time | NA | 2/5/2013 5:20 | |
| 24 hr Runoff volume (cf) | NA | 1305 | | Composite end date/time | NA | 2/6/2013 5:00 | |
| Runoff volume sampled (cf) | NA | 1284 | | Sampling Duration (hr) | ≥ 1 | 23.67 | |
| Percent runoff sampled (%) | ≥ 75 | 98 | | Grab Sample Date/Time | NA | 2/5/2013 14:28 | |
| Average flow during sampling (cfs) | NA | 0.015 | | | | | |
| **NOTES:** | | | | | | | |



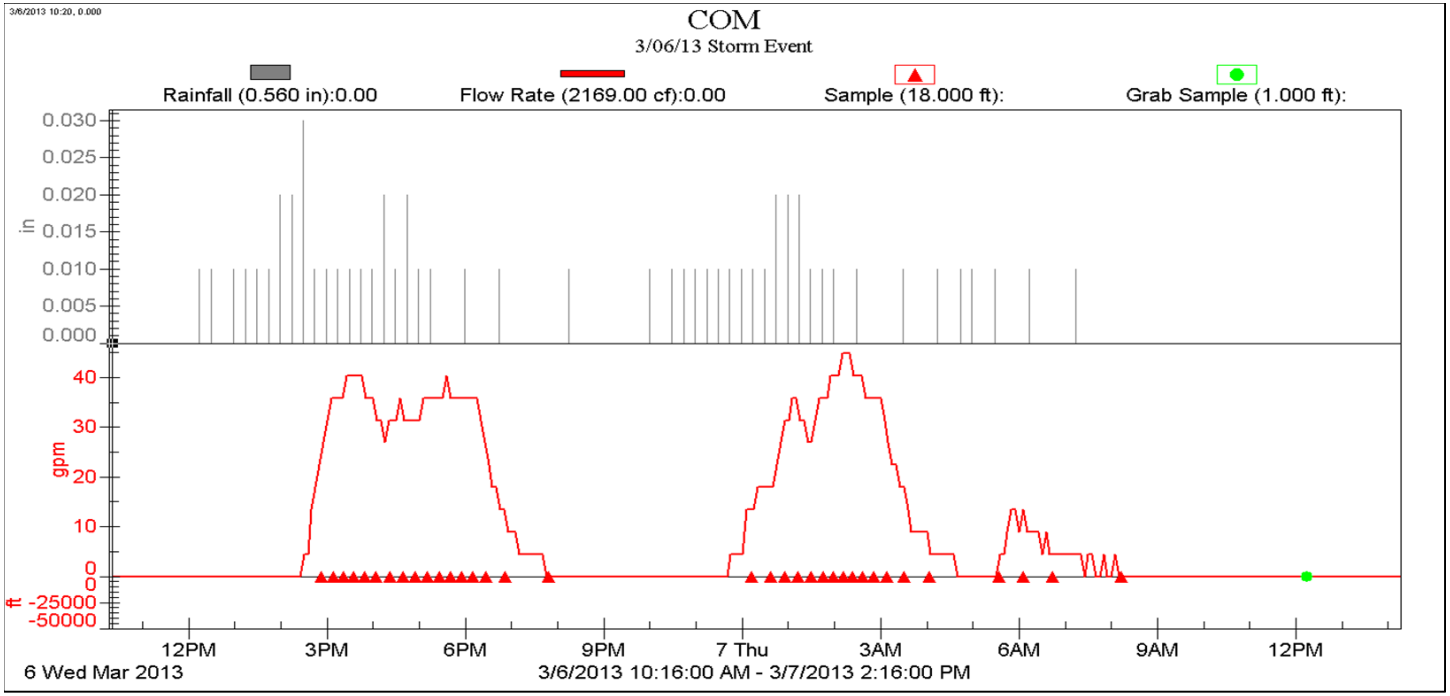

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.19 | | No. of Aliquots | ≥ 10 | 24 | |
| Precipitation Duration (hrs) | NA | 2.75 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.07 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 26.75 | | Composite Start date/time | NA | 2/25/2013 0:30 | |
| 24 hr Runoff volume (cf) | NA | 1056 | | Composite end date/time | NA | 2/25/2013 3:50 | |
| Runoff volume sampled (cf) | NA | 1056 | | Sampling Duration (hr) | ≥ 1 | 3.33 | |
| Percent runoff sampled (%) | ≥ 75 | 100 | | Grab Sample Date/Time | NA | NA | |
| Average flow during sampling (cfs) | NA | 0.058 | | | | | |

**NOTES:** Storm did not meet storm size criterion, however sample was submitted as one of three allowed "non-qualifying" samples.



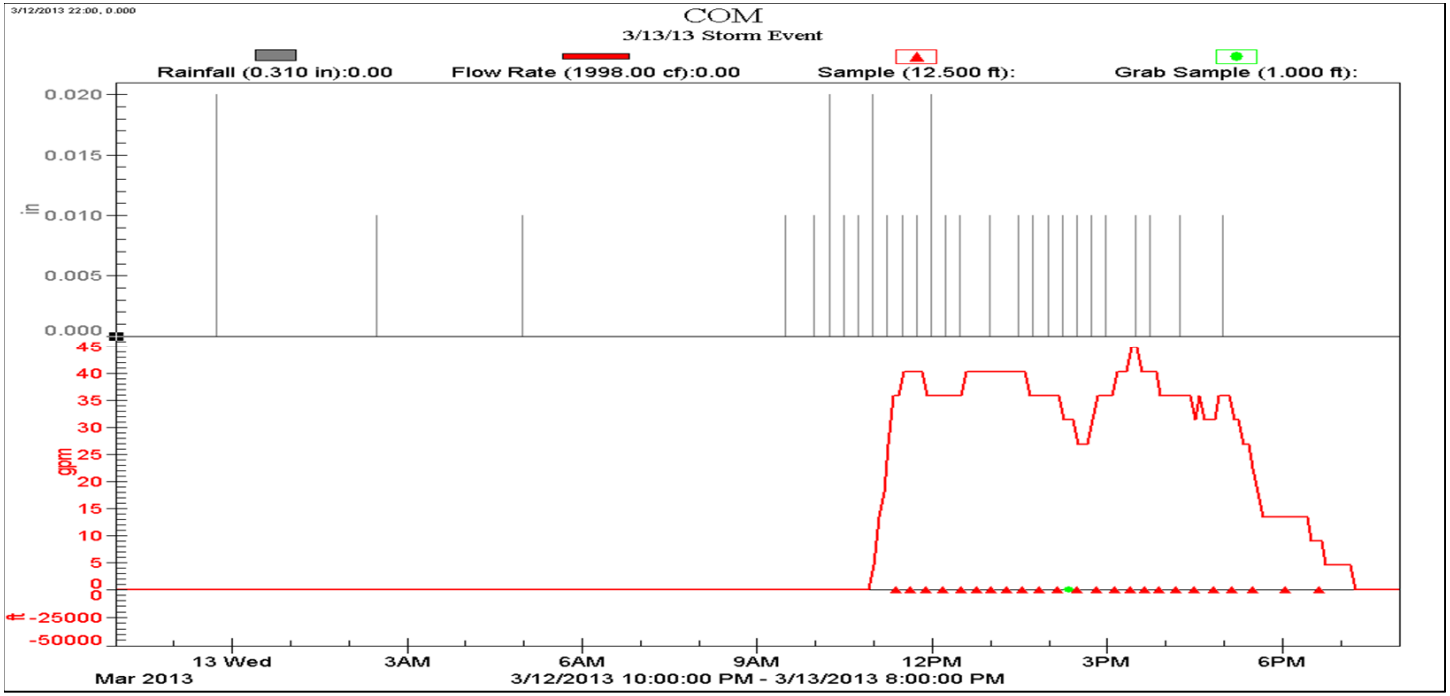

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.43 | | No. of Aliquots | ≥ 10 | 22 | |
| Precipitation Duration (hrs) | NA | 10.75 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.04 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 36.00 | | Composite Start date/time | NA | 3/2/2013 16:00 | |
| 24 hr Runoff volume (cf) | NA | 2367 | | Composite end date/time | NA | 3/3/2013 0:34 | |
| Runoff volume sampled (cf) | NA | 2334 | | Sampling Duration (hr) | ≥ 1 | 8.57 | |
| Percent runoff sampled (%) | ≥ 75 | 99 | | Grab Sample Date/Time | NA | 3/3/2013 9:30 | |
| Average flow during sampling (cfs) | NA | 0.064 | | | | | |

**NOTES:** Storm did not meet storm size criterion, however sample was submitted as one of three allowed "non-qualifying" samples.



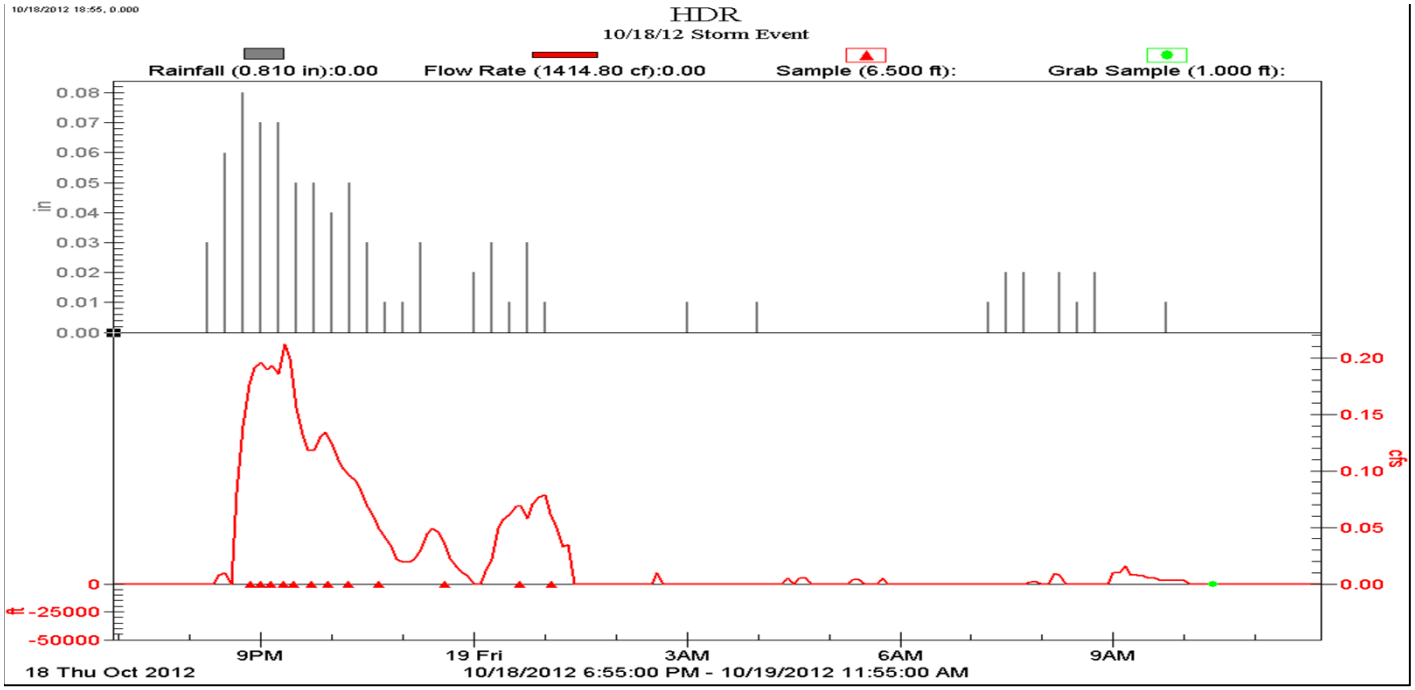

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.56 | | No. of Aliquots | ≥ 10 | 35 | |
| Precipitation Duration (hrs) | NA | 19.00 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.03 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 85.25 | | Composite Start date/time | NA | 3/6/2013 14:25 | |
| 24 hr Runoff volume (cf) | NA | 2169 | | Composite end date/time | NA | 3/7/2013 8:13 | |
| Runoff volume sampled (cf) | NA | 2169 | | Sampling Duration (hr) | ≥ 1 | 17.80 | |
| Percent runoff sampled (%) | ≥ 75 | 100 | | Grab Sample Date/Time | NA | 3/7/2013 12:15 | |
| Average flow during sampling (cfs) | NA | 0.013 | | | | | |

**NOTES:** Storm did not meet storm size criterion, however sample was submitted as one of three allowed "non-qualifying" samples.

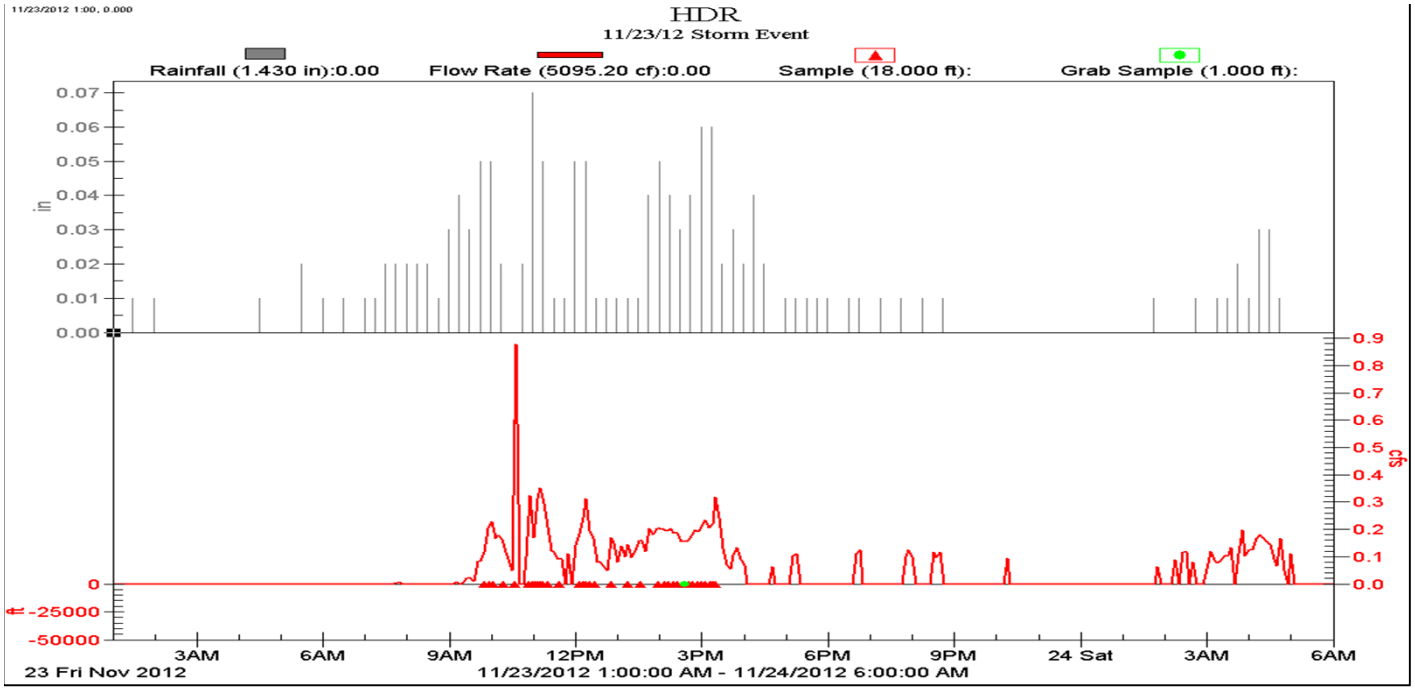



| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.31 | | No. of Aliquots | ≥ 10 | 24 | |
| Precipitation Duration (hrs) | NA | 17.25 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 30.00 | | Composite Start date/time | NA | 3/13/2013 10:55 | |
| 24 hr Runoff volume (cf) | NA | 1998 | | Composite end date/time | NA | 3/13/2013 18:36 | |
| Runoff volume sampled (cf) | NA | 1980 | | Sampling Duration (hr) | ≥ 1 | 7.68 | |
| Percent runoff sampled (%) | ≥ 75 | 99 | | Grab Sample Date/Time | NA | 3/13/2013 14:20 | |
| Average flow during sampling (cfs) | NA | 0.068 | | | | | |

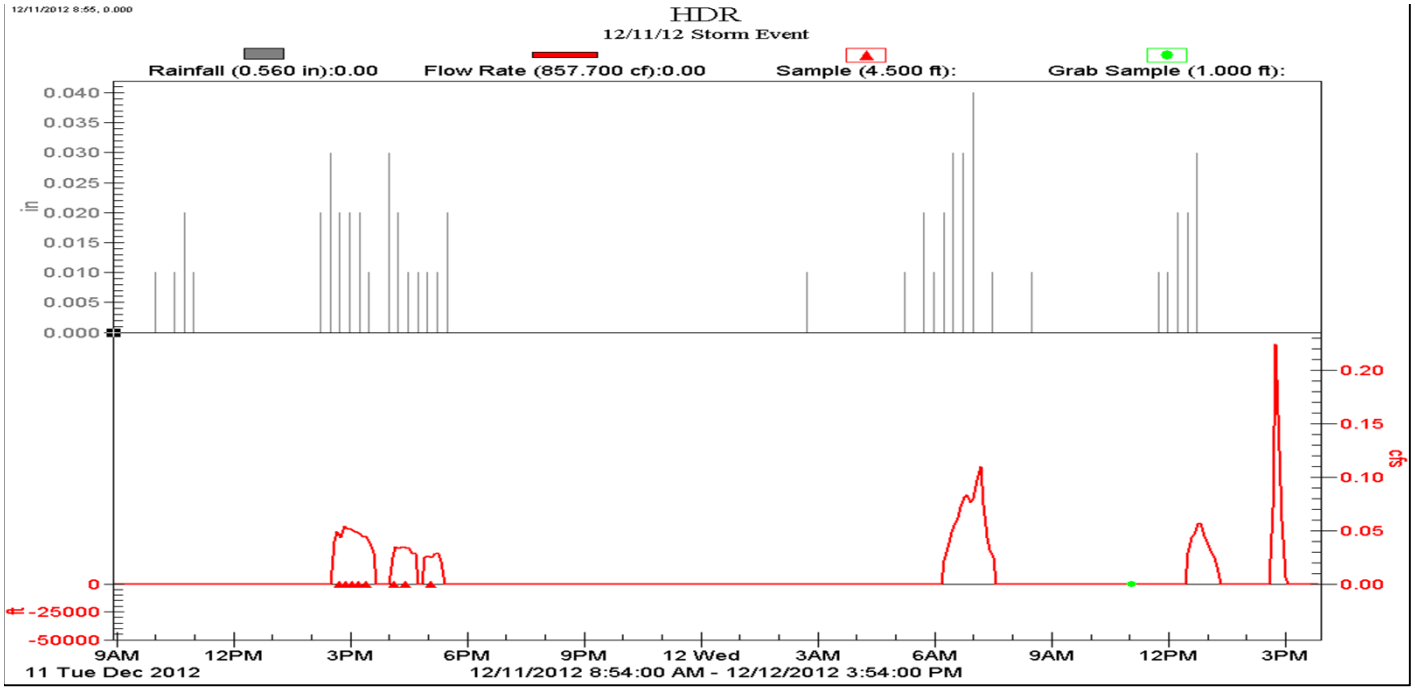
**NOTES:** Storm did not meet storm size criterion, however sample was submitted as one of three allowed "non-qualifying" samples.



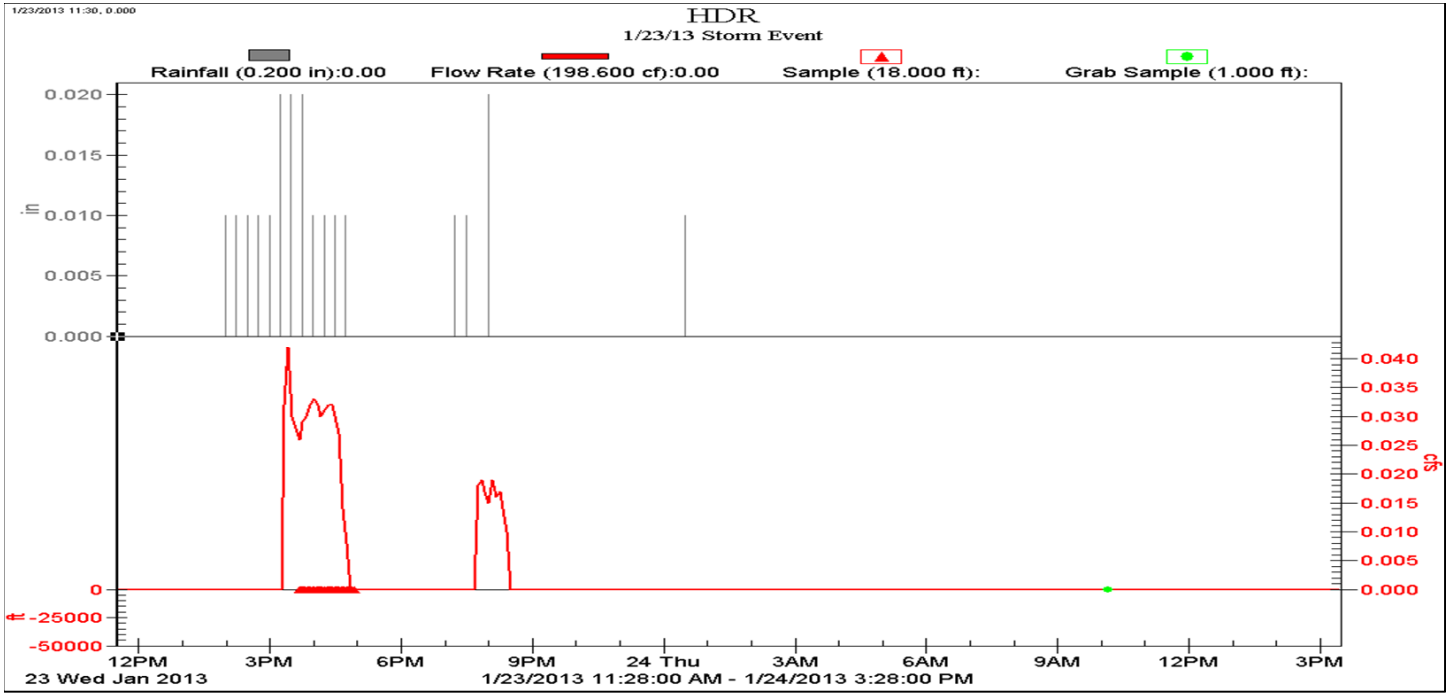

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.81 | | No. of Aliquots | ≥ 10 | 12 | |
| Precipitation Duration (hrs) | NA | 13.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.06 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 49.75 | | Composite Start date/time | NA | 10/18/2012 20:20 | |
| 24 hr Runoff volume (cf) | NA | 1415 | | Composite end date/time | NA | 10/19/2012 1:06 | |
| Runoff volume sampled (cf) | NA | 1351 | | Sampling Duration (hr) | ≥ 1 | 4.77 | |
| Percent runoff sampled (%) | ≥ 75 | 95 | | Grab Sample Date/Time | NA | 10/19/2012 10:24 | |
| Average flow during sampling (cfs) | NA | 0.062 | | | | | |
| **NOTES:** | | | | | | | |



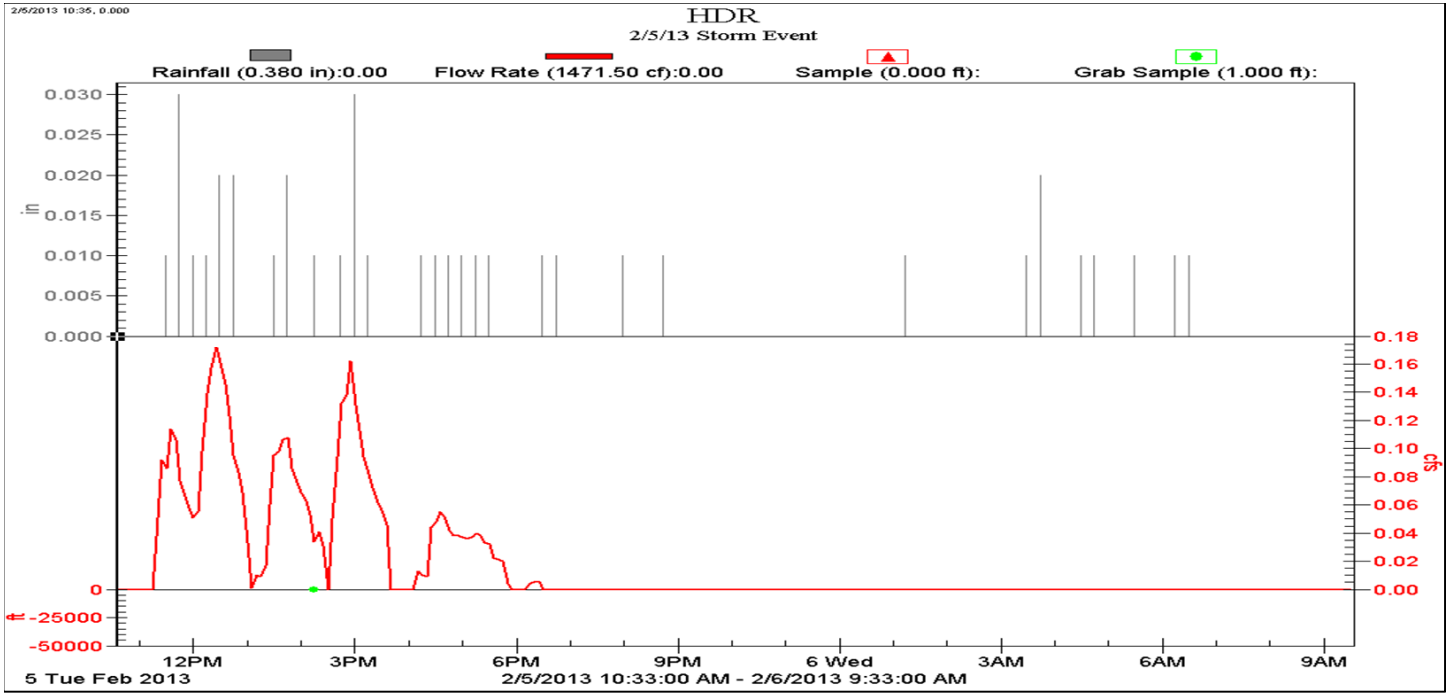

| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 1.43 | | No. of Aliquots | ≥ 10 | 35 | |
| Precipitation Duration (hrs) | NA | 27.25 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.05 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 35.23 | | Composite Start date/time | NA | 11/23/2012 9:05 | |
| 24 hr Runoff volume (cf) | NA | 5095 | | Composite end date/time | NA | 11/23/2012 15:20 | |
| Runoff volume sampled (cf) | NA | 3800 | | Sampling Duration (hr) | ≥ 1 | 6.25 | |
| Percent runoff sampled (%) | ≥ 75 | 75 | | Grab Sample Date/Time | NA | 11/23/2012 14:35 | |
| Average flow during sampling (cfs) | NA | 0.144 | | | | | |
| **NOTES:** | | | | | | | |




| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.28 | | No. of Aliquots | ≥ 10 | 8 | |
| Precipitation Duration (hrs) | NA | 7.50 | | 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 | 35.75 | | Composite Start date/time | NA | 12/11/2012 14:30 | |
| 24 hr Runoff volume (cf) | NA | 299 | | Composite end date/time | NA | 12/11/2012 17:04 | |
| Runoff volume sampled (cf) | NA | 275 | | Sampling Duration (hr) | ≥ 1 | 2.57 | |
| Percent runoff sampled (%) | ≥ 75 | 92 | | Grab Sample Date/Time | NA | 12/12/2012 11:03 | |
| Average flow during sampling (cfs) | NA | 0.008 | | | | | |
| **NOTES:** | | | | | | | |

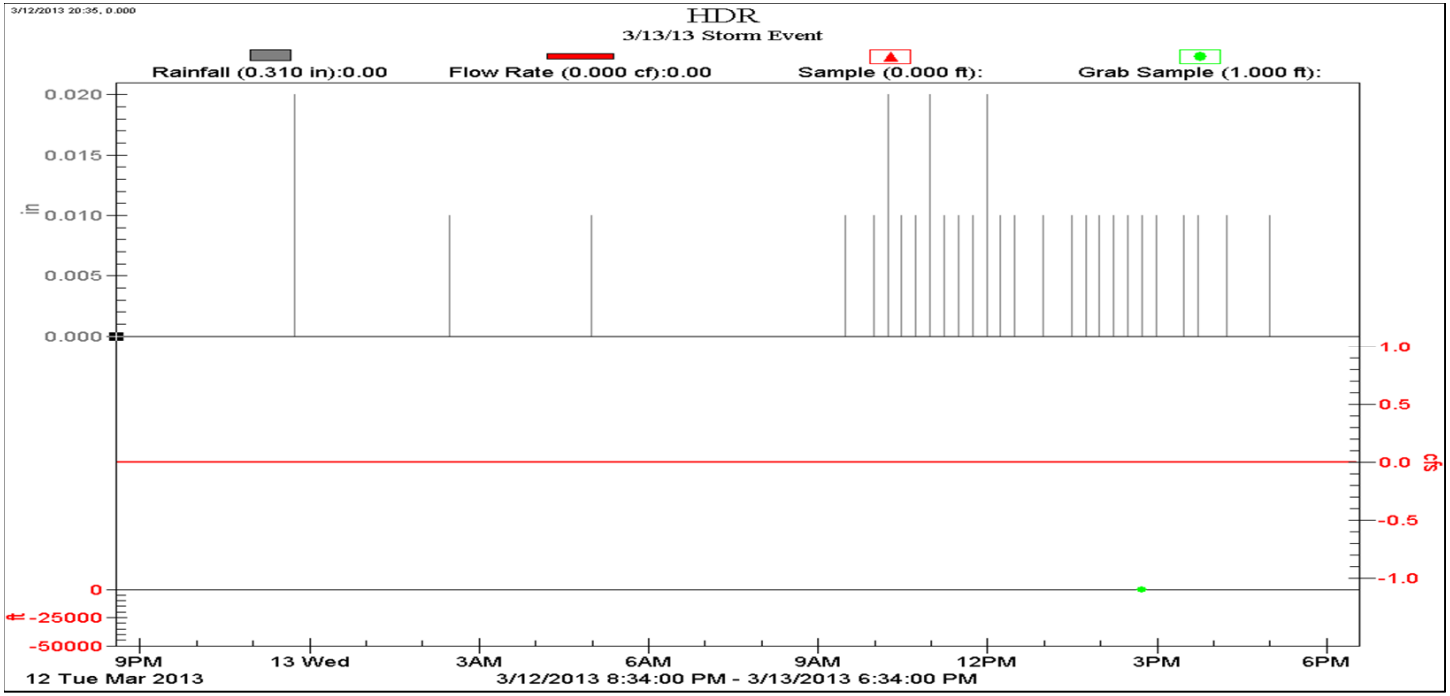



| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.20 | | No. of Aliquots | ≥ 10 | 9 | |
| Precipitation Duration (hrs) | NA | 10.50 | | Stormflow present during event | Y | Y | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | N | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 312.50 | | Composite Start date/time | NA | 1/23/2013 15:15 | |
| 24 hr Runoff volume (cf) | NA | 199 | | Composite end date/time | NA | 1/23/2013 16:55 | |
| Runoff volume sampled (cf) | NA | 155 | | Sampling Duration (hr) | ≥ 1 | 1.67 | |
| Percent runoff sampled (%) | ≥ 75 | 78 | | Grab Sample Date/Time | NA | 1/24/2013 10:10 | |
| Average flow during sampling (cfs) | NA | 0.01 | | | | | |
| **NOTES:** | | | | | | | |




| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.45 | | No. of Aliquots | ≥ 10 | NA | |
| Precipitation Duration (hrs) | NA | 26.50 | | Stormflow present during event | Y | NA | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | NA | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 32.25 | | Composite Start date/time | NA | NA | |
| 24 hr Runoff volume (cf) | NA | 1472 | | Composite end date/time | NA | NA | |
| Runoff volume sampled (cf) | NA | NA | | Sampling Duration (hr) | ≥ 1 | NA | |
| Percent runoff sampled (%) | ≥ 75 | NA | | Grab Sample Date/Time | NA | 2/5/2013 14:15 | |
| Average flow during sampling (cfs) | NA | NA | | | | | |

**NOTES:** Collected composite sample consisting of 35 aliquots, however sample only represented 36% of the hydrograph. Therefore, the composite sample was discarded.

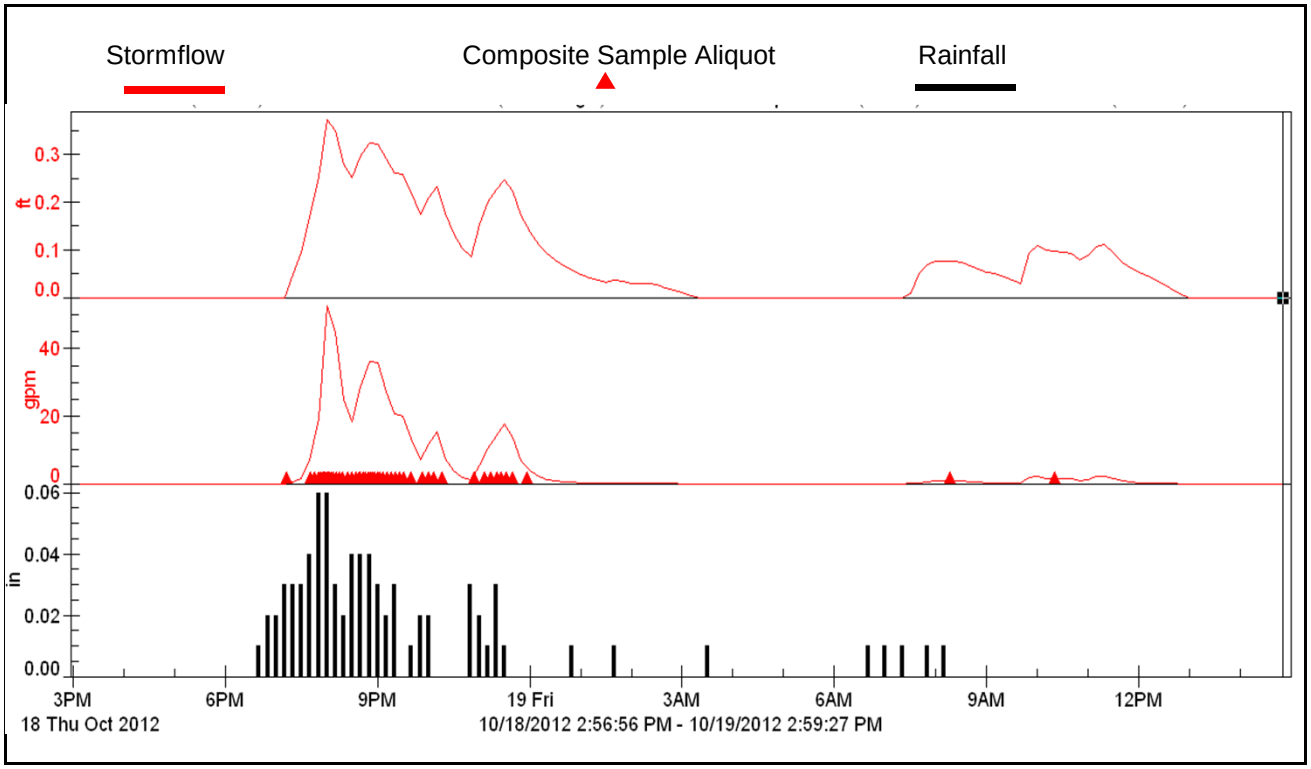



| Sampling Period Information | Criterion | Value | Notes | Sample Information | Criterion | Value | Notes |
|---|---|---|---|---|---|---|---|
| Precipitation Total (in) | ≥ 0.20 | 0.31 | | No. of Aliquots | ≥ 10 | NA | |
| Precipitation Duration (hrs) | NA | 17.25 | | Stormflow present during event | Y | NA | |
| Mean precip. Intensity (in/hr) | NA | 0.02 | | Baseflow Included in composite | N | NA | |
| Antecedent period w/ ≤ 0.02 (hr) | >24 | 30.00 | | Composite Start date/time | NA | NA | |
| 24 hr Runoff volume (cf) | NA | 0 | | Composite end date/time | NA | NA | |
| Runoff volume sampled (cf) | NA | NA | | Sampling Duration (hr) | ≥ 1 | NA | |
| Percent runoff sampled (%) | ≥ 75 | NA | | Grab Sample Date/Time | NA | 3/13/2013 14:44 | |
| Average flow during sampling (cfs) | NA | NA | | | | | |

**NOTES:** No flow was recorded at the site and therefore no composite sample was collected.

**Roads Rural Residential Site Charactorization Monitoring:**

| | | | |
|---|---|---|---|
| **Storm Date:** | October 18th 2012 | Grab Sample ID: | L5204-2 |
| **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 | | |



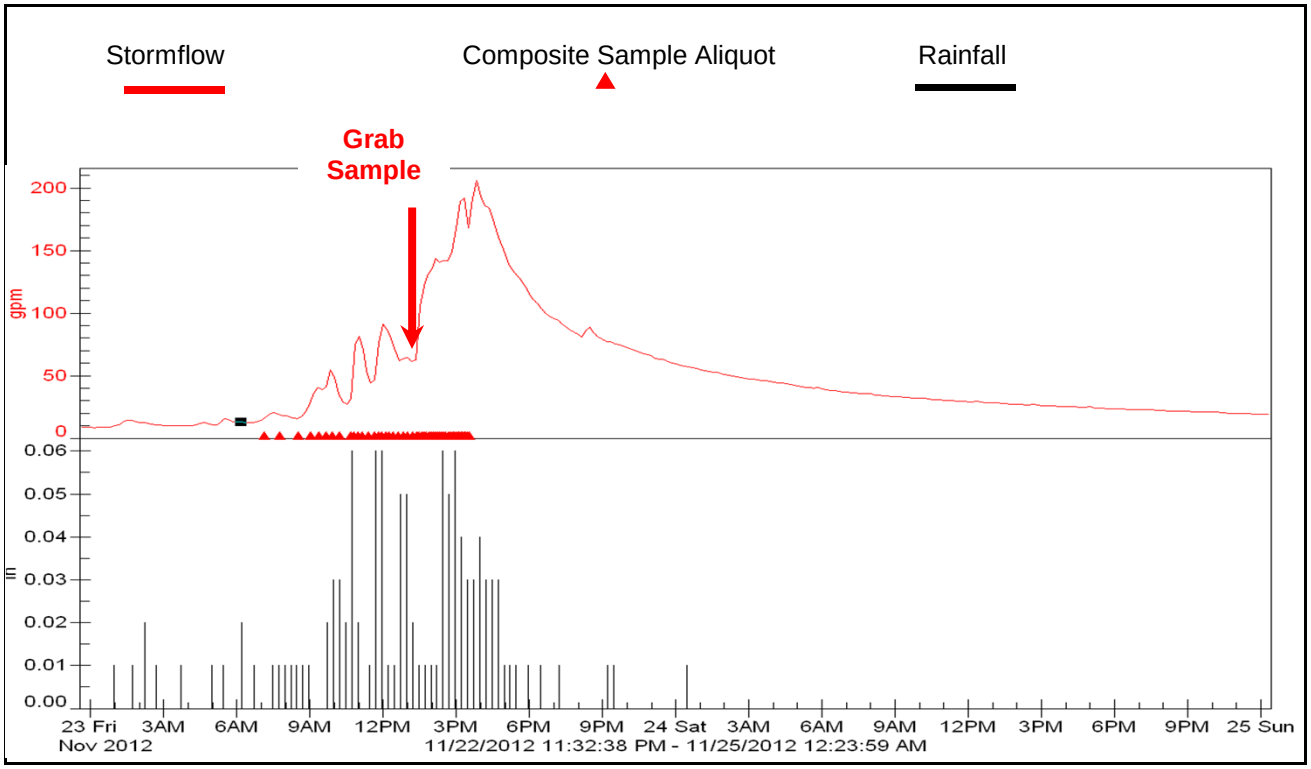

| | |
|---|---|
| **Rainfall (inches):** | 0.74 |
| **Duration (hours):** | 14 |
| **Average Intensity (inches per hour):** | 0.053 |
| **Antecedent Dry Period (hours):** | 70 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 10/17/2012 |
| **Mid-Storm Visit:** | 10/19/2012 |
| **Post Storm Visit:** | 10/20/2012 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 5,014 |
| **Sampled Stormflow (gallons)** | 5,000 |
| **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 23 2012 | (Grab only) |
| **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 | |

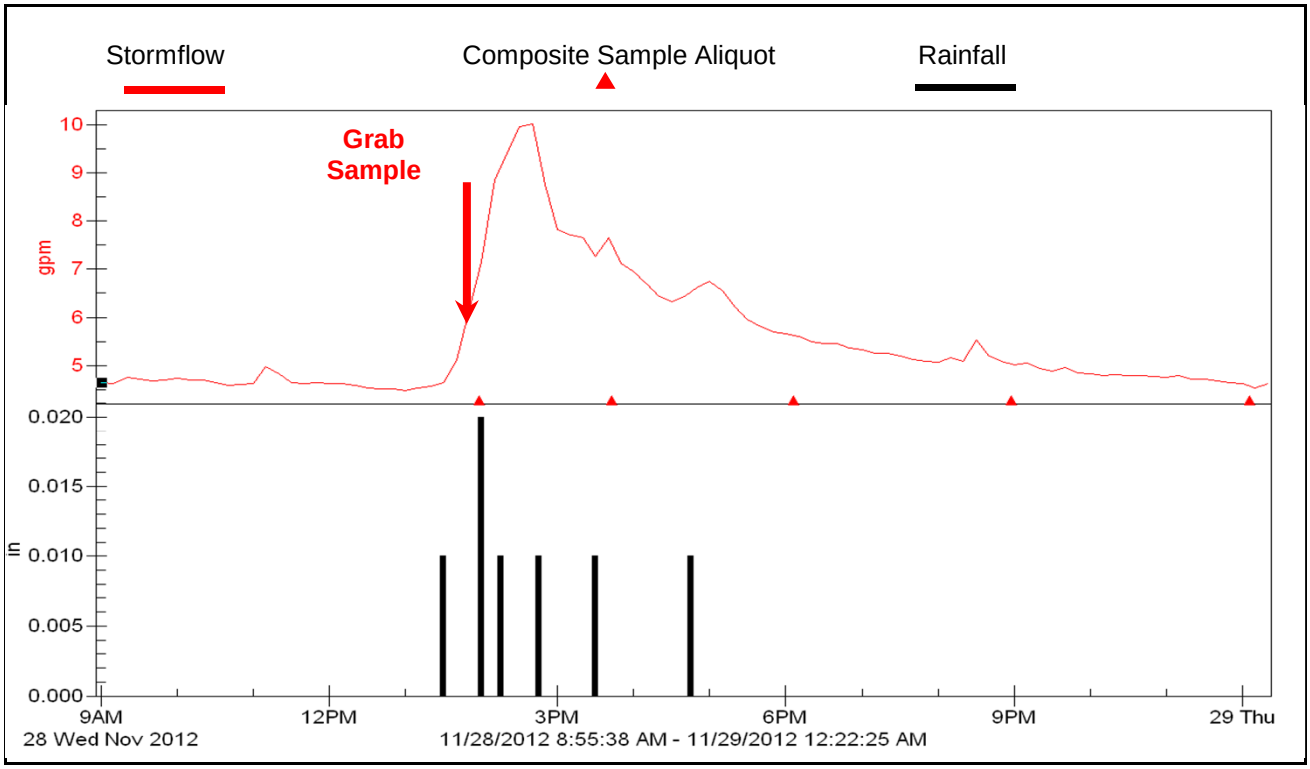



| | |
|---|---|
| **Rainfall (inches):** | 1.14 |
| **Duration (hours):** | 24 |
| **Average Intensity (inches per hour):** | 0.048 |
| **Antecedent Dry Period (hours):** | 34 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 11/22/2012 |
| **Mid-Storm Visit:** | 11/23/2012 |
| **Post Storm Visit:** | 11/24/2012 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 95,331 |
| **Sampled Stormflow (gallons)** | 40,060 |
| **Baseflow (gpm):** | 9 |
| **Percent of Hydrograph Sampled:** | 42 |
| **Number of Aliquots Collected:** | 50 |

**Comments:** Storm met antecedent dry period critiera and grab samples were collected and analyzed. Total rainfall was greater than forecast and less than 75% of storm was sampled. Composite sample was not kept.

**Roads Rural Residential Site Charactorization Monitoring:**

| | | |
|---|---|---|
| **Storm Date:** | November 28 2012 | Composite Only |
| **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 | |

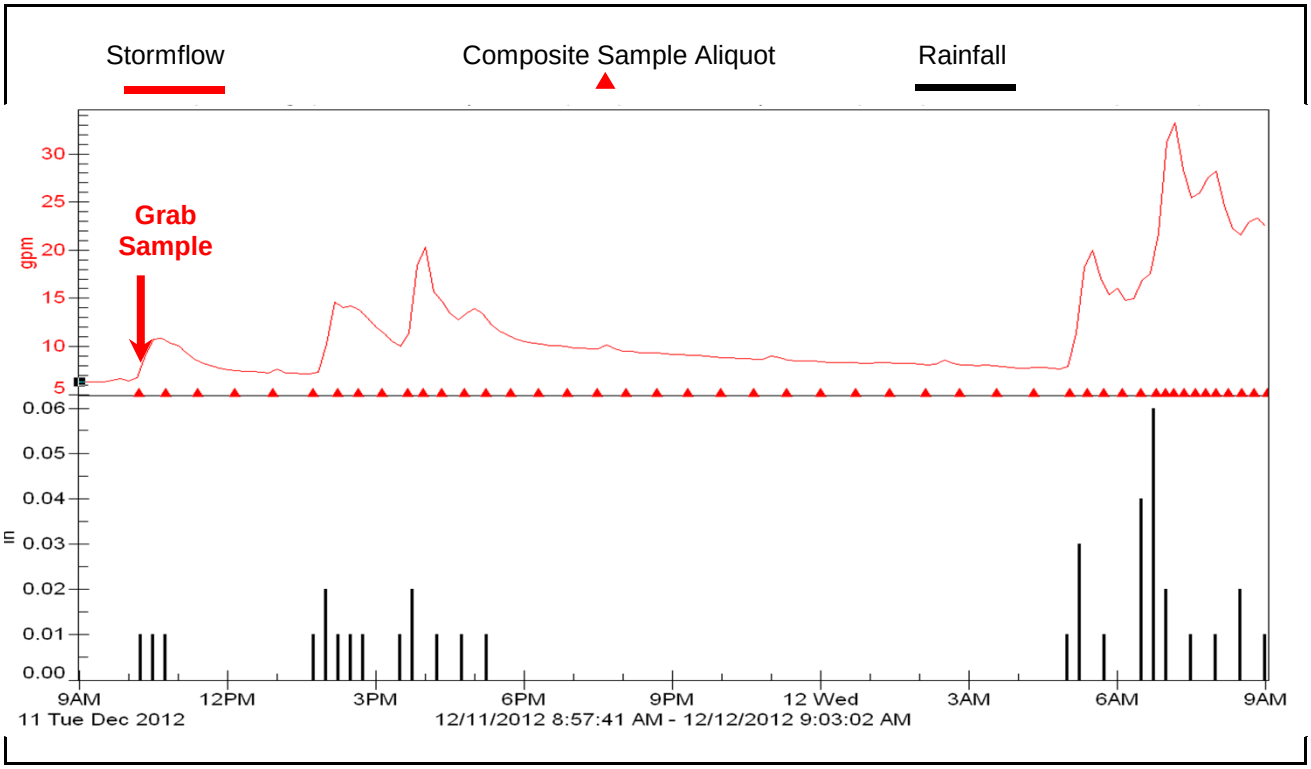



| | |
|---|---|
| **Rainfall (inches):** | 0.07 |
| **Duration (hours):** | 5 |
| **Average Intensity (inches per hour):** | 0.014 |
| **Antecedent Dry Period (hours):** | 35 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 11/27/2012 |
| **Mid-Storm Visit:** | 11/28/2012 |
| **Post Storm Visit:** | |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | -- |
| **Sampled Stormflow (gallons)** | -- |
| **Baseflow (gpm):** | -- |
| **Percent of Hydrograph Sampled:** | -- |
| **Number of Aliquots Collected:** | -- |

**Comments:** Antecedent dry period criteria met and a grab sample was collected at start of storm. Rainfall was less than 0.2 inches and did not meet criteria; composite sample was not kept.

**Roads Rural Residential Site Charactorization Monitoring:**

| | | | |
|---|---|---|---|
| **Storm Date:** | December 11 2012 | Grab Sample ID: | 57040 |
| **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):** | 0.15 |
| **Duration (hours):** | 8 |
| **Average Intensity (inches per hour):** | 0.019 |
| **Antecedent Dry Period (hours):** | 35 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 12/10/2012 |
| **Mid-Storm Visit:** | 12/11/2012 |
| **Post Storm Visit:** | |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | -- |
| **Sampled Stormflow (gallons)** | -- |
| **Baseflow (gpm):** | -- |
| **Percent of Hydrograph Sampled:** | -- |
| **Number of Aliquots Collected:** | -- |

**Comments:** Storm met antecedent dry period critiera and grab samples were collected. Total rainfall was less than 0.2 inches and mid-storm break was greater than 6 hrs. Composite sampling was discontinued.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: 57131

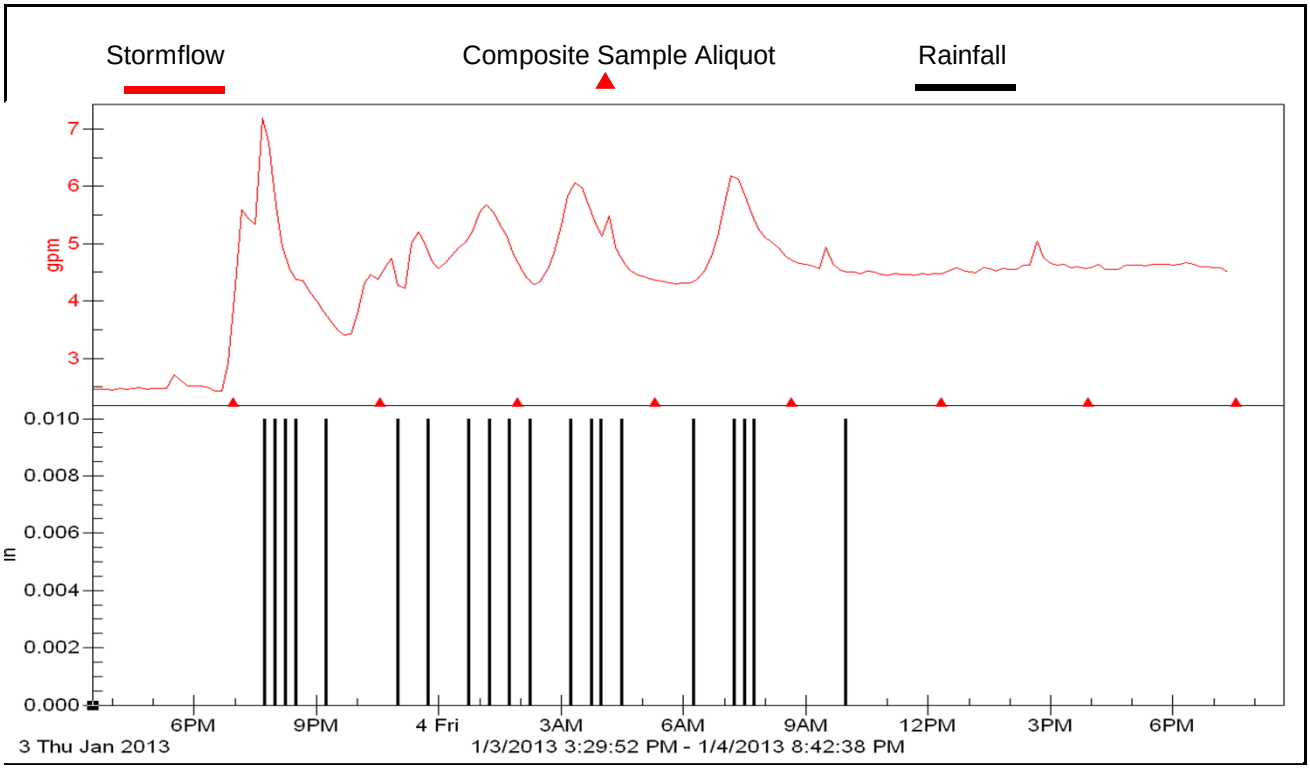
**Storm Date:** January 3rd 2013 Grab Sample ID: Not Collected

**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):** | 0.2 |
| **Duration (hours):** | 15 |
| **Average Intensity (inches per hour):** | 0.013 |
| **Antecedent Dry Period (hours):** | 118 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 1/3/2013 |
| **Mid-Storm Visit:** | 1/4/2013 |
| **Post Storm Visit:** | 1/4/2013 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 6,950 |
| **Sampled Stormflow (gallons)** | 6,950 |
| **Baseflow (gpm):** | 2.4 |
| **Percent of Hydrograph Sampled:** | 100% |
| **Number of Aliquots Collected:** | 8 |

**Comments:** Mid-storm visit well past peak of stormflow - no grab samples collected. Storm met criteria. Stormflow response very low, auto-sampler was over-paced. Sample was pulled after twenty-four hours after start of storm. Only 8 aliquots were

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: Not Collected

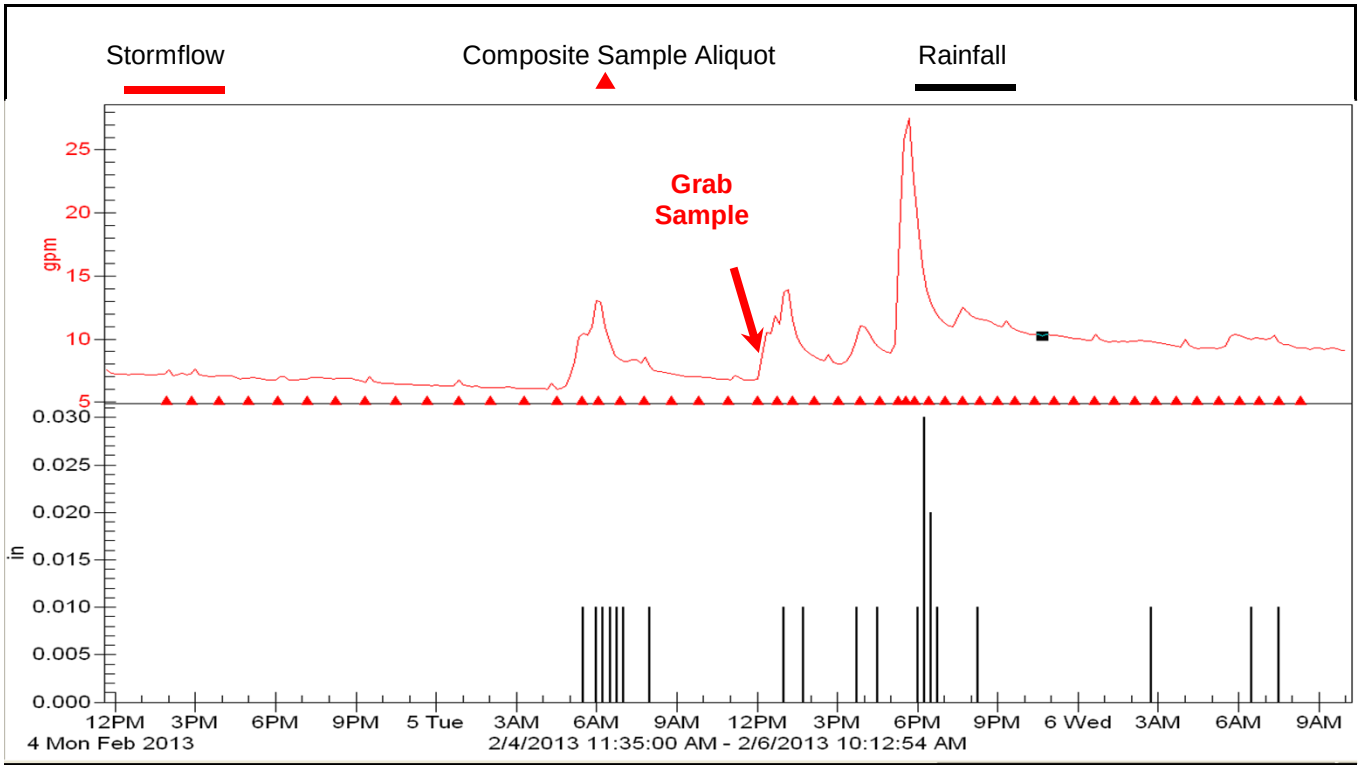
**Storm Date:** February 5th-6th 2013 Grab Sample ID:

**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):** | 0.21 |
| **Duration (hours):** | 26 |
| **Average Intensity (inches per hour):** | 0.008 |
| **Antecedent Dry Period (hours):** | 31 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 2/4/2013 |
| **Mid-Storm Visit:** | 2/5/2013 |
| **Post Storm Visit:** | 2/6/2013 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 17,280 |
| **Sampled Stormflow (gallons)** | 23,167 |
| **Baseflow (gpm):** | 6 |
| **Percent of Hydrograph Sampled:** | 134% |
| **Number of Aliquots Collected:** | 50 |

**Comments:**

Grab sample collected during rain shower 2/5/13 at 12:10 PM.
Sampler had a false start on 2/4/13 at 13:56, well before start of stormflow. Twenty six percent of composite sample included pre-storm flow. Composite sample was not analyzed.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: 57386-1

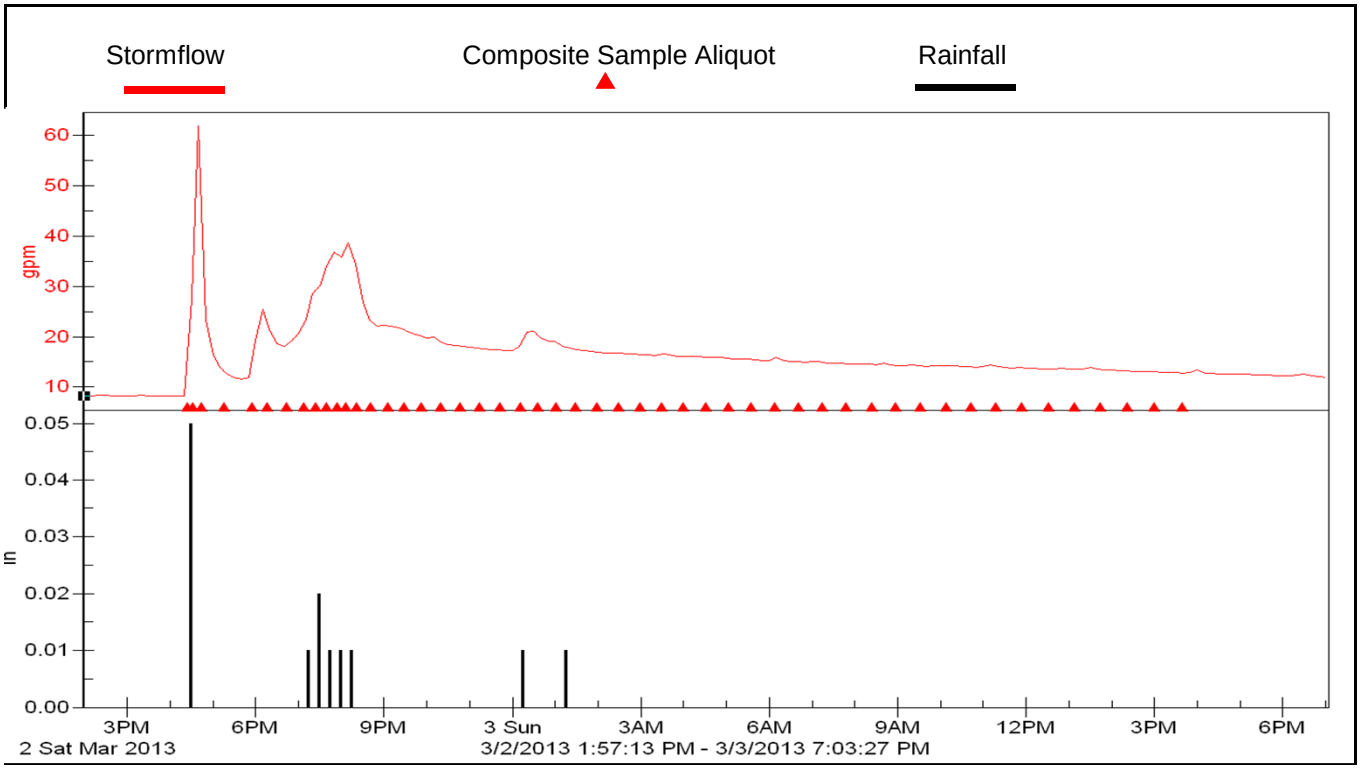
**Storm Date:** March 2nd 2012 Grab Sample ID: Not Collected

**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):** | 0.33 | (On-site Rain Gage-the Renton Rain Gage = 0.13 ) |
| **Duration (hours):** | 10 | |
| **Average Intensity (inches per hour):** | 0.055 | |
| **Antecedent Dry Period (hours):** | 38 | |
| **Inter-storm Dry Period (hours):** | <6 | |
| **Sampler Set Up:** | 3/1/2013 | |
| **Mid-Storm Visit:** | None | |
| **Post Storm Visit:** | 3/2/2013 | |
| **Sample Parameters:** | | |
| **Total Storm Flow (gallons):** | 25,298 | |
| **Sampled Stormflow (gallons)** | 24,399 | |
| **Baseflow (gpm):** | 8 | |
| **Percent of Hydrograph Sampled:** | 96% | |
| **Number of Aliquots Collected:** | 50 | |

**Comments:**

Aliquots were collected for 24 hours after the start of the storm as the hydrograph had not yet returned to pre-storm levels. The Renton Rain Gage 31UN only reported 0.13 inches for this storm, less than the criteria minimum of 0.2 inches. The on-site rain gage reported o.33 inches. All other criteria were met and the sample was analyzed. No grab samples were collected.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: Not Collected

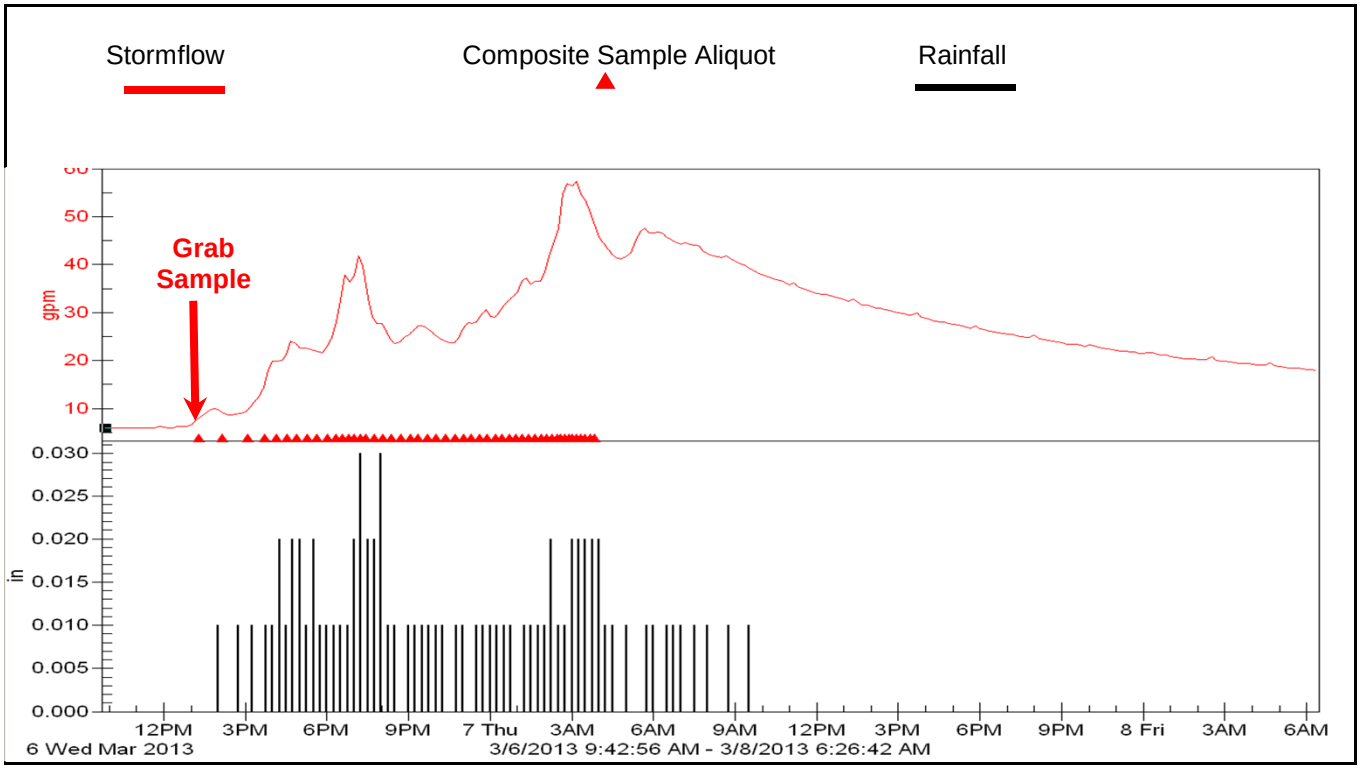
**Storm Date:** March 6th 2013 Grab Sample ID:

**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):** | 0.78 |
| **Duration (hours):** | 23 |
| **Average Intensity (inches per hour):** | 0.034 |
| **Antecedent Dry Period (hours):** | 85 |
| **Inter-storm Dry Period (hours):** | <6 |
| **Sampler Set Up:** | 2/4/2013 |
| **Mid-Storm Visit:** | 2/5/2013 |
| **Post Storm Visit:** | 2/6/2013 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 39,673 |
| **Sampled Stormflow (gallons)** | 24,890 |
| **Baseflow (gpm):** | 6 |
| **Percent of Hydrograph Sampled:** | 63% |
| **Number of Aliquots Collected:** | 50 |

**Comments:**

Storm met antecedent dry period critiera and grab samples were collected and analyzed. Total rainfall was greater than forecast and less than 75% of storm was sampled. Composite sample was not kept.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: 57388-1

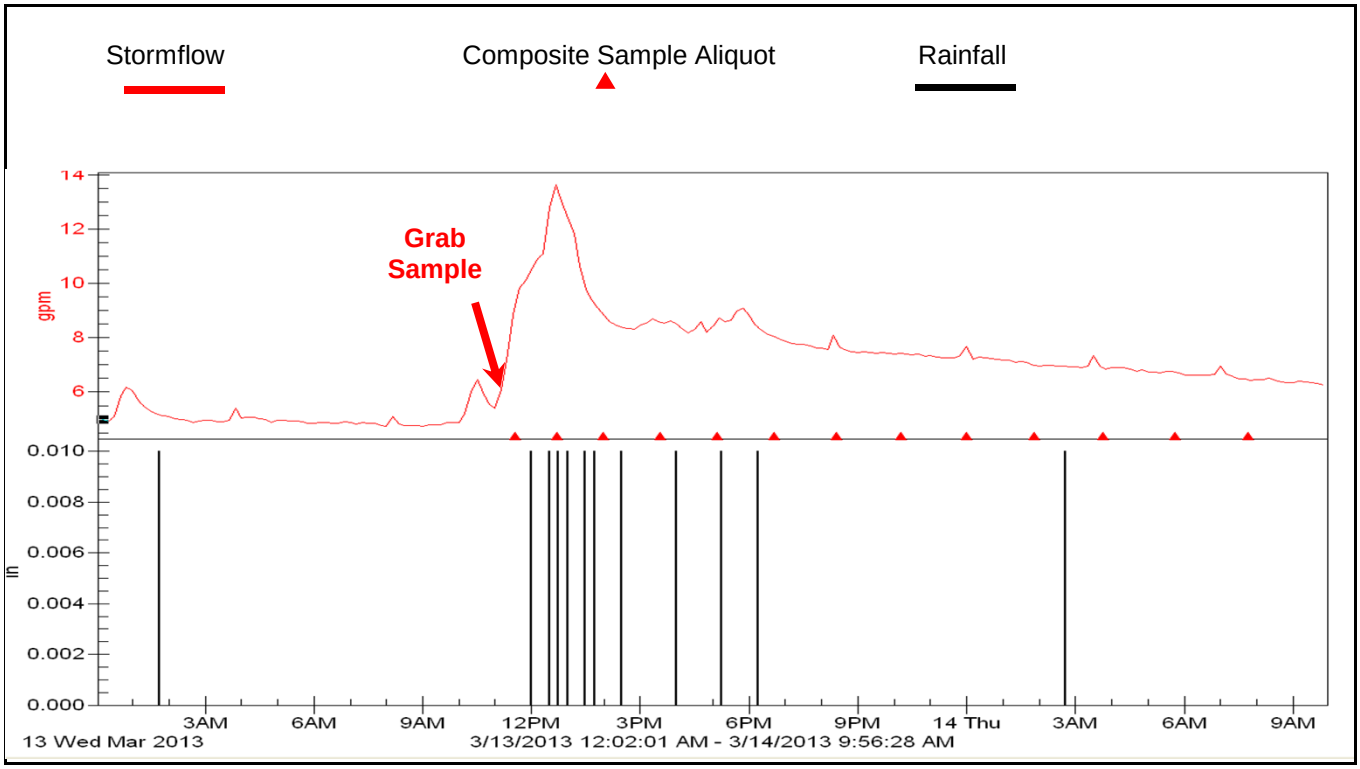
**Storm Date:** March 13 - 14 2012 Grab Sample ID: 57388-2

**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):** | 0.1 | (On-site Rain Gage-the Renton Rain Gage = 0.17 ) |
| **Duration (hours):** | 7 | |
| **Average Intensity (inches per hour):** | 0.017 | |
| **Antecedent Dry Period (hours):** | 41 | |
| **Inter-storm Dry Period (hours):** | <6 | |
| **Sampler Set Up:** | 3/1/2013 | |
| **Mid-Storm Visit:** | 3/13/2013 | |
| **Post Storm Visit:** | 3/14/2013 | |
| **Sample Parameters:** | | |
| **Total Storm Flow (gallons):** | 10,678 | |
| **Sampled Stormflow (gallons)** | 9,626 | |
| **Baseflow (gpm):** | 5 | |
| **Percent of Hydrograph Sampled:** | 96% | |
| **Number of Aliquots Collected:** | 13 | |

**Comments:**

Storm met criteria for Antecedent dry period (0.01 inch of rain measured in the previous 41 hrs), interstorm dry period and the composite sample included more than 12 aliquots and covered more than 75 percent of the storm. The storm failed only on rainfall measured at less than 0.2 inches. The sample was processes as failing the total rainfall criteria only. A grab sample was collected early in the storm event.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: 57473-1

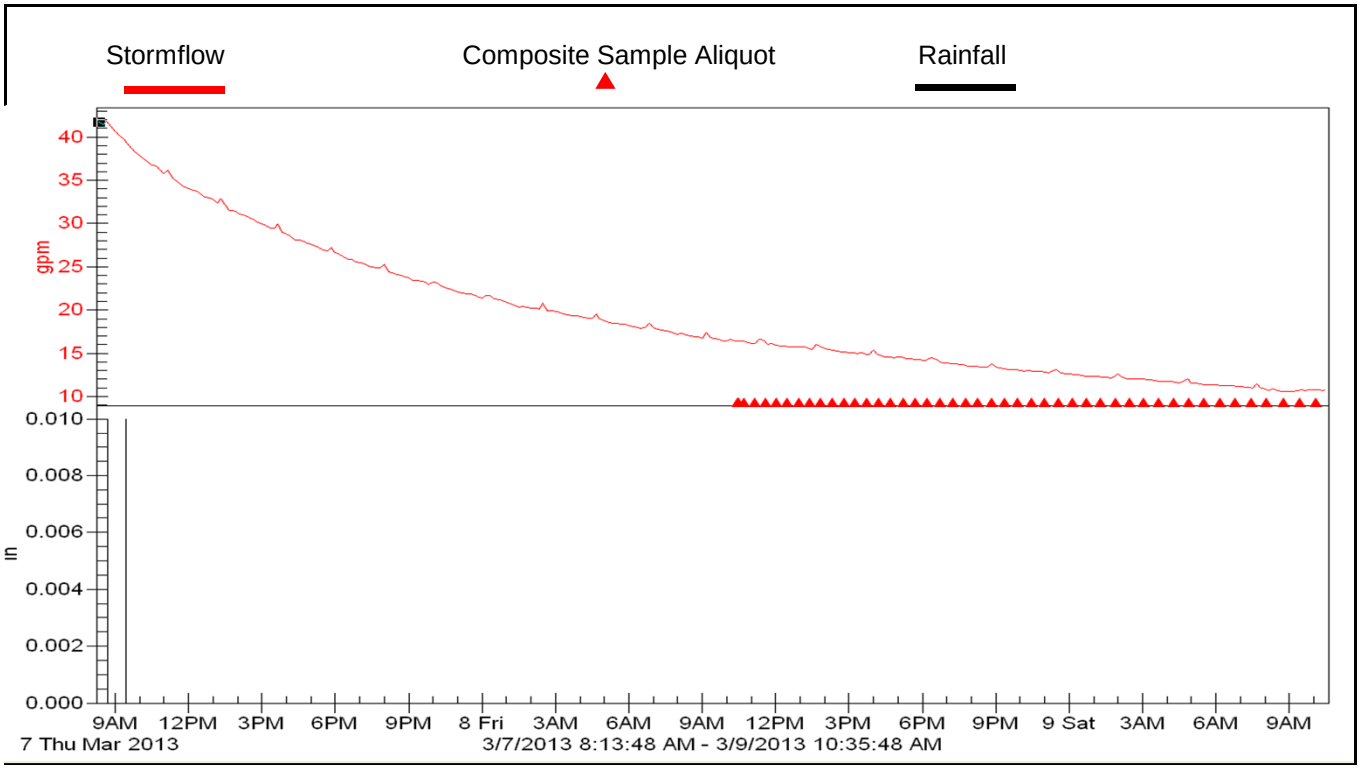
**Storm Date:** Base-flow sample - no precipitaiton Grab Sample ID: Not Collected

**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 |
| **Duration (hours):** | 24 |
| **Average Intensity (inches per hour):** | 0.000 |
| **Antecedent Dry Period (hours):** | 25 |
| **Inter-storm Dry Period (hours):** | 24 |
| **Sampler Set Up:** | 3/8/2013 |
| **Mid-Storm Visit:** | None |
| **Post Storm Visit:** | 3/9/2013 |
| **Sample Parameters:** | |
| **Total Storm Flow (gallons):** | 19,182 |
| **Sampled Stormflow (gallons)** | 19,182 |
| **Baseflow (gpm):** | 19182 |
| **Percent of Hydrograph Sampled:** | 100% |
| **Number of Aliquots Collected:** | 44 |

**Comments:**

Base flow composite sample started 24 hrs after last rain event. Collected flow weighted aliquots for 24 hrs. Sampling time was picked on forecast for no rain during the sampling period.

**Roads Rural Residential Site Charactorization Monitoring:** Composite Sample ID: Not Collected

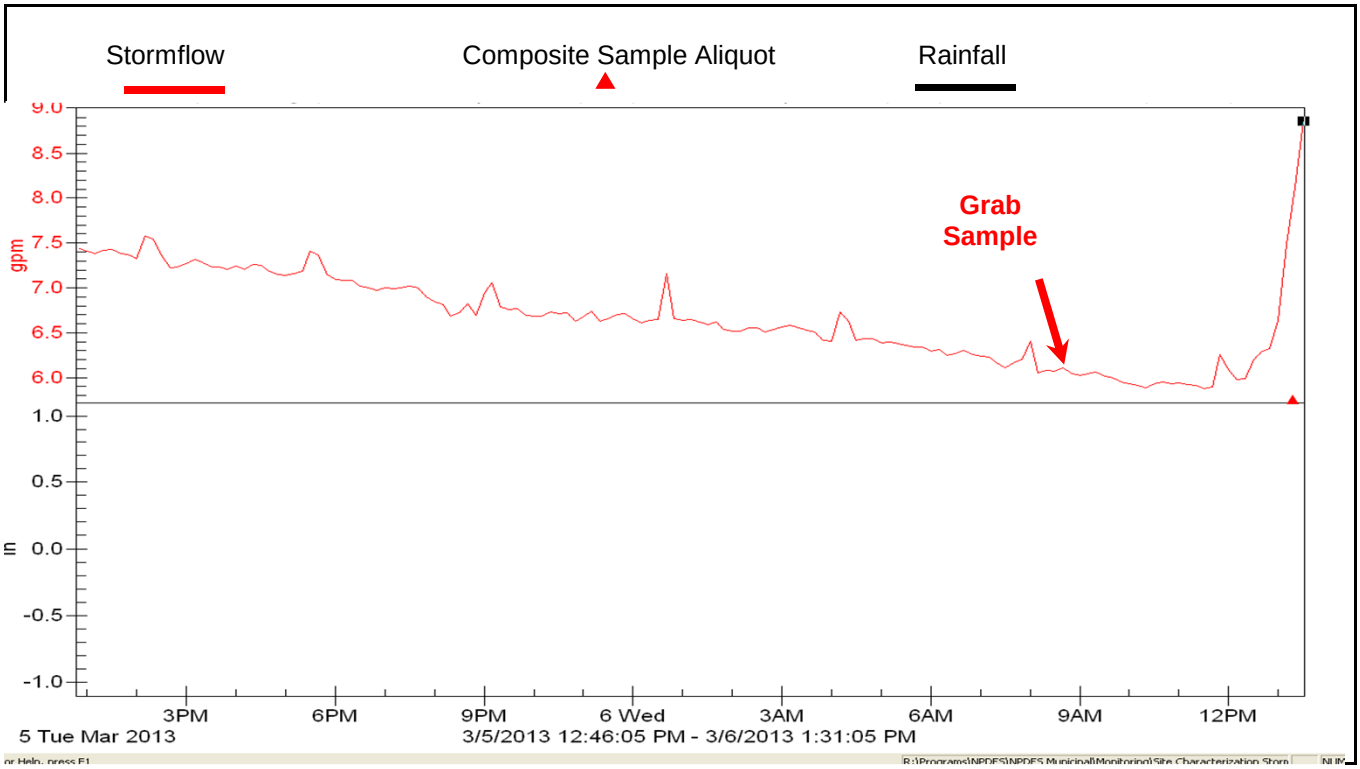
**Storm Date:** Base-flow Grab sample - no precipitaiton Grab Sample ID: 57473-2

**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 | |
| **Duration (hours):** | -- | |
| **Average Intensity (inches per hour):** | 0.000 | |
| **Antecedent Dry Period (hours):** | 80 | |
| **Inter-storm Dry Period (hours):** | -- | |
| **Sampler Set Up:** | -- | |
| **Mid-Storm Visit:** | -- | |
| **Post Storm Visit:** | -- | |
| **Sample Parameters:** | | |
| **Total Storm Flow (gallons):** | -- | |
| **Sampled Stormflow (gallons)** | -- | |
| **Baseflow (gpm):** | 6 | (at time of collection) |
| **Percent of Hydrograph Sampled:** | -- | |
| **Number of Aliquots Collected:** | -- | |

**Comments:**

Base flow grab sample collected 3/6/13 at 08:50, just prior to a storm event.

# 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. The following tables describe the details of this review.

**Water Analytical Methods & Reporting Limits:**

The following table 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 based on sample condition at the time of preparation.

Stormwater

| **Parameters** | **Units** | **Analytical Method Performed** | **Analytical Method Reported** | **Analytical Method in QAPP** | **Lab Ecology Accreditation** | **Lab Report Limit** |
|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | mg/L | SM5210-B | SM5210-B | SM5210-B | SM5210-B | 2 |
| Chloride | mg/L | SM4110B CL | SM4110B CL | SM4110B CL | SM4110B | 0.1 |
| Conductivity | umhos/cm | SM2510-B | SM2510-B | SM2510-B | SM2510B | 5 |
| Methylene Blue Act. Substance | mg/L | SM 5540C | SM 5540C | SM 5540C | SM5540c | 0.025 |
| Nitrite + Nitrate Nitrogen | mg/L | SM4500-NO3-F | SM4500-NO3-F | SM4500-NO3-F | SM4500-NO3-F | 0.04 |
| Orthophosphate Phosphorus | mg/L | SM4500-P-F | SM4500-P-F | SM4500-P-F | SM4500-P-F | 0.005 |
| Total Kjeldahl Nitrogen | mg/L | EPA 351.2 | EPA 351.2 | EPA 351.2 | EPA 351.2 | 0.2 |
| Total Phosphorus | mg/L | SM4500-P-B,F | SM4500-P-B,F | SM4500-P-B,F | SM4500-P-F | 0.01 |
| Total Suspended Solids | mg/L | SM2540-D | SM2540-D | SM2540-D | SM2540-D | 1 |
| Turbidity | NTU | SM2130-B | SM2130-B | SM2130-B | SM2130-B | 0.5 |
| Fecal Coliform | cfu/100 ml | SM 9222D 20TH | SM 9222D 20TH | SM 9222D 20TH | SM92222D | 1 |
| Cadmium, Total & Dissolved | ug/L | EPA 200.8*SW846 6020A | EPA 200.8*SW846 6020A | EPA 200.8 | EPA 200.8 | 0.25 |
| Copper, Total & Dissolved | ug/L | EPA 200.8*SW846 6020A | EPA 200.8*SW846 6020A | EPA 200.8 | EPA 200.8 | 2 |
| Lead, Total & | ug/L | EPA | EPA 200.8*SW846 | EPA 200.8 | EPA 200.8 | 0.5 |

| Parameters | Units | Analytical Method Performed | Analytical Method Reported | Analytical Method in QAPP | Lab Ecology Accreditation | Lab Report Limit |
|---|---|---|---|---|---|---|
| Dissolved | | 200.8*SW846 6020A | 6020A | | | |
| Zinc, Total & Dissolved | ug/L | EPA 200.8*SW846 6020A | EPA 200.8*SW846 6020A | EPA 200.8 | EPA 200.8 | 2.5 |
| Hardness, Calc | mg/L as CaCO3 | EPA 200.8/SW846 6020A*SM2340B | EPA 200.8/SW846 6020A*SM2340B | EPA 200.8/SM2340B | SM2340B | 0.33 |
| Mercury, Total & Dissolved | ug/L | EPA 245.1*SW846 7470A | EPA 245.1*SW846 7470A | EPA 245.1 | EPA 245.1 | 0.1 |
| Phthalates | ug/L | SW846 3520C*SW846 8270D | SW846 3520C*SW846 8270D | SW846 8270D | EPA 8270 | 1 |
| Polynuclear Aromatic Hydrocarbons | ug/L | SW846 3520C*SW846 8270D | SW846 3520C*SW846 8270D | SW846 8270D | EPA 8270 | 0.1 |
| Pentachlorophenol | ug/L | SW846 3520C*SW846 8270D | SW846 3520C*SW846 8270D | SW846 8270D | EPA 8270 | 1 |
| Diazinon | ug/L | SW846 3520C*SW846 8270D SIM | SW846 3520C*SW846 8270D SIM | SW846 8270D SIM | EPA 8270 | 0.1 |
| Chlorpyrifos | ug/L | SW846 3520C*SW846 8270D SIM | SW846 3520C*SW846 8270D SIM | SW846 8270D SIM | EPA 8270 | 0.1 |
| Malathion | ug/L | SW846 3520C*SW846 8270D SIM | SW846 3520C*SW846 8270D SIM | SW846 8270D SIM | EPA 8270 | 0.1 |
| 2,4-D | ug/L | SW846 3535A/8151A*8270D SIM | SW846 3535A/8151A*8270D SIM | SW846 8270D SIM | EPA 8151 | 1 |
| Dichlobenil | ug/L | SW846 3520C*SW846 8270D SIM | SW846 3520C*SW846 8270D SIM | SW846 8270D SIM | EPA 8270 | 1 |
| MCPP | ug/L | SW846 3535A/8151A*8270D SIM | SW846 3535A/8151A*8270D SIM | SW846 8270D SIM | EPA 8151 | 1 |
| Prometon | ug/L | SW846 3520C*SW846 8270D SIM | SW846 3520C*SW846 8270D SIM | SW846 8270D SIM | EPA 8270 | 1 |
| Triclopyr | ug/L | SW846 3535A/8151A*8270D SIM | SW846 3535A/8151A*8270D SIM | SW846 8270D SIM | EPA 8151 | 1 |
| 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 |

**Method Detection Limits**:

Stormwater: The reported MDLs met the limits defined in the QAPP with the following exceptions: The MDLs for Chloride, Turbidity, TKN, Total Phosphorus and TSS were reported above the QAPP MDL due to necessary dilution of selected samples. The MDL for benzo(b,j,k)fluoranthene was reported above the QAPP MDL for all samples due to the MDL and RDL being updated. The reported MDLs for benzo(g,h,i)perylene and dibenzo(a,h)anthracene were elevated above the QAPP MDLs due to matrix interference in sample L57311-1.

**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.

Nitrate/Nitrite, Nitrogen and BOD analyses were performed beyond the analytical holding time for 1 sample. The Nitrate/Nitrite, Nitrogen and BOD results for this sample have been flagged with an "H" qualifier.

**Method Blank Report:**

Bis(2-ethylhexyl)phthalate and/or benzyl butyl phthalate were detected in the all method blanks (MB) for semi volatile organic analysis. The bis(2-ethylhexyl)phthalate and benzyl butyl phthalate 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.

**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 |
|---|---|---|---|---|---|
| Triclopyr | L56016, L56017 | Blank Water | SB | Rec < LCL | None, all other QC was acceptable |
| Dichlobenil | L59807, L56808 | Blank Water | SB | Rec > UCL | None, all other QC was acceptable |

| Parameter | Sample ID | Matrix | QC Analysis Type | Recovery Check | Corrective Action |
|---|---|---|---|---|---|
| Dichlobenil | L57030 | Blank Water | SB | Rec > UCL | None, all other QC was acceptable |
| Pentachlorophenol | L57129, L57138 | Blank Water | SB/SBD | RPD > UCL | None, compound not detected in the sample |
| Bis (2-ethylhexyl) phthalate | L57129, L57138 | Blank Water | SB/SBD | Rec > UCL | Result flagged with a qualifier |
| 2-Methylnaphthalene | L57139-2 | Blank Water | SB | Rec < LCL | Result flagged with a qualifier |
| Indeno(1,2,3-Cd)Pyrene | L57139-2 | Blank Water | SB | Rec > UCL | None, all other QC was acceptable |
| Dibenzo(a,h)anthracene | L57139-2 | Blank Water | SB | Rec > UCL | None, all other QC was acceptable |
| Benzo(g,h,i)perylene | L57139-2 | Blank Water | SB | Rec > UCL | None, all other QC was acceptable |
| 2-Methylnaphthalene | L57139-2 | Stormwater | MS/MSD | Rec < LCL | Result flagged with a qualifier |
| Prometon | L57139-2 | Stormwater | MS | Rec > UCL | None, all other QC was acceptable |
| Chlopyrifos-D10 | L57139-1 | Stormwater | Surrogate | Rec < LCL | Results flagged with a qualifier |
| Prometon | L57311-1 | Stormwater | SB/SBD | Rec < LCL | Result flagged with a qualifier |
| Acenaphthene | L57311-1 | Blank Water | SB | Rec < LCL | None, all other QC was acceptable |
| Prometon | L57435-1 | Stormwater | MS | Rec > UCL | None, all other QC was acceptable |
| BOD | L57472-1 | Stormwater | None | | Sample underdepleated so result is an estimate |
| Prometon | L57472-1 | Stormwater | MS/MSD | Rec > UCL | None, compound not detected in the sample |
| Prometon | L57557-1 | Stormwater | MS/MSD | Rec > UCL | None, all other QC was acceptable |
| d5-Nitrobenzene | L57557-1 | Stormwater | Surrogate | Rec > UCL | None, all other surrogates were acceptable |

## Table of Qualified Data

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

| Parameter | Sample ID | Matrix | Qualfier | Reason for Qualification |
|---|---|---|---|---|
| Orthophosphate Phosphorus | All | Stormwater | H | Sample filtered outside the 15 minute filtration holding time |
| Total Kjeldahl Nitrogen | All | Stormwater | SH | Sample preserved outside the 15 minute preservation holding time |
| Dissolved Metals (Cd, Cu, Pb, Zn) | All | Stormwater | H | Sample filtered outside the 15 minute filtration holding time |
| Chloride | L56016-2 | Stormwater | SH | Sample aliquot taken from an inappropriate container |
| Benzyl butyl phthalate | Various | Blank Water | B, B2 | Method Contamination |
| Bis (2-ethylhexyl) phthalate | Various | Blank Water | B, B2 | Method Contamination |
| Ntrate/Nitrite, Nitrogen | L57112-2 | Stormwater | H | Sample preserved outside the preservation holding time (2 days) |
| BOD | L57112-2 | Stormwater | H | Sample analyzed outside the method |

| Parameter | Sample ID | Matrix | Qualfier | Reason for Qualification |
|---|---|---|---|---|
| | | | | holding time (2 days) |
| Bis (2-ethylhexyl) phthalate | L57129-all, L57138-all | Stormwater | JL | Spike recoveries greater than UCL |
| 2-Methylnaphthalene | L57139-2 | Stormwater | JG | Spike recoveries less than LCL |
| All Organophosphorus pesticides | L57139-1 | Stormwater | JG | Surrogate recovery was less than LCL |
| Prometon | L57311-1 | Stormwater | R | Rprometon was not recovered from any spike samples |

# Appendix E
# Analytical Lab Reports

Analytical laboratory reports available electronically on a cd

# 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

November 27, 2012

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L56016-1 to 5, L56017-, -3, collected October 18-19, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on October 19 & 20, 2012. The samples were 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 #15095 was prepared and sent via e-mail on November 27, 2012.

**Sample Collection:**
Sample L56017-2, a grab sample, was not collected for location RSW1UP.

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

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 results for sample L56016-2 for Chloride ion have been qualified with a "SH flag as the sample aliquot was taken from an inappropriate container.



1202M

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

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.

Triclopyr was outside the lower control limit in the spike blank (SB) for Herbicides analysis. The result was flagged with a "*" in the QC report. The matrix spike and matrix spike duplicate were with control limits. Triclopyr was not detected in any of the samples. No other corrective action was taken.

Butyl benzyl 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 an appropriate "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: | L56016-1 | L56016-2 | L56016-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 10/18/12 20:43 | 10/18/12 20:50 | 10/19/12 10:45 |
| TimeSpan: | 12.13 | 4.27 | |
| 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 | 0.621 | | 0.1 | 0.2 | mg/L | 0.59 | | 0.1 | 0.2 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.16 | | 0.025 | 0.025 | mg/L | 0.026 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 51 | | 0.2 | 0.5 | NTU | 6.54 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 26.4 | | 1 | 5 | umhos/cm | 20.7 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 50 | | 5 | 10 | mg/L | 8 | | 2 | 4 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 1.25 | | 0.05 | 0.1 | mg/L | 0.534 | SH | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.238 | | 0.01 | 0.04 | mg/L | 0.129 | | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.14 | | 0.005 | 0.01 | mg/L | 0.107 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.0401 | | 0.002 | 0.005 | mg/L | 0.0511 | | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 6.88 | | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | | | | | | 17000 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL | 0.05 | 0.25 | ug/L | | <MDL | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | 0.065 | <RDL | 0.05 | 0.25 | ug/L | | <MDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | 2740 | | 50 | 50 | ug/L | 1740 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | 4.68 | | 0.4 | 2 | ug/L | 4.26 | | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | 13.3 | | 0.4 | 2 | ug/L | 5.27 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | 0.33 | <RDL | 0.1 | 0.5 | ug/L | 0.18 | <RDL | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | 5.02 | | 0.1 | 0.5 | ug/L | 1.01 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | 928 | | 50 | 50 | ug/L | 217 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | 13.1 | | 0.5 | 2.5 | ug/L | 3.7 | | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | 50.6 | | 0.5 | 2.5 | ug/L | 6.61 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 10.7 | | 0.331 | 0.331 | mg CaCO3/L | 5.23 | | 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 | 0.0315 | | 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: | L56016-1 | L56016-2 | L56016-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 10/18/12 20:43 | 10/18/12 20:50 | 10/19/12 10:45 |
| TimeSpan: | 12.13 | 4.27 | |
| 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 | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(a)pyrene | | <MDL | 0.0094 | 0.0189 | ug/L | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(b,j,k)fluoranthene | | <MDL | 0.094 | 0.189 | ug/L | | <MDL | 0.094 | 0.189 | ug/L | | | | | |
| Benzo(g,h,i)perylene | | <MDL | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Benzyl Butyl Phthalate | 0.857 | B2 | 0.047 | 0.0943 | ug/L | 0.226 | B | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 2.98 | B2 | 0.024 | 0.0472 | ug/L | 0.822 | B | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | | <MDL | 0.0094 | 0.0189 | ug/L | 0.016 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | 0.402 | | 0.024 | 0.0472 | ug/L | 0.164 | | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | 0.0954 | | 0.024 | 0.0472 | ug/L | 0.025 | <RDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | 0.233 | | 0.024 | 0.0472 | ug/L | 0.038 | <RDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | 0.527 | | 0.024 | 0.0472 | ug/L | 0.341 | | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | 0.0301 | | 0.0094 | 0.0189 | ug/L | 0.0249 | | 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 | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Naphthalene | | <MDL | 0.0094 | 0.0189 | ug/L | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Pentachlorophenol | 0.14 | <RDL | 0.12 | 0.236 | ug/L | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Phenanthrene | 0.0408 | | 0.0094 | 0.0189 | ug/L | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | 0.221 | | 0.0094 | 0.0189 | ug/L | 0.195 | | 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 | 0.5 | 0.99 | ug/L | | <MDL | 0.5 | 0.99 | ug/L | | | | | |
| MCPP | | <MDL | 0.5 | 0.99 | ug/L | | <MDL | 0.5 | 0.99 | ug/L | | | | | |
| Triclopyr | | <MDL | 0.5 | 0.99 | ug/L | | <MDL | 0.5 | 0.99 | ug/L | | | | | |
| **OR WDOE NWTPH-DX** | | | | | | | | | | | | | | | |
| Diesel Range (>C12-C24) | | | | | | | | | | | | <MDL | 0.19 | 0.19 | mg/L |
| Lube Oil Range (>C24) | | | | | | | | | | | 0.449 | | 0.19 | 0.19 | mg/L |
| **OR WDOE NWTPH-GX** | | | | | | | | | | | | | | | |
| Gasoline Range (C7-C12) | | | | | | | | | | | | <MDL | 100 | 250 | 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: | L56016-4 | L56016-5 | L56017-1 |
| Matrix: | LG STORM WTR | LN BLANK WTR | LG STORM WTR |
| ColDate: | 10/19/12 10:24 | 10/20/12 11:10 | 10/18/12 19:10 |
| TimeSpan: | | | 15.15 |
| 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 | | | | | | | | | | | 0.721 | | 0.1 | 0.2 | mg/L |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | | | | | | | | | | | 0.036 | | 0.025 | 0.025 | mg/L |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | | | | | | | | | | | 8.29 | | 0.2 | 0.5 | NTU |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | | | | | | | | | | | 30.8 | | 1 | 5 | umhos/cm |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | | | | | | | | | | | 23.6 | | 2 | 4 | mg/L |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | | | | | | | | | | | 1.33 | | 0.25 | 0.5 | mg/L |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | | | | | | | <MDL | 0.01 | 0.04 | mg/L | 0.617 | | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | | | | | | | | | | | 0.125 | | 0.005 | 0.01 | mg/L |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | | | | | | | <MDL | 0.002 | 0.005 | mg/L | 0.0673 | | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | | | | | | | | | | 4.34 | | 2 | 2 | mg/L |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | 1500 | | | | CFU/100ml | | | | | | | | | | |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | | | | | | | | | | | <MDL | 0.05 | 0.25 | ug/L |
| Cadmium, Total, ICP-MS | | | | | | | | | | | | <MDL | 0.05 | 0.25 | ug/L |
| Calcium, Total, ICP-MS | | | | | | | | | | | 2550 | | 50 | 50 | ug/L |
| Copper, Dissolved, ICP-MS | | | | | | | | | | | 2.99 | | 0.4 | 2 | ug/L |
| Copper, Total, ICP-MS | | | | | | | | | | | 4.38 | | 0.4 | 2 | ug/L |
| Lead, Dissolved, ICP-MS | | | | | | | | | | | 0.14 | <RDL | 0.1 | 0.5 | ug/L |
| Lead, Total, ICP-MS | | | | | | | | | | | 1.61 | | 0.1 | 0.5 | ug/L |
| Magnesium, Total, ICP-MS | | | | | | | | | | | 683 | | 50 | 50 | ug/L |
| Zinc, Dissolved, ICP-MS | | | | | | | | | | | 5.19 | | 0.5 | 2.5 | ug/L |
| Zinc, Total, ICP-MS | | | | | | | | | | | 10.2 | | 0.5 | 2.5 | ug/L |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | | | | | | | | | | | 9.19 | | 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 | | | | Project: | 421879-210 | | | |
| Locator: | FCSW02 | | | | | Locator: | FFBLANK | | | | Locator: | RSW1UP | | | |
| Descrip: | FALL CITY HD RESID | | | | | Descrip: | FIELD FILTER BLANK | | | | Descrip: | 148TH AVE SE UPSTR | | | |
| Sample: | L56016-4 | | | | | Sample: | L56016-5 | | | | Sample: | L56017-1 | | | |
| Matrix: | LG STORM WTR | | | | | Matrix: | LN BLANK WTR | | | | Matrix: | LG STORM WTR | | | |
| ColDate: | 10/19/12 10:24 | | | | | ColDate: | 10/20/12 11:10 | | | | ColDate: | 10/18/12 19:10 | | | |
| TimeSpan: | | | | | | TimeSpan: | | | | | TimeSpan: | 15.15 | | | |
| 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 | | | | | | | | | | | 0.194 | | 0.0094 | 0.0189 | ug/L |
| Benzo(a)pyrene | | | | | | | | | | | 0.29 | | 0.0094 | 0.0189 | ug/L |
| Benzo(b,j,k)fluoranthene | | | | | | | | | | | 0.18 | <RDL | 0.094 | 0.189 | ug/L |
| Benzo(g,h,i)perylene | | | | | | | | | | | 0.101 | | 0.047 | 0.0943 | ug/L |
| Benzyl Butyl Phthalate | | | | | | | | | | | 0.148 | B | 0.047 | 0.0943 | ug/L |
| Bis(2-Ethylhexyl)Phthalate | | | | | | | | | | | 1.91 | B2 | 0.024 | 0.0472 | ug/L |
| Chrysene | | | | | | | | | | | 0.165 | | 0.0094 | 0.0189 | ug/L |
| Dibenzo(a,h)anthracene | | | | | | | | | | | | <MDL | 0.047 | 0.0943 | ug/L |
| Diethyl Phthalate | | | | | | | | | | | 0.718 | | 0.024 | 0.0472 | ug/L |
| Dimethyl Phthalate | | | | | | | | | | | 0.078 | | 0.024 | 0.0472 | ug/L |
| Di-N-Butyl Phthalate | | | | | | | | | | | 0.037 | <RDL | 0.024 | 0.0472 | ug/L |
| Di-N-Octyl Phthalate | | | | | | | | | | | | <MDL | 0.024 | 0.0472 | ug/L |
| Fluoranthene | | | | | | | | | | | 0.283 | | 0.0094 | 0.0189 | ug/L |
| Fluorene | | | | | | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L |
| Indeno(1,2,3-Cd)Pyrene | | | | | | | | | | | 0.082 | <RDL | 0.047 | 0.0943 | ug/L |
| Naphthalene | | | | | | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L |
| Pentachlorophenol | | | | | | | | | | | | <MDL | 0.12 | 0.236 | ug/L |
| Phenanthrene | | | | | | | | | | | 0.0741 | | 0.0094 | 0.0189 | ug/L |
| Pyrene | | | | | | | | | | | 0.355 | | 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) | | <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 Report

Project: 421879-210
Locator: FFBLANK
Descrip: FIELD FILTER BLANK
Sample: L56017-3
Matrix: LN BLANK WTR
ColDate: 10/20/12 10:30
TimeSpan:
TotalSolid:
ClientLoc:
SampDepth:
**WET Weight Basis**

| Parameters | 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 | | | | | |
| **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 |
| Locator: | FFBLANK |
| Descrip: | FIELD FILTER BLANK |
| Sample: | L56017-3 |
| Matrix: | LN BLANK WTR |
| ColDate: | 10/20/12 10:30 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | 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) | | | | | |
| 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 | 2-Methylnaphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 | ug/L |
| FCSW01 | 421879-210 | L56016-1 | 0.621 | 0.16 | 51 | 26.4 | 50 | 1.25 | 0.238 | 0.14 | 0.0401 | 6.88 | 0.065 | 2740 | 4.68 | 13.3 | 0.33 | 5.02 | 928 | 13.1 | 50.6 | 10.7 | 0.0315 |
| FCSW02 | 421879-210 | L56016-2 | 0.59 | 0.026 | 6.54 | 20.7 | 8 | 0.534 | 0.129 | 0.107 | 0.0511 | | | 1740 | 4.26 | 5.27 | 0.18 | 1.01 | 217 | 3.7 | 6.61 | 5.23 | |
| FCSW01 | 421879-210 | L56016-3 | | | | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L56016-4 | | | | | | | | | | | | | | | | | | | | | |
| RSW1UP | 421879-210 | L56017-1 | 0.721 | 0.036 | 8.29 | 30.8 | 23.6 | 1.33 | 0.617 | 0.125 | 0.0673 | 4.34 | | 2550 | 2.99 | 4.38 | 0.14 | 1.61 | 683 | 5.19 | 10.2 | 9.19 | |
| * 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 ug/L | Benzo(a)pyrene ug/L | Benzo(b,j,k)fluoranthene ug/L | Benzo(g,h,i)perylene ug/L | Benzyl Butyl Phthalate ug/L | Bis(2-Ethylhexyl)Phthalate ug/L | Chrysene ug/L | Di-N-Butyl Phthalate ug/L | Di-N-Octyl Phthalate ug/L | Diethyl Phthalate ug/L | Dimethyl Phthalate ug/L | Fluoranthene ug/L | Indeno(1,2,3-Cd)Pyrene ug/L | Pentachlorophenol ug/L | Phenanthrene ug/L | Pyrene ug/L | Fecal Coliform CFU/100ml | Lube Oil Range (>C24) mg/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FCSW01 | 421879-210 | L56016-1 | | | | | 0.857 | 2.98 | | 0.233 | 0.527 | 0.402 | 0.0954 | 0.0301 | | 0.14 | 0.0408 | 0.221 | | |
| FCSW02 | 421879-210 | L56016-2 | | | | | 0.226 | 0.822 | 0.016 | 0.038 | 0.341 | 0.164 | 0.025 | 0.0249 | | | | 0.195 | | |
| FCSW01 | 421879-210 | L56016-3 | | | | | | | | | | | | | | | | | 17000 | 0.449 |
| FCSW02 | 421879-210 | L56016-4 | | | | | | | | | | | | | | | | | 1500 | |
| RSW1UP | 421879-210 | L56017-1 | 0.194 | 0.29 | 0.18 | 0.101 | 0.148 | 1.91 | 0.165 | 0.037 | | 0.718 | 0.078 | 0.283 | 0.082 | | 0.0741 | 0.355 | | |
| * 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 | L56016-1 | Pentachlorophenol | D:.5*25-OCT-12 12:34 value reported from SIM data |

Login: P56016 NPDES Stormwater Permit Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* [signature] | *Date* 10/19/12 | *Time* 1320 |
| *Received by* [signature] | *Date* 12/19/12 | *Time* 1320 |
| *Sample Numbers* 56016 3-4 | | *[All]* |

| Sample Number | P56016-1 | P56016-2 | P56016-3 |
|---|---|---|---|
| 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 | 10/18/12 SAMP 1 2043 | 10/18/12 SAMP 1 2050 | 10/19/12 1045 JD BB |
| End Date/Time | 10/19/12 SAMP 14 0851 | 10/19/12 SAMP 12 0106 | |
| Time Span | TOTAL COLLECTED → | 6L 12 aliquots | |
| Sample Depth | 7L ; 14 aliquots | | |
| Dept, Matrix, Prod | DELETE BOD<br>~~3 LG BOD~~ ON 10/18/12 @ 1123<br>3 LG CL<br>3 LG COND<br>3 LG MBAS off 10/19/12 1550<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>3 bottles for org | DELETE BOD<br>DELETE CL<br>~~3 LG BOD~~ ON 10/18/12 1120<br>~~3 LG CL~~<br>3 LG COND<br>3 LG MBAS off 10/19/12 1550<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>3 bottles for Org | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

CHAIN OF CUSTODY
RELINQUISHED BY [signature] Date 10/20/12 Time 1200
RECEIVED BY [signature] 10/20 Time 1200
Sample Number(s) 56016 1, 2, 5 (All)

4.4°C at lab SPLIT @ 1115

3.7°C at lab SPLIT @ 1145

Login: P56016 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

*CHAIN OF CUSTODY*

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

| Sample Number | P56016-4 | P56016-5 | |
|---|---|---|---|
| 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 | SD 33 10/19/2012 1024 | 1110 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

Login: P56017

NPDES Stormwater Permit Monitoring

Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 10-20-12 | *Time* 11:00 |
| *Received by* | *Date* 10/20/12 | *Time* 11:10 |
| *Sample Numbers* 56017-1, 3 | | *[All]* |

| Sample Number | P56017-1 | P56017-2 | P56017-3 |
|---|---|---|---|
| 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 | 10-18-12 @ 1910 | | 10/20/12 10:30 |
| End Date/Time | 10-19-12 @ 10:19 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

*CHAIN OF CUSTODY*

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

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

***Professional Analytical Services***

Oct 23 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 RSW1UP project.

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

| CLIENT ID | MATRIX | AMTEST ID | TEST |
|---|---|---|---|
| L56017-1 | Water | 12-A016159 | CONV |
| L56015-2 | Water | 12-A016160 | CONV |
| I56015-1 | Water | 12-A016161 | CONV |

Your samples were received on Saturday, October 20, 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

Project #: 421196

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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 Name: RSW1UP
Project #: 421196
All results reported on an as received basis.

Date Received: 10/20/12
Date Reported: 10/23/12

---

**AMTEST Identification Number** **12-A016159**
**Client Identification** **L56017-1**
**Sampling Date** **10/19/12**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.036 | mg/l | | 0.025 | SM 5540C | SS | 10/20/12 |

---

**AMTEST Identification Number** **12-A016160**
**Client Identification** **L56015-2**
**Sampling Date** **10/19/12**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.026 | mg/l | | 0.025 | SM 5540C | SS | 10/20/12 |

---

**AMTEST Identification Number** **12-A016161**
**Client Identification** **I56015-1**
**Sampling Date**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.158 | mg/l | | 0.025 | SM 5540C | SS | 10/20/12 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample numbers: 12-A016159 to 12-A016161**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 12-A016157 | Surfactants | mg/l | 0.192 | 0.674 | 0.500 | 96.40 % |
| 12-A016157 | Surfactants | mg/l | 0.192 | 0.742 | 0.500 | 110.00 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.674 | 0.742 | 9.6 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.122 | 97.6 % |

## 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 1279281

Project Name: RSW1UP Date Received: 10/20/12 Received By: N/A

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.0 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):

Samples L56017-1, L56015-2, and L56015-1 are labeled as P56017-1, P56016-2, and P56016-1 respectively on sample container labels. Dates samples do not match on COC.

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 1279281

Project Name: FCSW02 Date Received: 10/20/12 Received By: N/A

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.0 degrees C

# CHAIN OF CUSTODY RECORD

**Project Number:** 421196
**Purchase Order Number:** n/a
**Subcontract Laboratory:** Am Test
**LPM/TC:** Fritz Grothkopp

**Shipment Number:** lmc
**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 | |
|---|---|---|---|---|---|---|---|---|
| 16159 | L56017 -1 | 10/19/2012 | Storm Water | Level 2 | X | 1 | 6.0°C RSW 10P | C |
| 16160 | * L56015-2 | 10/19/2012 | Storm Water | Level 2 | X | 1 | 7.5°C FCSW02 | D |
| 16161 | * I56015-1 | 41201 | Storm Water | Level 2 | X | 1 | 6.4°C FCSW01 | E |

**Additional Comments/Instructions:** Test has 48 hour hold time.

**Total Number of Containers:** 3

***Please return signed original CoC with data package.***

**Requested TAT:** 14 Days
**Data Package Due:** 7/1/2012

| | | | |
|---|---|---|---|
| **RELINQUISHED BY** Signature | | Date 10/20/12 | **RECEIVED BY** Signature |
| Printed Name | Irine Ca 425-530-1581 | Time 1:15 pr | Printed Name Suzanne Scott |
| Organization | King County DNR, Environmental Laboratory | | Organization Am Test |
| | | | Date 10.20.12 |
| | | | Time 1:15p |

* bottles say 6016-1
6016-2

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123753 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 10/18/2012 20:43 | 10/21/2012 14:15 | 10/21/2012 17:51 | WG123753-1,-2 | |
| L56017-1 | 421879-210 | | CVBOD | STORM WTR | 10/18/2012 19:10 | 10/21/2012 14:15 | 10/21/2012 17:50 | | |
| WG123753-1 | MB | | CVBOD | BLANK WTR | | 10/21/2012 14:15 | 10/21/2012 17:43 | | MB1 10/21/12 |
| WG123753-2 | SB | | CVBOD | BLANK WTR | | 10/21/2012 14:15 | 10/21/2012 17:50 | | WG123753-1 |

**WG123801 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 10/18/2012 20:43 | 10/24/2012 10:50 | 10/25/2012 8:31 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | |
| L56016-2 | 421879-210 | | CVCL | STORM WTR | 10/18/2012 20:50 | 10/24/2012 10:50 | 10/25/2012 10:02 | | |
| L56017-1 | 421879-210 | | CVCL | STORM WTR | 10/18/2012 19:10 | 10/24/2012 10:50 | 10/25/2012 3:57 | | |
| L56422-1 | 423575-850-4 | Brightwater Conveyance System Construction NPDES Monitoring | CVCL | GRND WTR | 10/11/2012 14:20 | 10/24/2012 10:50 | 10/24/2012 14:45 | | |
| L56422-1 | 423575-850-4 | | CVSO4 | GRND WTR | 10/11/2012 14:20 | 10/24/2012 10:50 | 10/24/2012 15:46 | WG123801-1,-2,-3,-4,-5,-6 | |
| L56422-2 | 423575-850-4 | | CVCL | GRND WTR | 10/11/2012 12:40 | 10/24/2012 10:50 | 10/24/2012 17:48 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | |
| L56422-2 | 423575-850-4 | | CVSO4 | GRND WTR | 10/11/2012 12:40 | 10/24/2012 10:50 | 10/24/2012 19:50 | WG123801-1,-2,-3,-4,-5,-6 | |
| L56422-3 | 423575-850-4 | | CVCL | GRND WTR | 10/11/2012 11:30 | 10/24/2012 10:50 | 10/24/2012 21:52 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | |
| L56422-3 | 423575-850-4 | | CVSO4 | GRND WTR | 10/11/2012 11:30 | 10/24/2012 10:50 | 10/24/2012 22:22 | WG123801-1,-2,-3,-4,-5,-6 | |
| L56422-5 | 423575-850-4 | | CVCL | GRND WTR | 10/11/2012 10:10 | 10/24/2012 10:50 | 10/24/2012 22:52 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | |
| L56422-5 | 423575-850-4 | | CVSO4 | GRND WTR | 10/11/2012 10:10 | 10/24/2012 10:50 | 10/25/2012 0:24 | WG123801-1,-2,-3,-4,-5,-6 | |
| L56422-6 | 423575-850-4 | | CVCL | GRND WTR | 10/11/2012 8:50 | 10/24/2012 10:50 | 10/25/2012 0:54 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | |
| L56422-6 | 423575-850-4 | | CVSO4 | GRND WTR | 10/11/2012 8:50 | 10/24/2012 10:50 | 10/25/2012 1:55 | WG123801-1,-2,-3,-4,-5,-6 | |
| WG123801-1 | CS | | CVCL | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 12:13 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | RDL_LEVEL |
| WG123801-1 | CS | | CVSO4 | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 12:13 | WG123801-1,-2,-3,-4,-5,-6 | RDL_LEVEL |
| WG123801-2 | MB | | CVCL | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 13:14 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | MB 10/24/12 |
| WG123801-2 | MB | | CVSO4 | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 13:14 | WG123801-1,-2,-3,-4,-5,-6 | MB 10/24/12 |
| WG123801-3 | SB | | CVCL | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 13:44 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | WG123801-2 |
| WG123801-3 | SB | | CVSO4 | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 13:44 | WG123801-1,-2,-3,-4,-5,-6 | WG123801-2 |
| WG123801-4 | LCS | | CVCL | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 14:15 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | LEVEL1 |
| WG123801-4 | LCS | | CVSO4 | BLANK WTR | | 10/24/2012 10:50 | 10/24/2012 14:15 | WG123801-1,-2,-3,-4,-5,-6 | LEVEL1 |
| WG123801-5 | LD | | CVCL | GRND WTR | | 10/24/2012 10:50 | 10/24/2012 18:49 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | L56422-2 |
| WG123801-5 | LD | | CVSO4 | GRND WTR | | 10/24/2012 10:50 | 10/24/2012 20:20 | WG123801-1,-2,-3,-4,-5,-6 | L56422-2 |
| WG123801-6 | MS | | CVCL | GRND WTR | | 10/24/2012 10:50 | 10/24/2012 19:19 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | L56422-2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG123801-6 | MS | CVSO4 | GRND WTR | 10/24/2012 10:50 | 10/24/2012 20:51 | WG123801-1,-2,-3,-4,-5,-6 | L56422-2 |
| WG123801-7 | LD | CVCL | STORM WTR | 10/24/2012 10:50 | 10/25/2012 4:27 | WG123801-1,-2,-3,-4,-5,-6,-7,-8 | L56017-1 |
| WG123801-8 | MS | CVCL | STORM WTR | 10/24/2012 10:50 | 10/25/2012 4:58 | | L56017-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123814 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 10/18/2012 20:43 | 10/23/2012 19:33 | 10/23/2012 19:33 | WG123814-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56016-2 | 421879-210 | | CVCOND | STORM WTR | 10/18/2012 20:50 | 10/23/2012 19:34 | 10/23/2012 19:34 | | |
| L56017-1 | 421879-210 | | CVCOND | STORM WTR | 10/18/2012 19:10 | 10/23/2012 19:35 | 10/23/2012 19:35 | | |
| L56616-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 10/22/2012 5:50 | 10/23/2012 14:58 | 10/23/2012 14:58 | | |
| L56616-6 | 421422-CHGW | | CVCOND | GRND WTR | 10/22/2012 8:07 | 10/23/2012 15:07 | 10/23/2012 15:07 | | |
| L56638-1 | 421422-CHGW | | CVCOND | GRND WTR | 10/19/2012 11:04 | 10/23/2012 15:27 | 10/23/2012 15:27 | | |
| L56638-6 | 421422-CHGW | | CVCOND | GRND WTR | 10/19/2012 9:20 | 10/23/2012 15:38 | 10/23/2012 15:38 | | |
| L56695-1 | 421422-CHGW | | CVCOND | GRND WTR | 10/22/2012 9:38 | 10/23/2012 15:59 | 10/23/2012 15:59 | | |
| L56695-2 | 421422-CHGW | | CVCOND | GRND WTR | 10/18/2012 9:45 | 10/23/2012 16:09 | 10/23/2012 16:09 | | |
| L56695-6 | 421422-CHGW | | CVCOND | GRND WTR | 10/22/2012 7:50 | 10/23/2012 16:18 | 10/23/2012 16:18 | | |
| L56696-1 | 421422-CHGW | | CVCOND | GRND WTR | 10/18/2012 6:50 | 10/23/2012 16:29 | 10/23/2012 16:29 | | |
| L56696-2 | 421422-CHGW | | CVCOND | GRND WTR | 10/18/2012 5:50 | 10/23/2012 16:39 | 10/23/2012 16:39 | | |
| L56702-1 | 421422-CHGW | | CVCOND | GRND WTR | 10/19/2012 6:30 | 10/23/2012 16:50 | 10/23/2012 16:50 | | |
| L56702-2 | 421422-CHGW | | CVCOND | GRND WTR | 10/19/2012 5:15 | 10/23/2012 17:00 | 10/23/2012 17:00 | | |
| L56703-2 | 421422-CHGW | | CVCOND | GRND WTR | 10/19/2012 8:52 | 10/23/2012 17:10 | 10/23/2012 17:10 | | |
| WG123814-1 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 12:35 | 10/23/2012 12:35 | | LEVEL1 |
| WG123814-2 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 12:36 | 10/23/2012 12:36 | | LEVEL2 |
| WG123814-3 | LD | | CVCOND | GRND WTR | | 10/23/2012 15:17 | 10/23/2012 15:17 | | L56616-6 |
| WG123814-4 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 15:47 | 10/23/2012 15:47 | | LEVEL1 |
| WG123814-5 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 15:48 | 10/23/2012 15:48 | | LEVEL2 |
| WG123814-6 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 19:21 | 10/23/2012 19:21 | | LEVEL1 |
| WG123814-7 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 19:22 | 10/23/2012 19:22 | | LEVEL2 |
| WG123814-8 | LD | | CVCOND | STORM WTR | | 10/23/2012 19:36 | 10/23/2012 19:36 | | L56017-1 |
| WG123814-9 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 19:37 | 10/23/2012 19:37 | | LEVEL1 |
| WG123814-10 | LCS | | CVCOND | BLANK WTR | | 10/23/2012 19:39 | 10/23/2012 19:39 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG124276 MBAS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVMBAS-SUB | STORM WTR | 10/18/2012 20:43 | 10/20/2012 0:00 | 10/20/2012 0:00 | | |
| L56016-2 | 421879-210 | | CVMBAS-SUB | STORM WTR | 10/18/2012 20:50 | 10/20/2012 0:00 | 10/20/2012 0:00 | | |
| L56017-1 | 421879-210 | | CVMBAS-SUB | STORM WTR | 10/18/2012 19:10 | 10/20/2012 0:00 | 10/20/2012 0:00 | | |

**WG123936 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | NPDES SW Monitoring | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56016-1 | 421879-210 | | CVNO23 | STORM WTR | 10/18/2012 20:43 | 10/31/2012 9:45 | 10/31/2012 12:38 | | |
| L56016-1 | 421879-210 | | CVORTHOP | STORM WTR | 10/18/2012 20:43 | 10/31/2012 9:45 | 10/31/2012 12:38 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| L56016-2 | 421879-210 | | CVNO23 | STORM WTR | 10/18/2012 20:50 | 10/31/2012 9:45 | 10/31/2012 12:40 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56016-2 | 421879-210 | | CVORTHOP | STORM WTR | 10/18/2012 20:50 | 10/31/2012 9:45 | 10/31/2012 12:40 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| L56016-5 | 421879-210 | | CVNO23 | BLANK WTR | 10/20/2012 11:10 | 10/31/2012 9:45 | 10/31/2012 11:58 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56016-5 | 421879-210 | | CVORTHOP | BLANK WTR | 10/20/2012 11:10 | 10/31/2012 9:45 | 10/31/2012 11:58 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| L56017-1 | 421879-210 | | CVNO23 | STORM WTR | 10/18/2012 19:10 | 10/31/2012 9:45 | 10/31/2012 12:42 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56017-1 | 421879-210 | | CVORTHOP | STORM WTR | 10/18/2012 19:10 | 10/31/2012 9:45 | 10/31/2012 12:42 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| L56017-3 | 421879-210 | | CVNO23 | BLANK WTR | 10/20/2012 10:30 | 10/31/2012 9:45 | 10/31/2012 12:27 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56017-3 | 421879-210 | | CVORTHOP | BLANK WTR | 10/20/2012 10:30 | 10/31/2012 9:45 | 10/31/2012 12:27 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| | | WRIA 7 Streams | | | | | | | |
| L56578-1 | 422019 | Ambient Monitoring | CVNH3-FL | FRESH WTR | 10/22/2012 14:24 | 10/31/2012 9:45 | 10/31/2012 11:48 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| L56578-1 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 14:24 | 10/31/2012 9:45 | 10/31/2012 11:48 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56578-1 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 14:24 | 10/31/2012 9:45 | 10/31/2012 11:48 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | |
| L56578-2 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 13:24 | 10/31/2012 9:45 | 10/31/2012 12:00 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| L56578-2 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 13:24 | 10/31/2012 9:45 | 10/31/2012 12:00 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |

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|---|---|---|---|---|---|---|---|---|
| L56578-2 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 13:24 | 10/31/2012 9:45 | 10/31/2012 12:00 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-3 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 13:04 | 10/31/2012 9:45 | 10/31/2012 12:02 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-3 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 13:04 | 10/31/2012 9:45 | 10/31/2012 12:02 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-3 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 13:04 | 10/31/2012 9:45 | 10/31/2012 12:02 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-4 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 12:43 | 10/31/2012 9:45 | 10/31/2012 12:04 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-4 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 12:43 | 10/31/2012 9:45 | 10/31/2012 12:04 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-4 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 12:43 | 10/31/2012 9:45 | 10/31/2012 12:04 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-5 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 12:24 | 10/31/2012 9:45 | 10/31/2012 12:06 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-5 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 12:24 | 10/31/2012 9:45 | 10/31/2012 12:06 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-5 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 12:24 | 10/31/2012 9:45 | 10/31/2012 12:06 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-6 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 11:58 | 10/31/2012 9:45 | 10/31/2012 12:08 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-6 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 11:58 | 10/31/2012 9:45 | 10/31/2012 12:08 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-6 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 11:58 | 10/31/2012 9:45 | 10/31/2012 12:08 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-7 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 11:17 | 10/31/2012 9:45 | 10/31/2012 12:11 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-7 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 11:17 | 10/31/2012 9:45 | 10/31/2012 12:11 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-7 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 11:17 | 10/31/2012 9:45 | 10/31/2012 12:11 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-8 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 10:54 | 10/31/2012 9:45 | 10/31/2012 12:13 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L56578-8 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 10:54 | 10/31/2012 9:45 | 10/31/2012 12:13 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-8 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 10:54 | 10/31/2012 9:45 | 10/31/2012 12:13 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-9 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 10:38 | 10/31/2012 9:45 | 10/31/2012 12:29 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-9 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 10:38 | 10/31/2012 9:45 | 10/31/2012 12:29 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-9 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 10:38 | 10/31/2012 9:45 | 10/31/2012 12:29 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-10 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 10:06 | 10/31/2012 9:45 | 10/31/2012 12:31 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-10 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 10:06 | 10/31/2012 9:45 | 10/31/2012 12:31 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-10 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 10:06 | 10/31/2012 9:45 | 10/31/2012 12:31 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-11 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 9:33 | 10/31/2012 9:45 | 10/31/2012 12:33 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-11 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 9:33 | 10/31/2012 9:45 | 10/31/2012 12:33 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-11 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 9:33 | 10/31/2012 9:45 | 10/31/2012 12:33 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-12 | 422019 | | CVNH3-FL | FRESH WTR | 10/22/2012 9:45 | 10/31/2012 9:45 | 10/31/2012 12:36 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-12 | 422019 | | CVNO23 | FRESH WTR | 10/22/2012 9:45 | 10/31/2012 9:45 | 10/31/2012 12:36 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-12 | 422019 | | CVORTHOP | FRESH WTR | 10/22/2012 9:45 | 10/31/2012 9:45 | 10/31/2012 12:36 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56578-13 | 422019 | | CVNH3-FL | BLANK WTR | 10/22/2012 9:25 | 10/31/2012 9:45 | 10/31/2012 11:46 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 |
| L56578-13 | 422019 | | CVNO23 | BLANK WTR | 10/22/2012 9:25 | 10/31/2012 9:45 | 10/31/2012 11:46 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 |
| L56578-13 | 422019 | | CVORTHOP | BLANK WTR | 10/22/2012 9:25 | 10/31/2012 9:45 | 10/31/2012 14:46 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 |
| L56742-1 | 421195-180 | Mercer Island | CVORTHOP | STORM WTR | 10/30/2012 10:28 | 10/31/2012 9:45 | 10/31/2012 13:05 | |
| L56742-2 | 421195-180 | Stormwater Monitoring | CVORTHOP | STORM WTR | 10/30/2012 10:36 | 10/31/2012 9:45 | 10/31/2012 13:07 | |
| L56742-3 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 10:50 | 10/31/2012 9:45 | 10/31/2012 13:09 | |

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|---|---|---|---|---|---|---|---|---|---|
| L56742-4 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 11:25 | 10/31/2012 9:45 | 10/31/2012 13:11 | | |
| L56742-5 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 12:53 | 10/31/2012 9:45 | 10/31/2012 13:13 | | |
| L56742-6 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 13:06 | 10/31/2012 9:45 | 10/31/2012 13:15 | | |
| L56742-7 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 13:17 | 10/31/2012 9:45 | 10/31/2012 13:26 | | |
| L56742-8 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 12:34 | 10/31/2012 9:45 | 10/31/2012 13:32 | | |
| L56742-9 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 12:24 | 10/31/2012 9:45 | 10/31/2012 13:34 | | |
| L56742-10 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 11:51 | 10/31/2012 9:45 | 10/31/2012 13:36 | | |
| L56742-11 | 421195-180 | | CVORTHOP | STORM WTR | 10/30/2012 13:48 | 10/31/2012 9:45 | 10/31/2012 13:38 | | |
| L56742-12 | 421195-180 | | CVORTHOP | BLANK WTR | 10/30/2012 10:19 | 10/31/2012 9:45 | 10/31/2012 13:03 | | FFB- orthoP |
| L56870-1 | 421303B | MARCKWORTH FOREST | CVNH3-FL | STORM WTR | 10/30/2012 13:37 | 10/31/2012 8:45 | 10/31/2012 13:44 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-1 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 13:37 | 10/31/2012 8:45 | 10/31/2012 13:44 | | |
| L56870-2 | 421303B | | CVNH3-FL | STORM WTR | 10/30/2012 13:00 | 10/31/2012 8:45 | 10/31/2012 13:55 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-2 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 13:00 | 10/31/2012 8:45 | 10/31/2012 13:55 | | |
| L56870-3 | 421303B | | CVNH3-FL | STORM WTR | 10/30/2012 14:05 | 10/31/2012 8:45 | 10/31/2012 13:57 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-3 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 14:05 | 10/31/2012 8:45 | 10/31/2012 13:57 | | |
| L56870-4 | 421303B | | CVNH3-FL | STORM WTR | 10/30/2012 14:42 | 10/31/2012 8:45 | 10/31/2012 13:59 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-4 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 14:42 | 10/31/2012 8:45 | 10/31/2012 13:59 | | |
| L56870-5 | 421303B | | CVNH3-FL | STORM WTR | 10/30/2012 15:14 | 10/31/2012 8:45 | 10/31/2012 14:07 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-5 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 15:14 | 10/31/2012 8:45 | 10/31/2012 14:07 | | |
| L56870-6 | 421303B | | CVNH3-FL | STORM WTR | 10/30/2012 13:38 | 10/31/2012 8:45 | 10/31/2012 14:09 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| L56870-6 | 421303B | | CVNO23 | STORM WTR | 10/30/2012 13:38 | 10/31/2012 8:45 | 10/31/2012 14:09 | | |
| WG123936-1 | MB | | CVNH3-FL | BLANK WTR | | 10/31/2012 9:45 | 10/31/2012 11:37 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | MB2 10/31/12 |
| | | | | | | | | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | |
| WG123936-1 | MB | | CVNO23 | BLANK WTR | | 10/31/2012 9:45 | 10/31/2012 11:37 | | MB2 10/31/12 |
| WG123936-1 | MB | | CVORTHOP | BLANK WTR | | 10/31/2012 9:45 | 10/31/2012 11:37 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | MB2 10/31/12 |

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|---|---|---|---|---|---|---|---|
| WG123936-2 | SB | CVNH3-FL | BLANK WTR | 10/31/2012 9:45 | 10/31/2012 11:39 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | WG123936-1 |
| WG123936-2 | SB | CVNO23 | BLANK WTR | 10/31/2012 9:45 | 10/31/2012 11:39 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | WG123936-1 |
| WG123936-2 | SB | CVORTHOP | BLANK WTR | 10/31/2012 9:45 | 10/31/2012 11:39 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | WG123936-1 |
| WG123936-3 | LCS | CVNH3-FL | BLANK WTR | 10/31/2012 14:11 | 10/31/2012 14:11 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | LEVEL1 |
| WG123936-3 | LCS | CVNO23 | BLANK WTR | 10/31/2012 14:11 | 10/31/2012 14:11 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | LEVEL1 |
| WG123936-3 | LCS | CVORTHOP | BLANK WTR | 10/31/2012 14:11 | 10/31/2012 14:11 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | LEVEL1 |
| WG123936-4 | LD | CVNH3-FL | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:15 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | L56578-8 |
| WG123936-4 | LD | CVNO23 | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:15 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56578-8 |
| WG123936-4 | LD | CVORTHOP | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:15 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | L56578-8 |
| WG123936-5 | MS | CVNH3-FL | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:17 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | L56578-8 |
| WG123936-5 | MS | CVNO23 | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:17 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56578-8 |
| WG123936-5 | MS | CVORTHOP | FRESH WTR | 10/31/2012 9:45 | 10/31/2012 12:17 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | L56578-8 |
| WG123936-6 | LD | CVNO23 | STORM WTR | 10/31/2012 9:45 | 10/31/2012 12:44 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56017-1 |
| WG123936-6 | LD | CVORTHOP | STORM WTR | 10/31/2012 9:45 | 10/31/2012 12:44 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | L56017-1 |
| WG123936-7 | MS | CVNO23 | STORM WTR | 10/31/2012 9:45 | 10/31/2012 12:46 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56017-1 |
| WG123936-7 | MS | CVORTHOP | STORM WTR | 10/31/2012 9:45 | 10/31/2012 12:46 | WG123936-6,-7,-8,-9,-1,-2,-4,-5,-10,-11,-3 | L56017-1 |
| WG123936-8 | MB | CVORTHOP | BLANK WTR | 10/31/2012 9:45 | 10/31/2012 12:56 | | MB3 10/31/12 |
| WG123936-9 | LCS | CVORTHOP | BLANK WTR | 10/31/2012 12:58 | 10/31/2012 12:58 | | LEVEL1 |
| WG123936-10 | LD | CVORTHOP | STORM WTR | 10/31/2012 9:45 | 10/31/2012 13:28 | | L56742-7 |
| WG123936-11 | MS | CVORTHOP | STORM WTR | 10/31/2012 9:45 | 10/31/2012 13:30 | | L56742-7 |

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|---|---|---|---|---|---|---|---|
| WG123936-12 | MB | CVNH3-FL | BLANK WTR | 10/31/2012 8:45 | 10/31/2012 13:42 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | MB1 10/31/12 |
| WG123936-12 | MB | CVNO23 | BLANK WTR | 10/31/2012 8:45 | 10/31/2012 13:42 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | MB1 10/31/12 |
| WG123936-13 | LD | CVNH3-FL | STORM WTR | 10/31/2012 8:45 | 10/31/2012 14:01 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | L56870-4 |
| WG123936-13 | LD | CVNO23 | STORM WTR | 10/31/2012 8:45 | 10/31/2012 14:01 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56870-4 |
| WG123936-14 | MS | CVNH3-FL | STORM WTR | 10/31/2012 8:45 | 10/31/2012 14:03 | WG123936-4,-5,-12,-13,-14,-3,-1,-2 | L56870-4 |
| WG123936-14 | MS | CVNO23 | STORM WTR | 10/31/2012 8:45 | 10/31/2012 14:03 | WG123936-6,-7,-12,-13,-14,-3,-1,-2,-4,-5 | L56870-4 |

**WG123816 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 10/18/2012 20:43 | 10/23/2012 11:20 | 10/24/2012 12:20 | WG123816-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56016-2 | 421879-210 | | CVTKN | STORM WTR | 10/18/2012 20:50 | 10/23/2012 11:20 | 10/24/2012 12:39 | | |
| L56017-1 | 421879-210 | | CVTKN | STORM WTR | 10/18/2012 19:10 | 10/23/2012 11:20 | 10/24/2012 12:41 | | |
| L56537-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 10/8/2012 7:00 | 10/23/2012 11:20 | 10/24/2012 12:43 | | |
| L56537-3 | 421430-300 | | CVTKN | EFFLUENT | 10/8/2012 7:07 | 10/23/2012 11:20 | 10/24/2012 12:51 | | |
| L56610-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVTKN | LEACHATE | 10/3/2012 7:00 | 10/23/2012 11:20 | 10/24/2012 12:53 | | |
| L56611-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 10/3/2012 4:15 | 10/23/2012 11:20 | 10/24/2012 12:55 | | |
| L56611-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 10/3/2012 8:34 | 10/23/2012 11:20 | 10/24/2012 12:57 | | |
| L56611-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 10/3/2012 9:23 | 10/23/2012 11:20 | 10/24/2012 13:16 | | |
| L56611-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 10/3/2012 7:18 | 10/23/2012 11:20 | 10/24/2012 13:18 | | |
| WG123816-1 | MB | | CVTKN | BLANK WTR | | 10/23/2012 11:20 | 10/24/2012 12:10 | | MB1 10/23/12 |
| WG123816-2 | LCS | | CVTKN | BLANK WTR | | 10/23/2012 11:20 | 10/24/2012 12:12 | | LEVEL1 |
| WG123816-3 | LCS | | CVTKN | BLANK WTR | | 10/23/2012 11:20 | 10/24/2012 12:14 | | LEVEL2 |
| WG123816-4 | SB | | CVTKN | BLANK WTR | | 10/23/2012 11:20 | 10/24/2012 12:16 | | WG123816-1 |
| WG123816-5 | LD | | CVTKN | STORM WTR | | 10/23/2012 11:20 | 10/24/2012 12:22 | | L56016-1 |
| WG123816-6 | MS | | CVTKN | STORM WTR | | 10/23/2012 11:20 | 10/24/2012 12:24 | | L56016-1 |
| WG123816-7 | LD | | CVTKN | EFFLUENT | | 10/23/2012 11:20 | 10/24/2012 12:45 | | L56537-1 |
| WG123816-8 | MS | | CVTKN | EFFLUENT | | 10/23/2012 11:20 | 10/24/2012 12:47 | | L56537-1 |
| WG123816-9 | LD | | CVTKN | LEACHATE | | 10/23/2012 11:20 | 10/24/2012 13:10 | | L56611-3 |
| WG123816-10 | MS | | CVTKN | LEACHATE | | 10/23/2012 11:20 | 10/24/2012 13:12 | | L56611-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123784 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 10/18/2012 20:43 | 10/23/2012 10:25 | 10/25/2012 11:10 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,- | |
| L56016-2 | 421879-210 | | CVTOTP | STORM WTR | 10/18/2012 20:50 | 10/23/2012 10:25 | 10/25/2012 11:25 | | |
| L56017-1 | 421879-210 | | CVTOTP | STORM WTR | 10/18/2012 19:10 | 10/23/2012 10:25 | 10/25/2012 11:27 | | |
| | | CDC Grant | | | | | | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56526-3 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:26 | | |
| | | | | | | | | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56526-3 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:26 | | |
| | | | | | | | | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56526-4 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:28 | | |
| | | | | | | | | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56526-4 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:28 | | |
| | | | | | | | | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56526-5 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:37 | | |
| | | | | | | | | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56526-5 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 10:10 | 10/23/2012 10:25 | 10/25/2012 9:37 | | |
| | | | | | | | | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56526-9 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:15 | 10/23/2012 10:25 | 10/25/2012 9:39 | | |
| | | | | | | | | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56526-9 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:15 | 10/23/2012 10:25 | 10/25/2012 9:39 | | |
| | | | | | | | | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56526-10 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:15 | 10/23/2012 10:25 | 10/25/2012 9:41 | | |
| | | | | | | | | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56526-10 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:15 | 10/23/2012 10:25 | 10/25/2012 9:41 | | |

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|---|---|---|---|---|---|---|---|---|
| L56526-14 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:49 | 10/23/2012 10:25 | 10/25/2012 9:42 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-14 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:49 | 10/23/2012 10:25 | 10/25/2012 9:42 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-15 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:49 | 10/23/2012 10:25 | 10/25/2012 9:44 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-15 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:49 | 10/23/2012 10:25 | 10/25/2012 9:44 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-18 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 9:46 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-18 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 9:46 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-19 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 10:06 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-19 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 10:58 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-20 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 10:08 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-20 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:20 | 10/23/2012 10:25 | 10/25/2012 10:59 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-23 | 421195-250 | | CVTOTN | FRESH WTR | 10/21/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:10 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L56526-23 | 421195-250 | | CVTOTP | FRESH WTR | 10/21/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 11:03 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-24 | 421195-250 | | CVTOTN | FRESH WTR | 10/21/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:12 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-24 | 421195-250 | | CVTOTP | FRESH WTR | 10/21/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:12 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-25 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:14 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-25 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:14 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-28 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 10:15 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-28 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 10:15 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-29 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 10:17 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-29 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 10:17 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-30 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 10:19 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-30 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 10:19 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |

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|---|---|---|---|---|---|---|---|---|
| L56526-33 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 10:28 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-33 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 11:05 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-34 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 10:30 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-34 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 11:07 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-35 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 10:32 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-35 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 11:09 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-38 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:34 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-38 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:34 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-39 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:41 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-39 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 13:30 | 10/23/2012 10:25 | 10/25/2012 10:41 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-40 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 10:43 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L56526-40 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 10:43 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-43 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:45 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-43 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:45 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-44 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:54 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-44 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:54 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56526-45 | 421195-250 | | CVTOTN | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:56 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56526-45 | 421195-250 | | CVTOTP | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 10:56 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTOTN | FRESH WTR | 10/22/2012 14:24 | 10/23/2012 10:25 | 10/25/2012 11:34 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-1 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 14:24 | 10/23/2012 10:25 | 10/25/2012 11:34 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-2 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 13:24 | 10/23/2012 10:25 | 10/25/2012 11:49 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-2 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 13:24 | 10/23/2012 10:25 | 10/25/2012 11:49 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |

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|---|---|---|---|---|---|---|---|---|
| L56578-3 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 13:04 | 10/23/2012 10:25 | 10/25/2012 11:51 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-3 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 13:04 | 10/23/2012 10:25 | 10/25/2012 11:51 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-4 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 12:43 | 10/23/2012 10:25 | 10/25/2012 11:53 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-4 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 12:43 | 10/23/2012 10:25 | 10/25/2012 11:53 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-5 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 12:24 | 10/23/2012 10:25 | 10/25/2012 11:54 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-5 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 12:24 | 10/23/2012 10:25 | 10/25/2012 11:54 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-6 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 11:58 | 10/23/2012 10:25 | 10/25/2012 11:56 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-6 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 11:58 | 10/23/2012 10:25 | 10/25/2012 11:56 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-7 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 11:17 | 10/23/2012 10:25 | 10/25/2012 11:58 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-7 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 11:17 | 10/23/2012 10:25 | 10/25/2012 11:58 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-8 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 10:54 | 10/23/2012 10:25 | 10/25/2012 12:00 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L56578-8 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 10:54 | 10/23/2012 10:25 | 10/25/2012 12:00 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-9 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 10:38 | 10/23/2012 10:25 | 10/25/2012 12:02 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-9 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 10:38 | 10/23/2012 10:25 | 10/25/2012 12:02 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-10 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 10:06 | 10/23/2012 10:25 | 10/25/2012 12:11 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-10 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 10:06 | 10/23/2012 10:25 | 10/25/2012 12:11 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-11 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 9:33 | 10/23/2012 10:25 | 10/25/2012 12:13 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-11 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 9:33 | 10/23/2012 10:25 | 10/25/2012 12:13 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56578-12 | 422019 | | CVTOTN | FRESH WTR | 10/22/2012 9:45 | 10/23/2012 10:25 | 10/25/2012 12:15 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56578-12 | 422019 | | CVTOTP | FRESH WTR | 10/22/2012 9:45 | 10/23/2012 10:25 | 10/25/2012 12:15 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| | | Volunteer Lakes City | | | | | | |
| L56591-1 | 421195-130 | | CVTOTN | FRESH WTR | 10/21/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 8:51 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-1 | 421195-130 | | CVTOTP | FRESH WTR | 10/21/2012 11:30 | 10/23/2012 10:25 | 10/25/2012 8:51 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |

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|---|---|---|---|---|---|---|---|---|
| L56591-2 | 421195-130 | | CVTOTN | FRESH WTR | 10/21/2012 13:00 | 10/23/2012 10:25 | 10/25/2012 8:58 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-2 | 421195-130 | | CVTOTP | FRESH WTR | 10/21/2012 13:00 | 10/23/2012 10:25 | 10/25/2012 8:58 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56591-3 | 421195-130 | | CVTOTN | FRESH WTR | 10/21/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 9:00 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-3 | 421195-130 | | CVTOTP | FRESH WTR | 10/21/2012 10:00 | 10/23/2012 10:25 | 10/25/2012 9:00 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56591-4 | 421195-130 | | CVTOTN | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 9:02 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-4 | 421195-130 | | CVTOTP | FRESH WTR | 10/22/2012 0:00 | 10/23/2012 10:25 | 10/25/2012 9:02 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56591-5 | 421195-130 | | CVTOTN | FRESH WTR | 10/21/2012 16:30 | 10/23/2012 10:25 | 10/25/2012 9:11 | |
| L56591-5 | 421195-130 | | CVTOTP | FRESH WTR | 10/21/2012 16:30 | 10/23/2012 10:25 | 10/25/2012 9:11 | |
| L56591-6 | 421195-130 | | CVTOTN | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 9:13 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-6 | 421195-130 | | CVTOTP | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 9:13 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56591-7 | 421195-130 | | CVTOTN | FRESH WTR | 10/21/2012 15:05 | 10/23/2012 10:25 | 10/25/2012 9:15 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |
| L56591-7 | 421195-130 | | CVTOTP | FRESH WTR | 10/21/2012 15:05 | 10/23/2012 10:25 | 10/25/2012 9:15 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L56591-8 | 421195-130 | | CVTOTN | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 9:17 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|---|---|
| L56591-8 | 421195-130 | | | CVTOTP | FRESH WTR | 10/22/2012 9:30 | 10/23/2012 10:25 | 10/25/2012 9:17 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56591-9 | 421195-130 | | | CVTOTN | FRESH WTR | 10/21/2012 14:00 | 10/23/2012 10:25 | 10/25/2012 9:19 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56591-9 | 421195-130 | | | CVTOTP | FRESH WTR | 10/21/2012 14:00 | 10/23/2012 10:25 | 10/25/2012 9:19 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56591-10 | 421195-130 | | | CVTOTN | FRESH WTR | 10/22/2012 9:23 | 10/23/2012 10:25 | 10/25/2012 9:20 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56591-10 | 421195-130 | | | CVTOTP | FRESH WTR | 10/22/2012 9:23 | 10/23/2012 10:25 | 10/25/2012 9:20 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56591-11 | 421195-130 | | | CVTOTN | FRESH WTR | 10/22/2012 9:00 | 10/23/2012 10:25 | 10/25/2012 9:22 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56591-11 | 421195-130 | | | CVTOTP | FRESH WTR | 10/22/2012 9:00 | 10/23/2012 10:25 | 10/25/2012 9:22 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L56591-12 | 421195-130 | | | CVTOTN | FRESH WTR | 10/21/2012 13:00 | 10/23/2012 10:25 | 10/25/2012 9:24 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | |
| L56591-12 | 421195-130 | | | CVTOTP | FRESH WTR | 10/21/2012 13:00 | 10/23/2012 10:25 | 10/25/2012 9:24 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| WG123784-1 | MB | | | CVTOTN | BLANK WTR | | 10/23/2012 10:25 | 10/25/2012 8:46 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | MB1 121023 |
| WG123784-1 | MB | | | CVTOTP | BLANK WTR | | 10/23/2012 10:25 | 10/25/2012 8:46 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | MB1 121023 |

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|---|---|---|---|---|---|---|---|
| WG123784-2 | SB | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 8:47 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | WG123784-1 |
| WG123784-2 | SB | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 8:47 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | WG123784-1 |
| WG123784-3 | LCS | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 8:49 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | LEVEL1 |
| WG123784-3 | LCS | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 8:49 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | LEVEL1 |
| WG123784-4 | LD | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 8:53 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56591-1 |
| WG123784-4 | LD | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 8:53 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56591-1 |
| WG123784-5 | MS | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 8:55 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56591-1 |
| WG123784-5 | MS | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 8:55 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56591-1 |
| WG123784-6 | LD | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 9:48 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56526-18 |
| WG123784-6 | LD | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 9:48 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56526-18 |
| WG123784-7 | MS | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 9:50 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56526-18 |

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|---|---|---|---|---|---|---|---|
| WG123784-7 | MS | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 9:50 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56526-18 |
| WG123784-8 | MB | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 9:53 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | MB2 121023 |
| WG123784-8 | MB | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 9:53 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | MB2 121023 |
| WG123784-9 | SB | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 10:03 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | WG123784-8 |
| WG123784-9 | SB | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 10:03 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | WG123784-8 |
| WG123784-10 | LCS | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 10:04 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | LEVEL1 |
| WG123784-10 | LCS | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 10:04 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | LEVEL1 |
| WG123784-11 | LD | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 10:36 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56526-38 |
| WG123784-11 | LD | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 10:36 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56526-38 |
| WG123784-12 | MS | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 10:37 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56526-38 |
| WG123784-12 | MS | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 10:37 | | L56526-38 |
| WG123784-13 | LD | CVTOTP | STORM WTR | 10/23/2012 10:25 | 10/25/2012 11:20 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,- | L56016-1 |
| WG123784-14 | MS | CVTOTP | STORM WTR | 10/23/2012 10:25 | 10/25/2012 11:21 | 11,-12,-13,-14,-15,- | L56016-1 |
| WG123784-15 | MB | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:29 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | MB3 121023 |

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|---|---|---|---|---|---|---|---|
| WG123784-15 | MB | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:29 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | MB3 121023 |
| WG123784-16 | SB | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:31 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | WG123784-15 |
| WG123784-16 | SB | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:31 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | WG123784-15 |
| WG123784-17 | LCS | CVTOTN | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:32 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | LEVEL1 |
| WG123784-17 | LCS | CVTOTP | BLANK WTR | 10/23/2012 10:25 | 10/25/2012 11:32 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | LEVEL1 |
| WG123784-18 | LD | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 11:36 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56578-1 |
| WG123784-18 | LD | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 11:36 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56578-1 |
| WG123784-19 | MS | CVTOTN | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 11:45 | WG123784-6,-7,-8,-9,-10,-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-4,-5 | L56578-1 |
| WG123784-19 | MS | CVTOTP | FRESH WTR | 10/23/2012 10:25 | 10/25/2012 11:45 | WG123784-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L56578-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123800 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 10/18/2012 20:43 | 10/24/2012 6:55 | 10/24/2012 12:26 | WG123800-4,-5,-1,-2,-3 | |
| L56016-2 | 421879-210 | | CVTSS | STORM WTR | 10/18/2012 20:50 | 10/24/2012 6:55 | 10/24/2012 12:27 | | |
| L56017-1 | 421879-210 | | CVTSS | STORM WTR | 10/18/2012 19:10 | 10/24/2012 6:55 | 10/24/2012 12:27 | | |
| L56578-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTSS | FRESH WTR | 10/22/2012 14:24 | 10/24/2012 6:55 | 10/24/2012 12:18 | | |
| L56578-2 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 13:24 | 10/24/2012 6:55 | 10/24/2012 12:18 | | |
| L56578-3 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 13:04 | 10/24/2012 6:55 | 10/24/2012 12:19 | | |
| L56578-4 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 12:43 | 10/24/2012 6:55 | 10/24/2012 12:19 | | |
| L56578-5 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 12:24 | 10/24/2012 6:55 | 10/24/2012 12:19 | | |
| L56578-6 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 11:58 | 10/24/2012 6:55 | 10/24/2012 12:20 | | |
| L56578-7 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 11:17 | 10/24/2012 6:55 | 10/24/2012 12:21 | | |
| L56578-8 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 10:54 | 10/24/2012 6:55 | 10/24/2012 12:21 | | |
| L56578-9 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 10:38 | 10/24/2012 6:55 | 10/24/2012 12:23 | | |
| L56578-10 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 10:06 | 10/24/2012 6:55 | 10/24/2012 12:24 | | |
| L56578-11 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 9:33 | 10/24/2012 6:55 | 10/24/2012 12:24 | | |
| L56578-12 | 422019 | | CVTSS | FRESH WTR | 10/22/2012 9:45 | 10/24/2012 6:55 | 10/24/2012 12:25 | | |
| L56616-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVTSS | GRND WTR | 10/22/2012 5:50 | 10/24/2012 6:55 | 10/24/2012 12:30 | | |
| L56616-5 | 421422-CHGW | | CVTSS | GRND WTR | 10/22/2012 5:50 | 10/24/2012 6:55 | 10/24/2012 12:29 | | |
| L56616-6 | 421422-CHGW | | CVTSS | GRND WTR | 10/22/2012 8:07 | 10/24/2012 6:55 | 10/24/2012 12:30 | | |
| L56695-1 | 421422-CHGW | | CVTSS | GRND WTR | 10/22/2012 9:38 | 10/24/2012 6:55 | 10/24/2012 12:31 | | |
| L56695-6 | 421422-CHGW | | CVTSS | GRND WTR | 10/22/2012 7:50 | 10/24/2012 6:55 | 10/24/2012 12:31 | | |
| WG123800-1 | MB | | CVTSS | BLANK WTR | | 10/24/2012 6:55 | 10/24/2012 12:16 | | MB1 10/24/12 |
| WG123800-2 | LCS | | CVTSS | BLANK WTR | | 10/24/2012 6:55 | 10/24/2012 12:17 | | LEVEL1 |
| WG123800-3 | LD | | CVTSS | FRESH WTR | | 10/24/2012 6:55 | 10/24/2012 12:22 | | L56578-8 |
| WG123800-4 | LD | | CVTSS | STORM WTR | | 10/24/2012 6:55 | 10/24/2012 12:29 | | L56017-1 |
| WG123800-5 | LD | | CVTSS | GRND WTR | | 10/24/2012 6:55 | 10/24/2012 12:32 | | L56695-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123783 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 10/18/2012 20:43 | 10/21/2012 16:29 | 10/21/2012 16:29 | WG123783-1,-2,-3 | |
| L56016-2 | 421879-210 | | CVTURB | STORM WTR | 10/18/2012 20:50 | 10/21/2012 16:31 | 10/21/2012 16:31 | | |
| L56017-1 | 421879-210 | | CVTURB | STORM WTR | 10/18/2012 19:10 | 10/21/2012 16:32 | 10/21/2012 16:32 | | |
| WG123783-1 | LCS | | CVTURB | BLANK WTR | | 10/21/2012 16:27 | 10/21/2012 16:27 | | LEVEL1 |
| WG123783-2 | LD | | CVTURB | STORM WTR | | 10/21/2012 16:35 | 10/21/2012 16:35 | | L56017-1 |
| WG123783-3 | LCS | | CVTURB | BLANK WTR | | 10/21/2012 16:36 | 10/21/2012 16:36 | | LEVEL2 |

**WG123582 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 10/19/2012 10:45 | 10/19/2012 14:30 | 10/20/2012 13:40 | WG123582-1,-2,-3,-4,-5 | |
| L56016-4 | 421879-210 | | MCFC-MF | STORM WTR | 10/19/2012 10:24 | 10/19/2012 14:30 | 10/20/2012 13:40 | | |
| WG123582-1 | LD | | MCFC-MF | STORM WTR | | 10/19/2012 14:30 | 10/20/2012 13:40 | | L56016-3 |
| WG123582-2 | PC | | MCFC-MF | BLANK WTR | | 10/19/2012 14:30 | 10/20/2012 13:40 | | QC-PERFORMED:14-OCT-12 |
| WG123582-3 | NC | | MCFC-MF | BLANK WTR | | 10/19/2012 14:30 | 10/20/2012 13:40 | | QC-PERFORMED:14-OCT-12 |
| WG123582-4 | BF | | MCFC-MF | BLANK WTR | | 10/19/2012 14:30 | 10/20/2012 13:40 | | QC-PERFORMED:14-OCT-12 |
| WG123582-5 | AF | | MCFC-MF | BLANK WTR | | 10/19/2012 14:30 | 10/20/2012 13:40 | | QC-PERFORMED:14-OCT-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG124087 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 10/18/2012 20:43 | 11/9/2012 10:30 | 11/14/2012 10:06 | WG124087-1,-2,-3,-4 | |
| L56016-1 | 421879-210 | | MTICPMS | STORM WTR | 10/18/2012 20:43 | 11/9/2012 10:30 | 11/13/2012 9:34 | | |
| L56016-2 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 10/18/2012 20:50 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56016-2 | 421879-210 | | MTICPMS | STORM WTR | 10/18/2012 20:50 | 11/9/2012 10:30 | 11/13/2012 9:40 | | |
| L56017-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 10/18/2012 19:10 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56017-1 | 421879-210 | | MTICPMS | STORM WTR | 10/18/2012 19:10 | 11/9/2012 10:30 | 11/13/2012 9:45 | | |
| L56321-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | MTHARD-ICPMS | FRESH WTR | 10/24/2012 7:19 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-1 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/24/2012 7:19 | 11/9/2012 10:30 | 11/13/2012 9:51 | | |
| L56321-5 | 421422-CHSW-Q | | MTHARD-ICPMS | FRESH WTR | 10/24/2012 8:13 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-5 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/24/2012 8:13 | 11/9/2012 10:30 | 11/13/2012 9:57 | | |
| L56321-6 | 421422-CHSW-Q | | MTHARD-ICPMS | FRESH WTR | 10/24/2012 7:52 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-6 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/24/2012 7:52 | 11/9/2012 10:30 | 11/13/2012 10:15 | | |
| L56321-7 | 421422-CHSW-Q | | MTHARD-ICPMS | FRESH WTR | 10/24/2012 7:30 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-7 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/24/2012 7:30 | 11/9/2012 10:30 | 11/13/2012 10:33 | | |
| L56321-8 | 421422-CHSW-Q | | MTHARD-ICPMS | FRESH WTR | 10/25/2012 10:47 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-8 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/25/2012 10:47 | 11/9/2012 10:30 | 11/13/2012 10:38 | | |
| L56321-9 | 421422-CHSW-Q | | MTHARD-ICPMS | FRESH WTR | 10/30/2012 5:00 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56321-9 | 421422-CHSW-Q | | MTICPMS | FRESH WTR | 10/30/2012 5:00 | 11/9/2012 10:30 | 11/13/2012 10:44 | | |
| L56643-1 | 423484-850-4 | Brightwater -Treatment Plant Construction | MTICPMS | STORM WTR | 10/29/2012 0:00 | 11/9/2012 10:30 | 11/13/2012 10:50 | | |
| L56643-6 | 423484-850-4 | | MTICPMS | STORM WTR | 10/29/2012 0:00 | 11/9/2012 10:30 | 11/13/2012 10:56 | | |
| L56786-3 | 421240-500 | Pre-Spawn Mortality Study | MTHARD-ICPMS | STORM WTR | 10/22/2012 15:15 | 11/9/2012 10:30 | 11/15/2012 14:03 | | |
| L56786-3 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 15:15 | 11/9/2012 10:30 | 11/13/2012 11:02 | | |
| L56786-4 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 16:00 | 11/9/2012 10:30 | 11/15/2012 14:03 | | |
| L56786-4 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 16:00 | 11/9/2012 10:30 | 11/13/2012 11:08 | | |
| L56786-5 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 16:45 | 11/9/2012 10:30 | 11/15/2012 14:03 | | |
| L56786-5 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 16:45 | 11/9/2012 10:30 | 11/13/2012 11:14 | | |
| L56786-6 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 17:30 | 11/9/2012 10:30 | 11/15/2012 14:03 | | |
| L56786-6 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 17:30 | 11/9/2012 10:30 | 11/13/2012 11:20 | | |
| L56786-7 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 18:15 | 11/9/2012 10:30 | 11/15/2012 14:03 | | |
| L56786-7 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 18:15 | 11/9/2012 10:30 | 11/13/2012 11:26 | | |
| L56786-8 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 19:00 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56786-8 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 19:00 | 11/9/2012 10:30 | 11/13/2012 11:43 | | |
| L56786-9 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 19:45 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56786-9 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 19:45 | 11/9/2012 10:30 | 11/13/2012 11:49 | | |
| L56786-10 | 421240-500 | | MTHARD-ICPMS | STORM WTR | 10/22/2012 20:30 | 11/9/2012 10:30 | 11/14/2012 10:06 | | |
| L56786-10 | 421240-500 | | MTICPMS | STORM WTR | 10/22/2012 20:30 | 11/9/2012 10:30 | 11/13/2012 11:55 | | |
| | | SWD-CHSW P Cedar Hills Surface Water Permit | | | | | | | |
| L56879-1 | 421422-CHSW-P | | MTICPMS | FRESH WTR | 10/30/2012 7:40 | 11/9/2012 10:30 | 11/13/2012 12:01 | | |
| WG124087-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 11/9/2012 10:30 | 11/14/2012 10:06 | | METHOD BLANK |
| WG124087-1 | MB | | MTICPMS | BLANK WTR | | 11/9/2012 10:30 | 11/13/2012 9:22 | | METHOD BLANK |
| WG124087-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 11/9/2012 10:30 | 11/14/2012 10:06 | | WG124087-1 MS-20 SPIKE BLANK |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124087-2 | SB | MTICPMS | BLANK WTR | 11/9/2012 10:30 | 11/13/2012 9:28 | | WG124087-1 MS-20 SPIKE BLANK |
| WG124087-3 | LD | MTHARD-ICPMS | FRESH WTR | 11/9/2012 10:30 | 11/14/2012 10:06 | | L56321-5 RPD-LIQ LAB DUPLICATE |
| WG124087-3 | LD | MTICPMS | FRESH WTR | 11/9/2012 10:30 | 11/13/2012 10:03 | | L56321-5 RPD-LIQ LAB DUPLICATE |
| WG124087-4 | MS | MTHARD-ICPMS | FRESH WTR | 11/9/2012 10:30 | 11/14/2012 10:06 | | L56321-5 MS-20 MATRIX SPIKE |
| WG124087-4 | MS | MTICPMS | FRESH WTR | 11/9/2012 10:30 | 11/13/2012 10:09 | | L56321-5 MS-20 MATRIX SPIKE |

**WG123922 Total and Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 10/18/2012 20:43 | 10/31/2012 13:50 | 11/2/2012 14:04 | WG123922-1,-2,-3,-4 | |
| L56016-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 10/18/2012 20:43 | 10/31/2012 13:50 | 11/2/2012 13:43 | WG123922-1 | |
| L56321-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | MTHG-MID | FRESH WTR | 10/24/2012 7:19 | 10/31/2012 13:50 | 11/2/2012 14:06 | WG123922-1,-2,-3,-4 | |
| L56321-2 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/23/2012 4:40 | 10/31/2012 13:50 | 11/2/2012 14:08 | | |
| L56321-3 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/23/2012 5:30 | 10/31/2012 13:50 | 11/2/2012 14:10 | | |
| L56321-4 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/23/2012 6:20 | 10/31/2012 13:50 | 11/2/2012 14:12 | | |
| L56321-5 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/24/2012 8:13 | 10/31/2012 13:50 | 11/2/2012 14:17 | | |
| L56321-6 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/24/2012 7:52 | 10/31/2012 13:50 | 11/2/2012 13:37 | | |
| L56321-7 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/24/2012 7:30 | 10/31/2012 13:50 | 11/2/2012 14:19 | | |
| L56321-8 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/25/2012 10:47 | 10/31/2012 13:50 | 11/2/2012 14:21 | | |
| L56321-9 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 10/30/2012 5:00 | 10/31/2012 13:50 | 11/2/2012 14:22 | | |
| L56493-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 10/25/2012 8:25 | 10/31/2012 13:50 | 11/2/2012 13:45 | WG123922-1 | |
| L56500-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/25/2012 10:05 | 10/31/2012 13:50 | 11/2/2012 13:46 | | |
| L56616-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/22/2012 5:50 | 10/31/2012 13:50 | 11/2/2012 13:48 | | |
| L56616-5 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/22/2012 5:50 | 10/31/2012 13:50 | 11/2/2012 13:50 | | |
| L56616-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/22/2012 8:07 | 10/31/2012 13:50 | 11/2/2012 13:55 | | |
| L56695-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/22/2012 9:38 | 10/31/2012 13:50 | 11/2/2012 13:59 | | |
| L56695-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/22/2012 7:50 | 10/31/2012 13:50 | 11/2/2012 14:01 | | |
| L56703-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/26/2012 8:15 | 10/31/2012 13:50 | 11/2/2012 14:03 | | |
| L56705-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 10/24/2012 5:55 | 10/31/2012 13:50 | 11/2/2012 13:57 | | |
| WG123922-1 | MB | | MTHG-MID | BLANK WTR | | 10/31/2012 13:50 | 11/2/2012 13:34 | WG123922-1,-2,-3,-4 | METHOD BLANK |
| WG123922-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 10/31/2012 13:50 | 11/2/2012 13:34 | WG123922-1 | METHOD BLANK |
| WG123922-2 | SB | | MTHG-MID | BLANK WTR | | 10/31/2012 13:50 | 11/2/2012 13:35 | WG123922-1,-2,-3,-4 | WG123922-1 HG-LMID |
| WG123922-3 | MS | | MTHG-MID | FRESH WTR | | 10/31/2012 13:50 | 11/2/2012 13:39 | | L56321-6 HG-LMID |
| WG123922-4 | MSD | | MTHG-MID | FRESH WTR | | 10/31/2012 13:50 | 11/2/2012 13:41 | | WG123922-3 L56321-6 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123794 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | SWD-CHSW - A5 TD Cedar Hills Surface Area 5 Top Deck | | | | | | WG123794-1,-2,-3,-4 | |
| L55991-1 | 421422-CHSW-A5-TD | | MTICPMS-DISS | FRESH WTR | 10/23/2012 7:55 | 10/24/2012 14:30 | 10/24/2012 16:28 | | |
| L56016-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 10/18/2012 20:43 | 10/24/2012 14:30 | 10/24/2012 16:33 | | |
| L56016-2 | 421879-210 | | MTICPMS-DISS | STORM WTR | 10/18/2012 20:50 | 10/24/2012 14:30 | 10/24/2012 16:39 | | |
| L56017-1 | 421879-210 | | MTICPMS-DISS | STORM WTR | 10/18/2012 19:10 | 10/24/2012 14:30 | 10/24/2012 16:57 | | |
| | | SWD-CHSW Q Cedar Hills Surface Water Quarterly | | | | | | | |
| L56321-2 | 421422-CHSW-Q | | MTICPMS-DISS | FRESH WTR | 10/23/2012 4:40 | 10/24/2012 14:30 | 10/24/2012 17:09 | | |
| L56616-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 10/22/2012 5:50 | 10/24/2012 14:30 | 10/24/2012 17:03 | | |
| L56616-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/22/2012 5:50 | 10/24/2012 14:30 | 10/24/2012 16:45 | | |
| L56616-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/22/2012 8:07 | 10/24/2012 14:30 | 10/24/2012 16:51 | | |
| L56695-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/22/2012 9:38 | 10/24/2012 14:30 | 10/24/2012 17:38 | | |
| L56695-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/22/2012 7:50 | 10/24/2012 14:30 | 10/24/2012 17:44 | | |
| L56702-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/19/2012 5:15 | 10/24/2012 14:30 | 10/24/2012 17:50 | | |
| L56703-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 10/19/2012 8:52 | 10/24/2012 14:30 | 10/24/2012 17:56 | | |
| L56759-3 | 421240-500 | Pre-Spawn Mortality Study | MTICPMS-DISS | STORM WTR | 10/15/2012 15:45 | 10/24/2012 14:30 | 10/24/2012 18:02 | | |
| L56759-4 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 16:30 | 10/24/2012 14:30 | 10/24/2012 18:08 | | |
| L56759-5 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 17:15 | 10/24/2012 14:30 | 10/24/2012 18:14 | | |
| L56759-6 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 17:45 | 10/24/2012 14:30 | 10/24/2012 18:20 | | |
| L56759-7 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 18:15 | 10/24/2012 14:30 | 10/24/2012 18:37 | | |
| L56759-8 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 19:00 | 10/24/2012 14:30 | 10/24/2012 18:43 | | |
| L56759-9 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 19:45 | 10/24/2012 14:30 | 10/24/2012 18:49 | | |
| L56759-10 | 421240-500 | | MTICPMS-DISS | STORM WTR | 10/15/2012 20:30 | 10/24/2012 14:30 | 10/24/2012 18:55 | | |
| WG123794-1 | MB | | MTICPMS-DISS | BLANK WTR | | 10/24/2012 14:30 | 10/24/2012 16:16 | | METHOD BLANK |
| WG123794-2 | SB | | MTICPMS-DISS | BLANK WTR | | 10/24/2012 14:30 | 10/24/2012 16:22 | | WG123794-1 MS-20 |
| WG123794-3 | LD | | MTICPMS-DISS | FRESH WTR | | 10/24/2012 14:30 | 10/24/2012 17:27 | | L56321-2 RPD-LIQ |
| WG123794-4 | MS | | MTICPMS-DISS | FRESH WTR | | 10/24/2012 14:30 | 10/24/2012 17:32 | | L56321-2 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123842 Chlorinated Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 10/18/2012 20:43 | 10/25/2012 17:00 | 11/5/2012 16:25 | WG123842-4,-1,-2,-3 | |
| L56016-2 | 421879-210 | | ORHERB-NPDES | STORM WTR | 10/18/2012 20:50 | 10/25/2012 17:00 | 11/5/2012 16:49 | | |
| L56017-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 10/18/2012 19:10 | 10/25/2012 17:00 | 11/5/2012 16:01 | | |
| WG123842-1 | MB | | ORHERB-NPDES | BLANK WTR | | 10/25/2012 17:00 | 11/5/2012 8:49 | | MB121025 |
| WG123842-2 | SB | | ORHERB-NPDES | BLANK WTR | | 10/25/2012 17:00 | 11/5/2012 9:37 | | WG123842-1 |
| WG123842-3 | MS | | ORHERB-NPDES | STORM WTR | | 10/25/2012 17:00 | 11/5/2012 15:13 | | L56017-1 |
| WG123842-4 | MSD | | ORHERB-NPDES | STORM WTR | | 10/25/2012 17:00 | 11/5/2012 15:37 | | WG123842-3 L56017-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123746 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 10/18/2012 20:43 | 10/22/2012 17:00 | 10/29/2012 15:49 | WG123746-4,-1,-2,-3 | |
| L56016-2 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 10/18/2012 20:50 | 10/22/2012 17:00 | 10/29/2012 15:23 | | |
| L56017-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 10/18/2012 19:10 | 10/22/2012 17:00 | 10/29/2012 14:58 | | |
| WG123746-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 10/22/2012 17:00 | 10/29/2012 13:15 | | MB121022 |
| WG123746-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 10/22/2012 17:00 | 10/29/2012 13:40 | | WG123746-1 |
| WG123746-3 | MS | | OROPPEST-NPDES | STORM WTR | | 10/22/2012 17:00 | 10/29/2012 14:06 | | L56017-1 |
| WG123746-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 10/22/2012 17:00 | 10/29/2012 14:32 | | WG123746-3 L56017-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123745 PAH**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 10/18/2012 20:43 | 10/22/2022 17:00 | 10/25/2012 12:34 | WG123745-4,-1,-2,-3 | |
| L56016-2 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 10/18/2012 20:50 | 10/22/2022 17:00 | 10/25/2012 13:11 | | |
| L56017-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 10/18/2012 19:10 | 10/22/2022 17:00 | 10/25/2012 11:56 | | |
| WG123745-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 10/22/2022 17:00 | 10/25/2012 9:26 | | MB121022 |
| WG123745-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 10/22/2022 17:00 | 10/25/2012 10:04 | | WG123745-1 |
| WG123745-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 10/22/2022 17:00 | 10/25/2012 10:41 | | L56017-1 |
| WG123745-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 10/22/2022 17:00 | 10/25/2012 11:19 | | WG123745-3 L56017-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123733 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 10/19/2012 10:45 | 10/22/2012 17:00 | 11/8/2012 6:06 | WG123733-1,-2,-3,-4,-5 | |
| L56016-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 10/19/2012 10:24 | 10/22/2012 17:00 | 11/8/2012 6:29 | | |
| L56694-1 | 421196-170 | Roads UST Groundwater | ORWTPH-DX | GRND WTR | 10/16/2012 11:27 | 10/22/2012 17:00 | 11/8/2012 1:24 | | |
| L56694-2 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/16/2012 10:55 | 10/22/2012 17:00 | 11/8/2012 1:48 | | |
| L56694-3 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/16/2012 12:20 | 10/22/2012 17:00 | 11/8/2012 2:11 | | |
| L56694-5 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/17/2012 10:00 | 10/22/2012 17:00 | 11/8/2012 2:35 | | |
| L56694-6 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/17/2012 10:40 | 10/22/2012 17:00 | 11/8/2012 2:58 | | |
| L56694-7 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/17/2012 11:35 | 10/22/2012 17:00 | 11/8/2012 4:09 | | |
| L56694-8 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/18/2012 11:45 | 10/22/2012 17:00 | 11/8/2012 4:32 | | |
| L56694-9 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/18/2012 10:37 | 10/22/2012 17:00 | 11/8/2012 4:56 | | |
| L56694-10 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/18/2012 11:20 | 10/22/2012 17:00 | 11/8/2012 5:19 | | |
| L56694-11 | 421196-170 | | ORWTPH-DX | GRND WTR | 10/18/2012 12:30 | 10/22/2012 17:00 | 11/8/2012 5:43 | | |
| WG123733-1 | MB | | ORWTPH-DX | BLANK WTR | | 10/22/2012 17:00 | 11/7/2012 23:26 | | MB121022 |
| WG123733-2 | SB | | ORWTPH-DX | BLANK WTR | | 10/22/2012 17:00 | 11/7/2012 23:49 | | WG123733-1 SB-MO |
| WG123733-3 | SB | | ORWTPH-DX | BLANK WTR | | 10/22/2012 17:00 | 11/8/2012 0:12 | | WG123733-1 SB-DSL |
| WG123733-4 | LD | | ORWTPH-DX | GRND WTR | | 10/22/2012 17:00 | 11/8/2012 0:36 | | L56694-3 |
| WG123733-5 | LD | | ORWTPH-DX | STORM WTR | | 10/22/2012 17:00 | 11/8/2012 1:01 | | L56016-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**WG123715 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56016-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 10/19/2012 10:45 | 10/19/2012 18:00 | 10/19/2012 18:00 | WG123715-1,-2,-3 | |
| L56016-4 | 421879-210 | | ORWTPH-G | STORM WTR | 10/19/2012 10:24 | 10/19/2012 18:29 | 10/19/2012 18:29 | | |
| L56694-8 | 421196-170 | Roads UST Groundwater | ORWTPH-G | GRND WTR | 10/18/2012 11:45 | 10/19/2012 15:03 | 10/19/2012 15:03 | | |
| L56694-10 | 421196-170 | | ORWTPH-G | GRND WTR | 10/18/2012 11:20 | 10/19/2012 16:31 | 10/19/2012 16:31 | | |
| L56694-11 | 421196-170 | | ORWTPH-G | GRND WTR | 10/18/2012 12:30 | 10/19/2012 17:01 | 10/19/2012 17:01 | | |
| WG123715-1 | MB | | ORWTPH-G | BLANK WTR | | 10/19/2012 12:06 | 10/19/2012 12:06 | | MB121019 |
| WG123715-2 | SB | | ORWTPH-G | BLANK WTR | | 10/19/2012 14:04 | 10/19/2012 14:04 | | WG123715-1 |
| WG123715-3 | LD | | ORWTPH-G | GRND WTR | | 10/19/2012 15:32 | 10/19/2012 15:32 | | L56694-8 |

**Workgroup: WG123753 BOD**

**MB:WG123753-1 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:WG123753-2 MB:WG123753-1 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 | 160 | 81 | | 80--120 |

**Workgroup: WG123801 Anions**

**CS:WG123801-1 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 | 0.1 | 100 | | 70--130 |

**CS:WG123801-1 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 | 0.2 | 99 | | 70--130 |

**MB:WG123801-2 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:WG123801-2 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:WG123801-3 MB:WG123801-2 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 | 2.05 | 103 | | 80--120 |

**SB:WG123801-3 MB:WG123801-2 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 | 5.3 | 106 | | 80--120 |

**LCS:WG123801-4 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 | 3.27 | 109 | | 85--115 |

**LCS:WG123801-4 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 | 15.9 | 106 | | 85--115 |

**LD:WG123801-5 L56422-2 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423575-850-4 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 2.26 | 2.19 | 3 | | 0--20 |

**LD:WG123801-5 L56422-2 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:423575-850-4 Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG123801-6 L56422-2 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:423575-850-4 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 | 2.26 | 10 | 12.3 | 101 | | 75--125 |

**MS:WG123801-6 L56422-2 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:423575-850-4 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 | <MDL | 5 | 5.37 | 107 | | 75--125 |

**LD:WG123801-7 L56017-1 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 | 0.25 | 0.5 | mg/L | 1.33 | 1.27 | 5 | | 0--20 |

**MS:WG123801-8 L56017-1 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 | 0.25 | 0.5 | mg/L | 1.33 | 10 | 11.5 | 102 | | 75--125 |

**Workgroup: WG123814 Conductivity**

**LCS:WG123814-1 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 | 74.2 | 100 | | 90--110 |

**LCS:WG123814-2 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 | 690 | 96 | | 90--110 |

**LD:WG123814-3 L56616-6 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 | 138 | 139 | 0 | | 0--10 |

**LCS:WG123814-4 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 | 75.4 | 102 | | 90--110 |

**LCS:WG123814-5 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 | 708 | 99 | | 90--110 |

**LCS:WG123814-6 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 | 76 | 103 | | 90--110 |

**LCS:WG123814-7 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 | 707 | 98 | | 90--110 |

**LD:WG123814-8 L56017-1 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 | 30.8 | 31 | 1 | | 0--10 |

**LCS:WG123814-9 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 | 73.9 | 76.2 | 103 | | 90--110 |

**LCS:WG123814-10 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 | 717.5 | 706 | 98 | | 90--110 |

**Workgroup: WG123936 Dissolved Nutrients**

**MB:WG123936-1 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:WG123936-1 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:WG123936-1 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:WG123936-2 MB:WG123936-1 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 | 0.1 | 100 | | 80--120 |

**SB:WG123936-2 MB:WG123936-1 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 | 0.787 | 98 | | 80--120 |

**SB:WG123936-2 MB:WG123936-1 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 | 0.0388 | 97 | | 80--120 |

**LCS:WG123936-3 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 | 0.105 | 105 | | 85--115 |

**LCS:WG123936-3 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 | 0.792 | 99 | | 85--115 |

**LCS:WG123936-3 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 | 0.0388 | 97 | | 85--115 |

**LD:WG123936-4 L56578-8 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 | 0.0159 | 0.016 | 1 | | 0--20 |

**LD:WG123936-4 L56578-8 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 | 0.356 | 0.357 | 0 | | 0--20 |

**LD:WG123936-4 L56578-8 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 | 0.0265 | 0.0267 | 1 | | 0--20 |

**MS:WG123936-5 L56578-8 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 | 0.0159 | 0.1 | 0.116 | 100 | | 75--125 |

**MS:WG123936-5 L56578-8 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 | 0.356 | 0.8 | 1.12 | 95 | | 75--125 |

**MS:WG123936-5 L56578-8 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 | 0.0265 | 0.04 | 0.0637 | 93 | | 75--125 |

**LD:WG123936-6 L56017-1 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 | 0.617 | 0.606 | 2 | | 0--20 |

**LD:WG123936-6 L56017-1 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 | 0.0673 | 0.0657 | 2 | | 0--20 |

**MS:WG123936-7 L56017-1 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 | 0.617 | 0.8 | 1.39 | 97 | | 75--125 |

**MS:WG123936-7 L56017-1 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 | 0.0673 | 0.04 | 0.104 | 92 | | 75--125 |

**MB:WG123936-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG123936-9 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 | 0.0383 | 96 | | 85--115 |

**LD:WG123936-10 L56742-7 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 | 0.0678 | 0.0685 | 1 | | 0--20 |

**MS:WG123936-11 L56742-7 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 | 0.0678 | 0.04 | 0.105 | 93 | | 75--125 |

**MB:WG123936-12 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:WG123936-12 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 | |

**LD:WG123936-13 L56870-4 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:WG123936-13 L56870-4 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 | 0.247 | 0.245 | 1 | | 0--20 |

**MS:WG123936-14 L56870-4 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 | 0.105 | 105 | | 75--125 |

**MS:WG123936-14 L56870-4 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 | 0.247 | 0.8 | 0.983 | 92 | | 75--125 |

**Workgroup: WG123816 TKN**

**MB:WG123816-1 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 | |

**LCS:WG123816-2 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 | 0.483 | 97 | | 80--120 |

**LCS:WG123816-3 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 | 5 | 4.94 | 99 | | 80--120 |

**SB:WG123816-4 MB:WG123816-1 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 |

**LD:WG123816-5 L56016-1 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 | 0.621 | 0.569 | 9 | | 0--20 |

**MS:WG123816-6 L56016-1 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 | 0.621 | 5 | 5.38 | 95 | | 70--130 |

**LD:WG123816-7 L56537-1 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 | 20.7 | 20.7 | 0 | | 0--20 |

**MS:WG123816-8 L56537-1 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 | 20.7 | 5 | 70.2 | 99 | | 70--130 |

**LD:WG123816-9 L56611-3 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 | 20 | 40 | mg/L | 492 | 496 | 1 | | 0--20 |

**MS:WG123816-10 L56611-3 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 | 20 | 40 | mg/L | 492 | 5 | 1500 | 101 | | 70--130 |

**Workgroup: WG123784 Total Nutrients**

**MB:WG123784-1 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:WG123784-1 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:WG123784-2 MB:WG123784-1 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 | 1 | 100 | | 80--120 |

**SB:WG123784-2 MB:WG123784-1 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 | 0.097 | 97 | | 80--120 |

**LCS:WG123784-3 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 | 0.989 | 99 | | 85--115 |

**LCS:WG123784-3 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 | 0.0975 | 97 | | 85--115 |

**LD:WG123784-4 L56591-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-130 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.295 | 0.293 | 1 | | 0--20 |

**LD:WG123784-4 L56591-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-130 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0095 | 0.0085 | | | 0--20 |

**MS:WG123784-5 L56591-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-130 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 | 0.295 | 1 | 1.28 | 98 | | 75--125 |

**MS:WG123784-5 L56591-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-130 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 | 0.0095 | 0.1 | 0.106 | 97 | | 75--125 |

**LD:WG123784-6 L56526-18 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.85 | 0.847 | 0 | | 0--20 |

**LD:WG123784-6 L56526-18 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0718 | 0.0697 | 3 | | 0--20 |

**MS:WG123784-7 L56526-18 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 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 | 0.85 | 1 | 1.85 | 100 | | 75--125 |

**MS:WG123784-7 L56526-18 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 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 | 0.0718 | 0.1 | 0.165 | 93 | | 75--125 |

**MB:WG123784-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG123784-8 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:WG123784-9 MB:WG123784-8 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 | 100 | | 80--120 |

**SB:WG123784-9 MB:WG123784-8 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 | 0.0997 | 100 | | 80--120 |

**LCS:WG123784-10 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 | 1.01 | 101 | | 85--115 |

**LCS:WG123784-10 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:WG123784-11 L56526-38 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.696 | 0.685 | 1 | | 0--20 |

**LD:WG123784-11 L56526-38 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0357 | 0.0347 | 3 | | 0--20 |

**MS:WG123784-12 L56526-38 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 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 | 0.696 | 1 | 1.72 | 103 | | 75--125 |

**MS:WG123784-12 L56526-38 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 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 | 0.0357 | 0.1 | 0.134 | 98 | | 75--125 |

**LD:WG123784-13 L56016-1 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 | 0.14 | 0.133 | 5 | | 0--20 |

**MS:WG123784-14 L56016-1 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 | 0.14 | 0.1 | 0.225 | 85 | | 75--125 |

**MB:WG123784-15 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:WG123784-15 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:WG123784-16 MB:WG123784-15 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 | 0.958 | 96 | | 80--120 |

**SB:WG123784-16 MB:WG123784-15 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 | 0.0996 | 100 | | 80--120 |

**LCS:WG123784-17 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 | 1.01 | 101 | | 85--115 |

**LCS:WG123784-17 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 | 0.0997 | 100 | | 85--115 |

**LD:WG123784-18 L56578-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.167 | 0.159 | 5 | | 0--20 |

**LD:WG123784-18 L56578-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG123784-19 L56578-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 0.167 | 1 | 1.14 | 97 | | 75--125 |

**MS:WG123784-19 L56578-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0978 | 98 | | 75--125 |

**Workgroup: WG123800 (TSS) Run ID: R184362**

**MB:WG123800-1 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:WG123800-2 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 | 106 | 106 | | 80--120 |

**LD:WG123800-3 L56578-8 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 3.4 | 4.2 | 21 | | 0--25 |

**LD:WG123800-4 L56017-1 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 | 2 | 4 | mg/L | 23.6 | 26.8 | 13 | | 0--25 |

**LD:WG123800-5 L56695-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 14.2 | 14.2 | 0 | | 0--25 |

**Workgroup: WG123783 Turbidity**

**LCS:WG123783-1 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 | 9.93 | 99 | | 90--110 |

**LD:WG123783-2 L56017-1 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 | 8.29 | 8.96 | 8 | | 0--25 |

**LCS:WG123783-3 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 | 96.7 | 97 | | 90--110 |

# King County Environmental Laboratory Analytical QC Report NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**Workgroup: WG123582 Fecal coliform**

**LD:WG123582-1 L56016-3 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 | 17000 | 18000 | 0.02 0.32 | N10 |

**PC:WG123582-2 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:WG123582-3 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:WG123582-4 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:WG123582-5 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: WG124087 Toal Metals and Hardness**

**MB:WG124087-1 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:WG124087-1 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:WG124087-2 MB:WG124087-1 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 | 34.2 | 103 | | 85--115 |

**SB:WG124087-2 MB:WG124087-1 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 | 21.9 | 109 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5340 | 107 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5310 | 106 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 22 | 110 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5480 | 110 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4950 | 99 | | 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 | 20.7 | 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 | 20.7 | 103 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.2 | 106 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.8 | 109 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |

**LD:WG124087-3 L56321-5 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 | 58.9 | 59.1 | 0 | | 0--20 |

**LD:WG124087-3 L56321-5 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 | 6570 | 6630 | 1 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 5130 | 5150 | 0 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 183 | 188 | 3 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 1580 | 1610 | 2 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 15100 | 15200 | 0 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 1.02 | 1.05 | 3 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.34 | 0.35 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 934 | 940 | 1 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 41.6 | 42.1 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.12 | 0.12 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.48 | 0.513 | 6 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 1.1 | 1.1 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 6.3 | 6.48 | 3 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.583 | 0.585 | 0 | | 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 | 7.54 | 7.46 | 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 | 0.23 | 0.26 | | | 0--20 |

**MS:WG124087-4 L56321-5 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 | 58.9 | 33.1 | 91.8 | 100 | | 75--125 |

**MS:WG124087-4 L56321-5 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 | 21.8 | 109 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 6570 | 5000 | 11600 | 101 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 5130 | 5000 | 10200 | 101 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 183 | 20 | 212 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 1580 | 5000 | 6900 | 106 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 15100 | 5000 | 20000 | 97 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 1.02 | 20 | 21.4 | 102 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.34 | 20 | 20.7 | 102 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 934 | 5000 | 6140 | 104 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 41.6 | 20 | 62.1 | 102 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.12 | 20 | 19.5 | 97 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.48 | 20 | 21.6 | 106 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 1.1 | 20 | 22 | 105 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 6.3 | 20 | 27.4 | 105 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.583 | 20 | 21.2 | 103 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 104 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.9 | 104 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.4 | 97 | | 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 | 7.54 | 20 | 27.9 | 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 | 0.23 | 20 | 20.7 | 102 | | 75--125 |

**Workgroup: WG123922 Total and Dissolved Mercury**

**MB:WG123922-1 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:WG123922-1 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:WG123922-2 MB:WG123922-1 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 | 0.938 | 94 | | 85--115 |

**MSD:WG123922-4 MS:WG123922-3 L56321-6 Matrix: FRESH WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-CHSW-Q 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 | 0.971 | 97 | | 75--125 | 1 | 0.952 | 95 | | 2 | | 0--20 |

**Workgroup: WG123794 Dissolved Metals**

**MB:WG123794-1 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:WG123794-2 MB:WG123794-1 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 | 20.5 | 102 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5220 | 104 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5120 | 102 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5070 | 101 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4790 | 96 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5050 | 101 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.9 | 105 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |

**LD:WG123794-3 L56321-2 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 | 26900 | 26300 | 2 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 15700 | 15900 | 1 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 12.6 | 12.6 | 0 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 15500 | 15500 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 43100 | 43200 | 0 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.449 | 0.463 | 3 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.45 | 0.45 | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 20 | 21 | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.47 | 1.45 | 1 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.416 | 0.423 | 2 | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 7.19 | 7.21 | 0 | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 14 | 14.2 | 2 | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 25.8 | 26.2 | 2 | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.04 | 1.06 | 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 | 0.062 | 0.073 | | | 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 | 0.97 | 0.99 | | | 0--20 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 57.9 | 57.7 | 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 | 0.1 | 0.11 | | | 0--20 |

**MS:WG123794-4 L56321-2 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 | 21 | 105 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 26900 | 5000 | 31500 | | 4xRule | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 15700 | 5000 | 21200 | 109 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 12.6 | 20 | 32 | 97 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 15500 | 5000 | 20600 | 101 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 43100 | 5000 | 47700 | | 4xRule | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.449 | 20 | 20 | 98 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.45 | 20 | 19.8 | 97 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 20 | 5000 | 4880 | 97 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.47 | 20 | 20.6 | 95 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.416 | 20 | 19.8 | 97 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 7.19 | 20 | 26.9 | 98 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 14 | 20 | 34 | 100 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 25.8 | 20 | 46 | 101 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.04 | 20 | 21.6 | 103 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.7 | 109 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.062 | 20 | 20 | 99 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | 0.97 | 20 | 21 | 100 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 57.9 | 20 | 77.3 | 97 | | 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 | 0.1 | 20 | 19.6 | 98 | | 75--125 |

**Workgroup: WG123842 Chlorinated Herbicides**

**MB:WG123842-1 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 | |

**SB:WG123842-2 MB:WG123842-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.5 | 90 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 0.89 | 18 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 1.12 | 22 | * | 59--151 |

**MSD:WG123842-4 MS:WG123842-3 L56017-1 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 | 4.68 | 94 | | 20--162 | 5 | 4.56 | 91 | | 3 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.66 | 93 | | 10--196 | 5 | 4.61 | 92 | | 1 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.28 | 106 | | 30--150 | 5 | 4.88 | 98 | | 8 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | 4-Nitrophenol 40--160 |
|---|---|---|
| L56016-1 | 22 | 140 |
| L56016-2 | 20 | 134 |
| L56017-1 | 20 | 139 |
| WG123842-1 | 18 | 72 |
| WG123842-2 | 19 | 101 |
| WG123842-3 | 19 | 136 |
| WG123842-4 | 19 | 136 |

# King County Environmental Laboratory Analytical QC Report NPDES SW Monitoring Permit, Fall City Rural, L56016, L56017

**Workgroup: WG123746 Organophosphorus Pesticides**

**MB:WG123746-1 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:WG123746-2 MB:WG123746-1 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 | 0.25 | 0.264 | 106 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.286 | 114 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.284 | 114 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.239 | 96 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.223 | 89 | | 40--160 |

**MSD:WG123746-4 MS:WG123746-3 L56017-1 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 | 0.236 | 0.274 | 116 | | 67--148 | 0.236 | 0.257 | 109 | | 7 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.303 | 129 | | 52--190 | 0.236 | 0.285 | 121 | | 6 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.26 | 110 | | 57--141 | 0.236 | 0.252 | 107 | | 3 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.183 | 78 | | 40--160 | 0.236 | 0.174 | 74 | | 5 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.375 | 159 | | 40--160 | 0.236 | 0.326 | 138 | | 14 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L56016-1 | 105 |
| L56016-2 | 111 |
| L56017-1 | 112 |
| WG123746-1 | 112 |
| WG123746-2 | 117 |
| WG123746-3 | 107 |
| WG123746-4 | 102 |

**Workgroup: WG123745 PAH**

**MB:WG123745-1 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 | <MDL | |
| 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 | 0.129 | B |
| 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 | 0.353 | 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:WG123745-2 MB:WG123745-1 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 | 1.62 | 65 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.52 | 61 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.51 | 100 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.91 | 76 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.65 | 106 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.2 | 88 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.85 | 74 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.2 | 88 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.31 | 92 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.4 | 96 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.63 | 105 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | 0.129 | 2.5 | 2.53 | 96 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.51 | 101 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.64 | 106 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.353 | 2.5 | 2.26 | 76 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.28 | 91 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.44 | 99 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.59 | 104 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.5 | 100 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.48 | 99 | | 32--130 |

**MSD:WG123745-4 MS:WG123745-3 L56017-1 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 | <MDL | 2.36 | 1.04 | 44 | | 37--95 | 2.36 | 1.25 | 53 | | 18 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.1 | 46 | | 40--121 | 2.36 | 1.36 | 58 | | 22 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.078 | 2.36 | 2.46 | 101 | | 34--134 | 2.36 | 2.59 | 107 | | 5 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.65 | 70 | | 46--122 | 2.36 | 1.98 | 84 | | 18 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.52 | 64 | | 47--105 | 2.36 | 1.83 | 78 | | 19 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.718 | 2.36 | 3.28 | 108 | | 33--140 | 2.36 | 3.33 | 111 | | 2 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.9 | 81 | | 44--137 | 2.36 | 2.16 | 92 | | 13 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.82 | 119 | | 44--145 | 2.36 | 2.78 | 118 | | 1 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0741 | 2.36 | 2.21 | 91 | | 62--116 | 2.36 | 2.32 | 95 | | 5 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.08 | 88 | | 32--140 | 2.36 | 2.19 | 93 | | 5 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.037 | 2.36 | 2.35 | 98 | | 44--134 | 2.36 | 2.37 | 99 | | 0 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.283 | 2.36 | 2.68 | 102 | | 49--123 | 2.36 | 2.73 | 104 | | 2 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.355 | 2.36 | 2.31 | 83 | | 37--147 | 2.36 | 2.42 | 88 | | 5 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.148 | 2.36 | 2.6 | 104 | | 39--151 | 2.36 | 2.64 | 106 | | 2 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | 0.194 | 2.36 | 2.63 | 103 | | 50--120 | 2.36 | 2.67 | 105 | | 2 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.165 | 2.36 | 2.67 | 106 | | 42--115 | 2.36 | 2.77 | 110 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 1.91 | 2.36 | 2.89 | 42 | | 11--188 | 2.36 | 3.95 | 86 | | 31 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.32 | 98 | | 48--150 | 2.36 | 2.35 | 100 | | 1 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | 0.18 | 7.08 | 7.53 | 104 | | 42--123 | 7.08 | 7.59 | 105 | | 1 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.29 | 2.36 | 2.37 | 88 | | 45--121 | 2.36 | 2.4 | 89 | | 1 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | 0.082 | 2.36 | 2.52 | 103 | | 39--122 | 2.36 | 2.55 | 105 | | 2 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.38 | 101 | | 31--121 | 2.36 | 2.44 | 103 | | 3 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | 0.101 | 2.36 | 2.42 | 98 | | 22--125 | 2.36 | 2.47 | 101 | | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 15-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L56016-1 | 122 | 64 | 54 | 96 | 54 | 60 | 59 |
| L56016-2 | 129 | 56 | 49 | 96 | 48 | 51 | 54 |
| L56017-1 | 128 | 49 | 45 | 98 | 47 | 49 | 51 |
| WG123745-1 | 74 | 76 | 68 | 100 | 71 | 74 | 80 |
| WG123745-2 | 103 | 75 | 71 | 99 | 74 | 75 | 86 |
| WG123745-3 | 124 | 60 | 44 | 93 | 45 | 49 | 50 |
| WG123745-4 | 125 | 73 | 48 | 97 | 50 | 50 | 56 |

**Workgroup: WG123733 WTPH-Dx**

**MB:WG123733-1 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:WG123733-2 MB:WG123733-1 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 | 0.946 | 95 | | 50--150 |

**SB:WG123733-3 MB:WG123733-1 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 | 0.859 | 86 | | 50--150 |

**LD:WG123733-4 L56694-3 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421196-170 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | 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 |

**LD:WG123733-5 L56016-3 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 | 0.449 | 0.481 | 7 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluoro biphenyl 50--150 | Penta cosane 50--150 |
|---|---|---|
| L56016-3 | 77 | 97 |
| L56016-4 | 72 | 90 |
| L56694-1 | 90 | 104 |
| L56694-2 | 77 | 96 |
| L56694-3 | 81 | 103 |
| L56694-5 | 82 | 101 |
| L56694-6 | 88 | 106 |
| L56694-7 | 85 | 100 |
| L56694-8 | 75 | 105 |
| L56694-9 | 88 | 101 |
| L56694-10 | 78 | 100 |
| L56694-11 | 72 | 105 |
| WG123733-1 | 79 | 91 |
| WG123733-2 | 86 | 102 |
| WG123733-3 | 96 | 103 |
| WG123733-4 | 80 | 99 |
| WG123733-5 | 83 | 103 |

**Workgroup: WG123715 WTPH-G**

**MB:WG123715-1 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:WG123715-2 MB:WG123715-1 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 | 501 | 100 | | 50--150 |

**LD:WG123715-3 L56694-8 Matrix: GRND WTR Listtype:ORWTPH-G Method:WDOE NWTPH-GX Project:421196-170 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-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L56016-3 | 100 | 102 |
| L56016-4 | 100 | 103 |
| L56694-8 | 101 | 101 |
| L56694-10 | 100 | 103 |
| L56694-11 | 98 | 100 |
| WG123715-1 | 101 | 102 |
| WG123715-2 | 97 | 99 |
| WG123715-3 | 101 | 102 |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *10/24/12*

**WG #(s):** *WG123801*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56016-2*

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

**Matrix:** ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

## I. Analysis

☒ Anions: *Chloride (CL)*
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☐ Solids:
☐ Subcontract:
☐ Other:

## II. Instrument

| | |
|---|---|
| Analytical Balance: | ☐ Mettler Toledo XP205 ☐ Ohaus Voyager Pro<br>☐ Mettler Toledo AT201 |
| Autoanalyzer: | ☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)<br>☐ 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<br>☐ 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:** *Due to limited sample volume, the aliquot for CL analysis of sample L56016-2 was taken from a reused 1L clear wide mouth high density polyethylene (HDPE) container. The recommended container for CL is an unused 125mL clear narrow mouth HDPE container.*

## 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:
☐ Other

**Corrective Action Description:** *The CL result for sample L56016-2 has been qualified with "SH" and no other corrective action was taken.*

**VI. Potential Effects on Data Quality** (explanation mandatory): *Clean, unused HDPE containers are recommended for CL sample collection to insure that absence of trace levels of contamination. However, the laboratory's glassware cleaning procedures are well established and the chance of background contamination from reused containers is considered minimal. Thus, any potential impact from using non-standard reused containers is expected to be negligible.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Debbie Osada* | | |
| **Reviewer:** *Keith Solberg* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *11/2/2012*

**WG #(s):** *WG123922*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56016-1*

**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 in the King County environmental laboratory, 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 are qualified with an "H".*

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

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

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Anthony Ocana | | |
| **Reviewer:** Susannah Rowles | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** Fritz Grothkopp | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *11-05-2012*

**WG #(s):** *123842*

☒ **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 ☐ H ☐ I ☐ N |
| GC ECD: | ☐ F ☐ B ☐ C |
| GC FID: | ☐ I ☐ D ☐ Q TCD/ECD |
| Extraction/Cleanup: | ☐ PFE ☐ GPC |
| | ☒ Other: *7890G* |

## 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) Triclopyr exceeded the lower recovery 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) The analyte was reported with an " * " on the QC summary report.*

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

*2) Although the percent recovery for Triclopyr is low in the SB, the recoveries in the MS and MSD are within established limits with no reportable values in any of the associated samples. Therefore, no qualifiers were applied.*

| | 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:** *25-OCT-12*

**WG #(s):** *WG123745*

☒ **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: *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: *7890E* |

## 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:**

*1. WG123745-1 MB had a reportable levels of Butyl Benzyl Phthalate and Bis(2 Ethyl Hexyl)Phthalate.*

*18. L56016-1 - the pentachlorophenol value was reported from SIM data.*

## 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 Butyl Benzyl Phthalate and Bis(2-Ethylhexyl)Phthalate*

*18. Text field was annotated.*

## 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.*

*18. No data quality issues were reported. SIM data is normally free from matrix interferences which allowed the reporting of pentachlorophenol value in L56016-1 just above the MDL.*

| | 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

January 2, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L56807-1 to 5, L56808-2, collected November 23, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on November 23 & 24, 2012. The samples were 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 #15136 was prepared and sent via e-mail on December 31, 2012.

**Sample Collection:**
Sample L56808-1, a composite sample, was not collected for location RSW1UP due to failed storm criteria.

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

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.



1202M

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.

Dichlobenil was outside the upper control limit in the spike blank (SB) for Organophosphorus Pesticide analysis. The result was flagged with a "*" in the QC report. The matrix spike and matrix spike duplicate were with control limits. Dichlobenil was not detected in any of the samples. No other corrective action was taken.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All entries in the data report and the QC report have been flagged with an appropriate "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: | L56807-1 | L56807-2 | L56807-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 11/23/12 6:35 | 11/23/12 9:50 | 11/23/12 14:35 |
| TimeSpan: | 9.33 | 5.5 | |
| 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 | 0.491 | SH | 0.1 | 0.2 | mg/L | 0.41 | 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 | 54.2 | | 0.2 | 0.5 | NTU | 8.54 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 15.2 | | 1 | 5 | umhos/cm | 8.42 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 73.6 | | 1 | 2 | mg/L | 17 | | 0.5 | 1 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 0.476 | | 0.05 | 0.1 | mg/L | 0.055 | <RDL | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.0646 | | 0.01 | 0.04 | mg/L | 0.012 | <RDL | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.121 | | 0.005 | 0.01 | mg/L | 0.0695 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.0196 | H | 0.002 | 0.005 | mg/L | 0.016 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 2.67 | | 2 | 2 | mg/L | 2.24 | | 2 | 2 | mg/L | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | | | | | | 630 | | | | 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 | 0.062 | <RDL | 0.05 | 0.25 | ug/L | | <MDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | 2070 | | 50 | 50 | ug/L | 827 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | 2.19 | H | 0.4 | 2 | ug/L | 0.77 | <RDL,H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | 10 | | 0.4 | 2 | ug/L | 2.42 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | 0.14 | <RDL,H | 0.1 | 0.5 | ug/L | | <MDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | 5.09 | | 0.1 | 0.5 | ug/L | 1.33 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | 1150 | | 50 | 50 | ug/L | 197 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | 7.63 | H | 0.5 | 2.5 | ug/L | 1.7 | <RDL,H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | 37.9 | | 0.5 | 2.5 | ug/L | 6.47 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 9.89 | | 0.331 | 0.331 | mg CaCO3/L | 2.88 | | 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 | 0.016 | <RDL | 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: | L56807-1 | L56807-2 | L56807-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 11/23/12 6:35 | 11/23/12 9:50 | 11/23/12 14:35 |
| TimeSpan: | 9.33 | 5.5 | |
| 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 | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(a)pyrene | 0.018 | <RDL | 0.0094 | 0.0189 | ug/L | 0.015 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(b,j,k)fluoranthene | | <MDL | 0.094 | 0.189 | ug/L | | <MDL | 0.094 | 0.189 | ug/L | | | | | |
| Benzo(g,h,i)perylene | | <MDL | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Benzyl Butyl Phthalate | 0.074 | <RDL | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 1.27 | B | 0.024 | 0.0472 | ug/L | 0.45 | B | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | 0.0455 | | 0.0094 | 0.0189 | ug/L | 0.016 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | 0.141 | | 0.024 | 0.0472 | ug/L | 0.0667 | | 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 | 0.0593 | | 0.024 | 0.0472 | ug/L | 0.0482 | | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | 0.172 | | 0.024 | 0.0472 | ug/L | 0.038 | <RDL | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | 0.0395 | | 0.0094 | 0.0189 | ug/L | 0.025 | | 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 | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Naphthalene | | <MDL | 0.0094 | 0.0189 | ug/L | 0.0589 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pentachlorophenol | | <MDL | 0.12 | 0.236 | ug/L | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Phenanthrene | 0.0372 | | 0.0094 | 0.0189 | ug/L | 0.0195 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | 0.0704 | | 0.0094 | 0.0189 | ug/L | 0.0244 | | 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 | 0.5 | 1 | ug/L | | <MDL | 0.5 | 1 | ug/L | | | | | |
| MCPP | | <MDL | 0.5 | 1 | ug/L | | <MDL | 0.5 | 1 | ug/L | | | | | |
| Triclopyr | | <MDL | 0.5 | 1 | 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) | | | | | | | | | | | 0.349 | | 0.19 | 0.19 | mg/L |
| **OR WDOE NWTPH-GX** | | | | | | | | | | | | | | | |
| Gasoline Range (C7-C12) | | | | | | | | | | | | <MDL | 100 | 250 | ug/L |

# King County Environmental Lab Analytical Report

| | | | |
|---|---|---|---|
| Project: | 421879-210 | Project: | 421879-210 |
| Locator: | FCSW02 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD RESID | Descrip: | FIELD FILTER BLANK |
| Sample: | L56807-4 | Sample: | L56807-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 11/23/12 14:50 | ColDate: | 11/24/12 11:15 |
| 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 | 750 | | | | 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: | FCSW02 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD RESID | Descrip: | FIELD FILTER BLANK |
| Sample: | L56807-4 | Sample: | L56807-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 11/23/12 14:50 | ColDate: | 11/24/12 11:15 |
| 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 | 0.19 | 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| FCSW01 | 421879-210 | L56807-1 | 0.491 | 0.053 | 54.2 | 15.2 | 73.6 | 0.476 | 0.0646 | 0.121 | 0.0196 | 2.67 | 0.062 | 2070 | 2.19 | 10 | 0.14 | 5.09 | 1150 | 7.63 | 37.9 |
| FCSW02 | 421879-210 | L56807-2 | 0.41 | | 8.54 | 8.42 | 17 | 0.055 | 0.012 | 0.0695 | 0.016 | 2.24 | | 827 | 0.77 | 2.42 | | 1.33 | 197 | 1.7 | 6.47 |
| FCSW01 | 421879-210 | L56807-3 | | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L56807-4 | | | | | | | | | | | | | | | | | | | |
| RSW1UP | 421879-210 | L56808-2 | | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | 2-Methylnaphthalene | Benzo(a)pyrene | Benzyl Butyl Phthalate | Bis(2-Ethylhexyl)Phthalate | Chrysene | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Naphthalene | Phenanthrene | Pyrene | Fecal Coliform | Lube Oil Range (>C24) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/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 | L56807-1 | 9.89 | 0.016 | 0.018 | 0.074 | 1.27 | 0.0455 | 0.0593 | 0.172 | 0.141 | 0.0395 | | 0.0372 | 0.0704 | | |
| FCSW02 | 421879-210 | L56807-2 | 2.88 | | 0.015 | | 0.45 | 0.016 | 0.0482 | 0.038 | 0.0667 | 0.025 | 0.0589 | 0.0195 | 0.0244 | | |
| FCSW01 | 421879-210 | L56807-3 | | | | | | | | | | | | | | 630 | 0.349 |
| FCSW02 | 421879-210 | L56807-4 | | | | | | | | | | | | | | 750 | |
| RSW1UP | 421879-210 | L56808-2 | | | | | | | | | | | | | | 600 | |
| * Not converted to dry weight basis | | | | | | | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | | | | | | | |

Login: P56807 NPDES Stormwater Permit Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* [signature] | *Date* 11/23/12 | *Time* 1545 |
| *Received by* [signature] | *Date* 11/23/12 | *Time* 1545 |
| *Sample Numbers* 56807 3, 4 | | *[All]* |

| Sample Number | P56807-1 | P56807-2 | P56807-3 |
|---|---|---|---|
| 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 | 11/23/12 0635 ~~11/23/12 1435~~ | 11/23/12 950 | 11/23/12 1435 |
| End Date/Time | 11/23/12 ~~2135~~ 1555 | 11/23/12 1520 | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD split 1135<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 3 LG BOD split 1150<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |
| 4 extra organic bottles each | | | |
| LAB TEMP | 5.0°C | 7.2°C | |

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* [signature] | *Date* 11/24/12 | *Time* 1100 |
| *Received by* [signature] | *Date* 11/24/12 | *Time* 1100 |
| *Sample Numbers* 56807 1, 2, 5 | | *[All]* |

Login: P56807 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P56807-4 | P56807-5 | |
|---|---|---|---|
| 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 | 11/23/12 1450 | 11/24/12 1115 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

56 808

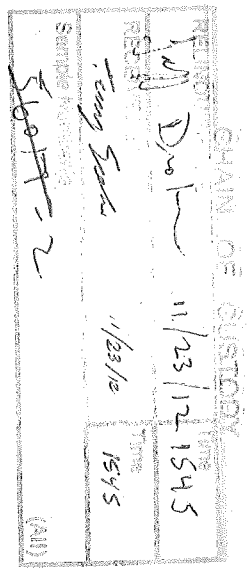
Login: ~~P56017~~ NPDES Stormwater Permit Monitoring Personnel: FINLINSON

Project: 421879-210

CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by C Finlinson | Date 11-23-2012 | Time 1416 |
| Received by | Date 11/23/2012 | Time 1416 |
| Sample Numbers ~~L56017-2~~ 56808-2 TS 11/23/12 | | [All] |

| Sample Number | ~~P56017-1~~ | ~~P56017-2~~ 56808-2 | ~~P56017-3~~ |
|---|---|---|---|
| QC Link | | TS 11/23/12 | |
| 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 | | 11/23/2012 #1324 | |
| End Date/Time | | 11/23/2012 1330 | |
| Time Span | | | |
| Sample Depth | | GRAB. | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |




CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by | Date | Time |
| Received by | Date | Time |
| Sample Numbers | | [All] |

(1 / 1)

# AM TEST, INC.

13600 NE 126TH PLACE
SUITE C
KIRKLAND, WA 98034

Phone # 425-885-1664

# Invoice

| DATE | INVOICE # |
|---|---|
| 11/27/2012 | 73127 |

BILL TO

KING COUNTY DNR ENVIRON LAB
SUBCONTRACT ANALYSIS COORD.
322 W EWING ST
LAB-NR-0100
SEATTLE WA 98119

___PLEASE CHECK HERE IF YOU PREFER YOUR INVOICES AND STATEMENTS SENT BY E-MAIL.
MY E-MAIL ADDRESS IS:

_____

| P.O. NO. | TERMS | PROJECT |
|---|---|---|
| PROJ#1047106 | Net 30 | |

| QUANTITY | DESCRIPTION | RATE | SERVICED | AMOUNT |
|---|---|---|---|---|
| 2 | MBAS<br><br>SAMPLE NUMBERS: 12-A0018044-18045 | 50.00 | | 100.00 |

TERMS:NET 30 DAYS PAST DUE ACCOUNTS 1 1/2 PERCENT INTEREST PER MONTH

WE ACCEPT VISA & MASTER CARD.

EFFECTIVE IMMEDIATELY, ON INVOICES 60 DAYS PAST DUE A $25 LATE FEE WILL BE CHARGED MONTHLY UNTIL INVOICE IS PAID.

| | |
|---|---|
| **Total** | $100.00 |
| **Payments/Credits** | $0.00 |
| **Balance Due** | $100.00 |

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

*Professional Analytical Services*

Nov 27 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 |
|---|---|---|---|
| 56807-1 | Water | 12-A018044 | CONV |
| 56807-2 | Water | 12-A018045 | CONV |

Your samples were received on Saturday, November 24, 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,

Aaron W. Young
Laboratory Manager

Project #: 1047106

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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: 11/24/12
Date Reported: 11/27/12

---

**AMTEST Identification Number** **12-A018044**
**Client Identification** **56807-1**
**Sampling Date** **11/23/12, 15:55**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.053 | mg/l | | 0.025 | SM 5540C | SS | 11/24/12 |

---

**AMTEST Identification Number** **12-A018045**
**Client Identification** **56807-2**
**Sampling Date** **11/23/12, 15:20**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | < 0.025 | mg/l | | 0.025 | SM 5540C | SS | 11/24/12 |

Aaron W. Young
Laboratory Manager

AMTEST
LABORATORIES

**QC Summary for sample numbers: 12-A018044 to 12-A018045**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 12-A018045 | Surfactants | mg/l | < 0.025 | 0.138 | 0.125 | 110.40 % |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.118 | 94.4 % |

## 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 1279694

Project Name: _____ Date Received: 11/24/12 Received By: N/A

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.6 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):

Sample container labels do not match COC. Date sampled on containers is 11/15/12.

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 1279694

Project Name: _____ Date Received: 11/24/12 Received By: N/A

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.6 degrees C

# CHAIN OF CUSTODY RECORD

**Project Number:** 1047106
**Purchase Order Number:** n/a
**Subcontract Laboratory:** Am Test
**LPM/TC:** Fritz Grothkopp

425-205-0729

**Shipment Number:** EL-12-39
**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***

1804
1805
6.6CA
6.6CB

| Sample ID | Collect Date | @1555 1570 Matrix | QC Required | Requested Parameters: MBAS | | | | | | | | | | | | No. of Containers | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56807-1 | 11/23/12 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | |
| 56807-2 | 11/23/12 | " | " | X | | | | | | | | | | | | 1 | |
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**Additional Comments/Instructions:** Test has 48 hour hold time.
Sample container labels indicate Sample collected on 11/15/12. Does not match the COC.
***Please return signed original CoC with data package.***

**Total Number of Containers:** 2

**Requested TAT:** 14 Days
**Data Package Due:**

| | | | |
|---|---|---|---|
| **RELINQUISHED BY** Signature | David C Hunn | Date 11/24/12 | **RECEIVED BY** Signature Suzanne Scott | Date 11/24/12 |
| Printed Name | David C Hunn | Time 1200 | Printed Name Suzanne Scott | Time 1245 |
| Organization | King County DNR, Environmental Laboratory | | Organization Amtest | |

**WG124320 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 11/23/2012 6:35 | 11/25/2012 17:46 | 11/25/2012 17:46 | WG124320-2,-1 | |
| L56807-2 | 421879-210 | | CVBOD | STORM WTR | 11/23/2012 9:50 | 11/25/2012 17:49 | 11/25/2012 17:49 | | |
| WG124320-1 | MB | | CVBOD | BLANK WTR | | 11/25/2012 17:38 | 11/25/2012 17:38 | | MB1 11/25/12 |
| WG124320-2 | SB | | CVBOD | BLANK WTR | | 11/25/2012 17:45 | 11/25/2012 17:45 | | WG124320-1 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124464 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 11/23/2012 6:35 | 12/5/2012 12:40 | 12/6/2012 14:56 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56807-2 | 421879-210 | | CVCL | STORM WTR | 11/23/2012 9:50 | 12/5/2012 12:40 | 12/6/2012 16:58 | | |
| L56898-2 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/3/2012 10:45 | 12/5/2012 12:40 | 12/5/2012 23:43 | | |
| L56898-2 | 421422-DUGW | | CVSO4 | GRND WTR | 12/3/2012 10:45 | 12/5/2012 12:40 | 12/6/2012 1:14 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56918-1 | 421422-DUGW | | CVCL | GRND WTR | 12/6/2012 8:55 | 12/6/2012 11:35 | 12/6/2012 17:59 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56918-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/6/2012 8:55 | 12/6/2012 11:35 | 12/6/2012 19:30 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56918-3 | 421422-DUGW | | CVCL | GRND WTR | 12/6/2012 8:00 | 12/6/2012 11:35 | 12/6/2012 20:01 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56918-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/6/2012 8:00 | 12/6/2012 11:35 | 12/6/2012 21:02 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56923-1 | 421422-DUGW | | CVCL | GRND WTR | 12/3/2012 10:45 | 12/5/2012 12:40 | 12/6/2012 2:15 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56923-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/3/2012 10:45 | 12/5/2012 12:40 | 12/6/2012 3:47 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56923-3 | 421422-DUGW | | CVCL | GRND WTR | 12/3/2012 11:43 | 12/5/2012 12:40 | 12/6/2012 4:17 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56923-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/3/2012 11:43 | 12/5/2012 12:40 | 12/6/2012 5:48 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56925-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCL | GRND WTR | 12/3/2012 10:30 | 12/5/2012 12:40 | 12/6/2012 6:19 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56925-1 | 421422-CFGW | | CVSO4 | GRND WTR | 12/3/2012 10:30 | 12/5/2012 12:40 | 12/6/2012 6:49 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56925-3 | 421422-CFGW | | CVCL | GRND WTR | 12/3/2012 11:30 | 12/5/2012 12:40 | 12/6/2012 7:50 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56925-3 | 421422-CFGW | | CVSO4 | GRND WTR | 12/3/2012 11:30 | 12/5/2012 12:40 | 12/6/2012 8:21 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L56936-1 | 421422-CFGW | | CVCL | GRND WTR | 12/4/2012 8:25 | 12/5/2012 12:40 | 12/6/2012 8:51 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56936-1 | 421422-CFGW | | CVSO4 | GRND WTR | 12/4/2012 8:25 | 12/5/2012 12:40 | 12/6/2012 9:21 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57052-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/4/2012 9:42 | 12/5/2012 12:40 | 12/6/2012 9:52 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57052-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/4/2012 9:42 | 12/5/2012 12:40 | 12/6/2012 10:22 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57052-3 | 421422-DUGW | | CVCL | GRND WTR | 12/4/2012 10:42 | 12/5/2012 12:40 | 12/5/2012 18:39 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57052-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/4/2012 10:42 | 12/5/2012 12:40 | 12/5/2012 22:12 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57053-1 | 421422-DUGW | | CVCL | GRND WTR | 12/6/2012 6:05 | 12/6/2012 11:35 | 12/6/2012 21:32 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57053-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/6/2012 6:05 | 12/6/2012 11:35 | 12/6/2012 22:33 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57053-3 | 421422-DUGW | | CVCL | GRND WTR | 12/6/2012 7:00 | 12/6/2012 11:35 | 12/6/2012 23:03 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57053-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/6/2012 7:00 | 12/6/2012 11:35 | 12/6/2012 23:34 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57053-4 | 421422-DUGW | | CVCL | GRND WTR | 12/5/2012 10:19 | 12/5/2012 12:40 | 12/6/2012 10:53 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57053-4 | 421422-DUGW | | CVSO4 | GRND WTR | 12/5/2012 10:19 | 12/5/2012 12:40 | 12/6/2012 11:23 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| L57054-1 | 421422-DUGW | | CVCL | GRND WTR | 12/5/2012 9:23 | 12/5/2012 12:40 | 12/6/2012 11:54 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/5/2012 9:23 | 12/5/2012 12:40 | 12/6/2012 12:24 | WG124464-1,-2,-3,-4,-5,-6,-9 | |
| WG124464-1 | CS | | CVCL | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 14:35 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | RDL_LEVEL |
| WG124464-1 | CS | | CVSO4 | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 14:35 | WG124464-1,-2,-3,-4,-5,-6,-9 | RDL_LEVEL |
| WG124464-2 | MB | | CVCL | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 15:36 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/5/12 |
| WG124464-2 | MB | | CVSO4 | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 15:36 | WG124464-1,-2,-3,-4,-5,-6,-9 | MB 12/5/12 |
| WG124464-3 | SB | | CVCL | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 16:06 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124464-2 |
| WG124464-3 | SB | | CVSO4 | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 16:06 | WG124464-1,-2,-3,-4,-5,-6,-9 | WG124464-2 |
| WG124464-4 | LCS | | CVCL | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 16:37 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124464-4 | LCS | | CVSO4 | BLANK WTR | | 12/5/2012 12:40 | 12/5/2012 16:37 | WG124464-1,-2,-3,-4,-5,-6,-9 | LEVEL1 |
| WG124464-5 | LD | | CVCL | GRND WTR | | 12/5/2012 12:40 | 12/5/2012 19:09 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57052-3 |
| WG124464-5 | LD | | CVSO4 | GRND WTR | | 12/5/2012 12:40 | 12/5/2012 22:42 | WG124464-1,-2,-3,-4,-5,-6,-9 | L57052-3 |
| WG124464-6 | MS | | CVCL | GRND WTR | | 12/5/2012 12:40 | 12/5/2012 19:39 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57052-3 |
| WG124464-6 | MS | | CVSO4 | GRND WTR | | 12/5/2012 12:40 | 12/5/2012 23:13 | WG124464-1,-2,-3,-4,-5,-6,-9 | L57052-3 |
| WG124464-7 | LD | | CVCL | STORM WTR | | 12/5/2012 12:40 | 12/6/2012 15:27 | WG124464-1,-2,-3,-4,-5,-6,-7,-8,-9 | L56807-1 |
| WG124464-8 | MS | | CVCL | STORM WTR | | 12/5/2012 12:40 | 12/6/2012 15:57 | | L56807-1 |
| WG124464-9 | MB | | CVCL | BLANK WTR | | 12/6/2012 11:35 | 12/6/2012 17:29 | | MB 12/6/12 |
| WG124464-9 | MB | | CVSO4 | BLANK WTR | | 12/6/2012 11:35 | 12/6/2012 17:29 | WG124464-1,-2,-3,-4,-5,-6,-9 | MB 12/6/12 |

**WG124357 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 11/23/2012 6:35 | 11/27/2012 14:14 | 11/27/2012 14:14 | WG124357-1,-2,-3,-4 | |
| L56807-2 | 421879-210 | | CVCOND | STORM WTR | 11/23/2012 9:50 | 11/27/2012 14:16 | 11/27/2012 14:16 | | |
| L56915-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 11/26/2012 10:30 | 11/27/2012 13:35 | 11/27/2012 13:35 | | |
| L56926-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | CVCOND | GRND WTR | 11/26/2012 10:40 | 11/27/2012 13:55 | 11/27/2012 13:55 | | |
| L56929-1 | 421422-ENGW | | CVCOND | GRND WTR | 11/26/2012 9:50 | 11/27/2012 14:05 | 11/27/2012 14:05 | | |
| WG124357-1 | LCS | | CVCOND | BLANK WTR | | 11/27/2012 12:47 | 11/27/2012 12:47 | | LEVEL1 |
| WG124357-2 | LD | | CVCOND | GRND WTR | | 11/27/2012 13:45 | 11/27/2012 13:45 | | L56915-1 |
| WG124357-3 | LD | | CVCOND | STORM WTR | | 11/27/2012 14:17 | 11/27/2012 14:17 | | L56807-2 |
| WG124357-4 | LCS | | CVCOND | BLANK WTR | | 11/27/2012 14:18 | 11/27/2012 14:18 | | LEVEL1 |

**WG124480 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 11/23/2012 6:35 | 12/5/2012 8:05 | 12/5/2012 12:46 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | |
| L56807-1 | 421879-210 | | CVORTHOP | STORM WTR | 11/23/2012 6:35 | 12/5/2012 8:05 | 12/5/2012 12:46 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | |
| L56807-2 | 421879-210 | | CVNO23 | STORM WTR | 11/23/2012 9:50 | 12/5/2012 8:05 | 12/5/2012 12:48 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | |
| L56807-2 | 421879-210 | | CVORTHOP | STORM WTR | 11/23/2012 9:50 | 12/5/2012 8:05 | 12/5/2012 12:48 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | |
| L56807-5 | 421879-210 | | CVNO23 | BLANK WTR | 11/24/2012 11:15 | 12/5/2012 8:05 | 12/5/2012 13:09 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | |
| L56807-5 | 421879-210 | | CVORTHOP | BLANK WTR | 11/24/2012 11:15 | 12/5/2012 8:05 | 12/5/2012 13:09 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | |
| L56828-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVNH3-FL | FRESH WTR | 11/26/2012 12:31 | 12/5/2012 8:05 | 12/5/2012 12:09 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | |
| L56828-1 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 12:31 | 12/5/2012 8:05 | 12/5/2012 12:09 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | |
| L56828-1 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 12:31 | 12/5/2012 8:05 | 12/5/2012 12:09 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | |
| L56828-2 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 11:25 | 12/5/2012 8:05 | 12/5/2012 12:11 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | |
| L56828-2 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 11:25 | 12/5/2012 8:05 | 12/5/2012 12:11 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | |

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|---|---|---|---|---|---|---|---|---|
| L56828-2 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 11:25 | 12/5/2012 8:05 | 12/5/2012 12:11 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-3 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 11:12 | 12/5/2012 8:05 | 12/5/2012 12:13 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-3 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 11:12 | 12/5/2012 8:05 | 12/5/2012 12:13 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-3 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 11:12 | 12/5/2012 8:05 | 12/5/2012 12:13 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-4 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 10:46 | 12/5/2012 8:05 | 12/5/2012 12:15 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-4 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 10:46 | 12/5/2012 8:05 | 12/5/2012 12:15 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-4 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 10:46 | 12/5/2012 8:05 | 12/5/2012 12:15 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-5 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 10:24 | 12/5/2012 8:05 | 12/5/2012 12:17 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-5 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 10:24 | 12/5/2012 8:05 | 12/5/2012 12:17 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-5 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 10:24 | 12/5/2012 8:05 | 12/5/2012 12:17 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-6 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 9:58 | 12/5/2012 8:05 | 12/5/2012 12:19 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-6 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 9:58 | 12/5/2012 8:05 | 12/5/2012 12:19 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L56828-6 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 9:58 | 12/5/2012 8:05 | 12/5/2012 13:51 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-7 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 9:28 | 12/5/2012 8:05 | 12/5/2012 12:34 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-7 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 9:28 | 12/5/2012 8:05 | 12/5/2012 12:34 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-7 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 9:28 | 12/5/2012 8:05 | 12/5/2012 12:34 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-8 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 8:57 | 12/5/2012 8:05 | 12/5/2012 12:36 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-8 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 8:57 | 12/5/2012 8:05 | 12/5/2012 12:36 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-8 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 8:57 | 12/5/2012 8:05 | 12/5/2012 12:36 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-9 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 8:33 | 12/5/2012 8:05 | 12/5/2012 12:38 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-9 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 8:33 | 12/5/2012 8:05 | 12/5/2012 12:38 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-9 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 8:33 | 12/5/2012 8:05 | 12/5/2012 12:38 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-10 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 8:01 | 12/5/2012 8:05 | 12/5/2012 12:40 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-10 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 8:01 | 12/5/2012 8:05 | 12/5/2012 12:40 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|---|
| L56828-10 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 8:01 | 12/5/2012 8:05 | 12/5/2012 12:40 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-11 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 7:43 | 12/5/2012 8:05 | 12/5/2012 12:42 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-11 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 7:43 | 12/5/2012 8:05 | 12/5/2012 12:42 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-11 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 7:43 | 12/5/2012 8:05 | 12/5/2012 12:42 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-12 | 422019 | | CVNH3-FL | FRESH WTR | 11/26/2012 7:25 | 12/5/2012 8:05 | 12/5/2012 12:44 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-12 | 422019 | | CVNO23 | FRESH WTR | 11/26/2012 7:25 | 12/5/2012 8:05 | 12/5/2012 12:44 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-12 | 422019 | | CVORTHOP | FRESH WTR | 11/26/2012 7:25 | 12/5/2012 8:05 | 12/5/2012 12:44 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56828-13 | 422019 | | CVNH3-FL | BLANK WTR | 11/26/2012 7:00 | 12/5/2012 8:05 | 12/5/2012 12:05 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56828-13 | 422019 | | CVNO23 | BLANK WTR | 11/26/2012 7:00 | 12/5/2012 8:05 | 12/5/2012 12:05 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56828-13 | 422019 | | CVORTHOP | BLANK WTR | 11/26/2012 7:00 | 12/5/2012 8:05 | 12/5/2012 12:05 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56868-1 | 421195-280 | Des Moines Creek Basin Support | CVNH3-FL | FRESH WTR | 11/28/2012 11:55 | 12/5/2012 8:05 | 12/5/2012 13:13 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56868-1 | 421195-280 | | CVNO23 | FRESH WTR | 11/28/2012 11:55 | 12/5/2012 8:05 | 12/5/2012 13:13 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|---|
| L56868-1 | 421195-280 | | CVORTHOP | FRESH WTR | 11/28/2012 11:55 | 12/5/2012 8:05 | 12/5/2012 13:13 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56868-4 | 421195-280 | | CVNH3-FL | FRESH WTR | 11/28/2012 12:35 | 12/5/2012 8:05 | 12/5/2012 13:15 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56868-4 | 421195-280 | | CVNO23 | FRESH WTR | 11/28/2012 12:35 | 12/5/2012 8:05 | 12/5/2012 13:15 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56868-4 | 421195-280 | | CVORTHOP | FRESH WTR | 11/28/2012 12:35 | 12/5/2012 8:05 | 12/5/2012 13:15 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56868-5 | 421195-280 | | CVNH3-FL | BLANK WTR | 11/28/2012 8:15 | 12/5/2012 8:05 | 12/5/2012 13:11 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56868-5 | 421195-280 | | CVNO23 | BLANK WTR | 11/28/2012 8:15 | 12/5/2012 8:05 | 12/5/2012 13:11 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56868-5 | 421195-280 | | CVORTHOP | BLANK WTR | 11/28/2012 8:15 | 12/5/2012 8:05 | 12/5/2012 13:11 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-1 | 421240A | STREAMS MONITOR (surf wtr) | CVNH3-FL | FRESH WTR | 12/3/2012 8:46 | 12/5/2012 8:05 | 12/5/2012 10:47 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-1 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 8:46 | 12/5/2012 8:05 | 12/5/2012 10:47 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-1 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 8:46 | 12/5/2012 8:05 | 12/5/2012 10:47 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-2 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 9:46 | 12/5/2012 8:05 | 12/5/2012 10:50 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-2 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 9:46 | 12/5/2012 8:05 | 12/5/2012 10:50 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|
| L56984-2 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 9:46 | 12/5/2012 8:05 | 12/5/2012 10:50 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-3 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 10:12 | 12/5/2012 8:05 | 12/5/2012 10:52 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-3 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 10:12 | 12/5/2012 8:05 | 12/5/2012 13:32 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-3 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 10:12 | 12/5/2012 8:05 | 12/5/2012 10:52 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-4 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 10:30 | 12/5/2012 8:05 | 12/5/2012 11:06 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-4 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 10:30 | 12/5/2012 8:05 | 12/5/2012 11:06 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-4 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 10:30 | 12/5/2012 8:05 | 12/5/2012 11:06 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-5 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:08 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-5 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:08 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-5 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:08 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-6 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 11:06 | 12/5/2012 8:05 | 12/5/2012 11:10 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-6 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 11:06 | 12/5/2012 8:05 | 12/5/2012 11:10 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|
| L56984-6 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 11:06 | 12/5/2012 8:05 | 12/5/2012 11:10 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-7 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 11:30 | 12/5/2012 8:05 | 12/5/2012 11:12 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-7 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 11:30 | 12/5/2012 8:05 | 12/5/2012 11:12 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-7 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 11:30 | 12/5/2012 8:05 | 12/5/2012 11:12 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-8 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 11:57 | 12/5/2012 8:05 | 12/5/2012 11:15 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-8 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 11:57 | 12/5/2012 8:05 | 12/5/2012 11:15 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-8 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 11:57 | 12/5/2012 8:05 | 12/5/2012 11:15 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-9 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 12:22 | 12/5/2012 8:05 | 12/5/2012 11:17 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-9 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 12:22 | 12/5/2012 8:05 | 12/5/2012 11:17 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-9 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 12:22 | 12/5/2012 8:05 | 12/5/2012 11:17 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-10 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 12:34 | 12/5/2012 8:05 | 12/5/2012 11:19 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-10 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 12:34 | 12/5/2012 8:05 | 12/5/2012 11:19 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|---|
| L56984-10 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 12:34 | 12/5/2012 8:05 | 12/5/2012 11:19 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-11 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 13:05 | 12/5/2012 8:05 | 12/5/2012 11:21 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-11 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 13:05 | 12/5/2012 8:05 | 12/5/2012 11:21 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-11 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 13:05 | 12/5/2012 8:05 | 12/5/2012 11:21 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-12 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 13:23 | 12/5/2012 8:05 | 12/5/2012 11:23 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-12 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 13:23 | 12/5/2012 8:05 | 12/5/2012 11:23 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-12 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 13:23 | 12/5/2012 8:05 | 12/5/2012 11:23 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56984-13 | 421240A | | CVNH3-FL | BLANK WTR | 12/3/2012 8:35 | 12/5/2012 8:05 | 12/5/2012 10:25 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56984-13 | 421240A | | CVNO23 | BLANK WTR | 12/3/2012 8:35 | 12/5/2012 8:05 | 12/5/2012 10:25 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56984-13 | 421240A | | CVORTHOP | BLANK WTR | 12/3/2012 8:35 | 12/5/2012 8:05 | 12/5/2012 10:25 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-1 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 9:47 | 12/5/2012 8:05 | 12/5/2012 11:25 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-1 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 9:47 | 12/5/2012 8:05 | 12/5/2012 11:25 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|
| L56985-1 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 9:47 | 12/5/2012 8:05 | 12/5/2012 11:25 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-2 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 10:05 | 12/5/2012 8:05 | 12/5/2012 11:35 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-2 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 10:05 | 12/5/2012 8:05 | 12/5/2012 11:35 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-2 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 10:05 | 12/5/2012 8:05 | 12/5/2012 11:35 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-3 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:37 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-3 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:37 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-3 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 10:54 | 12/5/2012 8:05 | 12/5/2012 11:37 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-4 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 11:17 | 12/5/2012 8:05 | 12/5/2012 11:40 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-4 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 11:17 | 12/5/2012 8:05 | 12/5/2012 11:40 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-4 | 421240A | CVORTHOP | FRESH WTR | 12/3/2012 11:17 | 12/5/2012 8:05 | 12/5/2012 11:40 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-5 | 421240A | CVNH3-FL | FRESH WTR | 12/3/2012 11:31 | 12/5/2012 8:05 | 12/5/2012 11:44 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-5 | 421240A | CVNO23 | FRESH WTR | 12/3/2012 11:31 | 12/5/2012 8:05 | 12/5/2012 13:49 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |

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|---|---|---|---|---|---|---|---|---|
| L56985-5 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 11:31 | 12/5/2012 8:05 | 12/5/2012 13:49 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-6 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 12:09 | 12/5/2012 8:05 | 12/5/2012 11:52 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-6 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 12:09 | 12/5/2012 8:05 | 12/5/2012 11:52 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-6 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 12:09 | 12/5/2012 8:05 | 12/5/2012 11:52 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-7 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 13:04 | 12/5/2012 8:05 | 12/5/2012 11:54 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-7 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 13:04 | 12/5/2012 8:05 | 12/5/2012 11:54 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-7 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 13:04 | 12/5/2012 8:05 | 12/5/2012 11:54 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-8 | 421240A | | CVNH3-FL | FRESH WTR | 12/3/2012 13:24 | 12/5/2012 8:05 | 12/5/2012 12:07 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-8 | 421240A | | CVNO23 | FRESH WTR | 12/3/2012 13:24 | 12/5/2012 8:05 | 12/5/2012 12:07 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-8 | 421240A | | CVORTHOP | FRESH WTR | 12/3/2012 13:24 | 12/5/2012 8:05 | 12/5/2012 12:07 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 |
| L56985-9 | 421240A | | CVNH3-FL | BLANK WTR | 12/3/2012 9:44 | 12/5/2012 8:05 | 12/5/2012 10:27 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 |
| L56985-9 | 421240A | | CVNO23 | BLANK WTR | 12/3/2012 9:44 | 12/5/2012 8:05 | 12/5/2012 10:27 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 |
| L56985-9 | 421240A | | CVORTHOP | BLANK WTR | 12/3/2012 9:44 | 12/5/2012 8:05 | 12/5/2012 10:27 | WG124480-1,-2,-3,- |
| L57027-1 | 421195-150 | Beaver Lake | CVORTHOP | FRESH WTR | 12/4/2012 10:00 | 12/5/2012 8:05 | 12/5/2012 13:42 | 6,-7,-9,-8,-12,-13,-14,- |
| L57027-2 | 421195-150 | | CVORTHOP | FRESH WTR | 12/4/2012 9:50 | 12/5/2012 8:05 | 12/5/2012 13:40 | 15,-16,-17,-4,-5,-10,- |

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|---|---|---|---|---|---|---|---|
| WG124480-1 | MB | CVNH3-FL | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:16 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | CONNUTS3 |
| WG124480-1 | MB | CVNO23 | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:16 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | CONNUTS3 |
| WG124480-1 | MB | CVORTHOP | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:16 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | CONNUTS3 |
| WG124480-2 | SB | CVNH3-FL | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:18 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | WG124480-1 |
| WG124480-2 | SB | CVNO23 | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:18 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | WG124480-1 |
| WG124480-2 | SB | CVORTHOP | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 10:18 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | WG124480-1 |
| WG124480-3 | LCS | CVNH3-FL | BLANK WTR | 12/5/2012 10:20 | 12/5/2012 10:20 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124480-3 | LCS | CVNO23 | BLANK WTR | 12/5/2012 10:20 | 12/5/2012 10:20 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | LEVEL1 |
| WG124480-3 | LCS | CVORTHOP | BLANK WTR | 12/5/2012 10:20 | 12/5/2012 10:20 | WG124480-1,-2,-3,- | LEVEL1 |
| WG124480-4 | LD | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:45 | 6,-7,-9,-8,-12,-13,-14, | L57027-1 |
| WG124480-5 | MS | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:47 | 15,-16,-17,-4,-5,-10,- | L57027-1 |
| WG124480-6 | LD | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 10:54 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56984-3 |
| WG124480-6 | LD | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:34 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56984-3 |
| WG124480-6 | LD | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 10:54 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56984-3 |
| WG124480-7 | MS | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 10:56 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56984-3 |

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|---|---|---|---|---|---|---|---|
| WG124480-7 | MS | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:36 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56984-3 |
| WG124480-7 | MS | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 10:56 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56984-3 |
| WG124480-8 | MB | CVNH3-FL | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 11:50 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | CONNUTS3 |
| WG124480-8 | MB | CVNO23 | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 11:50 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | CONNUTS3 |
| WG124480-8 | MB | CVORTHOP | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 11:50 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | CONNUTS3 |
| WG124480-9 | LCS | CVNH3-FL | BLANK WTR | 12/5/2012 11:46 | 12/5/2012 11:46 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124480-9 | LCS | CVNO23 | BLANK WTR | 12/5/2012 11:46 | 12/5/2012 11:46 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | LEVEL1 |
| WG124480-9 | LCS | CVORTHOP | BLANK WTR | 12/5/2012 11:46 | 12/5/2012 11:46 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | LEVEL1 |
| WG124480-10 | LD | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 12:21 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56828-6 |
| WG124480-10 | LD | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 12:21 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56828-6 |
| WG124480-10 | LD | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 14:01 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56828-6 |
| WG124480-11 | MS | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 12:23 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56828-6 |

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|---|---|---|---|---|---|---|---|
| WG124480-11 | MS | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 12:23 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56828-6 |
| WG124480-11 | MS | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 14:03 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56828-6 |
| WG124480-12 | LD | CVNO23 | STORM WTR | 12/5/2012 8:05 | 12/5/2012 12:50 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56807-2 |
| WG124480-12 | LD | CVORTHOP | STORM WTR | 12/5/2012 8:05 | 12/5/2012 12:50 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56807-2 |
| WG124480-13 | MS | CVNO23 | STORM WTR | 12/5/2012 8:05 | 12/5/2012 12:52 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56807-2 |
| WG124480-13 | MS | CVORTHOP | STORM WTR | 12/5/2012 8:05 | 12/5/2012 12:52 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56807-2 |
| WG124480-14 | MB | CVNH3-FL | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 13:03 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | CONNUTS3 |
| WG124480-14 | MB | CVNO23 | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 13:03 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | CONNUTS3 |
| WG124480-14 | MB | CVORTHOP | BLANK WTR | 12/5/2012 8:05 | 12/5/2012 13:03 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | CONNUTS3 |
| WG124480-15 | LCS | CVNH3-FL | BLANK WTR | 12/5/2012 13:05 | 12/5/2012 13:05 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124480-15 | LCS | CVNO23 | BLANK WTR | 12/5/2012 13:05 | 12/5/2012 13:05 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | LEVEL1 |
| WG124480-15 | LCS | CVORTHOP | BLANK WTR | 12/5/2012 13:05 | 12/5/2012 13:05 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | LEVEL1 |

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|---|---|---|---|---|---|---|---|
| WG124480-16 | LD | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:17 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56868-4 |
| WG124480-16 | LD | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:17 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56868-4 |
| WG124480-16 | LD | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:17 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56868-4 |
| WG124480-17 | MS | CVNH3-FL | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:20 | WG124480-9,-8,-10,-11,-14,-15,-16,-17,-1,-2,-3,-6,-7 | L56868-4 |
| WG124480-17 | MS | CVNO23 | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:20 | WG124480-1,-2,-3,-9,-8,-10,-11,-12,-13,-14,-15,-16,-17,-6,-7 | L56868-4 |
| WG124480-17 | MS | CVORTHOP | FRESH WTR | 12/5/2012 8:05 | 12/5/2012 13:20 | WG124480-1,-2,-3,-6,-7,-9,-8,-12,-13,-14,-15,-16,-17,-4,-5,-10,-11 | L56868-4 |

**WG124752 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 11/23/2012 6:35 | 12/20/2012 10:50 | 12/24/2012 11:52 | WG124752-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56807-2 | 421879-210 | | CVTKN | STORM WTR | 11/23/2012 9:50 | 12/20/2012 10:50 | 12/24/2012 12:01 | | |
| L56976-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 12/3/2012 7:46 | 12/20/2012 10:50 | 12/24/2012 11:31 | | |
| L56976-3 | 421430-300 | | CVTKN | EFFLUENT | 12/3/2012 7:19 | 12/20/2012 10:50 | 12/24/2012 11:33 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/9/2012 13:01 | 12/20/2012 10:50 | 12/24/2012 12:03 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTKN | FRESH WTR | 12/10/2012 8:32 | 12/20/2012 10:50 | 12/24/2012 12:21 | | |
| L57066-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 8:07 | 12/20/2012 10:50 | 12/24/2012 12:30 | | |
| L57066-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 7:30 | 12/20/2012 10:50 | 12/24/2012 12:32 | | |
| L57066-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:04 | 12/20/2012 10:50 | 12/24/2012 12:34 | | |
| L57066-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 10:50 | 12/24/2012 12:36 | | |
| L57066-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:31 | 12/20/2012 10:50 | 12/24/2012 12:38 | | |
| L57066-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 8:56 | 12/20/2012 10:50 | 12/24/2012 12:40 | | |
| L57066-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 9:17 | 12/20/2012 10:50 | 12/24/2012 12:53 | | |
| L57098-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 10:50 | 12/24/2012 12:55 | | |
| L57098-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 10:50 | 12/24/2012 12:57 | | |
| L57098-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 12:59 | | |
| L57098-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 13:01 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/11/2012 14:42 | 12/20/2012 10:50 | 12/24/2012 12:05 | | |
| L57129-1 | 421879-210 | | CVTKN | STORM WTR | 12/13/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:07 | | |
| L57138-1 | 421879-210 | | CVTKN | STORM WTR | 12/15/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:09 | | |
| WG124752-1 | MB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:21 | | MB1 12/20/12 |
| WG124752-2 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:23 | | LEVEL1 |
| WG124752-3 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:25 | | LEVEL2 |
| WG124752-4 | SB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:27 | | WG124752-1 |
| WG124752-5 | LD | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:36 | | L56976-3 |
| WG124752-6 | MS | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:38 | | L56976-3 |
| WG124752-7 | LD | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:54 | | L56807-1 |
| WG124752-8 | MS | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:56 | | L56807-1 |
| WG124752-9 | LD | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:23 | | L57066-1 |
| WG124752-10 | MS | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:26 | | L57066-1 |

**WG124355 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56765-1 | 421874-100 | City of Shoreline Monthly Water Quality Monitoring | CVTOTN | FRESH WTR | 11/27/2012 10:17 | 11/28/2012 10:05 | 12/3/2012 11:37 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-1 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 10:17 | 11/28/2012 10:05 | 12/3/2012 11:37 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-2 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 10:31 | 11/28/2012 10:05 | 12/3/2012 11:39 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-2 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 10:31 | 11/28/2012 10:05 | 12/3/2012 11:39 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-3 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 10:00 | 11/28/2012 10:05 | 12/3/2012 11:41 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-3 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 10:00 | 11/28/2012 10:05 | 12/3/2012 11:41 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-4 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 9:40 | 11/28/2012 10:05 | 12/3/2012 11:43 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56765-4 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 9:40 | 11/28/2012 10:05 | 12/3/2012 11:43 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |

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|---|---|---|---|---|---|---|---|---|
| L56765-5 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 8:33 | 11/28/2012 10:05 | 12/3/2012 11:44 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56765-5 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 8:33 | 11/28/2012 10:05 | 12/3/2012 11:44 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56765-6 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 9:20 | 11/28/2012 10:05 | 12/3/2012 11:46 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56765-6 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 9:20 | 11/28/2012 10:05 | 12/3/2012 11:46 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56765-7 | 421874-100 | | CVTOTN | FRESH WTR | 11/27/2012 8:55 | 11/28/2012 10:05 | 12/3/2012 12:01 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56765-7 | 421874-100 | | CVTOTP | FRESH WTR | 11/27/2012 8:55 | 11/28/2012 10:05 | 12/3/2012 12:01 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,- |
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 11/23/2012 6:35 | 11/28/2012 10:05 | 12/3/2012 10:46 | |
| L56807-2 | 421879-210 | | CVTOTP | STORM WTR | 11/23/2012 9:50 | 11/28/2012 10:05 | 12/3/2012 10:02 | |
| L56828-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTOTN | FRESH WTR | 11/26/2012 12:31 | 11/28/2012 10:05 | 12/3/2012 10:55 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-1 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 12:31 | 11/28/2012 10:05 | 12/3/2012 10:55 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-2 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 11:25 | 11/28/2012 10:05 | 12/3/2012 11:04 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L56828-2 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 11:25 | 11/28/2012 10:05 | 12/3/2012 11:04 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-3 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 11:12 | 11/28/2012 10:05 | 12/3/2012 11:11 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-3 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 11:12 | 11/28/2012 10:05 | 12/3/2012 11:11 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-4 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 10:46 | 11/28/2012 10:05 | 12/3/2012 11:13 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-4 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 10:46 | 11/28/2012 10:05 | 12/3/2012 11:13 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-5 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 10:24 | 11/28/2012 10:05 | 12/3/2012 11:15 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-5 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 10:24 | 11/28/2012 10:05 | 12/3/2012 11:15 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-6 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 9:58 | 11/28/2012 10:05 | 12/3/2012 11:17 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L56828-6 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 9:58 | 11/28/2012 10:05 | 12/3/2012 11:17 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-7 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 9:28 | 11/28/2012 10:05 | 12/3/2012 11:19 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-7 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 9:28 | 11/28/2012 10:05 | 12/3/2012 11:19 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-8 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 8:57 | 11/28/2012 10:05 | 12/3/2012 11:21 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-8 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 8:57 | 11/28/2012 10:05 | 12/3/2012 11:21 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-9 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 8:33 | 11/28/2012 10:05 | 12/3/2012 11:30 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-9 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 8:33 | 11/28/2012 10:05 | 12/3/2012 11:30 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-10 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 8:01 | 11/28/2012 10:05 | 12/3/2012 11:32 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56828-10 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 8:01 | 11/28/2012 10:05 | 12/3/2012 11:32 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-11 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 7:43 | 11/28/2012 10:05 | 12/3/2012 11:33 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-11 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 7:43 | 11/28/2012 10:05 | 12/3/2012 11:33 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-12 | 422019 | | CVTOTN | FRESH WTR | 11/26/2012 7:25 | 11/28/2012 10:05 | 12/3/2012 11:35 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56828-12 | 422019 | | CVTOTP | FRESH WTR | 11/26/2012 7:25 | 11/28/2012 10:05 | 12/3/2012 11:35 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56868-1 | 421195-280 | Des Moines Creek Basin Support | CVTOTN | FRESH WTR | 11/28/2012 11:55 | 11/30/2012 9:50 | 12/3/2012 13:47 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56868-1 | 421195-280 | | CVTOTP | FRESH WTR | 11/28/2012 11:55 | 11/30/2012 9:50 | 12/3/2012 13:47 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56868-4 | 421195-280 | | CVTOTN | FRESH WTR | 11/28/2012 12:35 | 11/30/2012 9:50 | 12/3/2012 13:55 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56868-4 | 421195-280 | | CVTOTP | FRESH WTR | 11/28/2012 12:35 | 11/30/2012 9:50 | 12/3/2012 13:55 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 11/28/2012 8:17 | 11/30/2012 9:50 | 12/3/2012 12:08 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-1 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 8:17 | 11/30/2012 9:50 | 12/3/2012 12:08 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-2 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 8:13 | 11/30/2012 9:50 | 12/3/2012 12:23 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-2 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 8:13 | 11/30/2012 9:50 | 12/3/2012 12:23 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-3 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:10 | 11/30/2012 9:50 | 12/3/2012 12:25 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-3 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:10 | 11/30/2012 9:50 | 12/3/2012 12:25 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-4 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:07 | 11/30/2012 9:50 | 12/3/2012 12:27 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-4 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:07 | 11/30/2012 9:50 | 12/3/2012 12:27 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-5 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:04 | 11/30/2012 9:50 | 12/3/2012 12:28 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-5 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:04 | 11/30/2012 9:50 | 12/3/2012 12:28 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-6 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:00 | 11/30/2012 9:50 | 12/3/2012 12:30 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-6 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:00 | 11/30/2012 9:50 | 12/3/2012 12:30 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-8 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:39 | 11/30/2012 9:50 | 12/3/2012 12:32 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-8 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:39 | 11/30/2012 9:50 | 12/3/2012 12:32 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-9 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 9:35 | 11/30/2012 9:50 | 12/3/2012 12:34 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-9 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 9:35 | 11/30/2012 9:50 | 12/3/2012 12:34 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-10 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 13:26 | 11/30/2012 9:50 | 12/3/2012 12:36 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-10 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 13:26 | 11/30/2012 9:50 | 12/3/2012 12:36 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-11 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:38 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-11 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:38 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-12 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:47 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-12 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:47 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-13 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:49 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-13 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:55 | 11/30/2012 9:50 | 12/3/2012 12:49 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-14 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:54 | 11/30/2012 9:50 | 12/3/2012 12:50 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-14 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:54 | 11/30/2012 9:50 | 12/3/2012 12:50 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-15 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:54 | 11/30/2012 9:50 | 12/3/2012 12:52 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-15 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:54 | 11/30/2012 9:50 | 12/3/2012 12:52 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-16 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:52 | 11/30/2012 9:50 | 12/3/2012 12:54 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-16 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:52 | 11/30/2012 9:50 | 12/3/2012 12:54 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-17 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 12:51 | 11/30/2012 9:50 | 12/3/2012 12:56 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-17 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 12:51 | 11/30/2012 9:50 | 12/3/2012 12:56 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-19 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 12:58 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-19 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 12:58 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-20 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 13:00 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-20 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 13:00 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-21 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 13:01 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-21 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:12 | 11/30/2012 9:50 | 12/3/2012 13:01 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-22 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:11 | 11/30/2012 9:50 | 12/3/2012 13:03 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-22 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:11 | 11/30/2012 9:50 | 12/3/2012 13:03 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-23 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:11 | 11/30/2012 9:50 | 12/3/2012 13:18 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-23 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:11 | 11/30/2012 9:50 | 12/3/2012 13:18 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-25 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:09 | 11/30/2012 9:50 | 12/3/2012 13:25 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-25 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:09 | 11/30/2012 9:50 | 12/3/2012 13:25 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-26 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:09 | 11/30/2012 9:50 | 12/3/2012 13:27 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-26 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:09 | 11/30/2012 9:50 | 12/3/2012 13:27 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-27 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 10:08 | 11/30/2012 9:50 | 12/3/2012 13:29 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-27 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 10:08 | 11/30/2012 9:50 | 12/3/2012 13:29 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-29 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 11:39 | 11/30/2012 9:50 | 12/3/2012 13:38 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-29 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 11:39 | 11/30/2012 9:50 | 12/3/2012 13:38 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-30 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 11:39 | 11/30/2012 9:50 | 12/3/2012 13:40 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-30 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 11:39 | 11/30/2012 9:50 | 12/3/2012 13:40 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-31 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 11:38 | 11/30/2012 9:50 | 12/3/2012 13:42 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-31 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 11:38 | 11/30/2012 9:50 | 12/3/2012 13:42 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-32 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 11:38 | 11/30/2012 9:50 | 12/3/2012 13:43 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-32 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 11:38 | 11/30/2012 9:50 | 12/3/2012 13:43 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-33 | 421235 | | CVTOTN | FRESH WTR | 11/28/2012 11:36 | 11/30/2012 9:50 | 12/3/2012 13:45 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-33 | 421235 | | CVTOTP | FRESH WTR | 11/28/2012 11:36 | 11/30/2012 9:50 | 12/3/2012 13:45 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-37 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 11:25 | 11/28/2012 10:05 | 12/3/2012 10:04 | WG124355-6,-7 |
| L56979-37 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 11:25 | 11/28/2012 10:05 | 12/3/2012 10:04 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-38 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 11:17 | 11/28/2012 10:05 | 12/3/2012 10:18 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-38 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 11:17 | 11/28/2012 10:05 | 12/3/2012 10:18 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-39 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 11:10 | 11/28/2012 10:05 | 12/3/2012 10:20 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-39 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 11:10 | 11/28/2012 10:05 | 12/3/2012 10:20 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-40 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 11:05 | 11/28/2012 10:05 | 12/3/2012 10:22 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-40 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 11:05 | 11/28/2012 10:05 | 12/3/2012 10:22 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-41 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 11:00 | 11/28/2012 10:05 | 12/3/2012 10:24 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-41 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 11:00 | 11/28/2012 10:05 | 12/3/2012 10:24 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-42 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:56 | 11/28/2012 10:05 | 12/3/2012 10:26 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-42 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:56 | 11/28/2012 10:05 | 12/3/2012 10:26 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-44 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:36 | 11/28/2012 10:05 | 12/3/2012 10:27 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-44 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:36 | 11/28/2012 10:05 | 12/3/2012 10:27 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-45 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:32 | 11/28/2012 10:05 | 12/3/2012 10:29 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-45 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:32 | 11/28/2012 10:05 | 12/3/2012 10:29 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-46 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:26 | 11/28/2012 10:05 | 12/3/2012 10:38 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-46 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:26 | 11/28/2012 10:05 | 12/3/2012 10:38 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-47 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:22 | 11/28/2012 10:05 | 12/3/2012 10:40 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-47 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:22 | 11/28/2012 10:05 | 12/3/2012 10:40 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-48 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:18 | 11/28/2012 10:05 | 12/3/2012 10:42 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56979-48 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:18 | 11/28/2012 10:05 | 12/3/2012 10:42 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L56979-49 | 421235 | | CVTOTN | FRESH WTR | 11/27/2012 10:14 | 11/28/2012 10:05 | 12/3/2012 10:44 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56979-49 | 421235 | | CVTOTP | FRESH WTR | 11/27/2012 10:14 | 11/28/2012 10:05 | 12/3/2012 10:44 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,- | |
| L57019-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | CVTOTP | STORM WTR | 11/20/2012 0:00 | 11/28/2012 10:05 | 12/3/2012 10:48 | | |
| WG124355-1 | MB | | CVTOTN | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:47 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121128 |
| WG124355-1 | MB | | CVTOTP | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:47 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121128 |
| WG124355-2 | SB | | CVTOTN | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:49 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-1 |
| WG124355-2 | SB | | CVTOTP | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:49 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-1 |
| WG124355-3 | LCS | | CVTOTN | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:51 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124355-3 | LCS | | CVTOTP | BLANK WTR | | 11/28/2012 10:05 | 12/3/2012 9:51 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,- | LEVEL1 |
| WG124355-4 | LD | | CVTOTP | STORM WTR | | 11/28/2012 10:05 | 12/3/2012 9:56 | | L56807-1 |
| WG124355-5 | MS | | CVTOTP | STORM WTR | | 11/28/2012 10:05 | 12/3/2012 9:58 | | L56807-1 |
| WG124355-6 | LD | | CVTOTN | FRESH WTR | | 11/28/2012 10:05 | 12/3/2012 10:13 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-37 |

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| WG124355-6 | LD | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 10:13 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-37 |
| WG124355-7 | MS | CVTOTN | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 10:15 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-37 |
| WG124355-7 | MS | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 10:15 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-37 |
| WG124355-8 | MB | CVTOTN | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:49 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121128 |
| WG124355-8 | MB | CVTOTP | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:49 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121128 |
| WG124355-9 | SB | CVTOTN | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:51 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-8 |
| WG124355-9 | SB | CVTOTP | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:51 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-8 |
| WG124355-10 | LCS | CVTOTN | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:53 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |

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| WG124355-10 | LCS | CVTOTP | BLANK WTR | 11/28/2012 10:05 | 12/3/2012 10:53 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124355-11 | LD | CVTOTN | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:06 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56828-2 |
| WG124355-11 | LD | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:06 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56828-2 |
| WG124355-12 | MS | CVTOTN | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:08 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56828-2 |
| WG124355-12 | MS | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:08 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56828-2 |
| WG124355-13 | LD | CVTOTN | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:55 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56765-6 |
| WG124355-13 | LD | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:55 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56765-6 |
| WG124355-14 | MS | CVTOTN | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:57 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56765-6 |

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| WG124355-14 | MS | CVTOTP | FRESH WTR | 11/28/2012 10:05 | 12/3/2012 11:57 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56765-6 |
| WG124355-15 | MB | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:03 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121130 |
| WG124355-15 | MB | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:03 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121130 |
| WG124355-16 | SB | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:04 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-15 |
| WG124355-16 | SB | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:04 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-15 |
| WG124355-17 | LCS | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:06 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124355-17 | LCS | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 12:06 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124355-18 | LD | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 12:10 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-1 |

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| WG124355-18 | LD | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 12:10 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-1 |
| WG124355-19 | MS | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 12:12 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-1 |
| WG124355-19 | MS | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 12:12 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-1 |
| WG124355-20 | MB | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:12 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121130 |
| WG124355-20 | MB | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:12 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121130 |
| WG124355-21 | SB | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:14 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-20 |
| WG124355-21 | SB | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:14 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124355-20 |
| WG124355-22 | LCS | CVTOTN | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:16 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |

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| WG124355-22 | LCS | CVTOTP | BLANK WTR | 11/30/2012 9:50 | 12/3/2012 13:16 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124355-23 | LD | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:20 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-23 |
| WG124355-23 | LD | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:20 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-23 |
| WG124355-24 | MS | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:21 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-23 |
| WG124355-24 | MS | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:21 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56979-23 |
| WG124355-25 | LD | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:49 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56868-1 |
| WG124355-25 | LD | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:49 | WG124355-2,-3,-4,-5,-1,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56868-1 |
| WG124355-26 | MS | CVTOTN | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:51 | WG124355-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56868-1 |
| WG124355-26 | MS | CVTOTP | FRESH WTR | 11/30/2012 9:50 | 12/3/2012 13:51 | WG124355-2,-3,-4,-5, | L56868-1 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124311 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 11/23/2012 6:35 | 11/26/2012 11:00 | 11/26/2012 14:26 | WG124311-1,-2,-3,-4,-5 | |
| L56807-2 | 421879-210 | | CVTSS | STORM WTR | 11/23/2012 9:50 | 11/26/2012 11:00 | 11/26/2012 14:28 | | |
| L56994-1 | 423589-330-4 | Green Rvr PCB/PAH Loading | CVTSS | STORM WTR | 11/19/2012 12:00 | 11/26/2012 11:00 | 11/26/2012 14:24 | | |
| L57018-1 | 421092 | West Point Grit Disposal/Hauling | CVTSS | STORM WTR | 11/19/2012 7:01 | 11/26/2012 11:00 | 11/26/2012 14:29 | | |
| L57018-2 | 421092 | | CVTSS | STORM WTR | 11/19/2012 8:01 | 11/26/2012 11:00 | 11/26/2012 14:30 | | |
| L57018-3 | 421092 | West Point Grit Disposal/Hauling | CVTSS | STORM WTR | 11/19/2012 9:01 | 11/26/2012 11:00 | 11/26/2012 14:31 | | |
| WG124311-1 | MB | | CVTSS | BLANK WTR | | 11/26/2012 11:00 | 11/26/2012 14:23 | | MB 11/26/12 |
| WG124311-2 | LCS | | CVTSS | BLANK WTR | | 11/26/2012 11:00 | 11/26/2012 14:23 | | LEVEL1 |
| WG124311-3 | LD | | CVTSS | STORM WTR | | 11/26/2012 11:00 | 11/26/2012 14:25 | | L56994-1 |
| WG124311-4 | LD | | CVTSS | STORM WTR | | 11/26/2012 11:00 | 11/26/2012 14:26 | | L56807-1 |
| WG124311-5 | LD | | CVTSS | STORM WTR | | 11/26/2012 11:00 | 11/26/2012 14:33 | | L57018-3 |

**WG124325 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 11/23/2012 6:35 | 11/25/2012 14:52 | 11/25/2012 14:52 | WG124325-2,-3,-1 | |
| L56807-2 | 421879-210 | | CVTURB | STORM WTR | 11/23/2012 9:50 | 11/25/2012 14:53 | 11/25/2012 14:53 | | |
| WG124325-1 | LCS | | CVTURB | BLANK WTR | | 11/25/2012 14:50 | 11/25/2012 14:50 | | LEVEL1 |
| WG124325-2 | LD | | CVTURB | STORM WTR | | 11/25/2012 14:55 | 11/25/2012 14:55 | | L56807-2 |
| WG124325-3 | LCS | | CVTURB | BLANK WTR | | 11/25/2012 14:55 | 11/25/2012 14:55 | | LEVEL2 |

**WG124296 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56808-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 11/23/2012 13:24 | 11/23/2012 16:55 | 11/24/2012 15:50 | WG124296-1,-2,-3,-4 | |
| WG124296-1 | PC | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-2 | NC | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-3 | BF | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-4 | AF | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |

**WG124299 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 11/23/2012 14:35 | 11/23/2012 16:55 | 11/24/2012 15:50 | WG124296-1,-2,-3,-4 | |
| L56807-4 | 421879-210 | | MCFC-MF | STORM WTR | 11/23/2012 14:50 | 11/23/2012 16:55 | 11/24/2012 15:50 | | |
| WG124296-1 | PC | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-2 | NC | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-3 | BF | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |
| WG124296-4 | AF | | MCFC-MF | BLANK WTR | | 11/23/2012 16:55 | 11/24/2012 15:50 | | QC-PERFORMED:23-NOV-12 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124530 Toal Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L55586-1 | 421600 | South Plant Storm Water Discharge | MTICPMS | STORM WTR | 11/19/2012 0:00 | 12/10/2012 8:00 | 12/10/2012 15:17 | WG124530-1,-2,-3,-4 | |
| L55586-2 | 421600 | | MTICPMS | STORM WTR | 11/19/2012 0:00 | 12/10/2012 8:00 | 12/10/2012 15:23 | | |
| L55586-3 | 421600 | | MTICPMS | STORM WTR | 11/19/2012 0:00 | 12/10/2012 8:00 | 12/10/2012 15:29 | | |
| L56762-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | MTHARD-ICPMS | STORM WTR | 11/19/2012 11:35 | 12/10/2012 8:00 | 12/11/2012 6:48 | | |
| L56762-1 | 421185 | | MTICPMS | STORM WTR | 11/19/2012 11:35 | 12/10/2012 8:00 | 12/10/2012 15:05 | | |
| L56807-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 11/23/2012 6:35 | 12/10/2012 8:00 | 12/11/2012 6:48 | | |
| L56807-1 | 421879-210 | | MTICPMS | STORM WTR | 11/23/2012 6:35 | 12/10/2012 8:00 | 12/10/2012 16:35 | | |
| L56807-2 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 11/23/2012 9:50 | 12/10/2012 8:00 | 12/11/2012 6:48 | | |
| L56807-2 | 421879-210 | | MTICPMS | STORM WTR | 11/23/2012 9:50 | 12/10/2012 8:00 | 12/10/2012 16:41 | | |
| L56905-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | MTHARD-ICPMS | STORM WTR | 11/19/2012 0:00 | 12/10/2012 8:00 | 12/11/2012 6:48 | | |
| L56905-1 | 421185 | | MTICPMS | STORM WTR | 11/19/2012 0:00 | 12/10/2012 8:00 | 12/10/2012 15:11 | | |
| L56932-1 | 421422-CHSW-P | SWD-CHSW P Cedar Hills Surface Water Permit | MTICPMS | FRESH WTR | 12/6/2012 9:14 | 12/10/2012 8:00 | 12/10/2012 16:05 | | |
| L56932-2 | 421422-CHSW-P | | MTICPMS | FRESH WTR | 12/6/2012 8:12 | 12/10/2012 8:00 | 12/10/2012 16:11 | | |
| L56932-3 | 421422-CHSW-P | | MTICPMS | FRESH WTR | 12/6/2012 8:38 | 12/10/2012 8:00 | 12/10/2012 16:17 | | |
| L56975-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 12/2/2012 7:20 | 12/10/2012 8:00 | 12/10/2012 16:23 | | |
| L56975-3 | 421184-110 | | MTICPMS | INFLUENT | 12/2/2012 7:30 | 12/10/2012 8:00 | 12/10/2012 16:29 | | |
| L57019-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | MTHARD-ICPMS | STORM WTR | 11/20/2012 0:00 | 12/10/2012 8:00 | 12/11/2012 6:48 | | |
| L57019-1 | 421185 | | MTICPMS | STORM WTR | 11/20/2012 0:00 | 12/10/2012 8:00 | 12/10/2012 15:35 | | |
| L57095-1 | 421937 | Brightwater Operations | MTICPMS | FRESH WTR | 12/5/2012 12:40 | 12/10/2012 8:00 | 12/10/2012 16:46 | | |
| L57095-2 | 421937 | | MTICPMS | FRESH WTR | 12/5/2012 12:43 | 12/10/2012 8:00 | 12/10/2012 16:52 | | |
| WG124530-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 12/10/2012 8:00 | 12/11/2012 6:48 | | METHOD BLANK |
| WG124530-1 | MB | | MTICPMS | BLANK WTR | | 12/10/2012 8:00 | 12/10/2012 14:53 | | METHOD BLANK |
| WG124530-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 12/10/2012 8:00 | 12/11/2012 6:48 | | WG124530-1 MS-20 |
| WG124530-2 | SB | | MTICPMS | BLANK WTR | | 12/10/2012 8:00 | 12/10/2012 14:59 | | WG124530-1 MS-20 |
| WG124530-3 | LD | | MTHARD-ICPMS | STORM WTR | | 12/10/2012 8:00 | 12/11/2012 6:48 | | L57019-1 RPD-LIQ |
| WG124530-3 | LD | | MTICPMS | STORM WTR | | 12/10/2012 8:00 | 12/10/2012 15:41 | | L57019-1 RPD-LIQ |
| WG124530-4 | MS | | MTHARD-ICPMS | STORM WTR | | 12/10/2012 8:00 | 12/11/2012 6:48 | | L57019-1 MS-20 |
| WG124530-4 | MS | | MTICPMS | STORM WTR | | 12/10/2012 8:00 | 12/10/2012 15:47 | | L57019-1 MS-20 |

**WG124334 Total and Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 11/23/2012 6:35 | 11/27/2012 9:00 | 11/28/2012 13:54 | WG124334-1,-2,-5,-6 | |
| L56807-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 11/23/2012 6:35 | 11/27/2012 9:00 | 11/28/2012 13:35 | WG124334-1,-3,-4 | |
| L56888-4 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 11/20/2012 7:15 | 11/27/2012 9:00 | 11/28/2012 13:52 | | |
| L56892-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 11/16/2012 10:48 | 11/27/2012 9:00 | 11/28/2012 13:24 | | |
| L56894-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 11/16/2012 7:20 | 11/27/2012 9:00 | 11/28/2012 13:45 | | |
| L56913-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | MTHG-MID | LEACHATE | 11/14/2012 9:48 | 11/27/2012 9:00 | 11/28/2012 13:29 | WG124334-1,-2,-5,-6 | |
| L56913-1 | 421422-VALS-M | | MTHG-MID-DISS | LEACHATE | 11/14/2012 9:48 | 11/27/2012 9:00 | 11/28/2012 13:58 | WG124334-1,-3,-4 | |
| L56914-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | MTHG-MID | LEACHATE | 11/14/2012 4:45 | 11/27/2012 9:00 | 11/28/2012 14:03 | WG124334-1,-2,-5,-6 | |
| L56914-3 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 11/14/2012 6:15 | 11/27/2012 9:00 | 11/28/2012 14:05 | | |
| L56914-4 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 11/14/2012 7:15 | 11/27/2012 9:00 | 11/28/2012 14:07 | | |
| L56914-5 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 11/14/2012 7:05 | 11/27/2012 9:00 | 11/28/2012 14:09 | | |
| L56917-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 11/16/2012 9:37 | 11/27/2012 9:00 | 11/28/2012 13:47 | WG124334-1,-3,-4 | |
| L56919-1 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 11/15/2012 8:01 | 11/27/2012 9:00 | 11/28/2012 13:49 | | |
| L56919-3 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 11/15/2012 9:43 | 11/27/2012 9:00 | 11/28/2012 13:51 | | |
| L56933-2 | 421422-VAGW-APP3 | SWD-VAGW-Appendix III GW Analytes | MTHG-MID | GRND WTR | 11/15/2012 8:10 | 11/27/2012 9:00 | 11/28/2012 13:56 | WG124334-1,-2,-5,-6 | |
| L56933-2 | 421422-VAGW-APP3 | | MTHG-MID-DISS | GRND WTR | 11/15/2012 8:10 | 11/27/2012 9:00 | 11/28/2012 13:36 | WG124334-1,-3,-4 | |
| L57003-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 11/20/2012 5:20 | 11/27/2012 9:00 | 11/28/2012 13:42 | | |
| L57003-3 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 11/20/2012 6:10 | 11/27/2012 9:00 | 11/28/2012 13:44 | | |
| WG124334-1 | MB | | MTHG-MID | BLANK WTR | | 11/27/2012 9:00 | 11/28/2012 13:20 | WG124334-1,-2,-5,-6 | METHOD BLANK |
| WG124334-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 11/27/2012 9:00 | 11/28/2012 13:20 | WG124334-1,-3,-4 | METHOD BLANK |
| WG124334-2 | SB | | MTHG-MID | BLANK WTR | | 11/27/2012 9:00 | 11/28/2012 13:22 | WG124334-1,-2,-5,-6 | WG124334-1 HG-LMID |
| WG124334-3 | MS | | MTHG-MID-DISS | GRND WTR | | 11/27/2012 9:00 | 11/28/2012 13:25 | WG124334-1,-3,-4 | L56892-3 HG-LMID |
| WG124334-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 11/27/2012 9:00 | 11/28/2012 13:27 | | WG124334-3 L56892-3 HG-LMID-MSD |
| WG124334-5 | MS | | MTHG-MID | LEACHATE | | 11/27/2012 9:00 | 11/28/2012 13:31 | WG124334-1,-2,-5,-6 | L56913-1 HG-LMID |
| WG124334-6 | MSD | | MTHG-MID | LEACHATE | | 11/27/2012 9:00 | 11/28/2012 13:33 | | WG124334-5 L56913-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124655 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 11/23/2012 6:35 | 12/14/2012 12:30 | 12/14/2012 13:37 | WG124655-1,-2,-3,-4 | |
| L56807-2 | 421879-210 | | MTICPMS-DISS | STORM WTR | 11/23/2012 9:50 | 12/14/2012 12:30 | 12/14/2012 13:43 | | |
| L56918-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/6/2012 8:55 | 12/14/2012 12:30 | 12/14/2012 13:49 | | |
| L56918-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/6/2012 8:00 | 12/14/2012 12:30 | 12/14/2012 13:55 | | |
| L56942-6 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/11/2012 7:20 | 12/14/2012 12:30 | 12/14/2012 14:01 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/9/2012 13:01 | 12/14/2012 12:30 | 12/14/2012 14:07 | | |
| L57053-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/6/2012 6:05 | 12/14/2012 12:30 | 12/14/2012 14:13 | | |
| L57053-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/6/2012 7:00 | 12/14/2012 12:30 | 12/14/2012 14:20 | | |
| L57053-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/5/2012 10:19 | 12/14/2012 12:30 | 12/14/2012 14:38 | | |
| L57054-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/5/2012 9:23 | 12/14/2012 12:30 | 12/14/2012 14:44 | | |
| L57065-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/10/2012 6:50 | 12/14/2012 12:30 | 12/14/2012 14:50 | | |
| L57065-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 12/10/2012 7:42 | 12/14/2012 12:30 | 12/14/2012 14:57 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 12/10/2012 8:32 | 12/14/2012 12:30 | 12/14/2012 15:03 | | |
| L57066-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 8:07 | 12/14/2012 12:30 | 12/14/2012 15:09 | | |
| L57066-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 7:30 | 12/14/2012 12:30 | 12/14/2012 15:27 | | |
| L57066-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 9:04 | 12/14/2012 12:30 | 12/14/2012 15:33 | | |
| L57066-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 6:40 | 12/14/2012 12:30 | 12/14/2012 15:52 | | |
| L57066-6 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 9:31 | 12/14/2012 12:30 | 12/14/2012 15:58 | | |
| L57066-7 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/11/2012 8:56 | 12/14/2012 12:30 | 12/14/2012 16:04 | | |
| L57066-8 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/11/2012 9:17 | 12/14/2012 12:30 | 12/14/2012 16:10 | | |
| WG124655-1 | MB | | MTICPMS-DISS | BLANK WTR | | 12/14/2012 12:30 | 12/14/2012 13:24 | | METHOD BLANK |
| WG124655-2 | SB | | MTICPMS-DISS | BLANK WTR | | 12/14/2012 12:30 | 12/14/2012 13:30 | | |
| | | | | | | | | | WG124655-1 MS-20 |
| WG124655-3 | LD | | MTICPMS-DISS | FRESH WTR | | 12/14/2012 12:30 | 12/14/2012 15:15 | | L57066-2 RPD-LIQ |
| WG124655-4 | MS | | MTICPMS-DISS | FRESH WTR | | 12/14/2012 12:30 | 12/14/2012 15:21 | | L57066-2 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124394 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 11/23/2012 6:35 | 11/30/2012 7:00 | 12/10/2012 15:21 | WG124394-4,-3,-2,-1 | |
| L56807-2 | 421879-210 | | ORHERB-NPDES | STORM WTR | 11/23/2012 9:50 | 11/30/2012 7:00 | 12/10/2012 14:57 | | |
| WG124394-1 | MB | | ORHERB-NPDES | BLANK WTR | | 11/30/2012 7:00 | 12/10/2012 13:22 | | MB121130 |
| WG124394-2 | SB | | ORHERB-NPDES | BLANK WTR | | 11/30/2012 7:00 | 12/10/2012 13:45 | | WG124394-1 |
| WG124394-3 | MS | | ORHERB-NPDES | STORM WTR | | 11/30/2012 7:00 | 12/10/2012 14:09 | | L56807-2 |
| WG124394-4 | MSD | | ORHERB-NPDES | STORM WTR | | 11/30/2012 7:00 | 12/10/2012 14:33 | | WG124394-3 L56807-2 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124313 Orthophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 11/23/2012 6:35 | 11/25/2012 17:00 | 12/8/2012 6:40 | WG124313-4,-3,-2,-1 | |
| L56807-2 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 11/23/2012 9:50 | 11/25/2012 17:00 | 12/8/2012 5:22 | | |
| WG124313-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 11/25/2012 17:00 | 12/8/2012 1:01 | | MB121125 |
| WG124313-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 11/25/2012 17:00 | 12/8/2012 1:27 | | WG124313-1 |
| WG124313-3 | MS | | OROPPEST-NPDES | STORM WTR | | 11/25/2012 17:00 | 12/8/2012 5:48 | | L56807-1 |
| WG124313-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 11/25/2012 17:00 | 12/8/2012 6:14 | | WG124313-3 L56807-1 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L56807, L56808

**WG124312 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 11/23/2012 6:35 | 11/25/2012 17:00 | 11/29/2012 15:13 | WG124312-1,-2,-3,-4 | |
| L56807-2 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 11/23/2012 9:50 | 11/25/2012 17:00 | 11/29/2012 14:36 | | |
| WG124312-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 11/25/2012 17:00 | 11/29/2012 9:24 | | MB121125 |
| WG124312-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 11/25/2012 17:00 | 11/29/2012 12:44 | | WG124312-1 |
| WG124312-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 11/25/2012 17:00 | 11/29/2012 13:21 | | L56807-2 |
| WG124312-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 11/25/2012 17:00 | 11/29/2012 13:58 | | WG124312-3 L56807-2 |

**WG124379 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 11/23/2012 14:35 | 11/29/2012 17:00 | 12/18/2012 14:28 | WG124379-1,-2,-3,-4 | |
| L56807-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/23/2012 14:50 | 11/29/2012 17:00 | 12/18/2012 14:51 | | |
| L56808-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/23/2012 13:24 | 11/29/2012 17:00 | 12/18/2012 15:15 | | |
| L57031-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/28/2012 0:00 | 11/29/2012 17:00 | 12/18/2012 15:38 | | |
| WG124379-1 | MB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 12:53 | | MB121129 |
| WG124379-2 | SB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 13:17 | | WG124379-1 SB-MO |
| WG124379-3 | SB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 13:42 | | WG124379-1 SB-DSL |
| WG124379-4 | LD | | ORWTPH-DX | STORM WTR | | 11/29/2012 17:00 | 12/18/2012 14:05 | | L56807-4 |

**WG124308 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 11/23/2012 14:35 | 11/26/2012 13:23 | 11/26/2012 13:23 | WG124308-1,-2,-3 | |
| L56807-4 | 421879-210 | | ORWTPH-G | STORM WTR | 11/23/2012 14:50 | 11/26/2012 13:52 | 11/26/2012 13:52 | | |
| L56808-2 | 421879-210 | | ORWTPH-G | STORM WTR | 11/23/2012 13:24 | 11/26/2012 14:21 | 11/26/2012 14:21 | | |
| WG124308-1 | MB | | ORWTPH-G | BLANK WTR | | 11/26/2012 12:53 | 11/26/2012 12:53 | | MB121126 |
| WG124308-2 | SB | | ORWTPH-G | BLANK WTR | | 11/26/2012 11:55 | 11/26/2012 11:55 | | WG124308-1 |
| WG124308-3 | LD | | ORWTPH-G | STORM WTR | | 11/26/2012 14:51 | 11/26/2012 14:51 | | L56808-2 |

**Workgroup: WG124320 BOD**

**MB:WG124320-1 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:WG124320-2 MB:WG124320-1 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 | 178 | 90 | | 80--120 |

**Workgroup: WG124464 Anions**

**CS:WG124464-1 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 | 0.096 | 96 | | 70--130 |

**CS:WG124464-1 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 | 0.206 | 103 | | 70--130 |

**MB:WG124464-2 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:WG124464-2 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:WG124464-3 MB:WG124464-2 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 | 1.9 | 95 | | 80--120 |

**SB:WG124464-3 MB:WG124464-2 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 | 4.77 | 95 | | 80--120 |

**LCS:WG124464-4 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 | 2.82 | 94 | | 85--115 |

**LCS:WG124464-4 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 | 14.8 | 99 | | 85--115 |

**LD:WG124464-5 L57052-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 2.3 | 2.41 | 5 | | 0--20 |

**LD:WG124464-5 L57052-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.1 | 0.2 | mg/L | 1.81 | 1.83 | 1 | | 0--20 |

**MS:WG124464-6 L57052-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-DUGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 2.3 | 20 | 21.6 | 97 | | 75--125 |

**MS:WG124464-6 L57052-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-DUGW 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 | 1.81 | 5 | 6.68 | 97 | | 75--125 |

**LD:WG124464-7 L56807-1 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 | 0.476 | 0.473 | 1 | | 0--20 |

**MS:WG124464-8 L56807-1 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 | 0.476 | 2 | 2.43 | 98 | | 75--125 |

**MB:WG124464-9 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:WG124464-9 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: WG124357 Conductivity**

**LCS:WG124357-1 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 | 75.3 | 102 | | 90--110 |

**LD:WG124357-2 L56915-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 148 | 149 | 1 | | 0--10 |

**LD:WG124357-3 L56807-2 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 | 8.42 | 8.17 | 3 | | 0--10 |

**LCS:WG124357-4 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 | 74.3 | 101 | | 90--110 |

**Workgroup: WG124480 Dissolved Nutrients**

**MB:WG124480-1 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:WG124480-1 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:WG124480-1 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:WG124480-2 MB:WG124480-1 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 | 0.0971 | 97 | | 80--120 |

**SB:WG124480-2 MB:WG124480-1 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 | 0.797 | 100 | | 80--120 |

**SB:WG124480-2 MB:WG124480-1 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 | 0.0395 | 99 | | 80--120 |

**LCS:WG124480-3 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:WG124480-3 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 | 0.816 | 102 | | 85--115 |

**LCS:WG124480-3 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 | 0.0432 | 108 | | 85--115 |

**LD:WG124480-4 L57027-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0049 | 0.0043 | | | 0--20 |

**MS:WG124480-5 L57027-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.0049 | 0.04 | 0.04 | 88 | | 75--125 |

**LD:WG124480-6 L56984-3 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 | 0.0118 | 0.0117 | 1 | | 0--20 |

**LD:WG124480-6 L56984-3 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 | 0.02 | 0.08 | mg/L | 1.04 | 1.04 | 0 | | 0--20 |

**LD:WG124480-6 L56984-3 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 | 0.0146 | 0.0146 | 1 | | 0--20 |

**MS:WG124480-7 L56984-3 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 | 0.0118 | 0.1 | 0.11 | 98 | | 75--125 |

**MS:WG124480-7 L56984-3 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 | 0.02 | 0.08 | mg/L | 1.04 | 0.8 | 2.62 | 99 | | 75--125 |

**MS:WG124480-7 L56984-3 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 | 0.0146 | 0.04 | 0.051 | 91 | | 75--125 |

**MB:WG124480-8 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124480-8 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124480-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG124480-9 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 | 0.105 | 105 | | 85--115 |

**LCS:WG124480-9 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 | 0.803 | 100 | | 85--115 |

**LCS:WG124480-9 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 | 0.0452 | 113 | | 85--115 |

**LD:WG124480-10 L56828-6 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 | <MDL | <MDL | | | 0--20 |

**LD:WG124480-10 L56828-6 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 | 0.412 | 0.409 | 1 | | 0--20 |

**LD:WG124480-10 L56828-6 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 | 0.00533 | 0.0044 | 19 | | 0--20 |

**MS:WG124480-11 L56828-6 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 | <MDL | 0.1 | 0.101 | 101 | | 75--125 |

**MS:WG124480-11 L56828-6 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 | 0.412 | 0.8 | 1.18 | 96 | | 75--125 |

**MS:WG124480-11 L56828-6 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 | 0.00533 | 0.04 | 0.0409 | 89 | | 75--125 |

**LD:WG124480-12 L56807-2 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 | 0.012 | 0.012 | | | 0--20 |

**LD:WG124480-12 L56807-2 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 | 0.016 | 0.0162 | 1 | | 0--20 |

**MS:WG124480-13 L56807-2 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 | 0.012 | 0.8 | 0.788 | 97 | | 75--125 |

**MS:WG124480-13 L56807-2 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 | 0.016 | 0.04 | 0.0554 | 98 | | 75--125 |

**MB:WG124480-14 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124480-14 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124480-14 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG124480-15 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:WG124480-15 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 | 0.796 | 100 | | 85--115 |

**LCS:WG124480-15 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 | 0.0425 | 106 | | 85--115 |

**LD:WG124480-16 L56868-4 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 | 0.0323 | 0.0323 | 0 | | 0--20 |

**LD:WG124480-16 L56868-4 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 | 0.443 | 0.445 | 0 | | 0--20 |

**LD:WG124480-16 L56868-4 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 | 0.02 | 0.0198 | 1 | | 0--20 |

**MS:WG124480-17 L56868-4 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 | 0.0323 | 0.1 | 0.13 | 98 | | 75--125 |

**MS:WG124480-17 L56868-4 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 | 0.443 | 0.8 | 1.23 | 98 | | 75--125 |

**MS:WG124480-17 L56868-4 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 | 0.02 | 0.04 | 0.0579 | 95 | | 75--125 |

**Workgroup: WG124752 TKN**

**MB:WG124752-1 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 | |

**LCS:WG124752-2 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 | 0.491 | 98 | | 80--120 |

**LCS:WG124752-3 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 | 5 | 5.14 | 103 | | 80--120 |

**SB:WG124752-4 MB:WG124752-1 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 | 5.23 | 105 | | 80--120 |

**LD:WG124752-5 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 7.72 | 5 | | 0--20 |

**MS:WG124752-6 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 5 | 12.8 | 94 | | 70--130 |

**LD:WG124752-7 L56807-1 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 | 0.491 | 0.488 | 1 | | 0--20 |

**MS:WG124752-8 L56807-1 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 | 0.491 | 5 | 5.65 | 103 | | 70--130 |

**LD:WG124752-9 L57066-1 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 | 0.433 | 0.496 | 14 | | 0--20 |

**MS:WG124752-10 L57066-1 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 | 0.433 | 5 | 5.54 | 102 | | 70--130 |

**Workgroup: WG124355 Total Nutrients**

**MB:WG124355-1 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:WG124355-1 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:WG124355-2 MB:WG124355-1 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 | 1.02 | 102 | | 80--120 |

**SB:WG124355-2 MB:WG124355-1 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124355-3 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 | 0.963 | 96 | | 85--115 |

**LCS:WG124355-3 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 | 0.0957 | 96 | | 85--115 |

**LD:WG124355-4 L56807-1 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 | 0.121 | 0.123 | 1 | | 0--20 |

**MS:WG124355-5 L56807-1 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 | 0.121 | 0.1 | 0.238 | 117 | | 75--125 |

**LD:WG124355-6 L56979-37 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 | 0.296 | 0.303 | 2 | | 0--20 |

**LD:WG124355-6 L56979-37 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 | 0.0228 | 0.0206 | 10 | | 0--20 |

**MS:WG124355-7 L56979-37 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 | 0.296 | 1 | 1.33 | 103 | | 75--125 |

**MS:WG124355-7 L56979-37 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 | 0.0228 | 0.1 | 0.121 | 98 | | 75--125 |

**MB:WG124355-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124355-8 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:WG124355-9 MB:WG124355-8 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 | 100 | | 80--120 |

**SB:WG124355-9 MB:WG124355-8 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 | 0.105 | 105 | | 80--120 |

**LCS:WG124355-10 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 | 1.01 | 101 | | 85--115 |

**LCS:WG124355-10 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 | 0.103 | 103 | | 85--115 |

**LD:WG124355-11 L56828-2 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.449 | 0.457 | 2 | | 0--20 |

**LD:WG124355-11 L56828-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0182 | 0.0192 | 5 | | 0--20 |

**MS:WG124355-12 L56828-2 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 0.449 | 1 | 1.5 | 106 | | 75--125 |

**MS:WG124355-12 L56828-2 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0182 | 0.1 | 0.123 | 105 | | 75--125 |

**LD:WG124355-13 L56765-6 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 | 1.82 | 1.75 | 4 | | 0--20 |

**LD:WG124355-13 L56765-6 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 | 0.0464 | 0.0433 | 7 | | 0--20 |

**MS:WG124355-14 L56765-6 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 | 1.82 | 1 | 2.78 | 96 | | 75--125 |

**MS:WG124355-14 L56765-6 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 | 0.0464 | 0.1 | 0.148 | 102 | | 75--125 |

**MB:WG124355-15 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:WG124355-15 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:WG124355-16 MB:WG124355-15 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 | 1.01 | 101 | | 80--120 |

**SB:WG124355-16 MB:WG124355-15 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 | 0.105 | 105 | | 80--120 |

**LCS:WG124355-17 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 | 0.99 | 99 | | 85--115 |

**LCS:WG124355-17 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:WG124355-18 L56979-1 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 | 0.259 | 0.253 | 2 | | 0--20 |

**LD:WG124355-18 L56979-1 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 | 0.0109 | 0.0099 | 9 | | 0--20 |

**MS:WG124355-19 L56979-1 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 | 0.259 | 1 | 1.26 | 100 | | 75--125 |

**MS:WG124355-19 L56979-1 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 | 0.0109 | 0.1 | 0.109 | 99 | | 75--125 |

**MB:WG124355-20 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:WG124355-20 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:WG124355-21 MB:WG124355-20 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 | 0.992 | 99 | | 80--120 |

**SB:WG124355-21 MB:WG124355-20 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 | 0.0991 | 99 | | 80--120 |

**LCS:WG124355-22 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 | 1.07 | 107 | | 85--115 |

**LCS:WG124355-22 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 | 0.109 | 109 | | 85--115 |

**LD:WG124355-23 L56979-23 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 | 0.259 | 0.253 | 2 | | 0--20 |

**LD:WG124355-23 L56979-23 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 | 0.0084 | 0.0073 | | | 0--20 |

**MS:WG124355-24 L56979-23 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 | 0.259 | 1 | 1.25 | 99 | | 75--125 |

**MS:WG124355-24 L56979-23 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 | 0.0084 | 0.1 | 0.105 | 96 | | 75--125 |

**LD:WG124355-25 L56868-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.864 | 0.9 | 4 | | 0--20 |

**LD:WG124355-25 L56868-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0381 | 0.0407 | 6 | | 0--20 |

**MS:WG124355-26 L56868-1 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 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 | 0.864 | 1 | 1.81 | 95 | | 75--125 |

**MS:WG124355-26 L56868-1 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 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 | 0.0381 | 0.1 | 0.138 | 100 | | 75--125 |

**Workgroup: WG124311 TSS**

**MB:WG124311-1 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:WG124311-2 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:WG124311-3 L56994-1 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 | 2 | mg/L | 43.6 | 44.6 | 2 | | 0--25 |

**LD:WG124311-4 L56807-1 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 | 1 | 2 | mg/L | 73.6 | 69.4 | 6 | | 0--25 |

**LD:WG124311-5 L57018-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421092 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1.4 | 2.9 | mg/L | 111 | 112 | 1 | | 0--25 |

**Workgroup: WG124325 Turbidity**

**LCS:WG124325-1 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 | 9.93 | 99 | | 90--110 |

**LD:WG124325-2 L56807-2 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 | 8.54 | 8.49 | 1 | | 0--25 |

**LCS:WG124325-3 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 | 97.4 | 97 | | 90--110 |

**Workgroup: WG124296 Fecal coliform**

**PC:WG124296-1 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:WG124296-2 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:WG124296-3 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:WG124296-4 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: WG124299 Fecal coliform**

**PC:WG124296-1 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:WG124296-2 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:WG124296-3 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:WG124296-4 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: WG124530 Total Metals and Hardness**

**MB:WG124530-1 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:WG124530-1 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 | |
| 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:WG124530-2 MB:WG124530-1 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 | 33.5 | 101 | | 85--115 |

**SB:WG124530-2 MB:WG124530-1 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 | 19.5 | 97 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5350 | 107 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4580 | 92 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.9 | 95 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.1 | 95 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.3 | 92 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18 | 90 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.1 | 91 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |

**LD:WG124530-3 L57019-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185 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 | 47.7 | 47.9 | 0 | | 0--20 |

**LD:WG124530-3 L57019-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3620 | 3670 | 1 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 13100 | 13200 | 0 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 1.03 | 1.02 | 0 | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.04 | 2.05 | 0 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 9.83 | 9.9 | 1 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 39.2 | 38.9 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.83 | 1.81 | 1 | | 0--20 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.055 | 0.06 | | | 0--20 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | 0.51 | 0.51 | | | 0--20 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 14.9 | 14.8 | 0 | | 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 | 1.86 | 1.88 | 1 | | 0--20 |

**MS:WG124530-4 L57019-1 Matrix: STORM WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185 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 | 47.7 | 33.1 | 79.5 | 96 | | 75--125 |

**MS:WG124530-4 L57019-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3620 | 5000 | 8850 | 105 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 13100 | 5000 | 17200 | 82 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 1.03 | 20 | 18.8 | 89 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.04 | 20 | 20.8 | 94 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 9.83 | 20 | 28.7 | 95 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 39.2 | 20 | 56.1 | 85 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.83 | 20 | 20.1 | 91 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 18.7 | 93 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18 | 90 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.055 | 20 | 18.3 | 91 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | 0.51 | 20 | 18.3 | 89 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 14.9 | 20 | 33 | 91 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.3 | 91 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.86 | 20 | 20 | 91 | | 75--125 |

**Workgroup: WG124334 Total and Dissolved Mercury**

**MB:WG124334-1 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:WG124334-1 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:WG124334-2 MB:WG124334-1 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 | 0.933 | 93 | | 85--115 |

**MSD:WG124334-4 MS:WG124334-3 L56892-3 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-ENGW 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 | 0.999 | 100 | | 75--125 | 1 | 0.948 | 95 | | 5 | | 0--20 |

**MSD:WG124334-6 MS:WG124334-5 L56913-1 Matrix: LEACHATE Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-VALS-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 | 1.99 | 100 | | 75--125 | 2 | 2 | 100 | | 0 | | 0--20 |

**Workgroup: WG124655 Dissolved Metals**

**MB:WG124655-1 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:WG124655-2 MB:WG124655-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5040 | 101 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4840 | 97 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.1 | 91 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |

**LD:WG124655-3 L57066-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5280 | 5250 | 1 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2050 | 2050 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 10.8 | 10.9 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1010 | 1010 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8890 | 8910 | 0 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.24 | 0.24 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | <MDL | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.55 | 1.57 | 1 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.3 | 0.3 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 0.66 | 0.58 | | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 1.4 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 0.13 | | | 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 | 3.24 | 3.27 | 1 | | 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:WG124655-4 L57066-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5280 | 5000 | 10000 | 95 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2050 | 5000 | 6880 | 97 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 10.8 | 20 | 29.9 | 96 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1010 | 5000 | 5960 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8890 | 5000 | 13600 | 95 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.24 | 20 | 18.6 | 92 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.9 | 99 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5000 | 100 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.55 | 20 | 20.4 | 94 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.9 | 95 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.3 | 20 | 20.9 | 103 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 0.66 | 20 | 21 | 102 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 20 | 22.5 | 105 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 20 | 20.6 | 102 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.1 | 105 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.1 | 101 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 3.24 | 20 | 22.6 | 97 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |

**Workgroup: WG124394 Herbicides**

**MB:WG124394-1 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 | |

**SB:WG124394-2 MB:WG124394-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.47 | 89 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 3.81 | 76 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 3.98 | 80 | | 59--151 |

**MSD:WG124394-4 MS:WG124394-3 L56807-2 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 | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.41 | 89 | | 20--162 | 5 | 4.81 | 96 | | 8 | | 0--40 |
| 2,4-D | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.79 | 97 | | 10--196 | 5 | 5.24 | 105 | | 9 | | 0--40 |
| Triclopyr | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.5 | 91 | | 30--150 | 5 | 5 | 100 | | 11 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L56807-1 | 92 | 104 |
| L56807-2 | 82 | 92 |
| WG124394-1 | 89 | 105 |
| WG124394-2 | 90 | 106 |
| WG124394-3 | 88 | 102 |
| WG124394-4 | 95 | 104 |

**Workgroup: WG124313 Orthophosphorus Pesticides**

**MB:WG124313-1 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:WG124313-2 MB:WG124313-1 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 | 0.25 | 0.266 | 106 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.259 | 103 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.281 | 112 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.253 | 101 | * | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.182 | 73 | | 40--160 |

**MSD:WG124313-4 MS:WG124313-3 L56807-1 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 | 0.236 | 0.238 | 101 | | 67--148 | 0.236 | 0.252 | 107 | | 6 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.274 | 116 | | 52--190 | 0.236 | 0.286 | 121 | | 4 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.294 | 125 | | 57--141 | 0.236 | 0.307 | 130 | | 5 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.239 | 101 | | 40--160 | 0.236 | 0.25 | 106 | | 5 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.294 | 125 | | 40--160 | 0.236 | 0.331 | 140 | | 12 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L56807-1 | 113 |
| L56807-2 | 114 |
| WG124313-1 | 101 |
| WG124313-2 | 113 |
| WG124313-3 | 108 |
| WG124313-4 | 132 |

**Workgroup: WG124312 Semi Volatile Organics**

**MB:WG124312-1 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 | <MDL | |
| 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 | 0.272 | 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:WG124312-2 MB:WG124312-1 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 | 1.17 | 47 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.985 | 39 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.18 | 87 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.66 | 66 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.58 | 63 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.25 | 90 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.88 | 75 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.36 | 54 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.06 | 83 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.06 | 82 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.22 | 89 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.15 | 86 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.38 | 95 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.57 | 103 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.13 | 85 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.31 | 92 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.272 | 2.5 | 2.36 | 84 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 1.54 | 61 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 6.28 | 84 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.11 | 84 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.31 | 93 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.26 | 90 | | 32--130 |

**MSD:WG124312-4 MS:WG124312-3 L56807-2 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 | 0.0589 | 2.36 | 1.21 | 49 | | 37--95 | 2.36 | 1.42 | 58 | | 16 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.09 | 46 | | 40--121 | 2.36 | 1.23 | 52 | | 12 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 1.63 | 69 | | 34--134 | 2.36 | 1.96 | 83 | | 19 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.29 | 55 | | 46--122 | 2.36 | 1.53 | 65 | | 17 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.28 | 54 | | 47--105 | 2.36 | 1.48 | 63 | | 15 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.0667 | 2.36 | 2.05 | 84 | | 33--140 | 2.36 | 2.31 | 95 | | 12 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.52 | 64 | | 44--137 | 2.36 | 1.87 | 79 | | 21 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.11 | 90 | | 44--145 | 2.36 | 2.24 | 95 | | 6 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0195 | 2.36 | 1.97 | 83 | | 62--116 | 2.36 | 2.21 | 93 | | 12 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.84 | 78 | | 32--140 | 2.36 | 2.06 | 87 | | 11 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.0482 | 2.36 | 2.18 | 90 | | 44--134 | 2.36 | 2.27 | 94 | | 4 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.025 | 2.36 | 2.12 | 89 | | 49--123 | 2.36 | 2.22 | 93 | | 4 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.0244 | 2.36 | 2.23 | 94 | | 37--147 | 2.36 | 2.39 | 100 | | 7 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.55 | 108 | | 39--151 | 2.36 | 2.69 | 114 | | 5 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.12 | 90 | | 50--120 | 2.36 | 2.21 | 94 | | 4 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.016 | 2.36 | 2.21 | 93 | | 42--115 | 2.36 | 2.27 | 96 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 0.45 | 2.36 | 2.73 | 97 | | 11--188 | 2.36 | 2.88 | 103 | | 5 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.038 | 2.36 | 1.76 | 73 | | 48--150 | 2.36 | 1.9 | 79 | | 7 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 6.29 | 89 | | 42--123 | 7.08 | 6.68 | 94 | | 6 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.015 | 2.36 | 2.07 | 87 | | 45--121 | 2.36 | 2.21 | 93 | | 6 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.18 | 92 | | 39--122 | 2.36 | 2.24 | 95 | | 3 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.27 | 96 | | 31--121 | 2.36 | 2.31 | 98 | | 1 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.1 | 89 | | 22--125 | 2.36 | 2.15 | 91 | | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L56807-1 | 88 | 59 | 43 | 76 | 48 | 54 | 55 |
| L56807-2 | 67 | 50 | 44 | 61 | 43 | 49 | 49 |
| WG124312-1 | 42 | 54 | 59 | 77 | 58 | 64 | 66 |
| WG124312-2 | 73 | 61 | 68 | 75 | 67 | 73 | 74 |
| WG124312-3 | 85 | 50 | 41 | 73 | 42 | 50 | 48 |
| WG124312-4 | 95 | 53 | 50 | 78 | 49 | 56 | 57 |

**Workgroup: WG124379 WTPH-Dx**

**MB:WG124379-1 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:WG124379-2 MB:WG124379-1 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 | 0.973 | 97 | | 50--150 |

**SB:WG124379-3 MB:WG124379-1 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 | 0.841 | 84 | | 50--150 |

**LD:WG124379-4 L56807-4 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 | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L56807-3 | 80 | 94 |
| L56807-4 | 77 | 93 |
| L56808-2 | 76 | 90 |
| L57031-2 | 84 | 92 |
| WG124379-1 | 68 | 89 |
| WG124379-2 | 75 | 91 |
| WG124379-3 | 85 | 91 |
| WG124379-4 | 74 | 95 |

**Workgroup: WG124308 WTPH-G**

**MB:WG124308-1 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:WG124308-2 MB:WG124308-1 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 | 480 | 96 | | 50--150 |

**LD:WG124308-3 L56808-2 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-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L56807-3 | 96 | 98 |
| L56807-4 | 96 | 98 |
| L56808-2 | 97 | 98 |
| WG124308-1 | 95 | 98 |
| WG124308-2 | 94 | 98 |
| WG124308-3 | 97 | 98 |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *12-07-2012*

**WG #(s):** *124313*

☒ **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 ☐ H ☐ I ☐ 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 | | 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 Dichlobenil recovery is above the 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) The parameter was qualified with an "*" on the QC report.*

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

*2) Although the recovery is high in the SB, the MS and MSD are within estblished limits and all associated samples are "ND". Therefore, the data may be used without bias.*

| | 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:** *November 25, 2012*

**WG #(s):** *WG124480*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56807-1, -1 LD (WG124480-12), -1 MS (WG124480-13), and -2.*

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

**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 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: *> 15 minutes*

11 ☐ Insufficient sample amount.

12 ☐ Inappropriate storage, container or preservation.

☐ Other

**Anomaly Description:** *Orthophosphate phosphorus (ORTHOP) samples must be filtered within 15 minutes of collection. To meet this short holding time samples are typically filtered immediately after collection. Samples L56807-1, -1 LD (WG124480-), -1 MS (WG124480-), and -2 were composite samples and were delivered to the lab un-filtered on November 25, 2012, but by then the 15 minute hold time had expired. They were filtered at the lab upon receipt.*

## 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:
☐ Other

**Corrective Action Description:** *Other than documenting that the filtration holding time had expired, no other corrective action could be taken.*

**VI. Potential Effects on Data Quality** (explanation mandatory): *Extended time between sample collection and filtration can result in a low bias due to sample degradation and a corresponding loss of the target analyte. The extent of any bias cannot be quantified and the results should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *David Hunn* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *29-NOV-12*

**WG #(s):** *WG124312*

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

**Project #(s):** *421879-210 NPDES STORM WATER*

**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 | | 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:**

*1. WG124312-1 MB had a reportable level Bis(2EthylHexyl)Phthalate.*

## 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 and Bis(2EthylHexyl)Phthalate .*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *11/23/12, 12/09/12*

**WG #(s):** *WG124655*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56807-(1-2), L57030-1*

**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)

## 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:** Kevin Cummings | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *11/28/2012*

**WG #(s):** *WG124334*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56807-1*

**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:** David Chin | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** Katherine Bourbonais | | |

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

January 2, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57031-2, collected November 28, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on November 28, 2012. The samples were analyzed in the Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15095 was prepared and sent via e-mail on November 27, 2012.

**Sample Collection:**
Sample L57031-1 and -3, a composite sample and a field filtration blank, were not collected for location RSW1UP due to failed storm criteria.

**Conventionals:**
There no conventionals samples in this batch.

**Trace Metals:**
There were not trace metals samples in the batch.

**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.



1202M

**Subcontract Parameters: MBAS**
There were no subcontract samples in this batch.

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

# King County Environmental Lab Analytical Report

| | |
|---|---|
| Project: | 421879-210 |
| Locator: | RSW1UP |
| Descrip: | 148TH AVE SE UPSTR |
| Sample: | L57031-2 |
| Matrix: | LG STORM WTR |
| ColDate: | 11/28/12 0:00 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | Value | Qual | MDL | RDL | Units |
|---|---|---|---|---|---|
| **MC SM 9222D 20TH** | | | | | |
| Fecal Coliform | 30 | | | | CFU/100ml |
| **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

| | | | Fecal Coliform |
|---|---|---|---|
| **LOCATOR** | **PROJECT** | **SAMPLE** | **CFU/100ml** |
| RSW1UP | 421879-210 | L57031-2 | 30 |
| * 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 codes | | | |

Login: P57031 NPDES Stormwater Permit Monitoring Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| *Relinquished by* | *Date* 11-28-12 | *Time* 14:45 |
|---|---|---|
| *Received by* | *Date* 11-28-12 | *Time* 1445 |
| *Sample Numbers* 57031-2 | | *[All]* |

| Sample Number | P57031-1 | P57031-2 | P57031-3 |
|---|---|---|---|
| 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 | 11-28-12 @ 520 | 11-28-12 @ 14:20 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

CHAIN OF CUSTODY

| RELINQUISHED BY | Date | Time |
|---|---|---|
| RECEIVED BY | Date | Time |
| Sample Number(s) | | (All) |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L57031

**WG124365 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57031-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 11/28/2012 0:00 | 11/28/2012 15:45 | 11/29/2012 14:30 | WG124365-1,-2,-3,-4,-5 | |
| WG124365-1 | LD | | MCFC-MF | STORM WTR | | 11/28/2012 15:45 | 11/29/2012 14:30 | | L57031-2 |
| WG124365-2 | PC | | MCFC-MF | BLANK WTR | | 11/28/2012 15:45 | 11/29/2012 14:30 | | QC-PERFORMED:28-NOV-12 |
| WG124365-3 | NC | | MCFC-MF | BLANK WTR | | 11/28/2012 15:45 | 11/29/2012 14:30 | | QC-PERFORMED:28-NOV-12 |
| WG124365-4 | BF | | MCFC-MF | BLANK WTR | | 11/28/2012 15:45 | 11/29/2012 14:30 | | QC-PERFORMED:28-NOV-12 |
| WG124365-5 | AF | | MCFC-MF | BLANK WTR | | 11/28/2012 15:45 | 11/29/2012 14:30 | | QC-PERFORMED:28-NOV-12 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L57031

**WG124379 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 11/23/2012 14:35 | 11/29/2012 17:00 | 12/18/2012 14:28 | WG124379-1,-2,-3,-4 | |
| L56807-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/23/2012 14:50 | 11/29/2012 17:00 | 12/18/2012 14:51 | | |
| L56808-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/23/2012 13:24 | 11/29/2012 17:00 | 12/18/2012 15:15 | | |
| L57031-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 11/28/2012 0:00 | 11/29/2012 17:00 | 12/18/2012 15:38 | | |
| WG124379-1 | MB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 12:53 | | MB121129 |
| WG124379-2 | SB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 13:17 | | WG124379-1 SB-MO |
| WG124379-3 | SB | | ORWTPH-DX | BLANK WTR | | 11/29/2012 17:00 | 12/18/2012 13:42 | | WG124379-1 SB-DSL |
| WG124379-4 | LD | | ORWTPH-DX | STORM WTR | | 11/29/2012 17:00 | 12/18/2012 14:05 | | L56807-4 |

# King County Environmental Laboratory Batch Report

# NPDES Stormwater Permit, Stormwater Mon., L57031

**WG124396 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57031-2 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 11/28/2012 0:00 | 11/30/2012 13:48 | 11/30/2012 13:48 | WG124396-1,-2,-3 | |
| WG124396-1 | MB | | ORWTPH-G | BLANK WTR | | 11/30/2012 13:18 | 11/30/2012 13:18 | | MB121130 |
| WG124396-2 | SB | | ORWTPH-G | BLANK WTR | | 11/30/2012 12:19 | 11/30/2012 12:19 | | WG124396-1 |
| WG124396-3 | LD | | ORWTPH-G | STORM WTR | | 11/30/2012 14:17 | 11/30/2012 14:17 | | L57031-2 |

**Workgroup: WG124365 Fecal coliform**

**LD:WG124365-1 L57031-2 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 | 30 | 100 | 0.52 | 0.45 | N11 |

**PC:WG124365-2 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:WG124365-3 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:WG124365-4 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:WG124365-5 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: WG124379 WTPH-Dx**

**MB:WG124379-1 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:WG124379-2 MB:WG124379-1 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 | 0.973 | 97 | | 50--150 |

**SB:WG124379-3 MB:WG124379-1 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 | 0.841 | 84 | | 50--150 |

**LD:WG124379-4 L56807-4 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 | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L56807-3 | 80 | 94 |
| L56807-4 | 77 | 93 |
| L56808-2 | 76 | 90 |
| L57031-2 | 84 | 92 |
| WG124379-1 | 68 | 89 |
| WG124379-2 | 75 | 91 |
| WG124379-3 | 85 | 91 |
| WG124379-4 | 74 | 95 |

**Workgroup: WG124396 WTPH-G**

**MB:WG124396-1 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:WG124396-2 MB:WG124396-1 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 | 481 | 96 | | 50--150 |

**LD:WG124396-3 L57031-2 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-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57031-2 | 97 | 98 |
| WG124396-1 | 97 | 97 |
| WG124396-2 | 95 | 97 |
| WG124396-3 | 98 | 97 |

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

January 14, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57030-1, -3, -5, collected December 9-10, 2012

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on December 10, 2012. The samples were 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 #15145 was prepared and sent via e-mail on January 8, 2013.

**Sample Collection:**
Sample L57030-2, a composite sample, and L57030-4, a grab sample, were not collected for location FCSW02 due to failed stormwater collection criteria.

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

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.



1202M

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

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.

Dichlobenil was outside the upper control limit in the spike blank (SB) for Organophosphorus Pesticides analysis. The result was flagged with a "*" in the QC report. The matrix spike and matrix spike duplicate were with control limits. Dichlobenil was not detected in any of the samples. No other corrective action was taken.

Bis (2-ethylhexyl) phthalate was detected in the method blank (MB) for semivolatile analysis. All entries in the data report and the QC report have been flagged with an appropriate "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: | L57030-1 | L57030-3 | L57030-5 |
| Matrix: | LG STORM WTR | LG STORM WTR | LN BLANK WTR |
| ColDate: | 12/9/12 13:01 | 12/10/12 11:20 | 12/10/12 13:00 |
| TimeSpan: | 11.82 | | |
| 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 | 0.853 | SH | 0.1 | 0.2 | mg/L | | | | | | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.044 | | 0.025 | 0.025 | mg/L | | | | | | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 78.6 | | 0.2 | 0.5 | NTU | | | | | | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 37.8 | | 1 | 5 | umhos/cm | | | | | | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 9.8 | | 1 | 2 | mg/L | | | | | | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 4.54 | | 0.25 | 0.5 | mg/L | | | | | | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.144 | | 0.01 | 0.04 | mg/L | | | | | | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.17 | | 0.05 | 0.1 | mg/L | | | | | | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.00893 | H | 0.002 | 0.005 | mg/L | | | | | | | <MDL | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 8.25 | | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | 2700 | | | | CFU/100ml | | | | | |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Cadmium, Total, ICP-MS | 0.092 | <RDL | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Calcium, Total, ICP-MS | 3990 | | 50 | 50 | ug/L | | | | | | | | | | |
| Copper, Dissolved, ICP-MS | 2.85 | H | 0.4 | 2 | ug/L | | | | | | | | | | |
| Copper, Total, ICP-MS | 14.4 | | 0.4 | 2 | ug/L | | | | | | | | | | |
| Lead, Dissolved, ICP-MS | 0.14 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Lead, Total, ICP-MS | 6.92 | | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Magnesium, Total, ICP-MS | 1590 | | 50 | 50 | ug/L | | | | | | | | | | |
| Zinc, Dissolved, ICP-MS | 13 | H | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| Zinc, Total, ICP-MS | 62.6 | | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 16.5 | | 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 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 | | | | | | | | | | |

# 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: | L57030-1 | L57030-3 | L57030-5 |
| Matrix: | LG STORM WTR | LG STORM WTR | LN BLANK WTR |
| ColDate: | 12/9/12 13:01 | 12/10/12 11:20 | 12/10/12 13:00 |
| TimeSpan: | 11.82 | | |
| TotalSolid: | | | |
| ClientLoc: | | | |
| SampDepth: | | | |
| **WET Weight Basis** | | | |

| Parameters | Value | Qual | MDL | RDL | Units | Value | Qual | MDL | RDL | Units | Value | Qual | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCPP | | <MDL | 0.5 | 0.99 | ug/L | | | | | | | | | | |
| Triclopyr | | <MDL | 0.5 | 0.99 | ug/L | | | | | | | | | | |
| **OR WDOE NWTPH-DX** | | | | | | | | | | | | | | | |
| Diesel Range (>C12-C24) | | | | | | | <MDL | 0.19 | 0.19 | mg/L | | | | | |
| Lube Oil Range (>C24) | | | | | | 0.39 | | 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| FCSW01 | 421879-210 | L57030-1 | 0.853 | 0.044 | 78.6 | 37.8 | 9.8 | 4.54 | 0.144 | 0.17 | 0.00893 | 8.25 | 0.092 | 3990 | 2.85 | 14.4 | 0.14 | 6.92 | 1590 | 13 | 62.6 |
| FCSW01 | 421879-210 | L57030-3 | | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc<br>mg CaCO3/L | Fecal Coliform<br>CFU/100ml | Lube Oil Range (>C24)<br>mg/L |
|---|---|---|---|---|---|
| FCSW01 | 421879-210 | L57030-1 | 16.5 | | |
| FCSW01 | 421879-210 | L57030-3 | | 2700 | 0.39 |
| * Not converted to dry weight basis | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | |

Login: P57030 NPDES Stormwater Permit Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 12/10/12 | *Time* 1215 |
| *Received by* | *Date* 12-10-12 | *Time* 1215 |
| *Sample Numbers* 57030 -3 | | *[All]* |

| Sample Number | P57030-1 | P57030-2 | P57030-3 |
|---|---|---|---|
| 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 | 12/9/12 1301 | | 12/10/12 1120 |
| End Date/Time | 12/10/12 0050 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

Temp 4.9C

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

*Professional Analytical Services*

Dec 13 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 |
|---|---|---|---|
| P57030-1 | Water | 12-A018628 | CONV |

Your sample was received on Monday, December 10, 2012. 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,

Aaron W. Young
Laboratory Manager

Project #: 1047106

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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: 12/10/12
Date Reported: 12/13/12

---

**AMTEST Identification Number** **12-A018628**
**Client Identification** **P57030-1**
**Sampling Date** **12/10/12, 00:50**

### Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.044 | mg/l | | 0.025 | SM 5540C | EB | 12/11/12 |

Aaron W. Young
Laboratory Manager

AMTEST
LABORATORIES

**QC Summary for sample number: 12-A018628**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 12-A018628 | Surfactants | mg/l | 0.044 | 0.325 | 0.250 | 112.40 % |
| 12-A018628 | Surfactants | mg/l | 0.044 | 0.340 | 0.250 | 118.40 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.325 | 0.340 | 4.5 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.124 | 99.2 % |

## 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: 1279874

Project Name: _____  Date Received: 12/10/12  Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 9.4 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.

# CHAIN OF CUSTODY RECORD

Project Number: 1047106
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-12-41
Shipment Method: ENA
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*

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18628 Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57030-1 | 12/10/2012 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 00:50 |
| | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

*Please return signed original CoC with data package.*

T=9.4°C

Requested TAT: 14 Days
Data Package Due: 1/3/2013

| | | | |
|---|---|---|---|
| RELINQUISHED BY | | Date | 12/10/12 |
| Signature | | Time | 1400 |
| Printed Name | Jason Kinnard | | |
| Organization | King County DNR, Environmental Laboratory | | |

| | | | |
|---|---|---|---|
| RECEIVED BY | | Date | 12/10/12 |
| Signature | | Time | 1640 |
| Printed Name | Jeffrey Hunt | | |
| Organization | Am Test | | |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124594 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/9/2012 13:01 | 12/12/2012 16:22 | 12/12/2012 16:22 | WG124594-1,-2 | |
| L57068-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVBOD | FRESH WTR | 12/11/2012 7:51 | 12/12/2012 16:13 | 12/12/2012 16:13 | | |
| L57068-2 | 421422-CHSW-P2 | | CVBOD | FRESH WTR | 12/11/2012 7:27 | 12/12/2012 16:15 | 12/12/2012 16:15 | | |
| L57068-3 | 421422-CHSW-P2 | | CVBOD | FRESH WTR | 12/11/2012 8:12 | 12/12/2012 16:17 | 12/12/2012 16:17 | | |
| L57068-4 | 421422-CHSW-P2 | | CVBOD | FRESH WTR | 12/11/2012 8:21 | 12/12/2012 16:18 | 12/12/2012 16:18 | | |
| L57069-1 | 421422-ENLS | SWD-ENLS Enumclaw Wastewater Permit | CVBOD | IW WTR | 12/11/2012 6:32 | 12/12/2012 16:20 | 12/12/2012 16:20 | | |
| L57073-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVBOD | LEACHATE | 12/12/2012 4:25 | 12/12/2012 16:24 | 12/12/2012 16:24 | | |
| L57073-3 | 421422-CHLS-M | | CVBOD | LEACHATE | 12/12/2012 5:10 | 12/12/2012 16:27 | 12/12/2012 16:27 | | |
| L57073-4 | 421422-CHLS-M | | CVBOD | LEACHATE | 12/12/2012 6:10 | 12/12/2012 16:29 | 12/12/2012 16:29 | | |
| WG124594-1 | MB | | CVBOD | BLANK WTR | | 12/12/2012 16:05 | 12/12/2012 16:05 | | MB1 12/12/12 |
| WG124594-2 | SB | | CVBOD | BLANK WTR | | 12/12/2012 16:11 | 12/12/2012 16:11 | | WG124594-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124682 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/9/2012 13:01 | 12/17/2012 18:16 | 12/17/2012 18:16 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:40 | 12/18/2012 3:24 | 12/18/2012 3:24 | | |
| L57054-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:40 | 12/18/2012 4:55 | 12/18/2012 4:55 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 17:01 | 12/18/2012 17:01 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 18:32 | 12/18/2012 18:32 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:05 | 12/18/2012 0:51 | 12/18/2012 0:51 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | | CVSO4 | GRND WTR | 12/17/2012 7:05 | 12/18/2012 1:22 | 12/18/2012 1:22 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 5:35 | 12/18/2012 15:29 | 12/18/2012 15:29 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 5:35 | 12/18/2012 16:00 | 12/18/2012 16:00 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:22 | 12/18/2012 13:28 | 12/18/2012 13:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 7:22 | 12/19/2012 5:11 | 12/19/2012 5:11 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVCL | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:00 | 12/18/2012 1:52 | 12/18/2012 1:52 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:00 | 12/18/2012 2:23 | 12/18/2012 2:23 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVCL | GRND WTR | 12/14/2012 7:45 | 12/18/2012 8:59 | 12/18/2012 8:59 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 7:45 | 12/18/2012 9:59 | 12/18/2012 9:59 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 19:02 | 12/18/2012 19:02 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 20:34 | 12/18/2012 20:34 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 9:15 | 12/18/2012 21:04 | 12/18/2012 21:04 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 9:15 | 12/18/2012 22:36 | 12/18/2012 22:36 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-3 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 7:25 | 12/18/2012 23:37 | 12/18/2012 23:37 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| L57104-3 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 7:25 | 12/19/2012 0:37 | 12/19/2012 0:37 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 10:24 | 12/19/2012 1:08 | 12/19/2012 1:08 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 10:24 | 12/19/2012 2:09 | 12/19/2012 2:09 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVCL | GRND WTR | 12/18/2012 9:09 | 12/19/2012 3:40 | 12/19/2012 3:40 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 9:09 | 12/19/2012 4:10 | 12/19/2012 4:10 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/11/2012 14:42 | 12/17/2012 22:19 | 12/17/2012 22:19 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57129-1 | 421879-210 | | CVCL | STORM WTR | 12/13/2012 0:00 | 12/17/2012 22:50 | 12/17/2012 22:50 | | |
| L57138-1 | 421879-210 | | CVCL | STORM WTR | 12/15/2012 0:00 | 12/17/2012 23:50 | 12/17/2012 23:50 | | |
| WG124682-1 | CS | | CVCL | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | | RDL_LEVEL |
| WG124682-1 | CS | | CVSO4 | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | WG124682-1,-2,-3,-4,-7,-8,-9 | RDL_LEVEL |
| WG124682-2 | MB | | CVCL | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/17/12 |
| WG124682-2 | MB | | CVSO4 | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/17/12 |
| WG124682-3 | SB | | CVCL | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124682-2 |
| WG124682-3 | SB | | CVSO4 | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-7,-8,-9 | WG124682-2 |
| WG124682-4 | LCS | | CVCL | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124682-4 | LCS | | CVSO4 | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-7,-8,-9 | LEVEL1 |
| WG124682-5 | LD | | CVCL | STORM WTR | | 12/17/2012 18:46 | 12/17/2012 18:46 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57030-1 |
| WG124682-6 | MS | | CVCL | STORM WTR | | 12/17/2012 19:16 | 12/17/2012 19:16 | | L57030-1 |
| WG124682-7 | LD | | CVCL | GRND WTR | | 12/18/2012 3:54 | 12/18/2012 3:54 | | L57054-3 |
| WG124682-7 | LD | | CVSO4 | GRND WTR | | 12/18/2012 5:25 | 12/18/2012 5:25 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVCL | GRND WTR | | 12/18/2012 4:24 | 12/18/2012 4:24 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVSO4 | GRND WTR | | 12/18/2012 5:56 | 12/18/2012 5:56 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-9 | MB | | CVCL | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/18/12 |
| WG124682-9 | MB | | CVSO4 | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/18/12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124647 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56918-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 12/6/2012 8:55 | 12/12/2012 16:59 | 12/12/2012 16:59 | WG124647-1,-2,-3,-4,-5,-6,-7 | |
| L56918-3 | 421422-DUGW | | CVCOND | GRND WTR | 12/6/2012 8:00 | 12/12/2012 17:08 | 12/12/2012 17:08 | | |
| L56942-6 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 12/11/2012 7:20 | 12/12/2012 17:19 | 12/12/2012 17:19 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 12/9/2012 13:01 | 12/12/2012 16:57 | 12/12/2012 16:57 | | |
| L57053-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 12/6/2012 6:05 | 12/12/2012 17:39 | 12/12/2012 17:39 | | |
| L57053-3 | 421422-DUGW | | CVCOND | GRND WTR | 12/6/2012 7:00 | 12/12/2012 17:49 | 12/12/2012 17:49 | | |
| L57053-4 | 421422-DUGW | | CVCOND | GRND WTR | 12/5/2012 10:19 | 12/12/2012 17:59 | 12/12/2012 17:59 | | |
| L57054-1 | 421422-DUGW | | CVCOND | GRND WTR | 12/5/2012 9:23 | 12/12/2012 18:09 | 12/12/2012 18:09 | | |
| L57065-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 12/10/2012 6:50 | 12/12/2012 18:18 | 12/12/2012 18:18 | | |
| L57065-3 | 421422-CFGW | | CVCOND | GRND WTR | 12/10/2012 7:42 | 12/12/2012 18:28 | 12/12/2012 18:28 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVCOND | FRESH WTR | 12/10/2012 8:32 | 12/12/2012 18:39 | 12/12/2012 18:39 | | |
| L57066-2 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/10/2012 8:07 | 12/12/2012 18:48 | 12/12/2012 18:48 | | |
| L57066-3 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/10/2012 7:30 | 12/12/2012 18:58 | 12/12/2012 18:58 | | |
| L57066-4 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/10/2012 9:04 | 12/12/2012 19:07 | 12/12/2012 19:07 | | |
| L57066-6 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/10/2012 9:31 | 12/12/2012 19:17 | 12/12/2012 19:17 | | |
| L57066-7 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/11/2012 8:56 | 12/12/2012 19:36 | 12/12/2012 19:36 | | |
| L57066-8 | 421422-CHSW-M | | CVCOND | FRESH WTR | 12/11/2012 9:17 | 12/12/2012 19:45 | 12/12/2012 19:45 | | |
| WG124647-1 | LCS | | CVCOND | BLANK WTR | | 12/12/2012 16:45 | 12/12/2012 16:45 | | LEVEL1 |
| WG124647-2 | LCS | | CVCOND | BLANK WTR | | 12/12/2012 16:46 | 12/12/2012 16:46 | | LEVEL2 |
| WG124647-3 | LD | | CVCOND | STORM WTR | | 12/12/2012 16:58 | 12/12/2012 16:58 | | L57030-1 |
| WG124647-4 | LD | | CVCOND | GRND WTR | | 12/12/2012 17:29 | 12/12/2012 17:29 | | L56942-6 |
| WG124647-5 | LD | | CVCOND | FRESH WTR | | 12/12/2012 19:27 | 12/12/2012 19:27 | | L57066-6 |
| WG124647-6 | LCS | | CVCOND | BLANK WTR | | 12/12/2012 19:55 | 12/12/2012 19:55 | | LEVEL1 |
| WG124647-7 | LCS | | CVCOND | BLANK WTR | | 12/12/2012 19:56 | 12/12/2012 19:56 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124604 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 12/9/2012 13:01 | 12/12/2012 9:50 | 12/12/2012 13:43 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57030-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/9/2012 13:01 | 12/12/2012 9:50 | 12/12/2012 13:43 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57030-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/10/2012 13:00 | 12/12/2012 9:50 | 12/12/2012 11:09 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57030-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/10/2012 13:00 | 12/12/2012 9:50 | 12/12/2012 11:09 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-1 | 421235 | MAJOR LAKES (wtr col) | CVNH3-FL | FRESH WTR | 12/10/2012 8:30 | 12/12/2012 9:50 | 12/12/2012 11:15 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-1 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 8:30 | 12/12/2012 9:50 | 12/12/2012 11:15 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-1 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 8:30 | 12/12/2012 9:50 | 12/12/2012 11:15 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-1 | 421235 | | CVSI | FRESH WTR | 12/10/2012 8:30 | 12/12/2012 9:50 | 12/12/2012 11:15 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | |
| L57046-2 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 8:26 | 12/12/2012 9:50 | 12/12/2012 11:17 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-2 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 8:26 | 12/12/2012 9:50 | 12/12/2012 11:17 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-2 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 8:26 | 12/12/2012 9:50 | 12/12/2012 11:17 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-2 | 421235 | | CVSI | FRESH WTR | 12/10/2012 8:26 | 12/12/2012 9:50 | 12/12/2012 11:17 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | |
| L57046-3 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:17 | 12/12/2012 9:50 | 12/12/2012 11:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-3 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:17 | 12/12/2012 9:50 | 12/12/2012 11:20 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-3 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:17 | 12/12/2012 9:50 | 12/12/2012 11:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |

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|---|---|---|---|---|---|---|---|---|
| L57046-3 | 421235 | | CVSI | FRESH WTR | 12/10/2012 9:17 | 12/12/2012 9:50 | 12/12/2012 11:20 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-4 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:14 | 12/12/2012 9:50 | 12/12/2012 11:36 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-4 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:14 | 12/12/2012 9:50 | 12/12/2012 11:36 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-4 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:14 | 12/12/2012 9:50 | 12/12/2012 11:36 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-4 | 421235 | | CVSI | FRESH WTR | 12/10/2012 9:14 | 12/12/2012 9:50 | 12/12/2012 11:36 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-5 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:11 | 12/12/2012 9:50 | 12/12/2012 11:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-5 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:11 | 12/12/2012 9:50 | 12/12/2012 11:22 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-5 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:11 | 12/12/2012 9:50 | 12/12/2012 11:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-6 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:09 | 12/12/2012 9:50 | 12/12/2012 11:38 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-6 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:09 | 12/12/2012 9:50 | 12/12/2012 11:38 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-6 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:09 | 12/12/2012 9:50 | 12/12/2012 11:38 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-8 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 11:40 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-8 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 11:40 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-8 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 11:40 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-8 | 421235 | | CVSI | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 11:40 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-9 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:45 | 12/12/2012 9:50 | 12/12/2012 11:42 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |

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|---|---|---|---|---|---|---|---|---|
| L57046-9 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:45 | 12/12/2012 9:50 | 12/12/2012 11:42 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-9 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:45 | 12/12/2012 9:50 | 12/12/2012 11:42 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-9 | 421235 | | CVSI | FRESH WTR | 12/10/2012 9:45 | 12/12/2012 9:50 | 12/12/2012 11:42 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-10 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:09 | 12/12/2012 9:50 | 12/12/2012 11:45 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-10 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:09 | 12/12/2012 9:50 | 12/12/2012 11:45 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-10 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:09 | 12/12/2012 9:50 | 12/12/2012 11:45 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-10 | 421235 | | CVSI | FRESH WTR | 12/10/2012 11:09 | 12/12/2012 9:50 | 12/12/2012 11:45 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-11 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:47 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-11 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:47 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-11 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:47 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-11 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:47 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-12 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:49 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-12 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:49 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-12 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:49 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-12 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:49 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-13 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:51 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |

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|---|---|---|---|---|---|---|---|---|
| L57046-13 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:51 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-13 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:51 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-14 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:53 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-14 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:53 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-14 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:53 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-15 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:55 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-15 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:55 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-15 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:25 | 12/12/2012 9:50 | 12/12/2012 11:55 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-16 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 12:10 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-16 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 12:10 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-16 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 12:10 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-17 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:23 | 12/12/2012 9:50 | 12/12/2012 12:12 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-17 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:23 | 12/12/2012 9:50 | 12/12/2012 12:12 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-17 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:23 | 12/12/2012 9:50 | 12/12/2012 12:12 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-19 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:14 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |

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|---|---|---|---|---|---|---|---|---|
| L57046-19 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:14 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-19 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:14 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-19 | 421235 | | CVSI | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:14 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-20 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:16 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-20 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:16 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-20 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:16 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-20 | 421235 | | CVSI | FRESH WTR | 12/10/2012 11:54 | 12/12/2012 9:50 | 12/12/2012 12:16 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-21 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:18 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-21 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:18 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-21 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:18 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-22 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-22 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:20 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-22 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-23 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:35 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-23 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:35 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-23 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:53 | 12/12/2012 9:50 | 12/12/2012 12:35 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |

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|---|---|---|---|---|---|---|---|---|
| L57046-25 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:37 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-25 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:37 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-25 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:37 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-26 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:39 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-26 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:39 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-26 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:52 | 12/12/2012 9:50 | 12/12/2012 12:39 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-27 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 11:51 | 12/12/2012 9:50 | 12/12/2012 12:41 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-27 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 11:51 | 12/12/2012 9:50 | 12/12/2012 12:41 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-27 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 11:51 | 12/12/2012 9:50 | 12/12/2012 12:41 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-29 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:43 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-29 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:43 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-29 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:43 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-29 | 421235 | | CVSI | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:43 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-30 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:45 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-30 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:45 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |

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|---|---|---|---|---|---|---|---|---|---|
| L57046-30 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:45 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-30 | 421235 | | CVSI | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:45 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | |
| L57046-31 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:47 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-31 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:47 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-31 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:47 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-32 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:49 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-32 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:49 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-32 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 13:57 | 12/12/2012 9:50 | 12/12/2012 12:49 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-33 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 13:56 | 12/12/2012 9:50 | 12/12/2012 12:51 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-33 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 13:56 | 12/12/2012 9:50 | 12/12/2012 12:51 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-33 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 13:56 | 12/12/2012 9:50 | 12/12/2012 12:51 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-35 | 421235 | | CVNH3-FL | BLANK WTR | 12/10/2012 8:10 | 12/12/2012 9:50 | 12/12/2012 10:55 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | FFB |
| L57046-35 | 421235 | | CVNO23 | BLANK WTR | 12/10/2012 8:10 | 12/12/2012 9:50 | 12/12/2012 10:55 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | FFB |
| L57046-35 | 421235 | | CVORTHOP | BLANK WTR | 12/10/2012 8:10 | 12/12/2012 9:50 | 12/12/2012 10:55 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | FFB |
| L57046-35 | 421235 | | CVSI | BLANK WTR | 12/10/2012 8:10 | 12/12/2012 9:50 | 12/12/2012 10:55 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | FFB |
| L57046-36 | 421235 | | CVNH3-FL | BLANK WTR | 12/10/2012 9:55 | 12/12/2012 9:50 | 12/12/2012 10:57 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | FFB |

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|---|---|---|---|---|---|---|---|---|---|---|
| L57046-36 | 421235 | | CVNO23 | BLANK WTR | 12/10/2012 9:55 | 12/12/2012 9:50 | 12/12/2012 10:57 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | FFB |
| L57046-36 | 421235 | | CVORTHOP | BLANK WTR | 12/10/2012 9:55 | 12/12/2012 9:50 | 12/12/2012 10:57 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | FFB |
| L57046-36 | 421235 | | CVSI | BLANK WTR | 12/10/2012 9:55 | 12/12/2012 9:50 | 12/12/2012 10:57 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | FFB |
| L57046-37 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:07 | 12/12/2012 9:50 | 12/12/2012 12:53 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-37 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:07 | 12/12/2012 9:50 | 12/12/2012 12:53 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-37 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:07 | 12/12/2012 9:50 | 12/12/2012 12:53 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-37 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:07 | 12/12/2012 9:50 | 12/12/2012 12:53 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | |
| L57046-38 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:04 | 12/12/2012 9:50 | 12/12/2012 13:04 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-38 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:04 | 12/12/2012 9:50 | 12/12/2012 13:04 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-38 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:04 | 12/12/2012 9:50 | 12/12/2012 13:04 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-38 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:04 | 12/12/2012 9:50 | 12/12/2012 13:04 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | |
| L57046-39 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:01 | 12/12/2012 9:50 | 12/12/2012 13:06 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-39 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:01 | 12/12/2012 9:50 | 12/12/2012 13:06 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |
| L57046-39 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:01 | 12/12/2012 9:50 | 12/12/2012 13:06 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | |
| L57046-40 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:57 | 12/12/2012 9:50 | 12/12/2012 13:08 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57046-40 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:57 | 12/12/2012 9:50 | 12/12/2012 13:08 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | |

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|---|---|---|---|---|---|---|---|---|
| L57046-40 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:57 | 12/12/2012 9:50 | 12/12/2012 13:08 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-41 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:52 | 12/12/2012 9:50 | 12/12/2012 13:10 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-41 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:52 | 12/12/2012 9:50 | 12/12/2012 13:10 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-41 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:52 | 12/12/2012 9:50 | 12/12/2012 13:10 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-42 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 13:16 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-42 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 13:16 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-42 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 9:48 | 12/12/2012 9:50 | 12/12/2012 13:16 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-44 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:42 | 12/12/2012 9:50 | 12/12/2012 13:18 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-44 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:42 | 12/12/2012 9:50 | 12/12/2012 13:18 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-44 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:42 | 12/12/2012 9:50 | 12/12/2012 13:18 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-44 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:42 | 12/12/2012 9:50 | 12/12/2012 13:18 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-45 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:39 | 12/12/2012 9:50 | 12/12/2012 13:33 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |
| L57046-45 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:39 | 12/12/2012 9:50 | 12/12/2012 13:33 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 |
| L57046-45 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:39 | 12/12/2012 9:50 | 12/12/2012 13:33 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 |
| L57046-45 | 421235 | | CVSI | FRESH WTR | 12/10/2012 10:39 | 12/12/2012 9:50 | 12/12/2012 13:33 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 |
| L57046-46 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:36 | 12/12/2012 9:50 | 12/12/2012 13:35 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 |

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|---|---|---|---|---|---|---|---|---|---|---|
| L57046-46 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:36 | 12/12/2012 9:50 | 12/12/2012 13:35 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | | |
| L57046-46 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:36 | 12/12/2012 9:50 | 12/12/2012 13:35 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | | |
| L57046-47 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:33 | 12/12/2012 9:50 | 12/12/2012 13:37 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | | |
| L57046-47 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:33 | 12/12/2012 9:50 | 12/12/2012 13:37 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | | |
| L57046-47 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:33 | 12/12/2012 9:50 | 12/12/2012 13:37 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | | |
| L57046-48 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:28 | 12/12/2012 9:50 | 12/12/2012 13:39 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | | |
| L57046-48 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:28 | 12/12/2012 9:50 | 12/12/2012 13:39 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | | |
| L57046-48 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:28 | 12/12/2012 9:50 | 12/12/2012 13:39 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | | |
| L57046-49 | 421235 | | CVNH3-FL | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 13:41 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | | |
| L57046-49 | 421235 | | CVNO23 | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 13:41 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | | |
| L57046-49 | 421235 | | CVORTHOP | FRESH WTR | 12/10/2012 10:24 | 12/12/2012 9:50 | 12/12/2012 13:41 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | | |
| L57046-51 | 421235 | | CVNH3-FL | BLANK WTR | 12/10/2012 9:43 | 12/12/2012 9:50 | 12/12/2012 11:07 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | FFB | |
| L57046-51 | 421235 | | CVNO23 | BLANK WTR | 12/10/2012 9:43 | 12/12/2012 9:50 | 12/12/2012 11:07 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | FFB | |
| L57046-51 | 421235 | | CVORTHOP | BLANK WTR | 12/10/2012 9:43 | 12/12/2012 9:50 | 12/12/2012 11:07 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | FFB | |
| L57046-51 | 421235 | | CVSI | BLANK WTR | 12/10/2012 9:43 | 12/12/2012 9:50 | 12/12/2012 11:07 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | FFB | |

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|---|---|---|---|---|---|---|---|
| WG124604-1 | MB | CVNH3-FL | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:46 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-1 | MB | CVNO23 | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:46 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | CONNUTS3 |
| WG124604-1 | MB | CVORTHOP | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:46 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | CONNUTS3 |
| WG124604-1 | MB | CVSI | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:46 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-2 | SB | CVNH3-FL | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:48 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | WG124604-1 |
| WG124604-2 | SB | CVNO23 | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:48 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | WG124604-1 |
| WG124604-2 | SB | CVORTHOP | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:48 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | WG124604-1 |
| WG124604-2 | SB | CVSI | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 10:48 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | WG124604-1 |
| WG124604-3 | LCS | CVNH3-FL | BLANK WTR | 12/12/2012 10:50 | 12/12/2012 10:50 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | LEVEL1 |
| WG124604-3 | LCS | CVNO23 | BLANK WTR | 12/12/2012 10:50 | 12/12/2012 10:50 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | LEVEL1 |
| WG124604-3 | LCS | CVORTHOP | BLANK WTR | 12/12/2012 10:50 | 12/12/2012 10:50 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | LEVEL1 |
| WG124604-3 | LCS | CVSI | BLANK WTR | 12/12/2012 10:50 | 12/12/2012 10:50 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | LEVEL1 |
| WG124604-4 | LD | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:24 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-5 |
| WG124604-4 | LD | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:24 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-5 |
| WG124604-4 | LD | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:24 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-5 |
| WG124604-5 | MS | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:26 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-5 |

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|---|---|---|---|---|---|---|---|
| WG124604-5 | MS | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:26 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-5 |
| WG124604-5 | MS | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 11:26 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-5 |
| WG124604-6 | MB | CVNH3-FL | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 12:05 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-6 | MB | CVNO23 | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 12:05 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | CONNUTS3 |
| WG124604-6 | MB | CVORTHOP | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 12:05 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | CONNUTS3 |
| WG124604-6 | MB | CVSI | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 12:05 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-7 | LCS | CVNH3-FL | BLANK WTR | 12/12/2012 12:07 | 12/12/2012 12:07 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | LEVEL1 |
| WG124604-7 | LCS | CVNO23 | BLANK WTR | 12/12/2012 12:07 | 12/12/2012 12:07 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | LEVEL1 |
| WG124604-7 | LCS | CVORTHOP | BLANK WTR | 12/12/2012 12:07 | 12/12/2012 12:07 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | LEVEL1 |
| WG124604-7 | LCS | CVSI | BLANK WTR | 12/12/2012 12:07 | 12/12/2012 12:07 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | LEVEL1 |
| WG124604-8 | LD | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-22 |
| WG124604-8 | LD | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:22 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-22 |
| WG124604-8 | LD | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-22 |
| WG124604-9 | MS | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:24 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-22 |
| WG124604-9 | MS | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:24 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-22 |
| WG124604-9 | MS | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 12:24 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-22 |

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|---|---|---|---|---|---|---|---|
| WG124604-10 | MB | CVNH3-FL | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 13:12 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-10 | MB | CVNO23 | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 13:12 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | CONNUTS3 |
| WG124604-10 | MB | CVORTHOP | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 13:12 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | CONNUTS3 |
| WG124604-10 | MB | CVSI | BLANK WTR | 12/12/2012 9:50 | 12/12/2012 13:12 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | CONNUTS3 |
| WG124604-11 | LCS | CVNH3-FL | BLANK WTR | 12/12/2012 13:14 | 12/12/2012 13:14 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | LEVEL1 |
| WG124604-11 | LCS | CVNO23 | BLANK WTR | 12/12/2012 13:14 | 12/12/2012 13:14 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | LEVEL1 |
| WG124604-11 | LCS | CVORTHOP | BLANK WTR | 12/12/2012 13:14 | 12/12/2012 13:14 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | LEVEL1 |
| WG124604-11 | LCS | CVSI | BLANK WTR | 12/12/2012 13:14 | 12/12/2012 13:14 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | LEVEL1 |
| WG124604-12 | LD | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-44 |
| WG124604-12 | LD | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:20 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-44 |
| WG124604-12 | LD | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:20 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-44 |
| WG124604-12 | LD | CVSI | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:20 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | L57046-44 |
| WG124604-13 | MS | CVNH3-FL | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | L57046-44 |
| WG124604-13 | MS | CVNO23 | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:22 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57046-44 |
| WG124604-13 | MS | CVORTHOP | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:22 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57046-44 |
| WG124604-13 | MS | CVSI | FRESH WTR | 12/12/2012 9:50 | 12/12/2012 13:22 | WG124604-1,-2,-3,-6,-7,-10,-11,-12,-13 | L57046-44 |

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|---|---|---|---|---|---|---|---|---|
| WG124604-14 | LD | | CVNO23 | STORM WTR | 12/12/2012 9:50 | 12/12/2012 13:45 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57030-1 |
| WG124604-14 | LD | | CVORTHOP | STORM WTR | 12/12/2012 9:50 | 12/12/2012 13:45 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57030-1 |
| WG124604-15 | MS | | CVNO23 | STORM WTR | 12/12/2012 9:50 | 12/12/2012 13:47 | WG124604-1,-2,-3,-4,-5,-8,-9,-10,-11,-12,-13,-14,-15,-6,-7 | L57030-1 |
| WG124604-15 | MS | | CVORTHOP | STORM WTR | 12/12/2012 9:50 | 12/12/2012 13:47 | WG124604-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15 | L57030-1 |

**WG124752 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 11/23/2012 6:35 | 12/20/2012 10:50 | 12/24/2012 11:52 | WG124752-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56807-2 | 421879-210 | | CVTKN | STORM WTR | 11/23/2012 9:50 | 12/20/2012 10:50 | 12/24/2012 12:01 | | |
| L56976-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 12/3/2012 7:46 | 12/20/2012 10:50 | 12/24/2012 11:31 | | |
| L56976-3 | 421430-300 | | CVTKN | EFFLUENT | 12/3/2012 7:19 | 12/20/2012 10:50 | 12/24/2012 11:33 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/9/2012 13:01 | 12/20/2012 10:50 | 12/24/2012 12:03 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTKN | FRESH WTR | 12/10/2012 8:32 | 12/20/2012 10:50 | 12/24/2012 12:21 | | |
| L57066-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 8:07 | 12/20/2012 10:50 | 12/24/2012 12:30 | | |
| L57066-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 7:30 | 12/20/2012 10:50 | 12/24/2012 12:32 | | |
| L57066-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:04 | 12/20/2012 10:50 | 12/24/2012 12:34 | | |
| L57066-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 10:50 | 12/24/2012 12:36 | | |
| L57066-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:31 | 12/20/2012 10:50 | 12/24/2012 12:38 | | |
| L57066-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 8:56 | 12/20/2012 10:50 | 12/24/2012 12:40 | | |
| L57066-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 9:17 | 12/20/2012 10:50 | 12/24/2012 12:53 | | |
| L57098-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 10:50 | 12/24/2012 12:55 | | |
| L57098-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 10:50 | 12/24/2012 12:57 | | |
| L57098-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 12:59 | | |
| L57098-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 13:01 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/11/2012 14:42 | 12/20/2012 10:50 | 12/24/2012 12:05 | | |
| L57129-1 | 421879-210 | | CVTKN | STORM WTR | 12/13/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:07 | | |
| L57138-1 | 421879-210 | | CVTKN | STORM WTR | 12/15/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:09 | | |
| WG124752-1 | MB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:21 | | MB1 12/20/12 |
| WG124752-2 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:23 | | LEVEL1 |
| WG124752-3 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:25 | | LEVEL2 |
| WG124752-4 | SB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:27 | | WG124752-1 |
| WG124752-5 | LD | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:36 | | L56976-3 |
| WG124752-6 | MS | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:38 | | L56976-3 |
| WG124752-7 | LD | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:54 | | L56807-1 |
| WG124752-8 | MS | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:56 | | L56807-1 |
| WG124752-9 | LD | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:23 | | L57066-1 |
| WG124752-10 | MS | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:26 | | L57066-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124574 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56995-29 | 421195-250 | CDC Grant | CVTOTN | FRESH WTR | 12/11/2012 10:05 | 12/13/2012 9:50 | 12/13/2012 12:56 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-29 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 10:05 | 12/13/2012 9:50 | 12/13/2012 12:56 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-33 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 11:45 | 12/13/2012 9:50 | 12/13/2012 13:04 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-33 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 11:45 | 12/13/2012 9:50 | 12/13/2012 13:04 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-38 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 13:45 | 12/13/2012 9:50 | 12/13/2012 13:05 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-38 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 13:45 | 12/13/2012 9:50 | 12/13/2012 13:05 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-43 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 9:15 | 12/13/2012 9:50 | 12/13/2012 13:07 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-43 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 9:15 | 12/13/2012 9:50 | 12/13/2012 13:07 | WG124574-1,-2,-3,-4,- | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 12/9/2012 13:01 | 12/11/2012 9:40 | 12/13/2012 9:22 | 5,-6,-7,-8,-9,-10,-11,- | |

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|---|---|---|---|---|---|---|---|---|
| L57046-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 12/10/2012 8:30 | 12/11/2012 9:40 | 12/13/2012 9:29 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-1 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 8:30 | 12/11/2012 9:40 | 12/13/2012 9:29 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-2 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 8:26 | 12/11/2012 9:40 | 12/13/2012 9:31 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-2 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 8:26 | 12/11/2012 9:40 | 12/13/2012 9:31 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-3 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:17 | 12/11/2012 9:40 | 12/13/2012 9:46 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-3 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:17 | 12/11/2012 9:40 | 12/13/2012 9:46 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-4 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:14 | 12/11/2012 9:40 | 12/13/2012 9:47 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-4 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:14 | 12/11/2012 9:40 | 12/13/2012 9:47 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-5 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:11 | 12/11/2012 9:40 | 12/13/2012 9:49 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-5 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:11 | 12/11/2012 9:40 | 12/13/2012 9:49 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-6 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:09 | 12/11/2012 9:40 | 12/13/2012 9:51 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-6 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:09 | 12/11/2012 9:40 | 12/13/2012 9:51 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-8 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 9:53 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-8 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 9:53 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-9 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:45 | 12/11/2012 9:40 | 12/13/2012 9:55 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-9 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:45 | 12/11/2012 9:40 | 12/13/2012 9:55 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-10 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:09 | 12/11/2012 9:40 | 12/13/2012 9:57 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-10 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:09 | 12/11/2012 9:40 | 12/13/2012 9:57 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-11 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 9:58 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-11 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 9:58 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-12 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:08 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-12 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:08 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-13 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:09 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-13 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:09 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-14 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:11 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-14 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:11 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-15 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:13 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-15 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:13 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-16 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 10:15 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-16 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 10:15 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-17 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:23 | 12/11/2012 9:40 | 12/13/2012 10:17 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-17 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:23 | 12/11/2012 9:40 | 12/13/2012 10:17 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-19 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:19 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-19 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:19 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-20 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:20 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-20 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:20 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-21 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:22 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-21 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:22 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-22 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:37 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-22 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:37 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-23 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:44 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-23 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:44 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-25 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:46 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-25 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:46 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-26 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:48 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-26 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:48 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-27 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:51 | 12/11/2012 9:40 | 12/13/2012 10:50 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-27 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:51 | 12/11/2012 9:40 | 12/13/2012 10:50 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-29 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 10:59 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-29 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 10:59 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-30 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:01 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-30 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:01 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-31 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:03 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-31 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:03 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-32 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:04 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-32 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:04 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-33 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:56 | 12/11/2012 9:40 | 12/13/2012 11:06 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-33 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:56 | 12/11/2012 9:40 | 12/13/2012 11:06 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-37 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:07 | 12/11/2012 9:40 | 12/13/2012 11:08 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-37 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:07 | 12/11/2012 9:40 | 12/13/2012 11:08 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-38 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:04 | 12/11/2012 9:40 | 12/13/2012 11:10 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-38 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:04 | 12/11/2012 9:40 | 12/13/2012 11:10 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-39 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:01 | 12/11/2012 9:40 | 12/13/2012 11:12 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-39 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:01 | 12/11/2012 9:40 | 12/13/2012 11:12 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-40 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:57 | 12/11/2012 9:40 | 12/13/2012 11:14 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-40 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:57 | 12/11/2012 9:40 | 12/13/2012 11:14 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-41 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:52 | 12/11/2012 9:40 | 12/13/2012 11:15 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-41 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:52 | 12/11/2012 9:40 | 12/13/2012 11:15 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-42 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 11:25 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-42 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 11:25 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-44 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:42 | 12/11/2012 9:40 | 12/13/2012 11:26 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-44 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:42 | 12/11/2012 9:40 | 12/13/2012 11:26 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-45 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:39 | 12/11/2012 9:40 | 12/13/2012 11:28 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-45 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:39 | 12/11/2012 9:40 | 12/13/2012 11:28 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-46 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:36 | 12/11/2012 9:40 | 12/13/2012 11:30 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-46 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:36 | 12/11/2012 9:40 | 12/13/2012 11:30 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-47 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:33 | 12/11/2012 9:40 | 12/13/2012 11:32 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-47 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:33 | 12/11/2012 9:40 | 12/13/2012 11:32 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-48 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:28 | 12/11/2012 9:40 | 12/13/2012 11:39 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-48 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:28 | 12/11/2012 9:40 | 12/13/2012 11:39 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-49 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 11:54 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L57046-49 | 421235 | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 11:54 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57066-1 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 8:32 | 12/11/2012 9:40 | 12/13/2012 11:56 | | |
| L57066-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 8:07 | 12/11/2012 9:40 | 12/13/2012 12:03 | | |
| L57066-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 7:30 | 12/11/2012 9:40 | 12/13/2012 12:05 | | |
| L57066-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 9:04 | 12/11/2012 9:40 | 12/13/2012 12:07 | | |
| L57066-6 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 9:31 | 12/11/2012 9:40 | 12/13/2012 12:16 | | |
| L57066-7 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/11/2012 8:56 | 12/13/2012 9:50 | 12/13/2012 13:16 | | |
| L57066-8 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/11/2012 9:17 | 12/13/2012 9:50 | 12/13/2012 13:18 | | |
| L57112-2 | 421879-210 | | CVTOTP | STORM WTR | 12/11/2012 14:42 | 12/13/2012 9:50 | 12/13/2012 13:20 | | |
| WG124574-1 | MB | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:16 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB1 121211 |
| WG124574-1 | MB | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:16 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121211 |
| WG124574-2 | SB | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:18 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-1 |
| WG124574-2 | SB | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:18 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-1 |
| WG124574-3 | LCS | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:20 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-3 | LCS | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:20 | WG124574-1,-2,-3,-4,- | LEVEL1 |
| WG124574-4 | LD | | CVTOTP | STORM WTR | | 12/11/2012 9:40 | 12/13/2012 9:24 | 5,-6,-7,-8,-9,-10,-11,- | L57030-1 |
| WG124574-5 | MS | | CVTOTP | STORM WTR | | 12/11/2012 9:40 | 12/13/2012 9:25 | 12,-13,-14,-15,-16,- | L57030-1 |

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| WG124574-6 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:33 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-2 |
| WG124574-6 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:33 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-2 |
| WG124574-7 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:42 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-2 |
| WG124574-7 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:42 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-2 |
| WG124574-8 | MB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:24 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB2 121211 |
| WG124574-8 | MB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:24 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121211 |
| WG124574-9 | SB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:33 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-8 |
| WG124574-9 | SB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:33 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-8 |

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|---|---|---|---|---|---|---|---|
| WG124574-10 | LCS | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:35 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-10 | LCS | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:35 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-11 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:39 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-22 |
| WG124574-11 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:39 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-22 |
| WG124574-12 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:41 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-22 |
| WG124574-12 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:41 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-22 |
| WG124574-13 | MB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:34 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB3 121211 |
| WG124574-13 | MB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:34 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB3 121211 |

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|---|---|---|---|---|---|---|---|
| WG124574-14 | SB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:36 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-13 |
| WG124574-14 | SB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:36 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-13 |
| WG124574-15 | LCS | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:37 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-15 | LCS | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:37 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-16 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:41 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-48 |
| WG124574-16 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:41 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-48 |
| WG124574-17 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:50 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-48 |
| WG124574-17 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:50 | WG124574-1,-2,-3,-4,- | L57046-48 |
| WG124574-18 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:58 | 5,-6,-7,-8,-9,-10,-11,- | L57066-1 |
| WG124574-19 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:59 | 12,-13,-14,-15,-16,- | L57066-1 |
| WG124574-20 | MB | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:51 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB1 121213 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124574-20 | MB | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:51 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121213 |
| WG124574-21 | SB | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:53 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-20 |
| WG124574-21 | SB | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:53 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-20 |
| WG124574-22 | LCS | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:54 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-22 | LCS | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:54 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-23 | LD | CVTOTN | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 12:58 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L56995-29 |
| WG124574-23 | LD | CVTOTP | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 12:58 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56995-29 |
| WG124574-24 | MS | CVTOTN | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 13:00 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L56995-29 |
| WG124574-24 | MS | CVTOTP | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 13:00 | WG124574-1,-2,-3,-4,- | L56995-29 |
| WG124574-25 | LD | CVTOTP | STORM WTR | 12/13/2012 9:50 | 12/13/2012 13:22 | 5,-6,-7,-8,-9,-10,-11,- | L57112-2 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WG124574-26 | MS | | CVTOTP | STORM WTR | | 12/13/2012 9:50 | 12/13/2012 13:24 | 12,-13,-14,-15,-16,- | L57112-2 |

**WG124683 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56942-6 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 12/11/2012 7:20 | 12/17/2012 14:20 | 12/18/2012 11:20 | WG124683-1,-2,-3,-4,-5 | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 12/9/2012 13:01 | 12/17/2012 14:20 | 12/18/2012 14:03 | | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVTSS | GRND WTR | 12/14/2012 6:40 | 12/17/2012 14:20 | 12/18/2012 11:22 | | |
| L57054-5 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 12/13/2012 7:20 | 12/17/2012 14:20 | 12/18/2012 11:24 | | |
| L57054-6 | 421422-DUGW | | CVTSS | GRND WTR | 12/13/2012 8:09 | 12/17/2012 14:20 | 12/18/2012 11:24 | | |
| L57065-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 12/10/2012 6:50 | 12/17/2012 14:20 | 12/18/2012 11:25 | | |
| L57065-3 | 421422-CFGW | | CVTSS | GRND WTR | 12/10/2012 7:42 | 12/17/2012 14:20 | 12/18/2012 11:27 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTSS | FRESH WTR | 12/10/2012 8:32 | 12/17/2012 14:20 | 12/18/2012 11:28 | | |
| L57066-2 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/10/2012 8:07 | 12/17/2012 14:20 | 12/18/2012 11:29 | | |
| L57066-3 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/10/2012 7:30 | 12/17/2012 14:20 | 12/18/2012 11:30 | | |
| L57066-4 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/10/2012 9:04 | 12/17/2012 14:20 | 12/18/2012 11:31 | | |
| L57066-5 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 6:40 | 12/17/2012 14:20 | 12/18/2012 11:31 | | |
| L57066-6 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/10/2012 9:31 | 12/17/2012 14:20 | 12/18/2012 11:32 | | |
| L57066-7 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/11/2012 8:56 | 12/17/2012 14:20 | 12/18/2012 11:32 | | |
| L57066-8 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/11/2012 9:17 | 12/17/2012 14:20 | 12/18/2012 11:33 | | |
| L57068-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTSS | FRESH WTR | 12/11/2012 7:51 | 12/17/2012 14:20 | 12/18/2012 11:36 | | |
| L57068-2 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 12/11/2012 7:27 | 12/17/2012 14:20 | 12/18/2012 11:36 | | |
| L57068-3 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 12/11/2012 8:12 | 12/17/2012 14:20 | 12/18/2012 11:37 | | |
| L57068-4 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 12/11/2012 8:21 | 12/17/2012 14:20 | 12/18/2012 11:37 | | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVTSS | GRND WTR | 12/17/2012 7:05 | 12/17/2012 14:20 | 12/18/2012 11:38 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVTSS | FRESH WTR | 12/13/2012 8:36 | 12/17/2012 14:20 | 12/18/2012 11:46 | | |
| WG124683-1 | MB | | CVTSS | BLANK WTR | | 12/17/2012 14:20 | 12/18/2012 11:07 | | MB1 121217 |
| WG124683-2 | LCS | | CVTSS | BLANK WTR | | 12/17/2012 14:20 | 12/18/2012 11:19 | | LEVEL1 |
| WG124683-3 | LD | | CVTSS | GRND WTR | | 12/17/2012 14:20 | 12/18/2012 11:20 | | L56942-6 |
| WG124683-4 | LD | | CVTSS | FRESH WTR | | 12/17/2012 14:20 | 12/18/2012 11:29 | | L57066-1 |
| WG124683-5 | LD | | CVTSS | STORM WTR | | 12/17/2012 14:20 | 12/18/2012 14:04 | | L57030-1 |

# King County Environmental Laboratory Batch Report

## NPDES SW Permit, SWM, L57030

**WG124567 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 12/9/2012 13:01 | 12/11/2012 14:38 | 12/11/2012 14:38 | WG124567-1,-2,-3,-4 | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTURB | FRESH WTR | 12/10/2012 8:32 | 12/11/2012 14:41 | 12/11/2012 14:41 | | |
| L57066-2 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/10/2012 8:07 | 12/11/2012 14:43 | 12/11/2012 14:43 | | |
| L57066-3 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/10/2012 7:30 | 12/11/2012 14:44 | 12/11/2012 14:44 | | |
| L57066-4 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/10/2012 9:04 | 12/11/2012 14:46 | 12/11/2012 14:46 | | |
| L57066-6 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/10/2012 9:31 | 12/11/2012 14:47 | 12/11/2012 14:47 | | |
| L57066-7 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/11/2012 8:56 | 12/11/2012 14:50 | 12/11/2012 14:50 | | |
| L57066-8 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/11/2012 9:17 | 12/11/2012 14:51 | 12/11/2012 14:51 | | |
| L57068-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTURB | FRESH WTR | 12/11/2012 7:51 | 12/11/2012 14:53 | 12/11/2012 14:53 | | |
| L57068-2 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 12/11/2012 7:27 | 12/11/2012 14:54 | 12/11/2012 14:54 | | |
| L57068-3 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 12/11/2012 8:12 | 12/11/2012 14:56 | 12/11/2012 14:56 | | |
| L57068-4 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 12/11/2012 8:21 | 12/11/2012 14:57 | 12/11/2012 14:57 | | |
| WG124567-1 | LCS | | CVTURB | BLANK WTR | | 12/11/2012 14:37 | 12/11/2012 14:37 | | LEVEL1 |
| WG124567-2 | LCS | | CVTURB | BLANK WTR | | 12/11/2012 14:37 | 12/11/2012 14:37 | | LEVEL2 |
| WG124567-3 | LD | | CVTURB | STORM WTR | | 12/11/2012 14:40 | 12/11/2012 14:40 | | L57030-1 |
| WG124567-4 | LD | | CVTURB | FRESH WTR | | 12/11/2012 14:49 | 12/11/2012 14:49 | | L57066-6 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124540 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 12/10/2012 11:20 | 12/10/2012 14:30 | 12/11/2012 14:05 | WG124488-4,-5,WG124487-2,-3 | |
| WG124487-2 | PC | | MCSWFC-MF | BLANK WTR | | 12/10/2012 14:30 | 12/11/2012 14:05 | | QC-PERFORMED:10-DEC-12 |
| WG124487-3 | NC | | MCSWFC-MF | BLANK WTR | | 12/10/2012 14:30 | 12/11/2012 14:05 | | QC-PERFORMED:10-DEC-12 |
| WG124488-4 | BF | | MCSWTC-MF | BLANK WTR | | 12/10/2012 14:30 | 12/11/2012 14:05 | | QC-PERFORMED:10-DEC-12 |
| WG124488-5 | AF | | MCSWTC-MF | BLANK WTR | | 12/10/2012 14:30 | 12/11/2012 14:05 | | QC-PERFORMED:10-DEC-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124838 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56876-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 12/18/2012 10:00 | 1/3/2013 8:00 | 1/3/2013 15:09 | WG124838-1,-2,-3,-4 | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57030-1 | 421879-210 | | MTICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/3/2013 15:15 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall | MTHARD-ICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57075-2 | 421422-DUSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/3/2013 15:22 | | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls | MTHARD-ICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57079-1 | 421422-CFSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/3/2013 15:28 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar | MTHARD-ICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-1 | 421422-CHSW-M | Hills Surface Water | MTICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/3/2013 15:34 | | |
| L57098-2 | 421422-CHSW-M | Monthly | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/3/2013 15:40 | | |
| L57098-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:46 | | |
| L57098-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:52 | | |
| L57098-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/3/2013 16:11 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57112-2 | 421879-210 | | MTICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/3/2013 16:17 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon | MTHARD-ICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-1 | 421422-VASW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/3/2013 16:23 | | |
| L57113-3 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-3 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/3/2013 16:29 | | |
| L57113-4 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-4 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/3/2013 16:35 | | |
| L57113-5 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-5 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/3/2013 16:42 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57129-1 | 421879-210 | | MTICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:00 | | |
| L57138-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57138-1 | 421879-210 | | MTICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:06 | | |
| WG124838-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | METHOD BLANK |
| WG124838-1 | MB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 14:57 | | METHOD BLANK |
| WG124838-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | WG124838-1 MS-20 |
| WG124838-2 | SB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 15:03 | | WG124838-1 MS-20 |
| WG124838-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | L57113-5 RPD-LIQ |
| WG124838-3 | LD | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:48 | | L57113-5 RPD-LIQ |
| WG124838-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:34 | | L57113-5 MS-20 |
| WG124838-4 | MS | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:54 | | L57113-5 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124593 Total and Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56975-1 | 421184-110 | OCS-City of Enumclaw | MTHG-MID | EFFLUENT | 12/2/2012 7:20 | 12/12/2012 13:00 | 12/13/2012 13:21 | WG124593-1,-2,-3,-4 | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 12/9/2012 13:01 | 12/12/2012 13:00 | 12/13/2012 13:12 | | |
| L57030-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 12/9/2012 13:01 | 12/12/2012 13:00 | 12/13/2012 13:10 | WG124593-1 | |
| L57052-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 12/4/2012 9:42 | 12/12/2012 13:00 | 12/13/2012 12:52 | | |
| L57052-3 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 12/4/2012 10:42 | 12/12/2012 13:00 | 12/13/2012 12:54 | | |
| L57053-1 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 12/6/2012 6:05 | 12/12/2012 13:00 | 12/13/2012 12:56 | | |
| L57053-3 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 12/6/2012 7:00 | 12/12/2012 13:00 | 12/13/2012 12:57 | | |
| L57053-4 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 12/5/2012 10:19 | 12/12/2012 13:00 | 12/13/2012 12:59 | | |
| L57054-1 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 12/5/2012 9:23 | 12/12/2012 13:00 | 12/13/2012 13:05 | | |
| L57065-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 12/10/2012 6:50 | 12/12/2012 13:00 | 12/13/2012 13:06 | | |
| L57065-3 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 12/10/2012 7:42 | 12/12/2012 13:00 | 12/13/2012 13:08 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHG-MID | FRESH WTR | 12/10/2012 8:32 | 12/12/2012 13:00 | 12/13/2012 12:47 | WG124593-1,-2,-3,-4 | |
| L57066-2 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 12/10/2012 8:07 | 12/12/2012 13:00 | 12/13/2012 13:14 | | |
| L57066-3 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 12/10/2012 7:30 | 12/12/2012 13:00 | 12/13/2012 13:15 | | |
| L57066-4 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 12/10/2012 9:04 | 12/12/2012 13:00 | 12/13/2012 13:17 | | |
| L57066-6 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 12/10/2012 9:31 | 12/12/2012 13:00 | 12/13/2012 13:19 | | |
| L57081-3 | 421163 | IW COMPLIANCE MONITORING | MTHG-MID | IW WTR | 12/4/2012 10:25 | 12/12/2012 13:00 | 12/13/2012 13:26 | | |
| L57081-6 | 421163 | | MTHG-MID | IW WTR | 12/4/2012 10:25 | 12/12/2012 13:00 | 12/13/2012 13:28 | | |
| WG124593-1 | MB | | MTHG-MID | BLANK WTR | | 12/12/2012 13:00 | 12/13/2012 12:43 | | METHOD BLANK |
| WG124593-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 12/12/2012 13:00 | 12/13/2012 12:43 | WG124593-1 | METHOD BLANK |
| WG124593-2 | SB | | MTHG-MID | BLANK WTR | | 12/12/2012 13:00 | 12/13/2012 12:45 | WG124593-1,-2,-3,-4 | WG124593-1 HG-LMID |
| WG124593-3 | MS | | MTHG-MID | FRESH WTR | | 12/12/2012 13:00 | 12/13/2012 12:48 | | L57066-1 HG-LMID |
| WG124593-4 | MSD | | MTHG-MID | FRESH WTR | | 12/12/2012 13:00 | 12/13/2012 12:50 | | WG124593-3 L57066-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124655 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 11/23/2012 6:35 | 12/14/2012 12:30 | 12/14/2012 13:37 | WG124655-1,-2,-3,-4 | |
| L56807-2 | 421879-210 | | MTICPMS-DISS | STORM WTR | 11/23/2012 9:50 | 12/14/2012 12:30 | 12/14/2012 13:43 | | |
| L56918-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/6/2012 8:55 | 12/14/2012 12:30 | 12/14/2012 13:49 | | |
| L56918-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/6/2012 8:00 | 12/14/2012 12:30 | 12/14/2012 13:55 | | |
| L56942-6 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/11/2012 7:20 | 12/14/2012 12:30 | 12/14/2012 14:01 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/9/2012 13:01 | 12/14/2012 12:30 | 12/14/2012 14:07 | | |
| L57053-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/6/2012 6:05 | 12/14/2012 12:30 | 12/14/2012 14:13 | | |
| L57053-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/6/2012 7:00 | 12/14/2012 12:30 | 12/14/2012 14:20 | | |
| L57053-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/5/2012 10:19 | 12/14/2012 12:30 | 12/14/2012 14:38 | | |
| L57054-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/5/2012 9:23 | 12/14/2012 12:30 | 12/14/2012 14:44 | | |
| L57065-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/10/2012 6:50 | 12/14/2012 12:30 | 12/14/2012 14:50 | | |
| L57065-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 12/10/2012 7:42 | 12/14/2012 12:30 | 12/14/2012 14:57 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 12/10/2012 8:32 | 12/14/2012 12:30 | 12/14/2012 15:03 | | |
| L57066-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 8:07 | 12/14/2012 12:30 | 12/14/2012 15:09 | | |
| L57066-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 7:30 | 12/14/2012 12:30 | 12/14/2012 15:27 | | |
| L57066-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 9:04 | 12/14/2012 12:30 | 12/14/2012 15:33 | | |
| L57066-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 6:40 | 12/14/2012 12:30 | 12/14/2012 15:52 | | |
| L57066-6 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/10/2012 9:31 | 12/14/2012 12:30 | 12/14/2012 15:58 | | |
| L57066-7 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/11/2012 8:56 | 12/14/2012 12:30 | 12/14/2012 16:04 | | |
| L57066-8 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/11/2012 9:17 | 12/14/2012 12:30 | 12/14/2012 16:10 | | |
| WG124655-1 | MB | | MTICPMS-DISS | BLANK WTR | | 12/14/2012 12:30 | 12/14/2012 13:24 | | METHOD BLANK |
| WG124655-2 | SB | | MTICPMS-DISS | BLANK WTR | | 12/14/2012 12:30 | 12/14/2012 13:30 | | WG124655-1 MS-20 |
| WG124655-3 | LD | | MTICPMS-DISS | FRESH WTR | | 12/14/2012 12:30 | 12/14/2012 15:15 | | L57066-2 RPD-LIQ |
| WG124655-4 | MS | | MTICPMS-DISS | FRESH WTR | | 12/14/2012 12:30 | 12/14/2012 15:21 | | L57066-2 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124642 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 12/9/2012 13:01 | 12/14/2012 9:00 | 12/21/2012 0:34 | WG124642-4,-3,-2,-1 | |
| L57112-2 | 421879-210 | | ORHERB-NPDES | STORM WTR | 12/11/2012 14:42 | 12/14/2012 9:00 | 12/21/2012 0:59 | | |
| WG124642-1 | MB | | ORHERB-NPDES | BLANK WTR | | 12/14/2012 9:00 | 12/20/2012 18:28 | | MB121214 |
| WG124642-2 | SB | | ORHERB-NPDES | BLANK WTR | | 12/14/2012 9:00 | 12/20/2012 18:52 | | WG124642-1 |
| WG124642-3 | MS | | ORHERB-NPDES | STORM WTR | | 12/14/2012 9:00 | 12/20/2012 23:45 | | L57030-1 |
| WG124642-4 | MSD | | ORHERB-NPDES | STORM WTR | | 12/14/2012 9:00 | 12/21/2012 0:10 | | WG124642-3 L57030-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124603 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 12/9/2012 13:01 | 12/13/2012 17:00 | 12/18/2012 14:52 | WG124603-4,-3,-2,-1 | |
| WG124603-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 12/13/2012 17:00 | 12/18/2012 12:13 | | MB121213 |
| WG124603-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 12/13/2012 17:00 | 12/18/2012 12:38 | | WG124603-1 |
| WG124603-3 | MS | | OROPPEST-NPDES | STORM WTR | | 12/13/2012 17:00 | 12/18/2012 13:04 | | L57030-1 |
| WG124603-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 12/13/2012 17:00 | 12/18/2012 13:29 | | WG124603-3 L57030-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124572 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 12/9/2012 13:01 | 12/12/2012 17:00 | 12/21/2012 15:23 | WG124572-4,-1,-2,-3 | |
| L57112-2 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 12/11/2012 14:42 | 12/12/2012 17:00 | 12/21/2012 15:58 | | |
| WG124572-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 12/12/2012 17:00 | 12/21/2012 13:01 | | MB121212 |
| WG124572-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 12/12/2012 17:00 | 12/21/2012 13:36 | | WG124572-1 |
| WG124572-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 12/12/2012 17:00 | 12/21/2012 14:12 | | L57030-1 |
| WG124572-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 12/12/2012 17:00 | 12/21/2012 14:47 | | WG124572-3 L57030-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124560 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/10/2012 11:20 | 12/11/2012 15:00 | 12/19/2012 13:31 | WG124560-1,-2,-3,-4 | |
| L57033-12 | 421196-130 | Roads Groundwater | ORWTPH-DX | GRND WTR | 12/7/2012 11:40 | 12/11/2012 15:00 | 12/19/2012 13:56 | | |
| L57040-2 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/11/2012 10:30 | 12/11/2012 15:00 | 12/19/2012 14:19 | | |
| WG124560-1 | MB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 11:56 | | MB121211 |
| WG124560-2 | SB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 12:19 | | WG124560-1 SB-MO |
| WG124560-3 | SB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 12:44 | | WG124560-1 SB-DSL |
| WG124560-4 | LD | | ORWTPH-DX | STORM WTR | | 12/11/2012 15:00 | 12/19/2012 13:07 | | L57040-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57030

**WG124578 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 12/10/2012 11:20 | 12/12/2012 12:52 | 12/12/2012 12:52 | WG124578-1,-2,-3 | |
| L57040-2 | 421879-210 | | ORWTPH-G | STORM WTR | 12/11/2012 10:30 | 12/12/2012 13:21 | 12/12/2012 13:21 | | |
| L57112-4 | 421879-210 | | ORWTPH-G | STORM WTR | 12/12/2012 11:03 | 12/12/2012 14:49 | 12/12/2012 14:49 | | |
| WG124578-1 | MB | | ORWTPH-G | BLANK WTR | | 12/12/2012 11:53 | 12/12/2012 11:53 | | MB121212 |
| WG124578-2 | LD | | ORWTPH-G | STORM WTR | | 12/12/2012 12:22 | 12/12/2012 12:22 | | L57030-3 |
| WG124578-3 | SB | | ORWTPH-G | BLANK WTR | | 12/12/2012 15:19 | 12/12/2012 15:19 | | WG124578-1 |

**Workgroup: WG124594 BOD**

**MB:WG124594-1 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:WG124594-2 MB:WG124594-1 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 | 201 | 101 | | 80--120 |

**Workgroup: WG124682 Anions**

**CS:WG124682-1 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 | 0.096 | 96 | | 70--130 |

**CS:WG124682-1 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 | 0.15 | 75 | | 70--130 |

**MB:WG124682-2 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:WG124682-2 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:WG124682-3 MB:WG124682-2 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 | 1.93 | 97 | | 80--120 |

**SB:WG124682-3 MB:WG124682-2 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 | 4.83 | 97 | | 80--120 |

**LCS:WG124682-4 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:WG124682-4 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 | 15.6 | 104 | | 85--115 |

**LD:WG124682-5 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 4.52 | 0 | | 0--20 |

**MS:WG124682-6 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 10 | 14.8 | 102 | | 75--125 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 6.4 | 8 | | 0--20 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 16.8 | 1 | | 0--20 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 20 | 26.8 | 105 | | 75--125 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 25 | 42 | 101 | | 75--125 |

**MB:WG124682-9 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:WG124682-9 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: WG124647 Conductivity**

**LCS:WG124647-1 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 | 75 | 102 | | 90--110 |

**LCS:WG124647-2 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 | 705 | 98 | | 90--110 |

**LD:WG124647-3 L57030-1 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 | 37.8 | 37.6 | 1 | | 0--10 |

**LD:WG124647-4 L56942-6 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 157 | 156 | 1 | | 0--10 |

**LD:WG124647-5 L57066-6 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 | 109 | 109 | 0 | | 0--10 |

**LCS:WG124647-6 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 | 74.9 | 101 | | 90--110 |

**LCS:WG124647-7 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 | 703 | 98 | | 90--110 |

**Workgroup: WG124604 Dissolved Nutrients**

**MB:WG124604-1 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:WG124604-1 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:WG124604-1 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 | |

**MB:WG124604-1 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | <MDL | |

**SB:WG124604-2 MB:WG124604-1 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:WG124604-2 MB:WG124604-1 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:WG124604-2 MB:WG124604-1 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 | 0.0402 | 101 | | 80--120 |

**SB:WG124604-2 MB:WG124604-1 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | <MDL | 2 | 1.94 | 97 | | 80--120 |

**LCS:WG124604-3 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:WG124604-3 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 | 0.808 | 101 | | 85--115 |

**LCS:WG124604-3 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 | 0.04 | 100 | | 85--115 |

**LCS:WG124604-3 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | 2 | 2.05 | 102 | | 85--115 |

**LD:WG124604-4 L57046-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | 0.005 | 0.01 | mg/L | 0.017 | 0.017 | 0 | | 0--20 |

**LD:WG124604-4 L57046-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.128 | 0.129 | 1 | | 0--20 |

**LD:WG124604-4 L57046-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0035 | 0.0037 | | | 0--20 |

**MS:WG124604-5 L57046-5 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | 0.005 | 0.01 | mg/L | 0.017 | 0.1 | 0.116 | 99 | | 75--125 |

**MS:WG124604-5 L57046-5 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.128 | 0.8 | 0.9 | 96 | | 75--125 |

**MS:WG124604-5 L57046-5 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0035 | 0.04 | 0.0419 | 96 | | 75--125 |

**MB:WG124604-6 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:WG124604-6 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124604-6 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124604-6 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | <MDL | |

**LCS:WG124604-7 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 | 0.103 | 103 | | 85--115 |

**LCS:WG124604-7 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 | 0.814 | 102 | | 85--115 |

**LCS:WG124604-7 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 |

**LCS:WG124604-7 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | 2 | 2.04 | 102 | | 85--115 |

**LD:WG124604-8 L57046-22 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | 0.005 | 0.01 | mg/L | 0.0118 | 0.0118 | 0 | | 0--20 |

**LD:WG124604-8 L57046-22 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.134 | 0.135 | 0 | | 0--20 |

**LD:WG124604-8 L57046-22 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0038 | 0.0041 | | | 0--20 |

**MS:WG124604-9 L57046-22 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | 0.005 | 0.01 | mg/L | 0.0118 | 0.1 | 0.111 | 99 | | 75--125 |

**MS:WG124604-9 L57046-22 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.134 | 0.8 | 0.908 | 97 | | 75--125 |

**MS:WG124604-9 L57046-22 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0038 | 0.04 | 0.0412 | 93 | | 75--125 |

**MB:WG124604-10 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:WG124604-10 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:WG124604-10 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 | |

**MB:WG124604-10 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | <MDL | |

**LCS:WG124604-11 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 | 0.103 | 103 | | 85--115 |

**LCS:WG124604-11 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 | 0.812 | 102 | | 85--115 |

**LCS:WG124604-11 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 | 0.0396 | 99 | | 85--115 |

**LCS:WG124604-11 Matrix: BLANK WTR Listtype:CVSI Method:WHITLEDGE 1981 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | 2 | 2.03 | 101 | | 85--115 |

**LD:WG124604-12 L57046-44 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD**
**(Lab Duplicate)**

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

**LD:WG124604-12 L57046-44 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.157 | 0.156 | 0 | | 0--20 |

**LD:WG124604-12 L57046-44 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0135 | 0.0136 | 1 | | 0--20 |

**LD:WG124604-12 L57046-44 Matrix: FRESH WTR Listtype:CVSI Method:WHITLEDGE 1981 Project:421235 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | 6.69 | 6.75 | 1 | | 0--20 |

**MS:WG124604-13 L57046-44 Matrix: FRESH WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project:421235 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ammonia Nitrogen | 0.005 | 0.01 | mg/L | <MDL | 0.1 | 0.103 | 103 | | 75--125 |

**MS:WG124604-13 L57046-44 Matrix: FRESH WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421235 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.157 | 0.8 | 0.921 | 96 | | 75--125 |

**MS:WG124604-13 L57046-44 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421235 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.0135 | 0.04 | 0.0515 | 95 | | 75--125 |

**MS:WG124604-13 L57046-44 Matrix: FRESH WTR Listtype:CVSI Method:WHITLEDGE 1981 Project:421235 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Silica | 0.05 | 0.1 | mg/L | 6.69 | 2 | 8.55 | 93 | | 65--120 |

**LD:WG124604-14 L57030-1 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 | 0.144 | 0.145 | 1 | | 0--20 |

**LD:WG124604-14 L57030-1 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 | 0.00893 | 0.0093 | 4 | | 0--20 |

**MS:WG124604-15 L57030-1 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 | 0.144 | 0.8 | 0.914 | 96 | | 75--125 |

**MS:WG124604-15 L57030-1 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 | 0.00893 | 0.04 | 0.0471 | 95 | | 75--125 |

**Workgroup: WG124752 TKN**

**MB:WG124752-1 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 | |

**LCS:WG124752-2 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 | 0.491 | 98 | | 80--120 |

**LCS:WG124752-3 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 | 5 | 5.14 | 103 | | 80--120 |

**SB:WG124752-4 MB:WG124752-1 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 | 5.23 | 105 | | 80--120 |

**LD:WG124752-5 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 7.72 | 5 | | 0--20 |

**MS:WG124752-6 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 5 | 12.8 | 94 | | 70--130 |

**LD:WG124752-7 L56807-1 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 | 0.491 | 0.488 | 1 | | 0--20 |

**MS:WG124752-8 L56807-1 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 | 0.491 | 5 | 5.65 | 103 | | 70--130 |

**LD:WG124752-9 L57066-1 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 | 0.433 | 0.496 | 14 | | 0--20 |

**MS:WG124752-10 L57066-1 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 | 0.433 | 5 | 5.54 | 102 | | 70--130 |

**Workgroup: WG124574 Total Nutrients**

**MB:WG124574-1 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:WG124574-1 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:WG124574-2 MB:WG124574-1 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 | 1.02 | 102 | | 80--120 |

**SB:WG124574-2 MB:WG124574-1 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124574-3 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 | 0.995 | 99 | | 85--115 |

**LCS:WG124574-3 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 | 0.0994 | 99 | | 85--115 |

**LD:WG124574-4 L57030-1 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 | 0.05 | 0.1 | mg/L | 0.17 | 0.162 | 5 | | 0--20 |

**MS:WG124574-5 L57030-1 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 | 0.05 | 0.1 | mg/L | 0.17 | 1 | 1.13 | 96 | | 75--125 |

**LD:WG124574-6 L57046-2 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 | 0.305 | 0.304 | 0 | | 0--20 |

**LD:WG124574-6 L57046-2 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 | 0.0107 | 0.0114 | 7 | | 0--20 |

**MS:WG124574-7 L57046-2 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 | 0.305 | 1 | 1.34 | 104 | | 75--125 |

**MS:WG124574-7 L57046-2 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 | 0.0107 | 0.1 | 0.11 | 99 | | 75--125 |

**MB:WG124574-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124574-8 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:WG124574-9 MB:WG124574-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Spike Blank, Method Blank)**

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

**SB:WG124574-9 MB:WG124574-8 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 | 0.0995 | 100 | | 80--120 |

**LCS:WG124574-10 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 | 0.955 | 95 | | 85--115 |

**LCS:WG124574-10 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 | 0.0964 | 96 | | 85--115 |

**LD:WG124574-11 L57046-22 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 | 0.297 | 0.293 | 1 | | 0--20 |

**LD:WG124574-11 L57046-22 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 | 0.0109 | 0.0095 | 14 | | 0--20 |

**MS:WG124574-12 L57046-22 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 | 0.297 | 1 | 1.29 | 99 | | 75--125 |

**MS:WG124574-12 L57046-22 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 | 0.0109 | 0.1 | 0.11 | 99 | | 75--125 |

**MB:WG124574-13 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:WG124574-13 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:WG124574-14 MB:WG124574-13 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 | 0.995 | 99 | | 80--120 |

**SB:WG124574-14 MB:WG124574-13 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 | 0.0999 | 100 | | 80--120 |

**LCS:WG124574-15 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 | 0.927 | 93 | | 85--115 |

**LCS:WG124574-15 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 | 0.0956 | 96 | | 85--115 |

**LD:WG124574-16 L57046-48 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 | 0.314 | 0.337 | 7 | | 0--20 |

**LD:WG124574-16 L57046-48 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 | 0.0224 | 0.0238 | 6 | | 0--20 |

**MS:WG124574-17 L57046-48 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 | 0.314 | 1 | 1.28 | 97 | | 75--125 |

**MS:WG124574-17 L57046-48 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 | 0.0224 | 0.1 | 0.119 | 97 | | 75--125 |

**LD:WG124574-18 L57066-1 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 | 0.04 | 0.0432 | 8 | | 0--20 |

**MS:WG124574-19 L57066-1 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 | 0.04 | 0.1 | 0.143 | 103 | | 75--125 |

**MB:WG124574-20 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:WG124574-20 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:WG124574-21 MB:WG124574-20 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 | 1.01 | 101 | | 80--120 |

**SB:WG124574-21 MB:WG124574-20 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124574-22 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 | 0.975 | 98 | | 85--115 |

**LCS:WG124574-22 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 | 0.102 | 102 | | 85--115 |

**LD:WG124574-23 L56995-29 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.35 | 1.33 | 2 | | 0--20 |

**LD:WG124574-23 L56995-29 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0653 | 0.0684 | 5 | | 0--20 |

**MS:WG124574-24 L56995-29 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 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 | 1.35 | 1 | 2.31 | 96 | | 75--125 |

**MS:WG124574-24 L56995-29 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 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 | 0.0653 | 0.1 | 0.156 | 91 | | 75--125 |

**LD:WG124574-25 L57112-2 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 | 0.05 | 0.1 | mg/L | 0.144 | 0.171 | 17 | | 0--20 |

**MS:WG124574-26 L57112-2 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 | 0.05 | 0.1 | mg/L | 0.144 | 1 | 1.14 | 100 | | 75--125 |

**Workgroup: WG124683 TSS**

**MB:WG124683-1 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:WG124683-2 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 | 93 | 93 | | 80--120 |

**LD:WG124683-3 L56942-6 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 | 1.6 | 1.8 | | | 0--25 |

**LD:WG124683-4 L57066-1 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 | 1 | 2 | mg/L | 1.6 | 1.6 | | | 0--25 |

**LD:WG124683-5 L57030-1 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 | 1 | 2 | mg/L | 9.8 | 9.2 | 6 | | 0--25 |

**Workgroup: WG124567 Turbidity**

**LCS:WG124567-1 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 | 9.82 | 98 | | 90--110 |

**LCS:WG124567-2 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 | 96.9 | 97 | | 90--110 |

**LD:WG124567-3 L57030-1 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 | 78.6 | 79.7 | 1 | | 0--25 |

**LD:WG124567-4 L57066-6 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 | 0.2 | 0.5 | NTU | 11.6 | 12.4 | 7 | | 0--25 |

**Workgroup: WG124540 Fecal coliform**

**PC:WG124487-2 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:WG124487-3 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:WG124488-4 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:WG124488-5 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: WG124838 Total Metals and Hardness**

**MB:WG124838-1 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:WG124838-1 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:WG124838-2 MB:WG124838-1 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 | 93 | | 85--115 |

**SB:WG124838-2 MB:WG124838-1 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 | 19.2 | 96 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4560 | 91 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4720 | 94 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 21.7 | 109 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4830 | 97 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4580 | 92 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.9 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4860 | 97 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.9 | 100 | | 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 | 19.5 | 98 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 17.9 | 90 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 289 | 0 | | 0--20 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 13500 | 1 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 38400 | 0 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 85.7 | 14 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 2550 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 52400 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.825 | 3 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 0.44 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 1080 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 269 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 0.19 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 2.53 | 2 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 0.67 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 0.9 | | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 1.84 | 0 | | 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 | 5.49 | 5.57 | 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 | 0.27 | 0.27 | | | 0--20 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 33.1 | 320 | | 4xRule | 75--125 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.2 | 96 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 5000 | 18600 | 104 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 5000 | 42500 | | 4xRule | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 20 | 106 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 5000 | 6790 | 85 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 5000 | 58000 | | 4xRule | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 16.9 | 80 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 20 | 17 | 83 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 5000 | 5250 | 83 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 20 | 286 | | 4xRule | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 20 | 17.5 | 86 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 20 | 21.9 | 97 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 20 | 19.7 | 95 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 20 | 20.1 | 96 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 20 | 20.8 | 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 | 18.9 | 94 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.4 | 92 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 17.2 | 86 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 17.8 | 89 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 5.49 | 20 | 23.2 | 88 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.27 | 20 | 19.7 | 97 | | 75--125 |

**Workgroup: WG124593 Total and Dissolved Mercury**

**MB:WG124593-1 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:WG124593-1 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:WG124593-2 MB:WG124593-1 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 | 0.946 | 95 | | 85--115 |

**MSD:WG124593-4 MS:WG124593-3 L57066-1 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 | 1.02 | 102 | | 75--125 | 1 | 0.882 | 88 | | 15 | | 0--20 |

**Workgroup: WG124655 Dissolved Metals**

**MB:WG124655-1 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:WG124655-2 MB:WG124655-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5040 | 101 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4840 | 97 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.1 | 91 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |

**LD:WG124655-3 L57066-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5280 | 5250 | 1 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2050 | 2050 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 10.8 | 10.9 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1010 | 1010 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8890 | 8910 | 0 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.24 | 0.24 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | <MDL | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.55 | 1.57 | 1 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.3 | 0.3 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 0.66 | 0.58 | | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 1.4 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 0.13 | | | 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 | 3.24 | 3.27 | 1 | | 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:WG124655-4 L57066-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5280 | 5000 | 10000 | 95 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2050 | 5000 | 6880 | 97 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 10.8 | 20 | 29.9 | 96 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1010 | 5000 | 5960 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8890 | 5000 | 13600 | 95 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.24 | 20 | 18.6 | 92 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.9 | 99 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5000 | 100 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.55 | 20 | 20.4 | 94 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.9 | 95 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.3 | 20 | 20.9 | 103 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 0.66 | 20 | 21 | 102 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 20 | 22.5 | 105 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 20 | 20.6 | 102 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.1 | 105 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.1 | 101 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 3.24 | 20 | 22.6 | 97 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57030

**Workgroup: WG124642 Herbicides**

**MB:WG124642-1 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 | |

**SB:WG124642-2 MB:WG124642-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.39 | 88 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.31 | 86 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.26 | 85 | | 59--151 |

**MSD:WG124642-4 MS:WG124642-3 L57030-1 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 | 4.85 | 97 | | 20--162 | 4.95 | 4.76 | 96 | | 2 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.46 | 109 | | 10--196 | 4.95 | 5.45 | 110 | | 0 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.87 | 97 | | 30--150 | 4.95 | 4.9 | 99 | | 1 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57030-1 | 91 | 109 |
| L57112-2 | 94 | 109 |
| WG124642-1 | 91 | 104 |
| WG124642-2 | 89 | 103 |
| WG124642-3 | 94 | 107 |
| WG124642-4 | 96 | 116 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57030

**Workgroup: WG124603 Organophosphorus Pesticides**

**MB:WG124603-1 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:WG124603-2 MB:WG124603-1 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 | 0.25 | 0.274 | 110 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.31 | 124 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.293 | 117 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.249 | 99 | * | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.221 | 88 | | 40--160 |

**MSD:WG124603-4 MS:WG124603-3 L57030-1 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 | 0.236 | 0.244 | 103 | | 67--148 | 0.236 | 0.25 | 106 | | 3 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.277 | 118 | | 52--190 | 0.236 | 0.285 | 121 | | 3 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.327 | 139 | | 57--141 | 0.236 | 0.291 | 123 | | 12 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.249 | 106 | | 40--160 | 0.236 | 0.258 | 109 | | 3 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.329 | 140 | | 40--160 | 0.236 | 0.33 | 140 | | 0 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57030-1 | 114 |
| WG124603-1 | 125 |
| WG124603-2 | 125 |
| WG124603-3 | 113 |
| WG124603-4 | 113 |

**Workgroup: WG124572 Semi Voaltile Organics**

**MB:WG124572-1 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 | <MDL | |
| 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 | 0.181 | 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:WG124572-2 MB:WG124572-1 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 | 2.15 | 86 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.87 | 75 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.18 | 87 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.19 | 88 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.13 | 85 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.2 | 88 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.51 | 60 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.94 | 78 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.91 | 76 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.01 | 80 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2 | 80 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.85 | 114 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.18 | 127 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.47 | 99 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.6 | 104 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.181 | 2.5 | 2.86 | 107 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.71 | 103 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.5 | 100 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.43 | 97 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.57 | 103 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.16 | 86 | | 32--130 |

**MSD:WG124572-4 MS:WG124572-3 L57030-1 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 | 0.0655 | 2.36 | 2.12 | 87 | | 37--95 | 2.36 | 1.84 | 75 | | 14 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | 0.0299 | 2.36 | 2.08 | 87 | | 40--121 | 2.36 | 1.92 | 80 | | 8 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.17 | 92 | | 34--134 | 2.36 | 1.91 | 81 | | 13 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.21 | 94 | | 46--122 | 2.36 | 1.96 | 83 | | 12 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.18 | 92 | | 47--105 | 2.36 | 1.94 | 82 | | 12 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.136 | 2.36 | 2.37 | 95 | | 33--140 | 2.36 | 1.99 | 79 | | 17 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | 0.0095 | 2.36 | 2.27 | 96 | | 44--137 | 2.36 | 2.01 | 85 | | 12 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.28 | 97 | | 44--145 | 2.36 | 2.18 | 93 | | 5 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0631 | 2.36 | 2.47 | 102 | | 62--116 | 2.36 | 2.21 | 91 | | 11 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.97 | 83 | | 32--140 | 2.36 | 1.75 | 74 | | 11 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.0626 | 2.36 | 1.95 | 80 | | 44--134 | 2.36 | 1.7 | 69 | | 14 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0572 | 2.36 | 1.98 | 81 | | 49--123 | 2.36 | 1.73 | 71 | | 13 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.144 | 2.36 | 2.83 | 114 | | 37--147 | 2.36 | 2.58 | 103 | | 9 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.188 | 2.36 | 3.21 | 128 | | 39--151 | 2.36 | 2.82 | 112 | | 13 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.47 | 105 | | 50--120 | 2.36 | 2.19 | 93 | | 12 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.088 | 2.36 | 2.63 | 108 | | 42--115 | 2.36 | 2.29 | 94 | | 13 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 2.04 | 2.36 | 4.84 | 119 | | 11--188 | 2.36 | 4.38 | 99 | | 10 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.337 | 2.36 | 2.72 | 101 | | 48--150 | 2.36 | 2.4 | 87 | | 13 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 8.19 | 116 | | 42--123 | 7.08 | 7.38 | 104 | | 11 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.51 | 106 | | 45--121 | 2.36 | 2.26 | 96 | | 10 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.86 | 79 | | 39--122 | 2.36 | 1.59 | 67 | | 16 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.02 | 86 | | 31--121 | 2.36 | 1.69 | 72 | | 18 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.62 | 69 | | 22--125 | 2.36 | 1.37 | 58 | | 17 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | l5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57030-1 | 86 | 72 | 53 | 79 | 51 | 64 | 61 |
| L57112-2 | 85 | 63 | 48 | 82 | 49 | 58 | 52 |
| WG124572-1 | 66 | 68 | 69 | 88 | 69 | 77 | 77 |
| WG124572-2 | 76 | 76 | 67 | 86 | 68 | 76 | 78 |
| WG124572-3 | 95 | 80 | 59 | 87 | 56 | 70 | 66 |
| WG124572-4 | 81 | 70 | 52 | 79 | 51 | 62 | 59 |

**Workgroup: WG124560 WTPH-Dx**

**MB:WG124560-1 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:WG124560-2 MB:WG124560-1 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 | 0.878 | 88 | | 50--150 |

**SB:WG124560-3 MB:WG124560-1 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 | 0.82 | 82 | | 50--150 |

**LD:WG124560-4 L57040-2 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) | 0.19 | 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-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57030-3 | 77 | 92 |
| L57033-12 | 80 | 93 |
| L57040-2 | 83 | 92 |
| WG124560-1 | 76 | 87 |
| WG124560-2 | 78 | 87 |
| WG124560-3 | 88 | 89 |
| WG124560-4 | 80 | 92 |

**Workgroup: WG124578 WTPH-G**

**MB:WG124578-1 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 | |

**LD:WG124578-2 L57030-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

**SB:WG124578-3 MB:WG124578-1 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 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57030-3 | 94 | 93 |
| L57040-2 | 94 | 93 |
| L57112-4 | 93 | 92 |
| WG124578-1 | 93 | 93 |
| WG124578-2 | 93 | 93 |
| WG124578-3 | 89 | 92 |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *11/23/12, 12/09/12*

**WG #(s):** *WG124655*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L56807-(1-2), L57030-1*

**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)

## 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:** Kevin Cummings | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *12/17/12*

**WG #(s):** *WG124683*

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

**Project #(s):** *421422*

**Matrix:** ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

## I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☐ Nutrients:
☐ Physicals:
☒ Solids: *TSS*
☐ 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 analyst inadvertently ran 21 samples with only one MB and LCS.*

## 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:
☐ Text added:
☐ Other

**Corrective Action Description:** *The problem was noticed at the time of data review. No corrective action was possible at that time. No qualification was applied to any data associated with this batch..*

## 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 LCS and MB that were run were within the control limits. There should be no effect on the sample data.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Lynne Cox* | | |
| **Reviewer:** *Terry Siebens* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *12-18-2012*

**WG #(s):** *124603*

☒ **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 ☐ H ☐ I ☐ 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 | | 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 Dichlobenil recovery is above the 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) The parameter was qualified with an "*" on the QC report.*

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

*2) Although the recovery is high in the SB, the MS and MSD are within estblished limits and all associated samples are "ND". Therefore, the data may be used without bias.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Felix Zboralski | | |
| **Reviewer:** Mike Doubrava | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/13/12*

**WG #(s):** *WG124593*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57030-1*

**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:** David Chin | | |
| **Supervisor:** *Brian Prosch* | | |
| **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

January 23, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring
Samples L57040-2, L57112-2, -4, -5, collected December 11, 12, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on December 11 & 12, 2012. The samples were 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 #15146 was prepared and sent via e-mail on January 14, 2013.

**Sample Collection:**
Sample L57040-1, a composite sample, was not collected for location RSW1UP (LDR). L57112-1, a composite sample, and L57112-3, a grab samples were not collected at location FCSW01 (COMM). All these samples did not meet the appropriate storm criteria.

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

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 Nitrate/Nitrite, Nitrogen result for sample L57112-2 was flagged with an "H" qualifier because it was not preserved (frozen) within the specified time of 48 hours.



1202M

The BOD analysis for sample L57112-2 was started one day passed its holding time. The result has 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.

The results for dissolved metals and mercury, if applicable, 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.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "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: | RSW1UP | FCSW02 | FCSW02 |
| Descrip: | 148TH AVE SE UPSTR | FALL CITY HD RESID | FALL CITY HD RESID |
| Sample: | L57040-2 | L57112-2 | L57112-4 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 12/11/12 10:30 | 12/11/12 14:42 | 12/12/12 11:03 |
| TimeSpan: | | 2.37 | |
| 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 | | | | | | 1.08 | 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 | | | | | | 29.9 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | | | | | | 20.4 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | | | | | | 2.6 | | 0.5 | 1 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | | | | | | 0.155 | | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | | | | | | 0.031 | <RDL,H | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | | | | | | 0.144 | | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | | | | | | 0.00877 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | | | | | 4.46 | H | 2 | 2 | mg/L | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | 16000 | | | | CFU/100ml | | | | | | 300 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | | | | | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | | | | | | 0.056 | <RDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | | | | | | 2020 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | | | | | | 1.8 | <RDL,H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | | | | | | 7.71 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | | | | | | 0.15 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | | | | | | 4.76 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | | | | | | 457 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | | | | | | 2.73 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | | | | | | 17.7 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | | | | | | 6.93 | | 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 | | | | | | 0.0568 | | 0.0094 | 0.0189 | ug/L | | | | | |

# King County Environmental Lab Analytical Report

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Project: | 421879-210 | | | | Project: | 421879-210 | | | | Project: | 421879-210 | | | |
| | Locator: | RSW1UP | | | | Locator: | FCSW02 | | | | Locator: | FCSW02 | | | |
| | Descrip: | 148TH AVE SE UPSTR | | | | Descrip: | FALL CITY HD RESID | | | | Descrip: | FALL CITY HD RESID | | | |
| | Sample: | L57040-2 | | | | Sample: | L57112-2 | | | | Sample: | L57112-4 | | | |
| | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | |
| | ColDate: | 12/11/12 10:30 | | | | ColDate: | 12/11/12 14:42 | | | | ColDate: | 12/12/12 11:03 | | | |
| | TimeSpan: | | | | | TimeSpan: | 2.37 | | | | 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 | | | | | | 0.12 | <RDL | 0.094 | 0.189 | ug/L | | | | | |
| Benzo(g,h,i)perylene | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Benzyl Butyl Phthalate | | | | | | 0.06 | <RDL | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | | | | | | 0.831 | B | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | | | | | | 0.0875 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | | | | | | 0.167 | | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | | | | | | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | | | | | | 0.037 | <RDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | | | | | | 0.0631 | | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | | | | | | 0.0927 | | 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 | | | | | | 0.017 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Pentachlorophenol | | | | | | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Phenanthrene | | | | | | 0.0621 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | | | | | | 0.131 | | 0.0094 | 0.0189 | 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) | | <MDL | 0.19 | 0.19 | mg/L | | | | | | | <MDL | 0.19 | 0.19 | mg/L |
| Lube Oil Range (>C24) | | <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 |

# King County Environmental Lab Analytical Report

Project: 421879-210
Locator: FFBLANK
Descrip: FIELD FILTER BLANK
Sample: L57112-5
Matrix: LN BLANK WTR
ColDate: 12/12/12 12:00
TimeSpan:
TotalSolid:
ClientLoc:
SampDepth:
**WET Weight Basis**

| Parameters | 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 | | | | | |
| **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
Locator: FFBLANK
Descrip: FIELD FILTER BLANK
Sample: L57112-5
Matrix: LN BLANK WTR
ColDate: 12/12/12 12:00
TimeSpan:
TotalSolid:
ClientLoc:
SampDepth:
**WET Weight Basis**

| Parameters | 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 3535A/8151A*8270D SIM** | | | | | |
| 2,4-D | | | | | |
| MCPP | | | | | |
| Triclopyr | | | | | |
| **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 | Fecal Coliform | Total Kjeldahl Nitrogen | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFU/100ml | 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 |
| RSW1UP | 421879-210 | L57040-2 | 16000 | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57112-2 | | 1.08 | 29.9 | 20.4 | 2.6 | 0.155 | 0.031 | 0.144 | 0.00877 | 4.46 | 0.056 | 2020 | 1.8 | 7.71 | 0.15 | 4.76 | 457 | 2.73 | 17.7 |
| FCSW02 | 421879-210 | L57112-4 | 300 | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | Benzo(a)pyrene | Benzo(b,j,k)fluoranthene | Benzyl Butyl Phthalate | Bis(2-Ethylhexyl)Phthalate | Chrysene | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Naphthalene | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/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 |
| RSW1UP | 421879-210 | L57040-2 | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57112-2 | 6.93 | 0.0568 | 0.12 | 0.06 | 0.831 | 0.0875 | 0.037 | 0.0631 | 0.167 | 0.0927 | 0.017 | 0.0621 | 0.131 |
| FCSW02 | 421879-210 | L57112-4 | | | | | | | | | | | | | |
| * 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 | L57112-2 | Cadmium, Dissolved, ICP-MS | ISO111 |
| 421879-210 | L57112-2 | Cadmium, Total, ICP-MS | ISO111 |
| 421879-210 | L57112-2 | Calcium, Total, ICP-MS | ISO43 |
| 421879-210 | L57112-2 | Copper, Dissolved, ICP-MS | ISO63 CCT |
| 421879-210 | L57112-2 | Copper, Total, ICP-MS | ISO63 CCT |
| 421879-210 | L57112-2 | Lead, Dissolved, ICP-MS | ISO206,207,208 |
| 421879-210 | L57112-2 | Lead, Total, ICP-MS | ISO206,207,208 |
| 421879-210 | L57112-2 | Magnesium, Total, ICP-MS | ISO25 |
| 421879-210 | L57112-2 | Zinc, Dissolved, ICP-MS | ISO66 |
| 421879-210 | L57112-2 | Zinc, Total, ICP-MS | ISO66 |

Login: P57040 | NPDES Stormwater Permit Monitoring | Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 12-11-12 11 | *Time* 11:25 |
| *Received by* | *Date* 12-11-12 | *Time* 1125 |
| *Sample Numbers* 57040-2 | | *[All]* |

| Sample Number | P57040-1 | P57040-2 | P57040-3 |
|---|---|---|---|
| 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 | | 12-11-12 @ 10:30 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

Login: P57112 NPDES Stormwater Permit Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 12/12/12 | *Time* 1303 |
| *Received by* | *Date* 12-12-12 | *Time* 1303 |
| *Sample Numbers* 52112 2, 4, 5 | | *[All]* |

| Sample Number | P57112-1 | P57112-2 | P57112-3 |
|---|---|---|---|
| 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 | | 12/11/12 1442 | |
| End Date/Time | | 12/11/12 1704 | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 3 LG BOD JD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>~~7 LG PAHPHTH-SUR~~<br>Temp at lab = 4.8°C | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

Login: P57112 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P57112-4 | P57112-5 | |
|---|---|---|---|
| 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 | 12/12/12 1103 | 12/12/12 1200 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF VD<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Dec 21 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 |
|---|---|---|---|
| P57112-2 | Water | 12-A018823 | CONV |

Your sample was received on Thursday, December 13, 2012. 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 #: 1047106

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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: 12/13/12
Date Reported: 12/21/12

---

**AMTEST Identification Number** **12-A018823**
**Client Identification** **P57112-2**
**Sampling Date** **12/11/12, 17:04**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | < 0.025 | mg/l | | 0.025 | SM 5540C | EB | 12/13/12 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 12-A018823**

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.134 | 107. % |

## 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 # EL-12-42 Batch Number 1279912

Project Name: _____ Date Received: 12/13/12 Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.5 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.

# CHAIN OF CUSTODY RECORD

Project Number: 1047106
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-12-42
Shipment Method: ENA
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***

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57112-2 | 12/11/2012 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 17:04 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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8 of 23

**Additional Comments/Instructions:** Test has 48 hour hold time.

**Total Number of Containers:** 1

***Please return signed original CoC with data package.***

**Requested TAT:** 14 **Days**
**Data Package Due:** 1/4/2013

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 12-13-12 | Signature | | 12/13/12 |
| Printed Name | Jason Kinnard | Time 0900 | Printed Name | Jeffrey Hunt | Time 1025 |
| Organization | King County DNR, Environmental Laboratory | | Organization | Am Test | |

T=6.5°C

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124653 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57072-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVBOD | LEACHATE | 12/12/2012 9:07 | 12/14/2012 18:15 | 12/14/2012 18:15 | WG124653-2,-1 | |
| L57073-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVBOD | LEACHATE | 12/12/2012 5:48 | 12/14/2012 18:16 | 12/14/2012 18:16 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVBOD | FRESH WTR | 12/13/2012 8:36 | 12/14/2012 18:19 | 12/14/2012 18:19 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/11/2012 14:42 | 12/14/2012 18:25 | 12/14/2012 18:25 | | |
| L57122-2 | 421161 | IW SURCHARGE | CVBOD | IW WTR | 12/12/2012 0:15 | 12/14/2012 18:20 | 12/14/2012 18:20 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/13/2012 0:00 | 12/14/2012 18:21 | 12/14/2012 18:21 | | |
| WG124653-1 | MB | | CVBOD | BLANK WTR | | 12/14/2012 18:05 | 12/14/2012 18:05 | | MB1 12/14/12 |
| WG124653-2 | SB | | CVBOD | BLANK WTR | | 12/14/2012 18:14 | 12/14/2012 18:14 | | WG124653-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124682 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/9/2012 13:01 | 12/17/2012 18:16 | 12/17/2012 18:16 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:40 | 12/18/2012 3:24 | 12/18/2012 3:24 | | |
| L57054-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:40 | 12/18/2012 4:55 | 12/18/2012 4:55 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 17:01 | 12/18/2012 17:01 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 18:32 | 12/18/2012 18:32 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:05 | 12/18/2012 0:51 | 12/18/2012 0:51 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | | CVSO4 | GRND WTR | 12/17/2012 7:05 | 12/18/2012 1:22 | 12/18/2012 1:22 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 5:35 | 12/18/2012 15:29 | 12/18/2012 15:29 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 5:35 | 12/18/2012 16:00 | 12/18/2012 16:00 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:22 | 12/18/2012 13:28 | 12/18/2012 13:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 7:22 | 12/19/2012 5:11 | 12/19/2012 5:11 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVCL | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:00 | 12/18/2012 1:52 | 12/18/2012 1:52 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:00 | 12/18/2012 2:23 | 12/18/2012 2:23 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVCL | GRND WTR | 12/14/2012 7:45 | 12/18/2012 8:59 | 12/18/2012 8:59 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 7:45 | 12/18/2012 9:59 | 12/18/2012 9:59 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 19:02 | 12/18/2012 19:02 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 20:34 | 12/18/2012 20:34 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 9:15 | 12/18/2012 21:04 | 12/18/2012 21:04 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 9:15 | 12/18/2012 22:36 | 12/18/2012 22:36 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-3 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 7:25 | 12/18/2012 23:37 | 12/18/2012 23:37 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57104-3 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 7:25 | 12/19/2012 0:37 | 12/19/2012 0:37 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 10:24 | 12/19/2012 1:08 | 12/19/2012 1:08 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 10:24 | 12/19/2012 2:09 | 12/19/2012 2:09 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVCL | GRND WTR | 12/18/2012 9:09 | 12/19/2012 3:40 | 12/19/2012 3:40 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 9:09 | 12/19/2012 4:10 | 12/19/2012 4:10 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/11/2012 14:42 | 12/17/2012 22:19 | 12/17/2012 22:19 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57129-1 | 421879-210 | | CVCL | STORM WTR | 12/13/2012 0:00 | 12/17/2012 22:50 | 12/17/2012 22:50 | | |
| L57138-1 | 421879-210 | | CVCL | STORM WTR | 12/15/2012 0:00 | 12/17/2012 23:50 | 12/17/2012 23:50 | | |
| WG124682-1 | CS | | CVCL | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | | RDL_LEVEL |
| WG124682-1 | CS | | CVSO4 | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | WG124682-1,-2,-3,-4,-7,-8,-9 | RDL_LEVEL |
| WG124682-2 | MB | | CVCL | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/17/12 |
| WG124682-2 | MB | | CVSO4 | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/17/12 |
| WG124682-3 | SB | | CVCL | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124682-2 |
| WG124682-3 | SB | | CVSO4 | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-7,-8,-9 | WG124682-2 |
| WG124682-4 | LCS | | CVCL | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124682-4 | LCS | | CVSO4 | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-7,-8,-9 | LEVEL1 |
| WG124682-5 | LD | | CVCL | STORM WTR | | 12/17/2012 18:46 | 12/17/2012 18:46 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57030-1 |
| WG124682-6 | MS | | CVCL | STORM WTR | | 12/17/2012 19:16 | 12/17/2012 19:16 | | L57030-1 |
| WG124682-7 | LD | | CVCL | GRND WTR | | 12/18/2012 3:54 | 12/18/2012 3:54 | | L57054-3 |
| WG124682-7 | LD | | CVSO4 | GRND WTR | | 12/18/2012 5:25 | 12/18/2012 5:25 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVCL | GRND WTR | | 12/18/2012 4:24 | 12/18/2012 4:24 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVSO4 | GRND WTR | | 12/18/2012 5:56 | 12/18/2012 5:56 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-9 | MB | | CVCL | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/18/12 |
| WG124682-9 | MB | | CVSO4 | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/18/12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124694 Conducticity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L55310-4 | 421195-140 | Lake Sawyer | CVCOND | STORM WTR | 12/17/2012 9:40 | 12/17/2012 19:28 | 12/17/2012 19:28 | WG124694-1,-2,-3,-4,-5,-6,-7,-8 | |
| L55310-7 | 421195-140 | | CVCOND | STORM WTR | 12/17/2012 9:04 | 12/17/2012 20:01 | 12/17/2012 20:01 | | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCOND | GRND WTR | 12/14/2012 6:40 | 12/17/2012 17:24 | 12/17/2012 17:24 | | |
| L57054-5 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 12/13/2012 7:20 | 12/17/2012 17:34 | 12/17/2012 17:34 | | |
| L57054-6 | 421422-DUGW | | CVCOND | GRND WTR | 12/13/2012 8:09 | 12/17/2012 17:45 | 12/17/2012 17:45 | | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCOND | GRND WTR | 12/17/2012 7:05 | 12/17/2012 18:03 | 12/17/2012 18:03 | | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCOND | GRND WTR | 12/14/2012 6:00 | 12/17/2012 18:36 | 12/17/2012 18:36 | | |
| L57080-3 | 421422-HTGW | | CVCOND | GRND WTR | 12/14/2012 7:45 | 12/17/2012 18:46 | 12/17/2012 18:46 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 12/11/2012 14:42 | 12/17/2012 17:20 | 12/17/2012 17:20 | | |
| L57129-1 | 421879-210 | | CVCOND | STORM WTR | 12/13/2012 0:00 | 12/17/2012 17:22 | 12/17/2012 17:22 | | |
| WG124694-1 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 15:21 | 12/17/2012 15:21 | | LEVEL1 |
| WG124694-2 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 15:22 | 12/17/2012 15:22 | | LEVEL2 |
| WG124694-3 | LD | | CVCOND | STORM WTR | | 12/17/2012 17:23 | 12/17/2012 17:23 | | L57129-1 |
| WG124694-4 | LD | | CVCOND | GRND WTR | | 12/17/2012 17:54 | 12/17/2012 17:54 | | L57054-6 |
| WG124694-5 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 18:10 | 12/17/2012 18:10 | | LEVEL1 |
| WG124694-6 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 18:17 | 12/17/2012 18:17 | | LEVEL2 |
| WG124694-7 | LD | | CVCOND | STORM WTR | | 12/17/2012 20:12 | 12/17/2012 20:12 | | L55310-7 |
| WG124694-8 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 22:02 | 12/17/2012 22:02 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124815 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56802-1 | 421250-700 | Marine Phytoplankton Study | CVNH3-FL | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-6,-7 | |
| L56802-1 | 421250-700 | | CVNO23 | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5 | |
| L57112-2 | 421879-210 | | CVORTHOP | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5 | |
| L57112-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-1 | 421879-210 | | CVNO23 | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5 | |
| L57129-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5 | |
| L57129-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-1 | 421879-210 | | CVNO23 | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5 | |
| L57138-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-3 | 421879-210 | | CVNO23 | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5 | |
| L57138-3 | 421879-210 | | CVORTHOP | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| WG124815-1 | MB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5 | CONNNUTS3 |
| WG124815-2 | SB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5 | WG124815-1 |
| WG124815-3 | LCS | | CVNH3-FL | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-6,-7 | LEVEL1 |
| WG124815-3 | LCS | | CVNO23 | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5,-6,-7 | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124815-3 | LCS | CVORTHOP | BLANK WTR | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5 | LEVEL1 |
| WG124815-4 | LD | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-4 | LD | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-5 | MS | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-5 | MS | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-6 | LD | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-6 | LD | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124752 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 11/23/2012 6:35 | 12/20/2012 10:50 | 12/24/2012 11:52 | WG124752-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56807-2 | 421879-210 | | CVTKN | STORM WTR | 11/23/2012 9:50 | 12/20/2012 10:50 | 12/24/2012 12:01 | | |
| L56976-1 | 421430-300 | OCS-Lake Haven Utility | CVTKN | EFFLUENT | 12/3/2012 7:46 | 12/20/2012 10:50 | 12/24/2012 11:31 | | |
| L56976-3 | 421430-300 | District routine testing | CVTKN | EFFLUENT | 12/3/2012 7:19 | 12/20/2012 10:50 | 12/24/2012 11:33 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/9/2012 13:01 | 12/20/2012 10:50 | 12/24/2012 12:03 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar | CVTKN | FRESH WTR | 12/10/2012 8:32 | 12/20/2012 10:50 | 12/24/2012 12:21 | | |
| L57066-2 | 421422-CHSW-M | Hills Surface Water | CVTKN | FRESH WTR | 12/10/2012 8:07 | 12/20/2012 10:50 | 12/24/2012 12:30 | | |
| L57066-3 | 421422-CHSW-M | Monthly | CVTKN | FRESH WTR | 12/10/2012 7:30 | 12/20/2012 10:50 | 12/24/2012 12:32 | | |
| L57066-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:04 | 12/20/2012 10:50 | 12/24/2012 12:34 | | |
| L57066-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 10:50 | 12/24/2012 12:36 | | |
| L57066-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:31 | 12/20/2012 10:50 | 12/24/2012 12:38 | | |
| L57066-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 8:56 | 12/20/2012 10:50 | 12/24/2012 12:40 | | |
| L57066-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 9:17 | 12/20/2012 10:50 | 12/24/2012 12:53 | | |
| L57098-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 10:50 | 12/24/2012 12:55 | | |
| L57098-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 10:50 | 12/24/2012 12:57 | | |
| L57098-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 12:59 | | |
| L57098-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 13:01 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/11/2012 14:42 | 12/20/2012 10:50 | 12/24/2012 12:05 | | |
| L57129-1 | 421879-210 | | CVTKN | STORM WTR | 12/13/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:07 | | |
| L57138-1 | 421879-210 | | CVTKN | STORM WTR | 12/15/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:09 | | |
| WG124752-1 | MB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:21 | | MB1 12/20/12 |
| WG124752-2 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:23 | | LEVEL1 |
| WG124752-3 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:25 | | LEVEL2 |
| WG124752-4 | SB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:27 | | WG124752-1 |
| WG124752-5 | LD | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:36 | | L56976-3 |
| WG124752-6 | MS | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:38 | | L56976-3 |
| WG124752-7 | LD | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:54 | | L56807-1 |
| WG124752-8 | MS | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:56 | | L56807-1 |
| WG124752-9 | LD | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:23 | | L57066-1 |
| WG124752-10 | MS | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:26 | | L57066-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124574 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56995-29 | 421195-250 | CDC Grant | CVTOTN | FRESH WTR | 12/11/2012 10:05 | 12/13/2012 9:50 | 12/13/2012 12:56 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-29 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 10:05 | 12/13/2012 9:50 | 12/13/2012 12:56 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-33 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 11:45 | 12/13/2012 9:50 | 12/13/2012 13:04 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-33 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 11:45 | 12/13/2012 9:50 | 12/13/2012 13:04 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-38 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 13:45 | 12/13/2012 9:50 | 12/13/2012 13:05 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-38 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 13:45 | 12/13/2012 9:50 | 12/13/2012 13:05 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56995-43 | 421195-250 | | CVTOTN | FRESH WTR | 12/11/2012 9:15 | 12/13/2012 9:50 | 12/13/2012 13:07 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L56995-43 | 421195-250 | | CVTOTP | FRESH WTR | 12/11/2012 9:15 | 12/13/2012 9:50 | 12/13/2012 13:07 | WG124574-1,-2,-3,-4,- | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 12/9/2012 13:01 | 12/11/2012 9:40 | 12/13/2012 9:22 | 5,-6,-7,-8,-9,-10,-11,- | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L57046-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 12/10/2012 8:30 | 12/11/2012 9:40 | 12/13/2012 9:29 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-1 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 8:30 | 12/11/2012 9:40 | 12/13/2012 9:29 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-2 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 8:26 | 12/11/2012 9:40 | 12/13/2012 9:31 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-2 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 8:26 | 12/11/2012 9:40 | 12/13/2012 9:31 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-3 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:17 | 12/11/2012 9:40 | 12/13/2012 9:46 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-3 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:17 | 12/11/2012 9:40 | 12/13/2012 9:46 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-4 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:14 | 12/11/2012 9:40 | 12/13/2012 9:47 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-4 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:14 | 12/11/2012 9:40 | 12/13/2012 9:47 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L57046-5 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:11 | 12/11/2012 9:40 | 12/13/2012 9:49 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-5 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:11 | 12/11/2012 9:40 | 12/13/2012 9:49 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-6 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:09 | 12/11/2012 9:40 | 12/13/2012 9:51 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-6 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:09 | 12/11/2012 9:40 | 12/13/2012 9:51 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-8 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 9:53 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-8 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 9:53 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-9 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:45 | 12/11/2012 9:40 | 12/13/2012 9:55 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-9 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:45 | 12/11/2012 9:40 | 12/13/2012 9:55 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-10 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:09 | 12/11/2012 9:40 | 12/13/2012 9:57 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-10 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:09 | 12/11/2012 9:40 | 12/13/2012 9:57 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-11 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 9:58 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-11 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 9:58 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-12 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:08 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-12 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:08 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-13 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:09 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-13 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:09 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-14 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:11 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-14 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:11 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-15 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:13 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-15 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:25 | 12/11/2012 9:40 | 12/13/2012 10:13 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-16 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 10:15 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-16 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 10:15 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-17 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:23 | 12/11/2012 9:40 | 12/13/2012 10:17 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-17 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:23 | 12/11/2012 9:40 | 12/13/2012 10:17 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L57046-19 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:19 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-19 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:19 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-20 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:20 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-20 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:54 | 12/11/2012 9:40 | 12/13/2012 10:20 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-21 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:22 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-21 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:22 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-22 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:37 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-22 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:37 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-23 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:44 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-23 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:53 | 12/11/2012 9:40 | 12/13/2012 10:44 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-25 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:46 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-25 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:46 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-26 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:48 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-26 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:52 | 12/11/2012 9:40 | 12/13/2012 10:48 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-27 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 11:51 | 12/11/2012 9:40 | 12/13/2012 10:50 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-27 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 11:51 | 12/11/2012 9:40 | 12/13/2012 10:50 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-29 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 10:59 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-29 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 10:59 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-30 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:01 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-30 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:01 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-31 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:03 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-31 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:03 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-32 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:04 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-32 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:57 | 12/11/2012 9:40 | 12/13/2012 11:04 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-33 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 13:56 | 12/11/2012 9:40 | 12/13/2012 11:06 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-33 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 13:56 | 12/11/2012 9:40 | 12/13/2012 11:06 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-37 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:07 | 12/11/2012 9:40 | 12/13/2012 11:08 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-37 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:07 | 12/11/2012 9:40 | 12/13/2012 11:08 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-38 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:04 | 12/11/2012 9:40 | 12/13/2012 11:10 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-38 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:04 | 12/11/2012 9:40 | 12/13/2012 11:10 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-39 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:01 | 12/11/2012 9:40 | 12/13/2012 11:12 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-39 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:01 | 12/11/2012 9:40 | 12/13/2012 11:12 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-40 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:57 | 12/11/2012 9:40 | 12/13/2012 11:14 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-40 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:57 | 12/11/2012 9:40 | 12/13/2012 11:14 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-41 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:52 | 12/11/2012 9:40 | 12/13/2012 11:15 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-41 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:52 | 12/11/2012 9:40 | 12/13/2012 11:15 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-42 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 11:25 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-42 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 9:48 | 12/11/2012 9:40 | 12/13/2012 11:25 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-44 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:42 | 12/11/2012 9:40 | 12/13/2012 11:26 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-44 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:42 | 12/11/2012 9:40 | 12/13/2012 11:26 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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| L57046-45 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:39 | 12/11/2012 9:40 | 12/13/2012 11:28 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-45 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:39 | 12/11/2012 9:40 | 12/13/2012 11:28 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-46 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:36 | 12/11/2012 9:40 | 12/13/2012 11:30 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-46 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:36 | 12/11/2012 9:40 | 12/13/2012 11:30 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-47 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:33 | 12/11/2012 9:40 | 12/13/2012 11:32 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-47 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:33 | 12/11/2012 9:40 | 12/13/2012 11:32 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57046-48 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:28 | 12/11/2012 9:40 | 12/13/2012 11:39 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 |
| L57046-48 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:28 | 12/11/2012 9:40 | 12/13/2012 11:39 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|---|
| L57046-49 | 421235 | | CVTOTN | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 11:54 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | |
| L57046-49 | 421235 | | CVTOTP | FRESH WTR | 12/10/2012 10:24 | 12/11/2012 9:40 | 12/13/2012 11:54 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/10/2012 8:32 | 12/11/2012 9:40 | 12/13/2012 11:56 | | |
| L57066-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 8:07 | 12/11/2012 9:40 | 12/13/2012 12:03 | | |
| L57066-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 7:30 | 12/11/2012 9:40 | 12/13/2012 12:05 | | |
| L57066-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 9:04 | 12/11/2012 9:40 | 12/13/2012 12:07 | | |
| L57066-6 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/10/2012 9:31 | 12/11/2012 9:40 | 12/13/2012 12:16 | | |
| L57066-7 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/11/2012 8:56 | 12/13/2012 9:50 | 12/13/2012 13:16 | | |
| L57066-8 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/11/2012 9:17 | 12/13/2012 9:50 | 12/13/2012 13:18 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 12/11/2012 14:42 | 12/13/2012 9:50 | 12/13/2012 13:20 | | |
| WG124574-1 | MB | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:16 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB1 121211 |
| WG124574-1 | MB | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:16 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121211 |
| WG124574-2 | SB | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:18 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-1 |
| WG124574-2 | SB | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:18 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-1 |
| WG124574-3 | LCS | | CVTOTN | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:20 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-3 | LCS | | CVTOTP | BLANK WTR | | 12/11/2012 9:40 | 12/13/2012 9:20 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,- | LEVEL1 |
| WG124574-4 | LD | | CVTOTP | STORM WTR | | 12/11/2012 9:40 | 12/13/2012 9:24 | | L57030-1 |
| WG124574-5 | MS | | CVTOTP | STORM WTR | | 12/11/2012 9:40 | 12/13/2012 9:25 | | L57030-1 |

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|---|---|---|---|---|---|---|---|
| WG124574-6 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:33 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-2 |
| WG124574-6 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:33 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-2 |
| WG124574-7 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:42 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-2 |
| WG124574-7 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 9:42 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-2 |
| WG124574-8 | MB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:24 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB2 121211 |
| WG124574-8 | MB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:24 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121211 |
| WG124574-9 | SB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:33 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-8 |
| WG124574-9 | SB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:33 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-8 |

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|---|---|---|---|---|---|---|---|
| WG124574-10 | LCS | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:35 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-10 | LCS | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 10:35 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-11 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:39 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-22 |
| WG124574-11 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:39 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-22 |
| WG124574-12 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:41 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-22 |
| WG124574-12 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 10:41 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-22 |
| WG124574-13 | MB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:34 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB3 121211 |
| WG124574-13 | MB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:34 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB3 121211 |

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|---|---|---|---|---|---|---|---|
| WG124574-14 | SB | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:36 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-13 |
| WG124574-14 | SB | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:36 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-13 |
| WG124574-15 | LCS | CVTOTN | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:37 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-15 | LCS | CVTOTP | BLANK WTR | 12/11/2012 9:40 | 12/13/2012 11:37 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-16 | LD | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:41 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-48 |
| WG124574-16 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:41 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57046-48 |
| WG124574-17 | MS | CVTOTN | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:50 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L57046-48 |
| WG124574-17 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:50 | WG124574-1,-2,-3,-4,- | L57046-48 |
| WG124574-18 | LD | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:58 | 5,-6,-7,-8,-9,-10,-11,- | L57066-1 |
| WG124574-19 | MS | CVTOTP | FRESH WTR | 12/11/2012 9:40 | 12/13/2012 11:59 | 12,-13,-14,-15,-16,- | L57066-1 |
| WG124574-20 | MB | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:51 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | MB1 121213 |

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|---|---|---|---|---|---|---|---|
| WG124574-20 | MB | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:51 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121213 |
| WG124574-21 | SB | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:53 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | WG124574-20 |
| WG124574-21 | SB | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:53 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124574-20 |
| WG124574-22 | LCS | CVTOTN | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:54 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | LEVEL1 |
| WG124574-22 | LCS | CVTOTP | BLANK WTR | 12/13/2012 9:50 | 12/13/2012 12:54 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124574-23 | LD | CVTOTN | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 12:58 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L56995-29 |
| WG124574-23 | LD | CVTOTP | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 12:58 | WG124574-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56995-29 |
| WG124574-24 | MS | CVTOTN | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 13:00 | WG124574-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-20,-21,-22,-23,-24,-1,-2,-3,-6,-7 | L56995-29 |
| WG124574-24 | MS | CVTOTP | FRESH WTR | 12/13/2012 9:50 | 12/13/2012 13:00 | WG124574-1,-2,-3,-4,- | L56995-29 |
| WG124574-25 | LD | CVTOTP | STORM WTR | 12/13/2012 9:50 | 12/13/2012 13:22 | 5,-6,-7,-8,-9,-10,-11,- | L57112-2 |

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|---|---|---|---|---|---|---|---|
| WG124574-26 | MS | CVTOTP | STORM WTR | 12/13/2012 9:50 | 12/13/2012 13:24 | 12,-13,-14,-15,-16,- | L57112-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124654 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57046-1 | 421235 | MAJOR LAKES (wtr col) | CVTSS | FRESH WTR | 12/10/2012 8:30 | 12/14/2012 16:15 | 12/27/2012 14:02 | WG124654-6,-7,-8,-9,-10,-1,-2,-3,-4,-5 | |
| L57046-2 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 8:26 | 12/14/2012 16:15 | 12/27/2012 14:35 | | |
| L57046-3 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:17 | 12/14/2012 16:15 | 12/27/2012 14:36 | | |
| L57046-4 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:14 | 12/14/2012 16:15 | 12/27/2012 14:37 | | |
| L57046-5 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:11 | 12/14/2012 16:15 | 12/27/2012 14:37 | | |
| L57046-6 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:09 | 12/14/2012 16:15 | 12/27/2012 14:38 | | |
| L57046-8 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:48 | 12/14/2012 16:15 | 12/27/2012 14:39 | | |
| L57046-9 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:45 | 12/14/2012 16:15 | 12/27/2012 14:39 | | |
| L57046-10 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:09 | 12/14/2012 16:15 | 12/27/2012 14:40 | | |
| L57046-11 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:25 | 12/14/2012 16:15 | 12/27/2012 14:41 | | |
| L57046-12 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:25 | 12/14/2012 16:15 | 12/27/2012 14:41 | | |
| L57046-13 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:25 | 12/14/2012 16:15 | 12/27/2012 14:42 | | |
| L57046-14 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:25 | 12/14/2012 16:15 | 12/27/2012 14:43 | | |
| L57046-15 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:25 | 12/14/2012 16:15 | 12/27/2012 14:44 | | |
| L57046-16 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:24 | 12/14/2012 16:15 | 12/27/2012 14:45 | | |
| L57046-17 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:23 | 12/14/2012 16:15 | 12/27/2012 14:45 | | |
| L57046-19 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:54 | 12/14/2012 16:15 | 12/27/2012 14:46 | | |
| L57046-20 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:54 | 12/14/2012 16:15 | 12/27/2012 14:47 | | |
| L57046-21 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:53 | 12/14/2012 16:15 | 12/27/2012 14:51 | | |
| L57046-22 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:53 | 12/14/2012 16:15 | 12/27/2012 14:57 | | |
| L57046-23 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:53 | 12/14/2012 16:15 | 12/27/2012 14:58 | | |
| L57046-25 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:52 | 12/14/2012 16:15 | 12/27/2012 14:59 | | |
| L57046-26 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:52 | 12/14/2012 16:15 | 12/27/2012 14:59 | | |
| L57046-27 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 11:51 | 12/14/2012 16:15 | 12/27/2012 15:00 | | |
| L57046-29 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 13:57 | 12/14/2012 16:15 | 12/27/2012 15:01 | | |
| L57046-30 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 13:57 | 12/14/2012 16:15 | 12/27/2012 15:02 | | |
| L57046-31 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 13:57 | 12/14/2012 16:15 | 12/27/2012 15:03 | | |
| L57046-32 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 13:57 | 12/14/2012 16:15 | 12/27/2012 15:03 | | |
| L57046-33 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 13:56 | 12/14/2012 16:15 | 12/27/2012 15:04 | | |
| L57046-37 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:07 | 12/14/2012 16:15 | 12/27/2012 15:05 | | |
| L57046-38 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:04 | 12/14/2012 16:15 | 12/27/2012 15:06 | | |
| L57046-39 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:01 | 12/14/2012 16:15 | 12/27/2012 15:06 | | |
| L57046-40 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:57 | 12/14/2012 16:15 | 12/27/2012 15:07 | | |
| L57046-41 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:52 | 12/14/2012 16:15 | 12/27/2012 15:09 | | |
| L57046-42 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 9:48 | 12/14/2012 16:15 | 12/27/2012 15:10 | | |
| L57046-44 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:42 | 12/14/2012 16:15 | 12/27/2012 15:11 | | |
| L57046-46 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:36 | 12/14/2012 16:15 | 12/27/2012 15:15 | | |
| L57046-47 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:33 | 12/14/2012 16:15 | 12/27/2012 15:16 | | |
| L57046-48 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:28 | 12/14/2012 16:15 | 12/27/2012 15:17 | | |
| L57046-49 | 421235 | | CVTSS | FRESH WTR | 12/10/2012 10:24 | 12/14/2012 16:15 | 12/27/2012 15:18 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 12/11/2012 14:42 | 12/14/2012 16:15 | 12/27/2012 15:18 | | |
| L57122-2 | 421161 | IW SURCHARGE | CVTSS | IW WTR | 12/12/2012 0:15 | 12/14/2012 16:15 | 12/27/2012 15:20 | | |
| WG124654-1 | MB | | CVTSS | BLANK WTR | | 12/14/2012 16:15 | 12/27/2012 14:00 | | MB1 121214 |

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|---|---|---|---|---|---|---|---|
| WG124654-2 | LCS | CVTSS | BLANK WTR | 12/14/2012 16:15 | 12/27/2012 14:01 | | LEVEL1 |
| WG124654-3 | LD | CVTSS | FRESH WTR | 12/14/2012 16:15 | 12/27/2012 14:05 | | L57046-1 |
| WG124654-4 | MB | CVTSS | BLANK WTR | 12/14/2012 16:15 | 12/27/2012 14:49 | | MB2 121214 |
| WG124654-5 | LCS | CVTSS | BLANK WTR | 12/14/2012 16:15 | 12/27/2012 14:50 | | LEVEL1 |
| WG124654-6 | LD | CVTSS | FRESH WTR | 12/14/2012 16:15 | 12/27/2012 15:10 | | L57046-42 |
| WG124654-7 | MB | CVTSS | BLANK WTR | 12/14/2012 16:15 | 12/27/2012 15:13 | | MB2 121214 |
| WG124654-8 | LCS | CVTSS | BLANK WTR | 12/14/2012 16:15 | 12/27/2012 15:13 | | LEVEL1 |
| WG124654-9 | LD | CVTSS | FRESH WTR | 12/14/2012 16:15 | 12/27/2012 15:15 | | L57046-46 |
| WG124654-10 | LD | CVTSS | IW WTR | 12/14/2012 16:15 | 12/27/2012 15:22 | | L57122-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124645 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57066-5 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTURB | FRESH WTR | 12/13/2012 6:40 | 12/13/2012 14:49 | 12/13/2012 14:49 | WG124645-1,-2,-3 | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVTURB | FRESH WTR | 12/13/2012 8:36 | 12/13/2012 14:51 | 12/13/2012 14:51 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTURB | FRESH WTR | 12/13/2012 4:25 | 12/13/2012 14:53 | 12/13/2012 14:53 | | |
| L57098-2 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/13/2012 5:00 | 12/13/2012 14:54 | 12/13/2012 14:54 | | |
| L57098-3 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/13/2012 5:30 | 12/13/2012 14:55 | 12/13/2012 14:55 | | |
| L57098-4 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/13/2012 5:30 | 12/13/2012 14:57 | 12/13/2012 14:57 | | |
| L57098-5 | 421422-CHSW-M | | CVTURB | FRESH WTR | 12/13/2012 6:05 | 12/13/2012 14:58 | 12/13/2012 14:58 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 12/11/2012 14:42 | 12/13/2012 15:00 | 12/13/2012 15:00 | | |
| WG124645-1 | LCS | | CVTURB | BLANK WTR | | 12/13/2012 14:49 | 12/13/2012 14:49 | | LEVEL1 |
| WG124645-2 | LD | | CVTURB | FRESH WTR | | 12/13/2012 14:50 | 12/13/2012 14:50 | | L57066-5 |
| WG124645-3 | LCS | | CVTURB | BLANK WTR | | 12/13/2012 15:00 | 12/13/2012 15:00 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124555 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57040-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 12/11/2012 10:30 | 12/11/2012 13:40 | 12/12/2012 13:00 | WG124545-1,-2,WG124499-3,-4 | |
| WG124499-3 | BF | | MCSWTC-MF | BLANK WTR | | 12/11/2012 13:40 | 12/12/2012 13:30 | | QC-PERFORMED:11-DEC-12 |
| WG124499-4 | AF | | MCSWTC-MF | BLANK WTR | | 12/11/2012 13:40 | 12/12/2012 13:30 | | QC-PERFORMED:11-DEC-12 |
| WG124545-1 | PC | | MCSWFC-MF | BLANK WTR | | 12/11/2012 13:40 | 12/12/2012 13:00 | | QC-PERFORMED:11-DEC-12 |
| WG124545-2 | NC | | MCSWFC-MF | BLANK WTR | | 12/11/2012 13:40 | 12/12/2012 13:00 | | QC-PERFORMED:11-DEC-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124579 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57112-4 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 12/12/2012 11:03 | 12/12/2012 13:50 | 12/13/2012 13:20 | WG124579-1,-2,-3,-4 | |
| WG124579-1 | PC | | MCFC-MF | BLANK WTR | | 12/12/2012 13:50 | 12/13/2012 13:20 | | QC-PERFORMED:12-DEC-12 |
| WG124579-2 | NC | | MCFC-MF | BLANK WTR | | 12/12/2012 13:50 | 12/13/2012 13:20 | | QC-PERFORMED:12-DEC-12 |
| WG124579-3 | BF | | MCFC-MF | BLANK WTR | | 12/12/2012 13:50 | 12/13/2012 13:20 | | QC-PERFORMED:12-DEC-12 |
| WG124579-4 | AF | | MCFC-MF | BLANK WTR | | 12/12/2012 13:50 | 12/13/2012 13:20 | | QC-PERFORMED:12-DEC-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124838 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56876-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 12/18/2012 10:00 | 1/3/2013 8:00 | 1/3/2013 15:09 | WG124838-1,-2,-3,-4 | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57030-1 | 421879-210 | | MTICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/3/2013 15:15 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall | MTHARD-ICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57075-2 | 421422-DUSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/3/2013 15:22 | | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls | MTHARD-ICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57079-1 | 421422-CFSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/3/2013 15:28 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar | MTHARD-ICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-1 | 421422-CHSW-M | Hills Surface Water | MTICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/3/2013 15:34 | | |
| L57098-2 | 421422-CHSW-M | Monthly | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/3/2013 15:40 | | |
| L57098-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:46 | | |
| L57098-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:52 | | |
| L57098-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/3/2013 16:11 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57112-2 | 421879-210 | | MTICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/3/2013 16:17 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon | MTHARD-ICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-1 | 421422-VASW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/3/2013 16:23 | | |
| L57113-3 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-3 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/3/2013 16:29 | | |
| L57113-4 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-4 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/3/2013 16:35 | | |
| L57113-5 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-5 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/3/2013 16:42 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57129-1 | 421879-210 | | MTICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:00 | | |
| L57138-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57138-1 | 421879-210 | | MTICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:06 | | |
| WG124838-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | METHOD BLANK |
| WG124838-1 | MB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 14:57 | | METHOD BLANK |
| WG124838-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | WG124838-1 MS-20 |
| WG124838-2 | SB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 15:03 | | WG124838-1 MS-20 |
| WG124838-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | L57113-5 RPD-LIQ |
| WG124838-3 | LD | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:48 | | L57113-5 RPD-LIQ |
| WG124838-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:34 | | L57113-5 MS-20 |
| WG124838-4 | MS | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:54 | | L57113-5 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124842 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56942-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/27/2012 9:40 | 1/2/2013 7:00 | 1/2/2013 9:03 | WG124842-1,-2,-3,-4 | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/19/2012 10:31 | 1/2/2013 7:00 | 1/2/2013 9:09 | | |
| L57076-4 | 421422-HTGW | | MTICPMS-DISS | GRND WTR | 12/24/2012 7:10 | 1/2/2013 7:00 | 1/2/2013 9:14 | | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/18/2012 8:00 | 1/2/2013 7:00 | 1/2/2013 9:20 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 12/13/2012 4:25 | 1/2/2013 7:00 | 1/2/2013 9:26 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:00 | 1/2/2013 7:00 | 1/2/2013 9:32 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:37 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:55 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 6:05 | 1/2/2013 7:00 | 1/2/2013 10:12 | | |
| L57107-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/20/2012 11:31 | 1/2/2013 7:00 | 1/2/2013 10:18 | | |
| L57107-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/24/2012 6:30 | 1/2/2013 7:00 | 1/2/2013 10:24 | | |
| L57108-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/21/2012 8:05 | 1/2/2013 7:00 | 1/2/2013 10:29 | | |
| L57108-3 | 421422-PUGW | | MTICPMS-DISS | GRND WTR | 12/21/2012 10:59 | 1/2/2013 7:00 | 1/2/2013 10:35 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/11/2012 14:42 | 1/2/2013 7:00 | 1/2/2013 10:41 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | MTICPMS-DISS | FRESH WTR | 12/20/2012 10:30 | 1/2/2013 7:00 | 1/2/2013 10:47 | | |
| L57113-3 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 11:58 | 1/2/2013 7:00 | 1/2/2013 11:04 | | |
| L57113-4 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 10:58 | 1/2/2013 7:00 | 1/2/2013 11:10 | | |
| L57113-5 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 9:52 | 1/2/2013 7:00 | 1/2/2013 11:15 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/13/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:21 | | |
| L57138-1 | 421879-210 | | MTICPMS-DISS | STORM WTR | 12/15/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:27 | | |
| WG124842-1 | MB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:51 | | METHOD BLANK |
| WG124842-2 | SB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:57 | | |
| | | | | | | | | | WG124842-1 MS-20 |
| WG124842-3 | LD | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:01 | | L57098-4 RPD-LIQ |
| WG124842-4 | MS | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:06 | | L57098-4 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124642 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 12/9/2012 13:01 | 12/14/2012 9:00 | 12/21/2012 0:34 | WG124642-4,-3,-2,-1 | |
| L57112-2 | 421879-210 | | ORHERB-NPDES | STORM WTR | 12/11/2012 14:42 | 12/14/2012 9:00 | 12/21/2012 0:59 | | |
| WG124642-1 | MB | | ORHERB-NPDES | BLANK WTR | | 12/14/2012 9:00 | 12/20/2012 18:28 | | MB121214 |
| WG124642-2 | SB | | ORHERB-NPDES | BLANK WTR | | 12/14/2012 9:00 | 12/20/2012 18:52 | | WG124642-1 |
| WG124642-3 | MS | | ORHERB-NPDES | STORM WTR | | 12/14/2012 9:00 | 12/20/2012 23:45 | | L57030-1 |
| WG124642-4 | MSD | | ORHERB-NPDES | STORM WTR | | 12/14/2012 9:00 | 12/21/2012 0:10 | | WG124642-3 L57030-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124572 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 12/9/2012 13:01 | 12/12/2012 17:00 | 12/21/2012 15:23 | WG124572-4,-1,-2,-3 | |
| L57112-2 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 12/11/2012 14:42 | 12/12/2012 17:00 | 12/21/2012 15:58 | | |
| WG124572-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 12/12/2012 17:00 | 12/21/2012 13:01 | | MB121212 |
| WG124572-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 12/12/2012 17:00 | 12/21/2012 13:36 | | WG124572-1 |
| WG124572-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 12/12/2012 17:00 | 12/21/2012 14:12 | | L57030-1 |
| WG124572-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 12/12/2012 17:00 | 12/21/2012 14:47 | | WG124572-3 L57030-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124560 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/10/2012 11:20 | 12/11/2012 15:00 | 12/19/2012 13:31 | WG124560-1,-2,-3,-4 | |
| L57033-12 | 421196-130 | Roads Groundwater | ORWTPH-DX | GRND WTR | 12/7/2012 11:40 | 12/11/2012 15:00 | 12/19/2012 13:56 | | |
| L57040-2 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/11/2012 10:30 | 12/11/2012 15:00 | 12/19/2012 14:19 | | |
| WG124560-1 | MB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 11:56 | | MB121211 |
| WG124560-2 | SB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 12:19 | | WG124560-1 SB-MO |
| WG124560-3 | SB | | ORWTPH-DX | BLANK WTR | | 12/11/2012 15:00 | 12/19/2012 12:44 | | WG124560-1 SB-DSL |
| WG124560-4 | LD | | ORWTPH-DX | STORM WTR | | 12/11/2012 15:00 | 12/19/2012 13:07 | | L57040-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124715 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57112-4 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/12/2012 11:03 | 12/19/2012 11:30 | 12/28/2012 13:05 | WG124715-1,-2,-3,-4 | |
| L57129-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/14/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:29 | | |
| L57138-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/16/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:52 | | |
| WG124715-1 | MB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:32 | | MB121219 |
| WG124715-2 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:55 | | WG124715-1 SB-MO |
| WG124715-3 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 12:18 | | WG124715-1 SB-DSL |
| WG124715-4 | LD | | ORWTPH-DX | STORM WTR | | 12/19/2012 11:30 | 12/28/2012 12:42 | | L57138-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57040, L57112

**WG124578 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 12/10/2012 11:20 | 12/12/2012 12:52 | 12/12/2012 12:52 | WG124578-1,-2,-3 | |
| L57040-2 | 421879-210 | | ORWTPH-G | STORM WTR | 12/11/2012 10:30 | 12/12/2012 13:21 | 12/12/2012 13:21 | | |
| L57112-4 | 421879-210 | | ORWTPH-G | STORM WTR | 12/12/2012 11:03 | 12/12/2012 14:49 | 12/12/2012 14:49 | | |
| WG124578-1 | MB | | ORWTPH-G | BLANK WTR | | 12/12/2012 11:53 | 12/12/2012 11:53 | | MB121212 |
| WG124578-2 | LD | | ORWTPH-G | STORM WTR | | 12/12/2012 12:22 | 12/12/2012 12:22 | | L57030-3 |
| WG124578-3 | SB | | ORWTPH-G | BLANK WTR | | 12/12/2012 15:19 | 12/12/2012 15:19 | | WG124578-1 |

**Workgroup: WG124653 BOD**

**MB:WG124653-1 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:WG124653-2 MB:WG124653-1 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 | 179 | 90 | | 80--120 |

**Workgroup: WG124682 Anions**

**CS:WG124682-1 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 | 0.096 | 96 | | 70--130 |

**CS:WG124682-1 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 | 0.15 | 75 | | 70--130 |

**MB:WG124682-2 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:WG124682-2 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:WG124682-3 MB:WG124682-2 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 | 1.93 | 97 | | 80--120 |

**SB:WG124682-3 MB:WG124682-2 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 | 4.83 | 97 | | 80--120 |

**LCS:WG124682-4 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:WG124682-4 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 | 15.6 | 104 | | 85--115 |

**LD:WG124682-5 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 4.52 | 0 | | 0--20 |

**MS:WG124682-6 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 10 | 14.8 | 102 | | 75--125 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 6.4 | 8 | | 0--20 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 16.8 | 1 | | 0--20 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 20 | 26.8 | 105 | | 75--125 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 25 | 42 | 101 | | 75--125 |

**MB:WG124682-9 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:WG124682-9 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: WG124694 Conducticity**

**LCS:WG124694-1 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 | 74.2 | 100 | | 90--110 |

**LCS:WG124694-2 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 | 697 | 97 | | 90--110 |

**LD:WG124694-3 L57129-1 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 | 34.6 | 35 | 1 | | 0--10 |

**LD:WG124694-4 L57054-6 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 1460 | 1460 | 0 | | 0--10 |

**LCS:WG124694-5 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 | 79.7 | 108 | | 90--110 |

**LCS:WG124694-6 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 | 713 | 99 | | 90--110 |

**LD:WG124694-7 L55310-7 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 263 | 263 | 0 | | 0--10 |

**LCS:WG124694-8 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 | 717.5 | 714 | 100 | | 90--110 |

**Workgroup: WG124815 Dissolved Nutrients**

**MB:WG124815-1 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:WG124815-1 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:WG124815-1 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:WG124815-2 MB:WG124815-1 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 | 0.0988 | 99 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.814 | 102 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.0398 | 100 | | 80--120 |

**LCS:WG124815-3 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:WG124815-3 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 | 0.834 | 104 | | 85--115 |

**LCS:WG124815-3 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 | 0.0396 | 99 | | 85--115 |

**LD:WG124815-4 L57138-1 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 | 0.179 | 0.178 | 0 | | 0--20 |

**LD:WG124815-4 L57138-1 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 | 0.00766 | 0.00792 | 3 | | 0--20 |

**MS:WG124815-5 L57138-1 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 | 0.179 | 0.8 | 0.978 | 100 | | 75--125 |

**MS:WG124815-5 L57138-1 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 | 0.00766 | 0.04 | 0.0459 | 95 | | 75--125 |

**LD:WG124815-6 L56802-1 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 | 0.026 | 0.0249 | 4 | | 0--20 |

**LD:WG124815-6 L56802-1 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 | 0.198 | 0.194 | 2 | | 0--20 |

**MS:WG124815-7 L56802-1 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 | 0.026 | 0.1 | 0.137 | 111 | | 75--125 |

**MS:WG124815-7 L56802-1 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 | 0.198 | 0.8 | 1.01 | 102 | | 75--125 |

**Workgroup: WG124752 TKN**

**MB:WG124752-1 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 | |

**LCS:WG124752-2 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 | 0.491 | 98 | | 80--120 |

**LCS:WG124752-3 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 | 5 | 5.14 | 103 | | 80--120 |

**SB:WG124752-4 MB:WG124752-1 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 | 5.23 | 105 | | 80--120 |

**LD:WG124752-5 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 7.72 | 5 | | 0--20 |

**MS:WG124752-6 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 5 | 12.8 | 94 | | 70--130 |

**LD:WG124752-7 L56807-1 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 | 0.491 | 0.488 | 1 | | 0--20 |

**MS:WG124752-8 L56807-1 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 | 0.491 | 5 | 5.65 | 103 | | 70--130 |

**LD:WG124752-9 L57066-1 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 | 0.433 | 0.496 | 14 | | 0--20 |

**MS:WG124752-10 L57066-1 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 | 0.433 | 5 | 5.54 | 102 | | 70--130 |

**Workgroup: WG124574 Total Nutrients**

**MB:WG124574-1 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:WG124574-1 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:WG124574-2 MB:WG124574-1 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 | 1.02 | 102 | | 80--120 |

**SB:WG124574-2 MB:WG124574-1 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124574-3 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 | 0.995 | 99 | | 85--115 |

**LCS:WG124574-3 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 | 0.0994 | 99 | | 85--115 |

**LD:WG124574-4 L57030-1 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 | 0.05 | 0.1 | mg/L | 0.17 | 0.162 | 5 | | 0--20 |

**MS:WG124574-5 L57030-1 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 | 0.05 | 0.1 | mg/L | 0.17 | 1 | 1.13 | 96 | | 75--125 |

**LD:WG124574-6 L57046-2 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 | 0.305 | 0.304 | 0 | | 0--20 |

**LD:WG124574-6 L57046-2 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 | 0.0107 | 0.0114 | 7 | | 0--20 |

**MS:WG124574-7 L57046-2 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 | 0.305 | 1 | 1.34 | 104 | | 75--125 |

**MS:WG124574-7 L57046-2 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 | 0.0107 | 0.1 | 0.11 | 99 | | 75--125 |

**MB:WG124574-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124574-8 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:WG124574-9 MB:WG124574-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Spike Blank, Method Blank)**

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

**SB:WG124574-9 MB:WG124574-8 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 | 0.0995 | 100 | | 80--120 |

**LCS:WG124574-10 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 | 0.955 | 95 | | 85--115 |

**LCS:WG124574-10 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 | 0.0964 | 96 | | 85--115 |

**LD:WG124574-11 L57046-22 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 | 0.297 | 0.293 | 1 | | 0--20 |

**LD:WG124574-11 L57046-22 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 | 0.0109 | 0.0095 | 14 | | 0--20 |

**MS:WG124574-12 L57046-22 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 | 0.297 | 1 | 1.29 | 99 | | 75--125 |

**MS:WG124574-12 L57046-22 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 | 0.0109 | 0.1 | 0.11 | 99 | | 75--125 |

**MB:WG124574-13 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:WG124574-13 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:WG124574-14 MB:WG124574-13 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 | 0.995 | 99 | | 80--120 |

**SB:WG124574-14 MB:WG124574-13 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 | 0.0999 | 100 | | 80--120 |

**LCS:WG124574-15 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 | 0.927 | 93 | | 85--115 |

**LCS:WG124574-15 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 | 0.0956 | 96 | | 85--115 |

**LD:WG124574-16 L57046-48 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 | 0.314 | 0.337 | 7 | | 0--20 |

**LD:WG124574-16 L57046-48 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 | 0.0224 | 0.0238 | 6 | | 0--20 |

**MS:WG124574-17 L57046-48 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 | 0.314 | 1 | 1.28 | 97 | | 75--125 |

**MS:WG124574-17 L57046-48 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 | 0.0224 | 0.1 | 0.119 | 97 | | 75--125 |

**LD:WG124574-18 L57066-1 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 | 0.04 | 0.0432 | 8 | | 0--20 |

**MS:WG124574-19 L57066-1 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 | 0.04 | 0.1 | 0.143 | 103 | | 75--125 |

**MB:WG124574-20 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:WG124574-20 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:WG124574-21 MB:WG124574-20 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 | 1.01 | 101 | | 80--120 |

**SB:WG124574-21 MB:WG124574-20 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124574-22 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 | 0.975 | 98 | | 85--115 |

**LCS:WG124574-22 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 | 0.102 | 102 | | 85--115 |

**LD:WG124574-23 L56995-29 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.35 | 1.33 | 2 | | 0--20 |

**LD:WG124574-23 L56995-29 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0653 | 0.0684 | 5 | | 0--20 |

**MS:WG124574-24 L56995-29 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 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 | 1.35 | 1 | 2.31 | 96 | | 75--125 |

**MS:WG124574-24 L56995-29 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 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 | 0.0653 | 0.1 | 0.156 | 91 | | 75--125 |

**LD:WG124574-25 L57112-2 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 | 0.05 | 0.1 | mg/L | 0.144 | 0.171 | 17 | | 0--20 |

**MS:WG124574-26 L57112-2 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 | 0.05 | 0.1 | mg/L | 0.144 | 1 | 1.14 | 100 | | 75--125 |

**Workgroup: WG124654 TSS**

**MB:WG124654-1 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:WG124654-2 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 | 103 | 103 | | 80--120 |

**LD:WG124654-3 L57046-1 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 | <MDL | <MDL | | | 0--25 |

**MB:WG124654-4 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG124654-5 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 | 101 | 101 | | 80--120 |

**LD:WG124654-6 L57046-42 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 | 1.4 | 1.4 | | | 0--25 |

**MB:WG124654-7 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG124654-8 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:WG124654-9 L57046-46 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 | 1.2 | 1.2 | | | 0--25 |

**LD:WG124654-10 L57122-2 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421161 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 3.3 | 6.7 | mg/L | 42 | 43.3 | 3 | | 0--25 |

**Workgroup: WG124645 Turbidity**

**LCS:WG124645-1 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 | 9.94 | 99 | | 90--110 |

**LD:WG124645-2 L57066-5 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 | 0.2 | 0.5 | NTU | 30 | 30.3 | 1 | | 0--25 |

**LCS:WG124645-3 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 | 96.8 | 97 | | 90--110 |

**Workgroup: WG124555 Fecal coliform**

**BF:WG124499-3 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:WG124499-4 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 | |

**PC:WG124545-1 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:WG124545-2 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 |

**Workgroup: WG124579 Fecal coliform**

**PC:WG124579-1 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:WG124579-2 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:WG124579-3 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:WG124579-4 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: WG124838 Total Metals and Hardness**

**MB:WG124838-1 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:WG124838-1 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:WG124838-2 MB:WG124838-1 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 | 93 | | 85--115 |

**SB:WG124838-2 MB:WG124838-1 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 | 19.2 | 96 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4560 | 91 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4720 | 94 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 21.7 | 109 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4830 | 97 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4580 | 92 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.9 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4860 | 97 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.9 | 100 | | 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 | 19.5 | 98 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 17.9 | 90 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 289 | 0 | | 0--20 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 13500 | 1 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 38400 | 0 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 85.7 | 14 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 2550 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 52400 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.825 | 3 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 0.44 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 1080 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 269 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 0.19 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 2.53 | 2 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 0.67 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 0.9 | | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 1.84 | 0 | | 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 | 5.49 | 5.57 | 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 | 0.27 | 0.27 | | | 0--20 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 33.1 | 320 | | 4xRule | 75--125 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.2 | 96 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 5000 | 18600 | 104 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 5000 | 42500 | | 4xRule | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 20 | 106 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 5000 | 6790 | 85 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 5000 | 58000 | | 4xRule | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 16.9 | 80 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 20 | 17 | 83 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 5000 | 5250 | 83 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 20 | 286 | | 4xRule | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 20 | 17.5 | 86 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 20 | 21.9 | 97 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 20 | 19.7 | 95 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 20 | 20.1 | 96 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 20 | 20.8 | 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 | 18.9 | 94 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.4 | 92 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 17.2 | 86 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 17.8 | 89 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 5.49 | 20 | 23.2 | 88 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.27 | 20 | 19.7 | 97 | | 75--125 |

**Workgroup: WG124842 Dissolved Metals**

**MB:WG124842-1 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:WG124842-2 MB:WG124842-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4530 | 91 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4910 | 98 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4780 | 96 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5180 | 104 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 97 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.7 | 94 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |

**LD:WG124842-3 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 2910 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 1050 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 45.2 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 628 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 4490 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 0.25 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 12 | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 0.925 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 0.17 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 0.44 | | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 1.7 | | | 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 |
| 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 | 5.84 | 5.77 | 1 | | 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:WG124842-4 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 5000 | 7750 | 97 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 5000 | 5800 | 95 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 20 | 64.5 | 99 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 5000 | 5560 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 5000 | 9180 | 94 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 20 | 19.4 | 96 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 5000 | 5220 | 104 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 20 | 20.9 | 100 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 20 | 20.8 | 103 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 20 | 22.2 | 102 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 20 | 20.3 | 101 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 105 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.5 | 97 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.84 | 20 | 25.2 | 97 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.5 | 107 | | 75--125 |

**Workgroup: WG124642 Herbicides**

**MB:WG124642-1 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 | |

**SB:WG124642-2 MB:WG124642-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.39 | 88 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.31 | 86 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.26 | 85 | | 59--151 |

**MSD:WG124642-4 MS:WG124642-3 L57030-1 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 | 4.85 | 97 | | 20--162 | 4.95 | 4.76 | 96 | | 2 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.46 | 109 | | 10--196 | 4.95 | 5.45 | 110 | | 0 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.87 | 97 | | 30--150 | 4.95 | 4.9 | 99 | | 1 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57030-1 | 91 | 109 |
| L57112-2 | 94 | 109 |
| WG124642-1 | 91 | 104 |
| WG124642-2 | 89 | 103 |
| WG124642-3 | 94 | 107 |
| WG124642-4 | 96 | 116 |

**Workgroup: WG124572 Semi Volatile Organics**

**MB:WG124572-1 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 | <MDL | |
| 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 | 0.181 | 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:WG124572-2 MB:WG124572-1 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 | 2.15 | 86 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.87 | 75 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.18 | 87 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.19 | 88 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.13 | 85 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.2 | 88 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.51 | 60 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.94 | 78 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.91 | 76 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.01 | 80 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2 | 80 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.85 | 114 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.18 | 127 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.47 | 99 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.6 | 104 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.181 | 2.5 | 2.86 | 107 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.71 | 103 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.5 | 100 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.43 | 97 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.57 | 103 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.16 | 86 | | 32--130 |

**MSD:WG124572-4 MS:WG124572-3 L57030-1 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 | 0.0655 | 2.36 | 2.12 | 87 | | 37--95 | 2.36 | 1.84 | 75 | | 14 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | 0.0299 | 2.36 | 2.08 | 87 | | 40--121 | 2.36 | 1.92 | 80 | | 8 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.17 | 92 | | 34--134 | 2.36 | 1.91 | 81 | | 13 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.21 | 94 | | 46--122 | 2.36 | 1.96 | 83 | | 12 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.18 | 92 | | 47--105 | 2.36 | 1.94 | 82 | | 12 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.136 | 2.36 | 2.37 | 95 | | 33--140 | 2.36 | 1.99 | 79 | | 17 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | 0.0095 | 2.36 | 2.27 | 96 | | 44--137 | 2.36 | 2.01 | 85 | | 12 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.28 | 97 | | 44--145 | 2.36 | 2.18 | 93 | | 5 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0631 | 2.36 | 2.47 | 102 | | 62--116 | 2.36 | 2.21 | 91 | | 11 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.97 | 83 | | 32--140 | 2.36 | 1.75 | 74 | | 11 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.0626 | 2.36 | 1.95 | 80 | | 44--134 | 2.36 | 1.7 | 69 | | 14 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0572 | 2.36 | 1.98 | 81 | | 49--123 | 2.36 | 1.73 | 71 | | 13 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.144 | 2.36 | 2.83 | 114 | | 37--147 | 2.36 | 2.58 | 103 | | 9 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.188 | 2.36 | 3.21 | 128 | | 39--151 | 2.36 | 2.82 | 112 | | 13 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.47 | 105 | | 50--120 | 2.36 | 2.19 | 93 | | 12 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.088 | 2.36 | 2.63 | 108 | | 42--115 | 2.36 | 2.29 | 94 | | 13 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 2.04 | 2.36 | 4.84 | 119 | | 11--188 | 2.36 | 4.38 | 99 | | 10 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.337 | 2.36 | 2.72 | 101 | | 48--150 | 2.36 | 2.4 | 87 | | 13 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 8.19 | 116 | | 42--123 | 7.08 | 7.38 | 104 | | 11 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.51 | 106 | | 45--121 | 2.36 | 2.26 | 96 | | 10 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.86 | 79 | | 39--122 | 2.36 | 1.59 | 67 | | 16 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.02 | 86 | | 31--121 | 2.36 | 1.69 | 72 | | 18 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.62 | 69 | | 22--125 | 2.36 | 1.37 | 58 | | 17 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57030-1 | 86 | 72 | 53 | 79 | 51 | 64 | 61 |
| L57112-2 | 85 | 63 | 48 | 82 | 49 | 58 | 52 |
| WG124572-1 | 66 | 68 | 69 | 88 | 69 | 77 | 77 |
| WG124572-2 | 76 | 76 | 67 | 86 | 68 | 76 | 78 |
| WG124572-3 | 95 | 80 | 59 | 87 | 56 | 70 | 66 |
| WG124572-4 | 81 | 70 | 52 | 79 | 51 | 62 | 59 |

**Workgroup: WG124560 WTPH-Dx**

**MB:WG124560-1 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:WG124560-2 MB:WG124560-1 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 | 0.878 | 88 | | 50--150 |

**SB:WG124560-3 MB:WG124560-1 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 | 0.82 | 82 | | 50--150 |

**LD:WG124560-4 L57040-2 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) | 0.19 | 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-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57030-3 | 77 | 92 |
| L57033-12 | 80 | 93 |
| L57040-2 | 83 | 92 |
| WG124560-1 | 76 | 87 |
| WG124560-2 | 78 | 87 |
| WG124560-3 | 88 | 89 |
| WG124560-4 | 80 | 92 |

**Workgroup: WG124715 WTPH-Dx**

**MB:WG124715-1 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:WG124715-2 MB:WG124715-1 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 | 0.894 | 89 | | 50--150 |

**SB:WG124715-3 MB:WG124715-1 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 | 0.71 | 71 | | 50--150 |

**LD:WG124715-4 L57138-2 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) | 0.19 | 0.19 | mg/L | 0.21 | 0.22 | 5 | | 0--40 |
| Lube Oil Range (>C24) | 0.19 | 0.19 | mg/L | 0.841 | 0.859 | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57112-4 | 74 | 92 |
| L57129-3 | 78 | 93 |
| L57138-2 | 72 | 92 |
| WG124715-1 | 68 | 87 |
| WG124715-2 | 76 | 87 |
| WG124715-3 | 80 | 87 |
| WG124715-4 | 65 | 93 |

**Workgroup: WG124578 WTPH-G**

**MB:WG124578-1 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 | |

**LD:WG124578-2 L57030-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

**SB:WG124578-3 MB:WG124578-1 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 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57030-3 | 94 | 93 |
| L57040-2 | 94 | 93 |
| L57112-4 | 93 | 92 |
| WG124578-1 | 93 | 93 |
| WG124578-2 | 93 | 93 |
| WG124578-3 | 89 | 92 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/11/12, 12/13/12, 12/15/12*

**WG #(s):** *WG124842*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57112-2, L57129-1, L57138-1*

**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)

## 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:** *11/23/12, 12/11/12, 12/13/12, 12/15/12*

**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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *21-DEC-12*

**WG #(s):** *WG124572*

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

**Project #(s):** *421879-210 NPDES STORM WATER*

**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: *7890E* |

## 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:**

*1. WG124572-1 MB had a reportable level of Bis(2 Ethyl Hexyl)Phthalate.*

## 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 Bis(2-Ethylhexyl)Phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *December 17, 2012*

**WG #(s):** *WG124815*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57112-2*

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

**Matrix:** ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

## I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☐ Demands:
☒ Nutrients: *Orthophosphate phosphorus (ORTHOP) and Nitrate/Nitrite (NO23)*
☐ 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: *1 day*
11 ☐ Insufficient sample amount.
12 ☒ Inappropriate storage, container or preservation.
☐ Other

**Anomaly Description:** *Orthophosphate phosphorus (ORTHOP) and nitrite/nitrate (NO23) samples must be either analyzed or frozen within 2 days of collection. During the data review process it was noticed that sample L57112-2 was frozen on 12/14/12, which was 1 day after the 2 day requirement had expired. At the time the sample was frozen the analyst was not aware that the composite sample had been collected entirely on 12/11/12.*

## 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:
☐ Other

**Corrective Action Description:** *Other than documenting that the preservation holding time had expired, no other corrective action could be taken.*

**VI. Potential Effects on Data Quality** (explanation mandatory): *Extended time between sample collection and preservation, i.e., freezing the sample, can result in a low bias due to sample degradation and a corresponding loss of the target analyte. The extent of any bias cannot be quantified and the results should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *Casey Maggart* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | _____ | _____ |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2012*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *Dave Hunn* | | |
| **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

January 22, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57129-1, -3, -5, collected December 13-14, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on December 14, 2012. The samples were 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 #15158 was prepared and sent via e-mail on January 22, 2013.

**Sample Collection:**
Sample L57129-2, a composite sample, and L57129-4, a grab sample, were not collected for location FCSW02 (HDR) due to failed storm collection criteria.

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

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.



1202M

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.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

Pentachlorophenol exceeded the control limit for RPD in the spike blank (SB) and spike blank duplicate (SBD) set. The recoveries for pentachlorophenol were within control for the SB and SBD. Bis (2-ethylhexyl) phthalate exceeded the upper control limit in both the SB and SBD at 130% and 130%. All of these results were flagged with an "*" in the QC report. Bis (2-ethylhexyl) phthalate results have been flagged with a "JL" qualifier to indicate possible high bias. 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 | 421879-210 | 421879-210 |
| Locator: | FCSW01 | FCSW01 | FFBLANK |
| Descrip: | FALL CITY HD COMME | FALL CITY HD COMME | FIELD FILTER BLANK |
| Sample: | L57129-1 | L57129-3 | L57129-5 |
| Matrix: | LG STORM WTR | LG STORM WTR | LN BLANK WTR |
| ColDate: | 12/13/12 0:00 | 12/14/12 0:00 | 12/14/12 0:00 |
| TimeSpan: | | | |
| 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 | 0.569 | SH | 0.1 | 0.2 | mg/L | | | | | | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.12 | | 0.025 | 0.025 | mg/L | | | | | | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 71.2 | | 0.2 | 0.5 | NTU | | | | | | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 34.6 | | 1 | 5 | umhos/cm | | | | | | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 53 | | 5 | 10 | mg/L | | | | | | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 1.72 | | 0.25 | 0.5 | mg/L | | | | | | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.149 | | 0.01 | 0.04 | mg/L | | | | | | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.0979 | | 0.005 | 0.01 | mg/L | | | | | | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.007 | H | 0.002 | 0.005 | mg/L | | | | | | | <MDL | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 3.96 | | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | 6900 | | | | CFU/100ml | | | | | |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Cadmium, Total, ICP-MS | 0.067 | <RDL | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Calcium, Total, ICP-MS | 3540 | | 50 | 50 | ug/L | | | | | | | | | | |
| Copper, Dissolved, ICP-MS | 2.59 | H | 0.4 | 2 | ug/L | | | | | | | | | | |
| Copper, Total, ICP-MS | 10.6 | | 0.4 | 2 | ug/L | | | | | | | | | | |
| Lead, Dissolved, ICP-MS | 0.14 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Lead, Total, ICP-MS | 4.81 | | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Magnesium, Total, ICP-MS | 1250 | | 50 | 50 | ug/L | | | | | | | | | | |
| Zinc, Dissolved, ICP-MS | 12.1 | H | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| Zinc, Total, ICP-MS | 46.8 | | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 14 | | 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: | L57129-1 | L57129-3 | L57129-5 |
| Matrix: | LG STORM WTR | LG STORM WTR | LN BLANK WTR |
| ColDate: | 12/13/12 0:00 | 12/14/12 0:00 | 12/14/12 0:00 |
| TimeSpan: | | | |
| 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 | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| 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 | 0.082 | <RDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 1.35 | B2,JL | 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 | 0.1 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Di-N-Butyl Phthalate | 0.046 | <RDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Di-N-Octyl Phthalate | 0.28 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Fluoranthene | 0.0312 | | 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 | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| Pyrene | 0.0829 | | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| **OR SW846 3520C*SW846 8270D SIM** | | | | | | | | | | | | | | | |
| Chlorpyrifos | | <MDL | 0.034 | 0.0495 | ug/L | | | | | | | | | | |
| Diazinon | | <MDL | 0.043 | 0.0495 | ug/L | | | | | | | | | | |
| Dichlobenil | | <MDL | 0.05 | 0.099 | ug/L | | | | | | | | | | |
| Malathion | | <MDL | 0.048 | 0.0495 | ug/L | | | | | | | | | | |
| Prometon | | <MDL | 0.05 | 0.099 | 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) | | | | | | | <MDL | 0.19 | 0.19 | mg/L | | | | | |
| Lube Oil Range (>C24) | | | | | | 0.44 | | 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 | 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 | L57129-1 | 0.569 | 0.12 | 71.2 | 34.6 | 53 | 1.72 | 0.149 | 0.0979 | 0.007 | 3.96 | 0.067 | 3540 | 2.59 | 10.6 | 0.14 | 4.81 | 1250 | 12.1 | 46.8 | 14 |
| FCSW01 | 421879-210 | L57129-3 | | | | | | | | | | | | | | | | | | | | |
| * 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 | Pyrene | Fecal Coliform | Lube Oil Range (>C24) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | CFU/100ml | mg/L |
| FCSW01 | 421879-210 | L57129-1 | 0.082 | 1.35 | 0.046 | 0.28 | 0.1 | 0.0312 | 0.0829 | | |
| FCSW01 | 421879-210 | L57129-3 | | | | | | | | 6900 | 0.44 |
| * Not converted to dry weight basis | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | |

Login: P57129

NPDES Stormwater Permit Monitoring

Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 12/14/12 | *Time* 1630 |
| *Received by* | *Date* 12-14-12 | *Time* 1630 |
| *Sample Numbers* 57129 3,1,3 | | *[All]* |

| Sample Number | P57129-1 | P57129-2 | P57129-3 |
|---|---|---|---|
| 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 | 12/13/12 2214 | | 12/14/12 1525 |
| End Date/Time | 12/14/12 0754 | | |
| Time Span | | | |
| Sample Depth | | | |
| **Dept, Matrix, Prod** | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | SAMP TEMP @ LAB ≈ 4.3°C<br>2.1 aliquots | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

Login: P57129 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P57129-4 | P57129-5 | |
|---|---|---|---|
| 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 | | 12/14/12 1700 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Dec 21 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 |
|---|---|---|---|
| P57129-1 | Water | 12-A018982 | CONV |

Your sample was received on Saturday, December 15, 2012. 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 #: 1047106

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

**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: 12/15/12
Date Reported: 12/21/12

---

**AMTEST Identification Number** **12-A018982**
**Client Identification** **P57129-1**
**Sampling Date** **12/14/12, 07:54**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.117 | mg/l | | 0.025 | SM 5540C | SS | 12/15/12 |

Kathy Fugiel
President

AMTEST LABORATORIES

**QC Summary for sample number: 12-A018982**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 12-A018982 | Surfactants | mg/l | 0.117 | 0.416 | 0.250 | 119.60 % |
| 12-A018982 | Surfactants | mg/l | 0.117 | 0.430 | 0.250 | 125.20 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.416 | 0.430 | 3.3 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.123 | 98.4 % |

## 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 1279950

Project Name: _____ Date Received: 12/15/12 Received By: N/A

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 4.1 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):

_____

_____

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_____

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.

# CHAIN OF CUSTODY RECORD

Project Number: 1047106
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-12-43
Shipment Method: T. Siebens
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***

| | | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID (18952) | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| 4.1°C P57129-1 | 12/14/2012 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 07:54 |
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**Additional Comments/Instructions:** Test has 48 hour hold time.

**Total Number of Containers:** 1

***Please return signed original CoC with data package.***

**Requested TAT:** 14 Days
**Data Package Due:** 1/8/2013

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 12-14-12 | Signature | | 12/15/12 |
| Printed Name | Jason Kinnard | Time 1730 | Printed Name | Suzanne Scott | Time 915 |
| Organization | King County DNR, Environmental Laboratory | | Organization | AmTest | |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124653 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57072-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVBOD | LEACHATE | 12/12/2012 9:07 | 12/14/2012 18:15 | 12/14/2012 18:15 | WG124653-2,-1 | |
| L57073-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVBOD | LEACHATE | 12/12/2012 5:48 | 12/14/2012 18:16 | 12/14/2012 18:16 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVBOD | FRESH WTR | 12/13/2012 8:36 | 12/14/2012 18:19 | 12/14/2012 18:19 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/11/2012 14:42 | 12/14/2012 18:25 | 12/14/2012 18:25 | | |
| L57122-2 | 421161 | IW SURCHARGE | CVBOD | IW WTR | 12/12/2012 0:15 | 12/14/2012 18:20 | 12/14/2012 18:20 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/13/2012 0:00 | 12/14/2012 18:21 | 12/14/2012 18:21 | | |
| WG124653-1 | MB | | CVBOD | BLANK WTR | | 12/14/2012 18:05 | 12/14/2012 18:05 | | MB1 12/14/12 |
| WG124653-2 | SB | | CVBOD | BLANK WTR | | 12/14/2012 18:14 | 12/14/2012 18:14 | | WG124653-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124682 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/9/2012 13:01 | 12/17/2012 18:16 | 12/17/2012 18:16 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:40 | 12/18/2012 3:24 | 12/18/2012 3:24 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57054-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:40 | 12/18/2012 4:55 | 12/18/2012 4:55 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 17:01 | 12/18/2012 17:01 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 18:32 | 12/18/2012 18:32 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:05 | 12/18/2012 0:51 | 12/18/2012 0:51 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | | CVSO4 | GRND WTR | 12/17/2012 7:05 | 12/18/2012 1:22 | 12/18/2012 1:22 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 5:35 | 12/18/2012 15:29 | 12/18/2012 15:29 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 5:35 | 12/18/2012 16:00 | 12/18/2012 16:00 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:22 | 12/18/2012 13:28 | 12/18/2012 13:28 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 7:22 | 12/19/2012 5:11 | 12/19/2012 5:11 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVCL | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:00 | 12/18/2012 1:52 | 12/18/2012 1:52 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:00 | 12/18/2012 2:23 | 12/18/2012 2:23 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVCL | GRND WTR | 12/14/2012 7:45 | 12/18/2012 8:59 | 12/18/2012 8:59 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 7:45 | 12/18/2012 9:59 | 12/18/2012 9:59 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 19:02 | 12/18/2012 19:02 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 20:34 | 12/18/2012 20:34 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 9:15 | 12/18/2012 21:04 | 12/18/2012 21:04 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 9:15 | 12/18/2012 22:36 | 12/18/2012 22:36 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-3 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 7:25 | 12/18/2012 23:37 | 12/18/2012 23:37 | WG124682-1,-2,-3,-4,-7,-8,-9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57104-3 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 7:25 | 12/19/2012 0:37 | 12/19/2012 0:37 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 10:24 | 12/19/2012 1:08 | 12/19/2012 1:08 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 10:24 | 12/19/2012 2:09 | 12/19/2012 2:09 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVCL | GRND WTR | 12/18/2012 9:09 | 12/19/2012 3:40 | 12/19/2012 3:40 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 9:09 | 12/19/2012 4:10 | 12/19/2012 4:10 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/11/2012 14:42 | 12/17/2012 22:19 | 12/17/2012 22:19 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57129-1 | 421879-210 | | CVCL | STORM WTR | 12/13/2012 0:00 | 12/17/2012 22:50 | 12/17/2012 22:50 | | |
| L57138-1 | 421879-210 | | CVCL | STORM WTR | 12/15/2012 0:00 | 12/17/2012 23:50 | 12/17/2012 23:50 | | |
| WG124682-1 | CS | | CVCL | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | | RDL_LEVEL |
| WG124682-1 | CS | | CVSO4 | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | WG124682-1,-2,-3,-4,-7,-8,-9 | RDL_LEVEL |
| WG124682-2 | MB | | CVCL | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/17/12 |
| WG124682-2 | MB | | CVSO4 | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/17/12 |
| WG124682-3 | SB | | CVCL | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124682-2 |
| WG124682-3 | SB | | CVSO4 | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-7,-8,-9 | WG124682-2 |
| WG124682-4 | LCS | | CVCL | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124682-4 | LCS | | CVSO4 | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-7,-8,-9 | LEVEL1 |
| WG124682-5 | LD | | CVCL | STORM WTR | | 12/17/2012 18:46 | 12/17/2012 18:46 | WG124682-1,-2,-3,-4,- | L57030-1 |
| WG124682-6 | MS | | CVCL | STORM WTR | | 12/17/2012 19:16 | 12/17/2012 19:16 | 5,-6,-7,-8,-9 | L57030-1 |
| WG124682-7 | LD | | CVCL | GRND WTR | | 12/18/2012 3:54 | 12/18/2012 3:54 | | L57054-3 |
| WG124682-7 | LD | | CVSO4 | GRND WTR | | 12/18/2012 5:25 | 12/18/2012 5:25 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVCL | GRND WTR | | 12/18/2012 4:24 | 12/18/2012 4:24 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVSO4 | GRND WTR | | 12/18/2012 5:56 | 12/18/2012 5:56 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-9 | MB | | CVCL | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/18/12 |
| WG124682-9 | MB | | CVSO4 | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/18/12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124694 Conducticity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L55310-4 | 421195-140 | Lake Sawyer | CVCOND | STORM WTR | 12/17/2012 9:40 | 12/17/2012 19:28 | 12/17/2012 19:28 | WG124694-1,-2,-3,-4,-5,-6,-7,-8 | |
| L55310-7 | 421195-140 | | CVCOND | STORM WTR | 12/17/2012 9:04 | 12/17/2012 20:01 | 12/17/2012 20:01 | | |
| | | SWD-HTGW Houghton Groundwater Quarterly | | | | | | | |
| L57054-3 | 421422-HTGW | | CVCOND | GRND WTR | 12/14/2012 6:40 | 12/17/2012 17:24 | 12/17/2012 17:24 | | |
| L57054-5 | 421422-DUGW | SWD-DUGW Duvall | CVCOND | GRND WTR | 12/13/2012 7:20 | 12/17/2012 17:34 | 12/17/2012 17:34 | | |
| L57054-6 | 421422-DUGW | Groundwater Quarterly | CVCOND | GRND WTR | 12/13/2012 8:09 | 12/17/2012 17:45 | 12/17/2012 17:45 | | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart | CVCOND | GRND WTR | 12/17/2012 7:05 | 12/17/2012 18:03 | 12/17/2012 18:03 | | |
| L57080-1 | 421422-HTGW | Groundwater Quarterly | CVCOND | GRND WTR | 12/14/2012 6:00 | 12/17/2012 18:36 | 12/17/2012 18:36 | | |
| L57080-3 | 421422-HTGW | | CVCOND | GRND WTR | 12/14/2012 7:45 | 12/17/2012 18:46 | 12/17/2012 18:46 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 12/11/2012 14:42 | 12/17/2012 17:20 | 12/17/2012 17:20 | | |
| L57129-1 | 421879-210 | | CVCOND | STORM WTR | 12/13/2012 0:00 | 12/17/2012 17:22 | 12/17/2012 17:22 | | |
| WG124694-1 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 15:21 | 12/17/2012 15:21 | | LEVEL1 |
| WG124694-2 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 15:22 | 12/17/2012 15:22 | | LEVEL2 |
| WG124694-3 | LD | | CVCOND | STORM WTR | | 12/17/2012 17:23 | 12/17/2012 17:23 | | L57129-1 |
| WG124694-4 | LD | | CVCOND | GRND WTR | | 12/17/2012 17:54 | 12/17/2012 17:54 | | L57054-6 |
| WG124694-5 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 18:10 | 12/17/2012 18:10 | | LEVEL1 |
| WG124694-6 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 18:17 | 12/17/2012 18:17 | | LEVEL2 |
| WG124694-7 | LD | | CVCOND | STORM WTR | | 12/17/2012 20:12 | 12/17/2012 20:12 | | L55310-7 |
| WG124694-8 | LCS | | CVCOND | BLANK WTR | | 12/17/2012 22:02 | 12/17/2012 22:02 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124815 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56802-1 | 421250-700 | Marine Phytoplankton Study | CVNH3-FL | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-6,-7 | |
| L56802-1 | 421250-700 | | CVNO23 | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5 | |
| L57112-2 | 421879-210 | | CVORTHOP | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5 | |
| L57112-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-1 | 421879-210 | | CVNO23 | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5 | |
| L57129-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5 | |
| L57129-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-1 | 421879-210 | | CVNO23 | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5 | |
| L57138-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-3 | 421879-210 | | CVNO23 | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5 | |
| L57138-3 | 421879-210 | | CVORTHOP | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| WG124815-1 | MB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5 | CONNNUTS3 |
| WG124815-2 | SB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5 | WG124815-1 |
| WG124815-3 | LCS | | CVNH3-FL | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-6,-7 | LEVEL1 |
| WG124815-3 | LCS | | CVNO23 | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5,-6,-7 | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124815-3 | LCS | CVORTHOP | BLANK WTR | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5 | LEVEL1 |
| WG124815-4 | LD | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-4 | LD | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-5 | MS | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-5 | MS | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-6 | LD | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-6 | LD | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124752 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 11/23/2012 6:35 | 12/20/2012 10:50 | 12/24/2012 11:52 | WG124752-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56807-2 | 421879-210 | | CVTKN | STORM WTR | 11/23/2012 9:50 | 12/20/2012 10:50 | 12/24/2012 12:01 | | |
| L56976-1 | 421430-300 | OCS-Lake Haven Utility | CVTKN | EFFLUENT | 12/3/2012 7:46 | 12/20/2012 10:50 | 12/24/2012 11:31 | | |
| L56976-3 | 421430-300 | District routine testing | CVTKN | EFFLUENT | 12/3/2012 7:19 | 12/20/2012 10:50 | 12/24/2012 11:33 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/9/2012 13:01 | 12/20/2012 10:50 | 12/24/2012 12:03 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar | CVTKN | FRESH WTR | 12/10/2012 8:32 | 12/20/2012 10:50 | 12/24/2012 12:21 | | |
| L57066-2 | 421422-CHSW-M | Hills Surface Water | CVTKN | FRESH WTR | 12/10/2012 8:07 | 12/20/2012 10:50 | 12/24/2012 12:30 | | |
| L57066-3 | 421422-CHSW-M | Monthly | CVTKN | FRESH WTR | 12/10/2012 7:30 | 12/20/2012 10:50 | 12/24/2012 12:32 | | |
| L57066-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:04 | 12/20/2012 10:50 | 12/24/2012 12:34 | | |
| L57066-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 10:50 | 12/24/2012 12:36 | | |
| L57066-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:31 | 12/20/2012 10:50 | 12/24/2012 12:38 | | |
| L57066-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 8:56 | 12/20/2012 10:50 | 12/24/2012 12:40 | | |
| L57066-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 9:17 | 12/20/2012 10:50 | 12/24/2012 12:53 | | |
| L57098-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 10:50 | 12/24/2012 12:55 | | |
| L57098-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 10:50 | 12/24/2012 12:57 | | |
| L57098-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 12:59 | | |
| L57098-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 13:01 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/11/2012 14:42 | 12/20/2012 10:50 | 12/24/2012 12:05 | | |
| L57129-1 | 421879-210 | | CVTKN | STORM WTR | 12/13/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:07 | | |
| L57138-1 | 421879-210 | | CVTKN | STORM WTR | 12/15/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:09 | | |
| WG124752-1 | MB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:21 | | MB1 12/20/12 |
| WG124752-2 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:23 | | LEVEL1 |
| WG124752-3 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:25 | | LEVEL2 |
| WG124752-4 | SB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:27 | | WG124752-1 |
| WG124752-5 | LD | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:36 | | L56976-3 |
| WG124752-6 | MS | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:38 | | L56976-3 |
| WG124752-7 | LD | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:54 | | L56807-1 |
| WG124752-8 | MS | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:56 | | L56807-1 |
| WG124752-9 | LD | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:23 | | L57066-1 |
| WG124752-10 | MS | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:26 | | L57066-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124809 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L55310-1 | 421195-140 | Lake Sawyer | CVTOTP | STORM WTR | 12/17/2012 11:05 | 12/19/2012 11:00 | 12/20/2012 10:20 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L55310-2 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:03 | 12/19/2012 11:00 | 12/20/2012 10:21 | | |
| L55310-3 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:36 | 12/19/2012 11:00 | 12/20/2012 10:23 | | |
| L55310-4 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:40 | 12/19/2012 11:00 | 12/20/2012 10:25 | | |
| L55310-5 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:55 | 12/19/2012 11:00 | 12/20/2012 10:27 | | |
| L55310-6 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:10 | 12/19/2012 11:00 | 12/20/2012 10:36 | | |
| L55310-7 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:04 | 12/19/2012 11:00 | 12/20/2012 10:38 | | |
| L56674-1 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:15 | 12/19/2012 11:00 | 12/20/2012 10:01 | | |
| L56674-2 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:00 | 12/19/2012 11:00 | 12/20/2012 10:16 | | |
| L56674-3 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:30 | 12/19/2012 11:00 | 12/20/2012 10:18 | | |
| | | City of Shoreline Monthly Water Quality Monitoring | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-1 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:27 | | |
| L56981-1 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:27 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-2 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 10:50 | 12/19/2012 11:00 | 12/20/2012 11:29 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-2 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:50 | 12/19/2012 11:00 | 12/20/2012 11:29 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-3 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 10:00 | 12/19/2012 11:00 | 12/20/2012 11:31 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-3 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:00 | 12/19/2012 11:00 | 12/20/2012 11:31 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-4 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:45 | 12/19/2012 11:00 | 12/20/2012 11:33 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |

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|---|---|---|---|---|---|---|---|---|
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-4 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:45 | 12/19/2012 11:00 | 12/20/2012 11:33 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-5 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 8:40 | 12/19/2012 11:00 | 12/20/2012 11:35 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-5 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 8:40 | 12/19/2012 11:00 | 12/20/2012 11:35 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-6 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:10 | 12/19/2012 11:00 | 12/20/2012 11:37 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-6 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:10 | 12/19/2012 11:00 | 12/20/2012 11:37 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-7 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:00 | 12/19/2012 11:00 | 12/20/2012 11:38 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-7 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:00 | 12/19/2012 11:00 | 12/20/2012 11:38 | |
| | | WRIA 7 Streams Ambient Monitoring | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-1 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 13:42 | 12/19/2012 11:00 | 12/20/2012 10:45 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-1 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 13:42 | 12/19/2012 11:00 | 12/20/2012 10:45 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-2 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 12:21 | 12/19/2012 11:00 | 12/20/2012 10:47 | |

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|---|---|---|---|---|---|---|---|---|
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-2 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 12:21 | 12/19/2012 11:00 | 12/20/2012 10:47 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-3 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 12:05 | 12/19/2012 11:00 | 12/20/2012 10:49 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-3 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 12:05 | 12/19/2012 11:00 | 12/20/2012 10:49 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-4 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 11:39 | 12/19/2012 11:00 | 12/20/2012 11:04 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-4 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 11:39 | 12/19/2012 11:00 | 12/20/2012 11:04 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-5 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 11:13 | 12/19/2012 11:00 | 12/20/2012 11:05 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-5 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 11:13 | 12/19/2012 11:00 | 12/20/2012 11:05 | |
| L56988-6 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:07 | |
| L56988-7 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 10:11 | 12/19/2012 11:00 | 12/20/2012 11:09 | |
| | | | | | | | | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-8 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 9:43 | 12/19/2012 11:00 | 12/20/2012 11:11 | |
| | | | | | | | | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-8 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 9:43 | 12/19/2012 11:00 | 12/20/2012 11:11 | |

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|---|---|---|---|---|---|---|---|---|
| L56988-9 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 9:21 | 12/19/2012 11:00 | 12/20/2012 11:13 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-9 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 9:21 | 12/19/2012 11:00 | 12/20/2012 11:13 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-10 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:54 | 12/19/2012 11:00 | 12/20/2012 11:15 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-10 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 8:54 | 12/19/2012 11:00 | 12/20/2012 11:15 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-11 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:33 | 12/19/2012 11:00 | 12/20/2012 11:16 | |
| L56988-12 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:15 | 12/19/2012 11:00 | 12/20/2012 11:18 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-12 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 8:15 | 12/19/2012 11:00 | 12/20/2012 11:18 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57066-5 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/13/2012 6:40 | 12/19/2012 11:00 | 12/20/2012 9:25 | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVTOTP | FRESH WTR | 12/13/2012 8:36 | 12/19/2012 11:00 | 12/20/2012 9:26 | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls Surface Water Quarterly | CVTOTP | FRESH WTR | 12/18/2012 6:39 | 12/19/2012 11:00 | 12/20/2012 9:34 | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/13/2012 4:25 | 12/19/2012 11:00 | 12/20/2012 9:36 | |
| L57098-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:00 | 12/19/2012 11:00 | 12/20/2012 9:45 | |
| L57098-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:30 | 12/19/2012 11:00 | 12/20/2012 9:47 | |
| L57098-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:30 | 12/19/2012 11:00 | 12/20/2012 9:48 | |
| L57098-5 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 6:05 | 12/19/2012 11:00 | 12/20/2012 9:50 | |
| L57111-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 12/18/2012 10:05 | 12/19/2012 11:00 | 12/20/2012 11:53 | |
| L57111-2 | 421195-150 | | CVTOTP | FRESH WTR | 12/18/2012 9:50 | 12/19/2012 11:00 | 12/20/2012 12:00 | |
| L57113-3 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | CVTOTP | FRESH WTR | 12/19/2012 11:58 | 12/20/2012 9:35 | 12/20/2012 12:46 | |
| L57113-4 | 421422-VASW | | CVTOTP | FRESH WTR | 12/19/2012 10:58 | 12/20/2012 9:35 | 12/20/2012 12:47 | |
| L57113-5 | 421422-VASW | | CVTOTP | FRESH WTR | 12/19/2012 9:52 | 12/20/2012 9:35 | 12/20/2012 12:55 | |
| L57124-1 | 421195-280 | Des Moines Creek Basin Support | CVTOTN | FRESH WTR | 12/19/2012 11:56 | 12/20/2012 9:35 | 12/20/2012 12:57 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |

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|---|---|---|---|---|---|---|---|---|---|
| L57124-1 | 421195-280 | | CVTOTP | FRESH WTR | 12/19/2012 11:56 | 12/20/2012 9:35 | 12/20/2012 12:57 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57124-4 | 421195-280 | | CVTOTN | FRESH WTR | 12/19/2012 12:26 | 12/20/2012 9:35 | 12/20/2012 13:06 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L57124-4 | 421195-280 | | CVTOTP | FRESH WTR | 12/19/2012 12:26 | 12/20/2012 9:35 | 12/20/2012 13:06 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:00 | 12/20/2012 9:52 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57138-1 | 421879-210 | | CVTOTP | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:00 | 12/20/2012 9:59 | | |
| WG124809-1 | MB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:19 | | MB1 121219 |
| WG124809-2 | SB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:21 | | WG124809-1 |
| WG124809-3 | LCS | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:23 | | LEVEL1 |
| WG124809-4 | LD | | CVTOTP | FRESH WTR | | 12/19/2012 11:00 | 12/20/2012 9:28 | | L57075-2 |
| WG124809-5 | MS | | CVTOTP | FRESH WTR | | 12/19/2012 11:00 | 12/20/2012 9:30 | | L57075-2 |
| WG124809-6 | LD | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 9:54 | | L57129-1 |
| WG124809-7 | MS | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 9:56 | | L57129-1 |
| WG124809-8 | LD | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 10:10 | | L56674-1 |
| WG124809-9 | MS | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 10:12 | | L56674-1 |
| WG124809-10 | MB | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:40 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | MB2 121219 |
| WG124809-10 | MB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:40 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121219 |
| WG124809-11 | SB | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:42 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | WG124809-10 |
| WG124809-11 | SB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:42 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124809-10 |
| WG124809-12 | LCS | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:43 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124809-12 | LCS | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 10:43 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124809-13 | LD | CVTOTN | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:51 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L56988-3 |
| WG124809-13 | LD | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:51 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56988-3 |
| WG124809-14 | MS | CVTOTN | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:53 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L56988-3 |
| WG124809-14 | MS | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:53 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56988-3 |
| WG124809-15 | MB | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:40 | | MB3 121219 |
| WG124809-16 | SB | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:42 | | WG124809-15 |
| WG124809-17 | LCS | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:44 | | LEVEL1 |
| WG124809-18 | LD | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 11:55 | | L57111-1 |
| WG124809-19 | MS | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 11:57 | | L57111-1 |
| WG124809-20 | MB | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:40 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | MB1 121220 |
| WG124809-20 | MB | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:40 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121220 |
| WG124809-21 | SB | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:42 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | WG124809-20 |
| WG124809-21 | SB | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:42 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124809-20 |
| WG124809-22 | LCS | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:44 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | LEVEL1 |
| WG124809-22 | LCS | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:44 | WG124809-1,-2,-3,-4,- | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124809-23 | LD | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 12:49 | 5,-6,-7,-8,-9,-10,-11,- | L57113-4 |
| WG124809-24 | MS | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 12:51 | 12,-13,-14,-15,-16,- | L57113-4 |
| WG124809-25 | LD | CVTOTN | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:08 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L57124-4 |
| WG124809-25 | LD | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:08 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57124-4 |
| WG124809-26 | MS | CVTOTN | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:09 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L57124-4 |
| WG124809-26 | MS | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:09 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57124-4 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124758 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVTSS | GRND WTR | 12/18/2012 8:00 | 12/20/2012 16:10 | 12/28/2012 10:20 | WG124758-1,-2,-3,-4,-5 | |
| L57076-1 | 421422-PUGW | | CVTSS | GRND WTR | 12/18/2012 5:35 | 12/20/2012 16:10 | 12/28/2012 10:21 | | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVTSS | GRND WTR | 12/19/2012 10:31 | 12/20/2012 16:10 | 12/28/2012 10:22 | | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 12/17/2012 7:22 | 12/20/2012 16:10 | 12/28/2012 10:23 | | |
| L57077-3 | 421422-DUGW | | CVTSS | GRND WTR | 12/17/2012 6:54 | 12/20/2012 16:10 | 12/28/2012 10:24 | | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVTSS | GRND WTR | 12/14/2012 6:00 | 12/20/2012 16:10 | 12/28/2012 10:27 | | |
| L57080-3 | 421422-HTGW | | CVTSS | GRND WTR | 12/14/2012 7:45 | 12/20/2012 16:10 | 12/28/2012 10:28 | | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVTSS | GRND WTR | 12/18/2012 8:00 | 12/20/2012 16:10 | 12/28/2012 10:29 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTSS | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 16:10 | 12/28/2012 11:03 | | |
| L57098-2 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 16:10 | 12/28/2012 11:05 | | |
| L57098-3 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 16:10 | 12/28/2012 11:05 | | |
| L57098-4 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 16:10 | 12/28/2012 11:06 | | |
| L57098-5 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 6:05 | 12/20/2012 16:10 | 12/28/2012 11:06 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 12/13/2012 0:00 | 12/20/2012 16:10 | 12/28/2012 10:31 | | |
| L57138-1 | 421879-210 | | CVTSS | STORM WTR | 12/15/2012 0:00 | 12/20/2012 16:10 | 12/28/2012 10:32 | | |
| WG124758-1 | MB | | CVTSS | BLANK WTR | | 12/20/2012 16:10 | 12/28/2012 10:19 | | MB1 121220 |
| WG124758-2 | LD | | CVTSS | GRND WTR | | 12/20/2012 16:10 | 12/28/2012 10:30 | | L57080-4 |
| WG124758-3 | LD | | CVTSS | STORM WTR | | 12/20/2012 16:10 | 12/28/2012 10:33 | | L57138-1 |
| WG124758-4 | LCS | | CVTSS | BLANK WTR | | 12/20/2012 16:10 | 12/28/2012 10:58 | | LEVEL1 |
| WG124758-5 | LD | | CVTSS | FRESH WTR | | 12/20/2012 16:10 | 12/28/2012 11:04 | | L57098-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124695 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 12/13/2012 0:00 | 12/14/2012 18:51 | 12/14/2012 18:51 | WG124695-1,-2,-3 | |
| WG124695-1 | LCS | | CVTURB | BLANK WTR | | 12/14/2012 18:49 | 12/14/2012 18:49 | | LEVEL1 |
| WG124695-2 | LD | | CVTURB | STORM WTR | | 12/14/2012 18:52 | 12/14/2012 18:52 | | L57129-1 |
| WG124695-3 | LCS | | CVTURB | BLANK WTR | | 12/14/2012 18:53 | 12/14/2012 18:53 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124659 Fecal coliforn**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 12/14/2012 0:00 | 12/14/2012 17:00 | 12/15/2012 15:00 | WG124659-1,-2,-3,-4 | |
| WG124659-1 | PC | | MCFC-MF | BLANK WTR | | 12/14/2012 17:00 | 12/15/2012 15:00 | | QC-PERFORMED:14-DEC-12 |
| WG124659-2 | NC | | MCFC-MF | BLANK WTR | | 12/14/2012 17:00 | 12/15/2012 15:00 | | QC-PERFORMED:14-DEC-12 |
| WG124659-3 | BF | | MCFC-MF | BLANK WTR | | 12/14/2012 17:00 | 12/15/2012 15:00 | | QC-PERFORMED:14-DEC-12 |
| WG124659-4 | AF | | MCFC-MF | BLANK WTR | | 12/14/2012 17:00 | 12/15/2012 15:00 | | QC-PERFORMED:14-DEC-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124838 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | Ravensdale Monthly GW | | | | | | WG124838-1,-2,-3,-4 | |
| L56876-1 | 421195-260 | | MTICPMS | GRND WTR | 12/18/2012 10:00 | 1/3/2013 8:00 | 1/3/2013 15:09 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57030-1 | 421879-210 | | MTICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/3/2013 15:15 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall | MTHARD-ICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57075-2 | 421422-DUSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/3/2013 15:22 | | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls | MTHARD-ICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57079-1 | 421422-CFSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/3/2013 15:28 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar | MTHARD-ICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-1 | 421422-CHSW-M | Hills Surface Water | MTICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/3/2013 15:34 | | |
| L57098-2 | 421422-CHSW-M | Monthly | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/3/2013 15:40 | | |
| L57098-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:46 | | |
| L57098-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:52 | | |
| L57098-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/3/2013 16:11 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57112-2 | 421879-210 | | MTICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/3/2013 16:17 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon | MTHARD-ICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-1 | 421422-VASW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/3/2013 16:23 | | |
| L57113-3 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-3 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/3/2013 16:29 | | |
| L57113-4 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-4 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/3/2013 16:35 | | |
| L57113-5 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-5 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/3/2013 16:42 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57129-1 | 421879-210 | | MTICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:00 | | |
| L57138-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57138-1 | 421879-210 | | MTICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:06 | | |
| WG124838-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | METHOD BLANK |
| WG124838-1 | MB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 14:57 | | METHOD BLANK |
| WG124838-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | WG124838-1 MS-20 |
| WG124838-2 | SB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 15:03 | | WG124838-1 MS-20 |
| WG124838-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | L57113-5 RPD-LIQ |
| WG124838-3 | LD | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:48 | | L57113-5 RPD-LIQ |
| WG124838-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:34 | | L57113-5 MS-20 |
| WG124838-4 | MS | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:54 | | L57113-5 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124787 Total and Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57113-1 | 421422-VASW | SWD-VASW Vashon | MTHG-MID | FRESH WTR | 12/20/2012 10:30 | 12/24/2012 10:00 | 12/27/2012 13:47 | WG124787-1,-2,-3,-4 | |
| L57113-3 | 421422-VASW | Surface Water Quarterly | MTHG-MID | FRESH WTR | 12/19/2012 11:58 | 12/24/2012 10:00 | 12/27/2012 13:49 | | |
| L57113-4 | 421422-VASW | | MTHG-MID | FRESH WTR | 12/19/2012 10:58 | 12/24/2012 10:00 | 12/27/2012 13:42 | | |
| L57113-5 | 421422-VASW | | MTHG-MID | FRESH WTR | 12/19/2012 9:52 | 12/24/2012 10:00 | 12/27/2012 13:51 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 12/13/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 13:53 | | |
| L57129-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 12/13/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 14:00 | WG124787-1 | |
| L57138-1 | 421879-210 | | MTHG-MID | STORM WTR | 12/15/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 13:55 | WG124787-1,-2,-3,-4 | |
| L57138-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 12/15/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 14:02 | WG124787-1 | |
| WG124787-1 | MB | | MTHG-MID | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:38 | WG124787-1,-2,-3,-4 | METHOD BLANK |
| WG124787-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:38 | WG124787-1 | METHOD BLANK |
| WG124787-2 | SB | | MTHG-MID | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:40 | WG124787-1,-2,-3,-4 | WG124787-1 HG-LMID |
| WG124787-3 | MS | | MTHG-MID | FRESH WTR | | 12/24/2012 10:00 | 12/27/2012 13:44 | | L57113-4 HG-LMID |
| WG124787-4 | MSD | | MTHG-MID | FRESH WTR | | 12/24/2012 10:00 | 12/27/2012 13:46 | | WG124787-3 L57113-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124842 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | SWD-DUGW Duvall Groundwater Quarterly | | | | | | WG124842-1,-2,-3,-4 | |
| L56942-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 12/27/2012 9:40 | 1/2/2013 7:00 | 1/2/2013 9:03 | | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/19/2012 10:31 | 1/2/2013 7:00 | 1/2/2013 9:09 | | |
| L57076-4 | 421422-HTGW | | MTICPMS-DISS | GRND WTR | 12/24/2012 7:10 | 1/2/2013 7:00 | 1/2/2013 9:14 | | |
| | | SWD-PUGW Puyallup Groundwater Quarterly | | | | | | | |
| L57080-4 | 421422-PUGW | | MTICPMS-DISS | GRND WTR | 12/18/2012 8:00 | 1/2/2013 7:00 | 1/2/2013 9:20 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 12/13/2012 4:25 | 1/2/2013 7:00 | 1/2/2013 9:26 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:00 | 1/2/2013 7:00 | 1/2/2013 9:32 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:37 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:55 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 6:05 | 1/2/2013 7:00 | 1/2/2013 10:12 | | |
| | | SWD-PUGW Puyallup Groundwater Quarterly | | | | | | | |
| L57107-1 | 421422-PUGW | | MTICPMS-DISS | GRND WTR | 12/20/2012 11:31 | 1/2/2013 7:00 | 1/2/2013 10:18 | | |
| | | SWD-HTGW Houghton Groundwater Quarterly | | | | | | | |
| L57107-3 | 421422-HTGW | | MTICPMS-DISS | GRND WTR | 12/24/2012 6:30 | 1/2/2013 7:00 | 1/2/2013 10:24 | | |
| L57108-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/21/2012 8:05 | 1/2/2013 7:00 | 1/2/2013 10:29 | | |
| L57108-3 | 421422-PUGW | | MTICPMS-DISS | GRND WTR | 12/21/2012 10:59 | 1/2/2013 7:00 | 1/2/2013 10:35 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/11/2012 14:42 | 1/2/2013 7:00 | 1/2/2013 10:41 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | MTICPMS-DISS | FRESH WTR | 12/20/2012 10:30 | 1/2/2013 7:00 | 1/2/2013 10:47 | | |
| L57113-3 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 11:58 | 1/2/2013 7:00 | 1/2/2013 11:04 | | |
| L57113-4 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 10:58 | 1/2/2013 7:00 | 1/2/2013 11:10 | | |
| L57113-5 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 9:52 | 1/2/2013 7:00 | 1/2/2013 11:15 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/13/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:21 | | |
| L57138-1 | 421879-210 | | MTICPMS-DISS | STORM WTR | 12/15/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:27 | | |
| WG124842-1 | MB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:51 | | METHOD BLANK |
| WG124842-2 | SB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:57 | | WG124842-1 MS-20 |
| WG124842-3 | LD | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:01 | | L57098-4 RPD-LIQ |
| WG124842-4 | MS | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:06 | | L57098-4 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124738 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 12/13/2012 0:00 | 12/20/2012 9:00 | 1/2/2013 14:48 | WG124738-1,-2,-3 | |
| L57138-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 12/15/2012 0:00 | 12/20/2012 9:00 | 1/2/2013 15:12 | | |
| WG124738-1 | MB | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 9:53 | | MB121220 |
| WG124738-2 | SB | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 10:17 | | WG124738-1 |
| | | | | | | | | | WG124738-2 |
| WG124738-3 | SBD | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 10:41 | | WG124738-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124716 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:30 | 1/4/2013 14:48 | WG124716-3,-1,-2 | |
| L57138-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:30 | 1/4/2013 15:14 | | |
| WG124716-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 13:32 | | MB121219 |
| WG124716-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 13:58 | | WG124716-1 |
| | | | | | | | | | WG124716-2 |
| WG124716-3 | SBD | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 14:23 | | WG124716-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124717 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:30 | 1/7/2013 10:54 | WG124717-3,-1,-2 | |
| L57138-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:30 | 1/7/2013 11:29 | | |
| WG124717-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 9:08 | | MB121219 |
| WG124717-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 9:43 | | WG124717-1 |
| | | | | | | | | | WG124717-2 |
| WG124717-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 10:19 | | WG124717-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124715 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57112-4 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/12/2012 11:03 | 12/19/2012 11:30 | 12/28/2012 13:05 | WG124715-1,-2,-3,-4 | |
| L57129-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/14/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:29 | | |
| L57138-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/16/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:52 | | |
| WG124715-1 | MB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:32 | | MB121219 |
| WG124715-2 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:55 | | WG124715-1 SB-MO |
| WG124715-3 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 12:18 | | WG124715-1 SB-DSL |
| WG124715-4 | LD | | ORWTPH-DX | STORM WTR | | 12/19/2012 11:30 | 12/28/2012 12:42 | | L57138-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57129

**WG124680 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 12/14/2012 0:00 | 12/17/2012 16:58 | 12/17/2012 16:58 | WG124680-1,-2,-3 | |
| L57138-2 | 421879-210 | | ORWTPH-G | STORM WTR | 12/16/2012 0:00 | 12/17/2012 17:27 | 12/17/2012 17:27 | | |
| WG124680-1 | MB | | ORWTPH-G | BLANK WTR | | 12/17/2012 15:59 | 12/17/2012 15:59 | | MB121712 |
| WG124680-2 | SB | | ORWTPH-G | BLANK WTR | | 12/17/2012 15:00 | 12/17/2012 15:00 | | WG124680-1 |
| WG124680-3 | LD | | ORWTPH-G | STORM WTR | | 12/17/2012 16:29 | 12/17/2012 16:29 | | L57129-3 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124653 (Assorted BOD) Run ID: R185426**

**MB:WG124653-1 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:WG124653-2 MB:WG124653-1 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 | 179 | 90 | | 80--120 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124682 (Anions) Run ID: R185452**

**CS:WG124682-1 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 | 0.096 | 96 | | 70--130 |

**CS:WG124682-1 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 | 0.15 | 75 | | 70--130 |

**MB:WG124682-2 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:WG124682-2 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:WG124682-3 MB:WG124682-2 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 | 1.93 | 97 | | 80--120 |

**SB:WG124682-3 MB:WG124682-2 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 | 4.83 | 97 | | 80--120 |

**LCS:WG124682-4 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:WG124682-4 Matrix: BLANK WTR Listtype:CVSO4 Method:SM4110B SO4 Project: Pkey:STD**
**(Lab Control Sample)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.1 | 0.2 | mg/L | 15 | 15.6 | 104 | | 85--115 |

**LD:WG124682-5 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 4.52 | 0 | | 0--20 |

**MS:WG124682-6 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 10 | 14.8 | 102 | | 75--125 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 6.4 | 8 | | 0--20 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 16.8 | 1 | | 0--20 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 20 | 26.8 | 105 | | 75--125 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 25 | 42 | 101 | | 75--125 |

**MB:WG124682-9 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 | |

# King County Environmental Laboratory Analytical QC Report

**MB:WG124682-9 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 | |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124694 (Conducticity) Run ID: R185495**

**LCS:WG124694-1 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 | 74.2 | 100 | | 90--110 |

**LCS:WG124694-2 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 | 697 | 97 | | 90--110 |

**LD:WG124694-3 L57129-1 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 | 34.6 | 35 | 1 | | 0--10 |

**LD:WG124694-4 L57054-6 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 1460 | 1460 | 0 | | 0--10 |

**LCS:WG124694-5 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 | 79.7 | 108 | | 90--110 |

**LCS:WG124694-6 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 | 713 | 99 | | 90--110 |

**LD:WG124694-7 L55310-7 Matrix: STORM WTR Listtype:CVCOND Method:SM2510-B Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 263 | 263 | 0 | | 0--10 |

**LCS:WG124694-8 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD**
**(Lab Control Sample)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 717.5 | 714 | 100 | | 90--110 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124897 (MBAS - 421879) Run ID: R185736**
**No QC sample found for this workgroup**

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124815 (DisNuts - various) Run ID: R185654**

**MB:WG124815-1 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:WG124815-1 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:WG124815-1 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:WG124815-2 MB:WG124815-1 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 | 0.0988 | 99 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.814 | 102 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.0398 | 100 | | 80--120 |

**LCS:WG124815-3 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:WG124815-3 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Lab Control Sample)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.8 | 0.834 | 104 | | 85--115 |

**LCS:WG124815-3 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 | 0.0396 | 99 | | 85--115 |

**LD:WG124815-4 L57138-1 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 | 0.179 | 0.178 | 0 | | 0--20 |

**LD:WG124815-4 L57138-1 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 | 0.00766 | 0.00792 | 3 | | 0--20 |

**MS:WG124815-5 L57138-1 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 | 0.179 | 0.8 | 0.978 | 100 | | 75--125 |

**MS:WG124815-5 L57138-1 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 | 0.00766 | 0.04 | 0.0459 | 95 | | 75--125 |

**LD:WG124815-6 L56802-1 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 | 0.026 | 0.0249 | 4 | | 0--20 |

**LD:WG124815-6 L56802-1 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 | 0.198 | 0.194 | 2 | | 0--20 |

# King County Environmental Laboratory Analytical QC Report

**MS:WG124815-7 L56802-1 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 | 0.026 | 0.1 | 0.137 | 111 | | 75--125 |

**MS:WG124815-7 L56802-1 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 | 0.198 | 0.8 | 1.01 | 102 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124752 (Assorted TKN) Run ID: R185548**

**MB:WG124752-1 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 | |

**LCS:WG124752-2 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 | 0.491 | 98 | | 80--120 |

**LCS:WG124752-3 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 | 5 | 5.14 | 103 | | 80--120 |

**SB:WG124752-4 MB:WG124752-1 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 | 5.23 | 105 | | 80--120 |

**LD:WG124752-5 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 7.72 | 5 | | 0--20 |

**MS:WG124752-6 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 5 | 12.8 | 94 | | 70--130 |

**LD:WG124752-7 L56807-1 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 | 0.491 | 0.488 | 1 | | 0--20 |

**MS:WG124752-8 L56807-1 Matrix: STORM WTR Listtype:CVTKN Method:EPA 351.2 Project:421879-210 Pkey:STD**
**(Matrix Spike)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Kjeldahl Nitrogen | 0.1 | 0.2 | mg/L | 0.491 | 5 | 5.65 | 103 | | 70--130 |

**LD:WG124752-9 L57066-1 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 | 0.433 | 0.496 | 14 | | 0--20 |

**MS:WG124752-10 L57066-1 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 | 0.433 | 5 | 5.54 | 102 | | 70--130 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124809 (TOTNUTS for 12/13 - 12/19) Run ID: R185606**

**MB:WG124809-1 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:WG124809-2 MB:WG124809-1 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124809-3 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 | 0.101 | 101 | | 85--115 |

**LD:WG124809-4 L57075-2 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 | 0.0164 | 0.0157 | 4 | | 0--20 |

**MS:WG124809-5 L57075-2 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 | 0.0164 | 0.1 | 0.115 | 98 | | 75--125 |

**LD:WG124809-6 L57129-1 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 | 0.0979 | 0.104 | 6 | | 0--20 |

**MS:WG124809-7 L57129-1 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 | 0.0979 | 0.1 | 0.193 | 95 | | 75--125 |

**LD:WG124809-8 L56674-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.029 | 0.0275 | 5 | | 0--20 |

**MS:WG124809-9 L56674-1 Matrix: STORM 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 | 0.029 | 0.1 | 0.125 | 96 | | 75--125 |

**MB:WG124809-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124809-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**SB:WG124809-11 MB:WG124809-10 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 | 1.01 | 101 | | 80--120 |

**SB:WG124809-11 MB:WG124809-10 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 | 0.102 | 102 | | 80--120 |

**LCS:WG124809-12 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 | 0.962 | 96 | | 85--115 |

**LCS:WG124809-12 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 | 0.0953 | 95 | | 85--115 |

# King County Environmental Laboratory Analytical QC Report

**LD:WG124809-13 L56988-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.749 | 0.814 | 8 | | 0--20 |

**LD:WG124809-13 L56988-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0182 | 0.0187 | 3 | | 0--20 |

**MS:WG124809-14 L56988-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 0.749 | 1 | 1.84 | 109 | | 75--125 |

**MS:WG124809-14 L56988-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0182 | 0.1 | 0.116 | 98 | | 75--125 |

**MB:WG124809-15 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:WG124809-16 MB:WG124809-15 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Spike Blank, Method Blank)**

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

**LCS:WG124809-17 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 | 0.0897 | 90 | | 85--115 |

**LD:WG124809-18 L57111-1 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 |
|---|---|---|---|---|---|---|---|---|

# King County Environmental Laboratory Analytical QC Report

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0123 | 0.0137 | 11 | | 0--20 |

**MS:WG124809-19 L57111-1 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 | 0.0123 | 0.1 | 0.108 | 96 | | 75--125 |

**MB:WG124809-20 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:WG124809-20 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:WG124809-21 MB:WG124809-20 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 | 0.982 | 98 | | 80--120 |

**SB:WG124809-21 MB:WG124809-20 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 | 0.0995 | 99 | | 80--120 |

**LCS:WG124809-22 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 | 0.92 | 92 | | 85--115 |

**LCS:WG124809-22 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 | 0.0935 | 93 | | 85--115 |

**LD:WG124809-23 L57113-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

# King County Environmental Laboratory Analytical QC Report

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0812 | 0.0807 | 1 | | 0--20 |

**MS:WG124809-24 L57113-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW 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 | 0.0812 | 0.1 | 0.178 | 96 | | 75--125 |

**LD:WG124809-25 L57124-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.545 | 0.569 | 4 | | 0--20 |

**LD:WG124809-25 L57124-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0271 | 0.0293 | 8 | | 0--20 |

**MS:WG124809-26 L57124-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 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 | 0.545 | 1 | 1.55 | 100 | | 75--125 |

**MS:WG124809-26 L57124-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 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 | 0.0271 | 0.1 | 0.123 | 96 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124758 (TSS FOR 421422/421879) Run ID: R185596**

**MB:WG124758-1 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 | |

**LD:WG124758-2 L57080-4 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 | 5 | 10 | mg/L | 54 | 58 | 7 | | 0--25 |

**LD:WG124758-3 L57138-1 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 | 124 | 114 | 8 | | 0--25 |

**LCS:WG124758-4 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:WG124758-5 L57098-1 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 | 1 | 2 | mg/L | <MDL | <MDL | | | 0--25 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124695 (Turbidity) Run ID: R185527**

**LCS:WG124695-1 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 | 9.98 | 100 | | 90--110 |

**LD:WG124695-2 L57129-1 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 | 71.2 | 69.2 | 3 | | 0--25 |

**LCS:WG124695-3 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 | 97.4 | 97 | | 90--110 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124659 (NPDES SW Monitoring) Run ID: R185366**

**PC:WG124659-1 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:WG124659-2 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:WG124659-3 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:WG124659-4 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 | |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124838 (Misc Totals) Run ID: R185700**

**MB:WG124838-1 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:WG124838-1 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:WG124838-2 MB:WG124838-1 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 | 93 | | 85--115 |

**SB:WG124838-2 MB:WG124838-1 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 |
|---|---|---|---|---|---|---|---|---|---|

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|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.2 | 96 | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4560 | 91 | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4720 | 94 | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 21.7 | 109 | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4830 | 97 | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4580 | 92 | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.9 | 95 | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4860 | 97 | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.9 | 100 | 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 | 19.5 | 98 | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.5 | 93 | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.5 | 93 | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 17.9 | 90 | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | 85--115 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 289 | 0 | | 0--20 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 13500 | 1 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 38400 | 0 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 85.7 | 14 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 2550 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 52400 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.825 | 3 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 0.44 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 1080 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 269 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 0.19 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 2.53 | 2 | | 0--20 |

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|---|---|---|---|---|---|---|---|---|
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 0.67 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 0.9 | | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 1.84 | 0 | | 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 | 5.49 | 5.57 | 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 | 0.27 | 0.27 | | | 0--20 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 33.1 | 320 | | 4xRule | 75--125 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.2 | 96 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 5000 | 18600 | 104 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 5000 | 42500 | | 4xRule | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 20 | 106 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 5000 | 6790 | 85 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 5000 | 58000 | | 4xRule | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 16.9 | 80 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 20 | 17 | 83 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 5000 | 5250 | 83 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 20 | 286 | | 4xRule | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 20 | 17.5 | 86 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 20 | 21.9 | 97 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 20 | 19.7 | 95 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 20 | 20.1 | 96 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 20 | 20.8 | 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 | 18.9 | 94 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.4 | 92 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 17.2 | 86 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 17.8 | 89 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 5.49 | 20 | 23.2 | 88 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.27 | 20 | 19.7 | 97 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124787 (SWD Surface water, NPDES) Run ID: R185578**

**MB:WG124787-1 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:WG124787-1 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:WG124787-2 MB:WG124787-1 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 | 0.905 | 90 | | 85--115 |

**MSD:WG124787-4 MS:WG124787-3 L57113-4 Matrix: FRESH WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-VASW 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 | 0.857 | 86 | | 75--125 | 1 | 0.893 | 89 | | 4 | | 0--20 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124842 (01/02/13 Misc. Diss.) Run ID: R185670**

**MB:WG124842-1 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:WG124842-2 MB:WG124842-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4530 | 91 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4910 | 98 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4780 | 96 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5180 | 104 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.7 | 99 | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 97 | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20 | 100 | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19 | 95 | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19 | 95 | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.7 | 94 | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21 | 105 | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.8 | 104 | 85--115 |

**LD:WG124842-3 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 2910 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 1050 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 45.2 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 628 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 4490 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 0.25 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 12 | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 0.925 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 0.17 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 0.44 | | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 1.7 | | | 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 |
| 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 | 5.84 | 5.77 | 1 | | 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:WG124842-4 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 5000 | 7750 | 97 | | 75--125 |

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|---|---|---|---|---|---|---|---|---|
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 5000 | 5800 | 95 | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 20 | 64.5 | 99 | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 5000 | 5560 | 99 | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 5000 | 9180 | 94 | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 20 | 19.4 | 96 | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20 | 100 | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 5000 | 5220 | 104 | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 20 | 20.9 | 100 | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.8 | 104 | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 20 | 20.8 | 103 | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.8 | 104 | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 20 | 22.2 | 102 | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 20 | 20.3 | 101 | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 105 | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.8 | 104 | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.5 | 97 | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.84 | 20 | 25.2 | 97 | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.5 | 107 | 75--125 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124738 (hb180 herbs-npdes) Run ID: R185667**

**MB:WG124738-1 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:WG124738-3 SB:WG124738-2 MB:WG124738-1 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 | 4.33 | 87 | | 21--147 | 5 | 3.99 | 80 | | 8 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.07 | 81 | | 10--175 | 5 | 4.19 | 84 | | 3 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.02 | 80 | | 59--151 | 5 | 4.14 | 83 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57129-1 | 95 | 109 |
| L57138-1 | 98 | 90 |
| WG124738-1 | 82 | 96 |
| WG124738-2 | 86 | 100 |
| WG124738-3 | 79 | 94 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124716 (OP#256) Run ID: R185725**

**MB:WG124716-1 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:WG124716-3 SB:WG124716-2 MB:WG124716-1 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 | BD Value | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.043 | 0.05 | ug/L | <MDL | 0.25 | 0.214 | 85 | | 52--129 | 0.25 | 0.222 | 89 | | 4 | | 0--40 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.262 | 105 | | 25--161 | 0.25 | 0.27 | 108 | | 3 | | 0--40 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.264 | 106 | | 57--127 | 0.25 | 0.261 | 105 | | 1 | | 0--40 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.244 | 98 | | 70--98 | 0.25 | 0.233 | 93 | | 5 | | 0--40 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.21 | 84 | | 40--160 | 0.25 | 0.235 | 94 | | 11 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57129-1 | 105 |
| L57138-1 | 103 |
| WG124716-1 | 102 |
| WG124716-2 | 115 |
| WG124716-3 | 110 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124717 (BL#86 pahphth-sur) Run ID: R185745**

**MB:WG124717-1 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 | <MDL | |
| 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 | 0.176 | 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 | |

**SBD:WG124717-3 SB:WG124717-2 MB:WG124717-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.97 | 79 | | 32--93 | 2.5 | 1.88 | 75 | | 5 | | 0--40 |
| 2-Methylnaphthalene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.8 | 72 | | 25--104 | 2.5 | 1.74 | 70 | | 3 | | 0--40 |
| Dimethyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 1.88 | 75 | | 31--119 | 2.5 | 1.78 | 71 | | 5 | | 0--40 |
| Acenaphthylene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.64 | 65 | | 49--107 | 2.5 | 1.83 | 73 | | 11 | | 0--40 |
| Acenaphthene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.98 | 79 | | 43--103 | 2.5 | 1.9 | 76 | | 4 | | 0--40 |
| Diethyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 1.79 | 72 | | 26--141 | 2.5 | 1.75 | 70 | | 3 | | 0--40 |
| Fluorene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.96 | 78 | | 43--127 | 2.5 | 1.75 | 70 | | 11 | | 0--40 |
| Pentachlorophenol | 1.3 | 2.5 | ug/L | <MDL | 2.5 | 1.6 | 64 | | 10--137 | 2.5 | 0.31 | 12 | | 135 | * | 0--40 |
| Phenanthrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.42 | 97 | | 57--114 | 2.5 | 2.33 | 93 | | 4 | | 0--40 |
| Anthracene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.01 | 80 | | 59--122 | 2.5 | 2.14 | 86 | | 7 | | 0--40 |
| Di-N-Butyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 2.08 | 83 | | 52--145 | 2.5 | 2.17 | 87 | | 4 | | 0--40 |
| Fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.35 | 94 | | 57--123 | 2.5 | 2.38 | 95 | | 1 | | 0--40 |

# King County Environmental Laboratory Analytical QC Report

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pyrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.56 | 103 | 51--139 | 2.5 | 2.51 | 100 | 2 | 0--40 |
| Benzyl Butyl Phthalate | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.59 | 103 | 49--145 | 2.5 | 2.64 | 106 | 2 | 0--40 |
| Benzo(a)anthracene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.64 | 106 | 67--130 | 2.5 | 2.51 | 100 | 5 | 0--40 |
| Chrysene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.69 | 107 | 58--114 | 2.5 | 2.65 | 106 | 1 | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.25 | 0.5 | ug/L | 0.176 | 2.5 | 3.41 | 130 * | 48--128 | 2.5 | 3.41 | 130 * | 0 | 0--40 |
| Di-N-Octyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 2.49 | 99 | 51--126 | 2.5 | 2.37 | 95 | 5 | 0--40 |
| Benzo(b,j,k)fluoranthene | 1 | 2 | ug/L | <MDL | 7.5 | 7.02 | 94 | 49--139 | 7.5 | 6.63 | 88 | 6 | 0--40 |
| Benzo(a)pyrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.05 | 82 | 55--132 | 2.5 | 2.07 | 83 | 1 | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.47 | 99 | 53--122 | 2.5 | 2.24 | 90 | 10 | 0--40 |
| Dibenzo(a,h)anthracene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.53 | 101 | 47--134 | 2.5 | 2.31 | 92 | 9 | 0--40 |
| Benzo(g,h,i)perylene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.29 | 92 | 32--130 | 2.5 | 2.2 | 88 | 4 | 0--40 |

| **Surrogate:** | **2,4,6-Tribromophenol** | **2-Fluorobiphenyl** | **2-Fluorophenol** | **d14-Terphenyl** | **d4-2-Chlorophenol** | **d5-Nitrobenzene** | **I5-Phenol** |
|---|---|---|---|---|---|---|---|
| **(Lab Limits)** | **20--142** | **30--128** | **30--110** | **51--133** | **42--113** | **48--116** | **31--143** |
| L57129-1 | 83 | 58 | 52 | 75 | 52 | 61 | 54 |
| L57138-1 | 86 | 63 | 51 | 79 | 50 | 66 | 53 |
| WG124717-1 | 63 | 61 | 66 | 85 | 67 | 73 | 76 |
| WG124717-2 | 67 | 80 | 61 | 93 | 66 | 77 | 55 |
| WG124717-3 | 48 | 66 | 60 | 84 | 64 | 74 | 68 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124715 (DL#353) Run ID: R185737**

**MB:WG124715-1 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:WG124715-2 MB:WG124715-1 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 | 0.894 | 89 | | 50--150 |

**SB:WG124715-3 MB:WG124715-1 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 | 0.71 | 71 | | 50--150 |

**LD:WG124715-4 L57138-2 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) | 0.19 | 0.19 | mg/L | 0.21 | 0.22 | 5 | | 0--40 |
| Lube Oil Range (>C24) | 0.19 | 0.19 | mg/L | 0.841 | 0.859 | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57112-4 | 74 | 92 |
| L57129-3 | 78 | 93 |
| L57138-2 | 72 | 92 |
| WG124715-1 | 68 | 87 |
| WG124715-2 | 76 | 87 |
| WG124715-3 | 80 | 87 |
| WG124715-4 | 65 | 93 |

# King County Environmental Laboratory Analytical QC Report

**Workgroup: WG124680 (GL#300) Run ID: R185387**

**MB:WG124680-1 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:WG124680-2 MB:WG124680-1 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 | 446 | 89 | | 50--150 |

**LD:WG124680-3 L57129-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L57129-3 | 92 | 92 |
| L57138-2 | 92 | 92 |
| WG124680-1 | 91 | 92 |
| WG124680-2 | 89 | 92 |
| WG124680-3 | 92 | 92 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/11/12, 12/13/12, 12/15/12*

**WG #(s):** *WG124842*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57112-2, L57129-1, L57138-1*

**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)

## 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:** *11/23/12, 12/11/12, 12/13/12, 12/15/12*

**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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/27/12*

**WG #(s):** *WG124787*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57129-1, L57138-1*

**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:** David Chin | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** Fritz Grothkopp | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *07-JAN-13*

**WG #(s):** *WG124717*

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

**Project #(s):** *421879-210 NPDES STORM WATER*

**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: *7890E* |

## 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:**

*1. WG124717-1 MB had a reportable level of Bis(2 Ethyl Hexyl)Phthalate.*

*2. WG124717-2 SB and WG124717-3 SBD had 2 of 46 spiked compounds exceed QC Lab Limits.*

*9. WG124717-2 SB and WG124717-3 SBD had 1 of 23 RPDs 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, JL*
☐ 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 Bis(2-Ethylhexyl)Phthalate.*

*2. Compounds which exceeded QC Lab Limits were asterisked on the QC Lab Report.*

*9. Compounds which exceeded 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 because the concentration in the samples was less than ten times the blank concentration.*

*2. The recoveries for Bis (2EH) Phthalate were recovered slightly high in the SB/SBD. Bis (2EH) Phthalate was flagged "JL" for the data set indicating a possible high bias.*

*9. The asterisked compound was reported without qualification.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2012*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *Dave Hunn* | | |
| **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

January 23, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57138-1, -2, -3, collected December 15-16, 2012.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on December 16, 2012. The samples were 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 #15148 was prepared and sent via e-mail on January 14, 2013.

**Sample Collection:**
There were no sampling anomalies to report.

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

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.



1202M

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.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

Pentachlorophenol exceeded the control limit for RPD in the spike blank (SB) and spike blank duplicate (SBD) set. The recoveries for pentachlorophenol were within control for the SB and SBD. Bis (2-ethylhexyl) phthalate exceeded the upper control limit in both the SB and SBD at 130% and 130%. All of these results were flagged with an "*" in the QC report. Bis (2-ethylhexyl) phthalate results have been flagged with a "JL" qualifier to indicate possible high bias. 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: | FCSW01 | | | | Locator: | FCSW01 | | | | Locator: | FFBLANK | | | |
| | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD COMME | | | | Descrip: | FIELD FILTER BLANK | | | |
| | Sample: | L57138-1 | | | | Sample: | L57138-2 | | | | Sample: | L57138-3 | | | |
| | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | | Matrix: | LN BLANK WTR | | | |
| | ColDate: | 12/15/12 0:00 | | | | ColDate: | 12/16/12 0:00 | | | | ColDate: | 12/16/12 0:00 | | | |
| | TimeSpan: | 5.25 | | | | 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 | 1.06 | SH | 0.1 | 0.2 | mg/L | | | | | | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.034 | | 0.025 | 0.025 | mg/L | | | | | | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 137 | | 0.2 | 0.5 | NTU | | | | | | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 54.6 | | 1 | 5 | umhos/cm | | | | | | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 124 | | 5 | 10 | mg/L | | | | | | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 9.34 | | 0.25 | 0.5 | mg/L | | | | | | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.179 | | 0.01 | 0.04 | mg/L | | | | | | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.233 | | 0.025 | 0.05 | mg/L | | | | | | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.00766 | H | 0.002 | 0.005 | mg/L | | | | | | | <MDL | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 5.61 | | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | 2100 | | | | CFU/100ml | | | | | |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Cadmium, Total, ICP-MS | 0.14 | <RDL | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Calcium, Total, ICP-MS | 6360 | | 50 | 50 | ug/L | | | | | | | | | | |
| Copper, Dissolved, ICP-MS | 3.07 | H | 0.4 | 2 | ug/L | | | | | | | | | | |
| Copper, Total, ICP-MS | 20.7 | | 0.4 | 2 | ug/L | | | | | | | | | | |
| Lead, Dissolved, ICP-MS | 0.11 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Lead, Total, ICP-MS | 10.7 | | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Magnesium, Total, ICP-MS | 2630 | | 50 | 50 | ug/L | | | | | | | | | | |
| Zinc, Dissolved, ICP-MS | 16.4 | H | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| Zinc, Total, ICP-MS | 93.2 | | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 26.7 | | 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: | L57138-1 | | | | | Sample: | L57138-2 | | | | | Sample: | L57138-3 | | | | | | | |
| | Matrix: | LG STORM WTR | | | | | Matrix: | LG STORM WTR | | | | | Matrix: | LN BLANK WTR | | | | | | | |
| | ColDate: | 12/15/12 0:00 | | | | | ColDate: | 12/16/12 0:00 | | | | | ColDate: | 12/16/12 0:00 | | | | | | | |
| | TimeSpan: | 5.25 | | | | | 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 | 0.098 | <RDL | 0.094 | 0.189 | ug/L | | | | | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | | | | | | | |
| Benzyl Butyl Phthalate | 0.0975 | | 0.047 | 0.0943 | ug/L | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 2.33 | JL | 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 | 0.188 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Di-N-Butyl Phthalate | 0.0478 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Di-N-Octyl Phthalate | 0.602 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Fluoranthene | 0.0694 | | 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 | | <MDL | 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 | 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) | | | | | | | 0.21 | TA | 0.19 | 0.19 | mg/L | | | | | | | | | | |
| Lube Oil Range (>C24) | | | | | | | 0.841 | | 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| FCSW01 | 421879-210 | L57138-1 | 1.06 | 0.034 | 137 | 54.6 | 124 | 9.34 | 0.179 | 0.233 | 0.00766 | 5.61 | 0.14 | 6360 | 3.07 | 20.7 | 0.11 | 10.7 | 2630 | 16.4 | 93.2 |
| FCSW01 | 421879-210 | L57138-2 | | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | Benzo(b,j,k)fluoranthene | Benzyl Butyl Phthalate | Bis(2-Ethylhexyl)Phthalate | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Pyrene | Fecal Coliform | Diesel Range (>C12-C24) | Lube Oil Range (>C24) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | CFU/100ml | mg/L | mg/L |
| FCSW01 | 421879-210 | L57138-1 | 26.7 | 0.098 | 0.0975 | 2.33 | 0.0478 | 0.602 | 0.188 | 0.0694 | 0.195 | | | |
| FCSW01 | 421879-210 | L57138-2 | | | | | | | | | | 2100 | 0.21 | 0.841 |
| * 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 | L57138-1 | Cadmium, Dissolved, ICP-MS | ISO111 |
| 421879-210 | L57138-1 | Cadmium, Total, ICP-MS | ISO111 |
| 421879-210 | L57138-1 | Calcium, Total, ICP-MS | ISO43 |
| 421879-210 | L57138-1 | Copper, Dissolved, ICP-MS | ISO63 CCT |
| 421879-210 | L57138-1 | Copper, Total, ICP-MS | ISO63 CCT |
| 421879-210 | L57138-1 | Lead, Dissolved, ICP-MS | ISO206,207,208 |
| 421879-210 | L57138-1 | Lead, Total, ICP-MS | ISO206,207,208 |
| 421879-210 | L57138-1 | Magnesium, Total, ICP-MS | ISO25 |
| 421879-210 | L57138-1 | Zinc, Dissolved, ICP-MS | ISO66 |
| 421879-210 | L57138-1 | Zinc, Total, ICP-MS | ISO66 |
| 421879-210 | L57138-2 | Diesel Range (>C12-C24) | No diesel pattern observed. Lube Oil Range component is contributing to the Diesel Range concentration. |

Login: P57138 NPDES SW Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 12/16/12 | *Time* 1200 |
| *Received by* | *Date* 12-17-12 | *Time* 0900 |
| *Sample Numbers* P57138 1-3 | | *[All]* |

| Sample Number | P57138-1 | P57138-2 | P57138-3 |
|---|---|---|---|
| QC Link | | | |
| Locator | FCSW01 | FCSW01 | FFBLANK |
| Short Loc Desc | NPDES-SW1 | NPDES-SW1 | FFBLANK |
| Locator Desc | FALL CITY HD COMMERCIAL | FALL CITY HD COMMERCIAL | FIELD FILTER BLANK |
| Site | KING COUNTY | KING COUNTY | METRO |
| Comments | comp, HD Commercial | grab, HD Commercial | filter blank, orthop |
| Start Date/Time | 12/15/12 1431 | 12/16/12 1045 | 12/16/12 1220 |
| End Date/Time | 12/15/12 1945 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>SAMP TEMP @ LAB = 3.2°C<br>SPLIT @ 1220 on 12/16/12 | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

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

***Professional Analytical Services***

Dec 21 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 |
|---|---|---|---|
| P57138-1 | Water | 12-A018983 | CONV |

Your sample was received on Monday, December 17, 2012. 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 #: 1047106

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

**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: 12/17/12
Date Reported: 12/21/12

---

**AMTEST Identification Number** **12-A018983**
**Client Identification** **P57138-1**
**Sampling Date** **12/16/12, 12:20**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.034 | mg/l | | 0.025 | SM 5540C | EB | 12/17/12 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 12-A018983**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 12-A018983 | Surfactants | mg/l | 0.034 | 0.281 | 0.250 | 98.80 % |
| 12-A018983 | Surfactants | mg/l | 0.034 | 0.295 | 0.250 | 104.40 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.281 | 0.295 | 4.9 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.118 | 94.4 % |

## 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 1279950

Project Name: _____  Date Received: 12/17/12  Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 3.6 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.

# CHAIN OF CUSTODY RECORD

Project Number: 1047106
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-12-44
Shipment Method: ENA
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***

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID (18983) | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57138-1 | 12/16/2012 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 12:20 |
| | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

Requested TAT: 14 Days
Data Package Due: 1/10/2012

***Please return signed original CoC with data package.***

| | | | |
|---|---|---|---|
| **RELINQUISHED BY** | | **RECEIVED BY** | |
| Signature | | Signature | |
| Printed Name | Jason Kinnard | Printed Name | Jeffrey Hurst |
| Organization | King County DNR, Environmental Laboratory | Organization | Am Test |
| Date | 12-17-12 | Date | 12/17/12 |
| Time | 0930 | Time | 11:15 |

T=8.3°C

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124724 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57138-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 12/15/2012 0:00 | 12/17/2012 15:25 | 12/17/2012 15:25 | WG124724-2,-1 | |
| WG124724-1 | MB | | CVBOD | BLANK WTR | | 12/17/2012 15:19 | 12/17/2012 15:19 | | MB1 12/17/19 |
| WG124724-2 | SB | | CVBOD | BLANK WTR | | 12/17/2012 15:25 | 12/17/2012 15:25 | | WG124724-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124682 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/9/2012 13:01 | 12/17/2012 18:16 | 12/17/2012 18:16 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:40 | 12/18/2012 3:24 | 12/18/2012 3:24 | | |
| L57054-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:40 | 12/18/2012 4:55 | 12/18/2012 4:55 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 17:01 | 12/18/2012 17:01 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57054-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 18:32 | 12/18/2012 18:32 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:05 | 12/18/2012 0:51 | 12/18/2012 0:51 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57070-1 | 421422-HOGW | | CVSO4 | GRND WTR | 12/17/2012 7:05 | 12/18/2012 1:22 | 12/18/2012 1:22 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 5:35 | 12/18/2012 15:29 | 12/18/2012 15:29 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57076-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 5:35 | 12/18/2012 16:00 | 12/18/2012 16:00 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCL | GRND WTR | 12/17/2012 7:22 | 12/18/2012 13:28 | 12/18/2012 13:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-1 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 7:22 | 12/19/2012 5:11 | 12/19/2012 5:11 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVCL | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57077-3 | 421422-DUGW | | CVSO4 | GRND WTR | 12/17/2012 6:54 | 12/18/2012 7:58 | 12/18/2012 7:58 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/14/2012 6:00 | 12/18/2012 1:52 | 12/18/2012 1:52 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-1 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 6:00 | 12/18/2012 2:23 | 12/18/2012 2:23 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVCL | GRND WTR | 12/14/2012 7:45 | 12/18/2012 8:59 | 12/18/2012 8:59 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-3 | 421422-HTGW | | CVSO4 | GRND WTR | 12/14/2012 7:45 | 12/18/2012 9:59 | 12/18/2012 9:59 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 8:00 | 12/18/2012 19:02 | 12/18/2012 19:02 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57080-4 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 8:00 | 12/18/2012 20:34 | 12/18/2012 20:34 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 9:15 | 12/18/2012 21:04 | 12/18/2012 21:04 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-1 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 9:15 | 12/18/2012 22:36 | 12/18/2012 22:36 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-3 | 421422-PUGW | | CVCL | GRND WTR | 12/18/2012 7:25 | 12/18/2012 23:37 | 12/18/2012 23:37 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57104-3 | 421422-PUGW | | CVSO4 | GRND WTR | 12/18/2012 7:25 | 12/19/2012 0:37 | 12/19/2012 0:37 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCL | GRND WTR | 12/18/2012 10:24 | 12/19/2012 1:08 | 12/19/2012 1:08 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-4 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 10:24 | 12/19/2012 2:09 | 12/19/2012 2:09 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVCL | GRND WTR | 12/18/2012 9:09 | 12/19/2012 3:40 | 12/19/2012 3:40 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57104-5 | 421422-HTGW | | CVSO4 | GRND WTR | 12/18/2012 9:09 | 12/19/2012 4:10 | 12/19/2012 4:10 | WG124682-1,-2,-3,-4,-7,-8,-9 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 12/11/2012 14:42 | 12/17/2012 22:19 | 12/17/2012 22:19 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57129-1 | 421879-210 | | CVCL | STORM WTR | 12/13/2012 0:00 | 12/17/2012 22:50 | 12/17/2012 22:50 | | |
| L57138-1 | 421879-210 | | CVCL | STORM WTR | 12/15/2012 0:00 | 12/17/2012 23:50 | 12/17/2012 23:50 | | |
| WG124682-1 | CS | | CVCL | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | | RDL_LEVEL |
| WG124682-1 | CS | | CVSO4 | BLANK WTR | | 12/17/2012 15:43 | 12/17/2012 15:43 | WG124682-1,-2,-3,-4,-7,-8,-9 | RDL_LEVEL |
| WG124682-2 | MB | | CVCL | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/17/12 |
| WG124682-2 | MB | | CVSO4 | BLANK WTR | | 12/17/2012 16:44 | 12/17/2012 16:44 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/17/12 |
| WG124682-3 | SB | | CVCL | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124682-2 |
| WG124682-3 | SB | | CVSO4 | BLANK WTR | | 12/17/2012 17:15 | 12/17/2012 17:15 | WG124682-1,-2,-3,-4,-7,-8,-9 | WG124682-2 |
| WG124682-4 | LCS | | CVCL | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124682-4 | LCS | | CVSO4 | BLANK WTR | | 12/17/2012 17:45 | 12/17/2012 17:45 | WG124682-1,-2,-3,-4,-7,-8,-9 | LEVEL1 |
| WG124682-5 | LD | | CVCL | STORM WTR | | 12/17/2012 18:46 | 12/17/2012 18:46 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57030-1 |
| WG124682-6 | MS | | CVCL | STORM WTR | | 12/17/2012 19:16 | 12/17/2012 19:16 | | L57030-1 |
| WG124682-7 | LD | | CVCL | GRND WTR | | 12/18/2012 3:54 | 12/18/2012 3:54 | | L57054-3 |
| WG124682-7 | LD | | CVSO4 | GRND WTR | | 12/18/2012 5:25 | 12/18/2012 5:25 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVCL | GRND WTR | | 12/18/2012 4:24 | 12/18/2012 4:24 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57054-3 |
| WG124682-8 | MS | | CVSO4 | GRND WTR | | 12/18/2012 5:56 | 12/18/2012 5:56 | WG124682-1,-2,-3,-4,-7,-8,-9 | L57054-3 |
| WG124682-9 | MB | | CVCL | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB 12/18/12 |
| WG124682-9 | MB | | CVSO4 | BLANK WTR | | 12/18/2012 14:28 | 12/18/2012 14:28 | WG124682-1,-2,-3,-4,-7,-8,-9 | MB 12/18/12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124773 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57066-5 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVCOND | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 17:03 | 12/20/2012 17:03 | WG124773-2,-3,-4,-1,-5,-6,-7,-8,-9,-10 | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVCOND | FRESH WTR | 12/13/2012 8:36 | 12/20/2012 17:12 | 12/20/2012 17:12 | | |
| L57076-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCOND | GRND WTR | 12/18/2012 5:35 | 12/20/2012 18:18 | 12/20/2012 18:18 | | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCOND | GRND WTR | 12/19/2012 10:31 | 12/20/2012 18:28 | 12/20/2012 18:28 | | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls Surface Water Quarterly | CVCOND | FRESH WTR | 12/18/2012 6:39 | 12/20/2012 18:06 | 12/20/2012 18:06 | | |
| L57104-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCOND | GRND WTR | 12/18/2012 9:15 | 12/20/2012 18:38 | 12/20/2012 18:38 | | |
| L57104-3 | 421422-PUGW | | CVCOND | GRND WTR | 12/18/2012 7:25 | 12/20/2012 18:58 | 12/20/2012 18:58 | | |
| L57104-4 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVCOND | GRND WTR | 12/18/2012 10:24 | 12/20/2012 19:08 | 12/20/2012 19:08 | | |
| L57104-5 | 421422-HTGW | | CVCOND | GRND WTR | 12/18/2012 9:09 | 12/20/2012 19:18 | 12/20/2012 19:18 | | |
| L57104-6 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVCOND | GRND WTR | 12/19/2012 8:40 | 12/20/2012 19:29 | 12/20/2012 19:29 | | |
| L57105-1 | 421422-PUGW | | CVCOND | GRND WTR | 12/19/2012 5:15 | 12/20/2012 19:38 | 12/20/2012 19:38 | | |
| L57105-3 | 421422-PUGW | | CVCOND | GRND WTR | 12/19/2012 6:15 | 12/20/2012 19:51 | 12/20/2012 19:51 | | |
| L57105-4 | 421422-PUGW | | CVCOND | GRND WTR | 12/19/2012 9:12 | 12/20/2012 20:01 | 12/20/2012 20:01 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | CVCOND | FRESH WTR | 12/20/2012 10:30 | 12/20/2012 16:31 | 12/20/2012 16:31 | | |
| L57113-3 | 421422-VASW | | CVCOND | FRESH WTR | 12/19/2012 11:58 | 12/20/2012 17:22 | 12/20/2012 17:22 | | |
| L57113-4 | 421422-VASW | | CVCOND | FRESH WTR | 12/19/2012 10:58 | 12/20/2012 17:43 | 12/20/2012 17:43 | | |
| L57113-5 | 421422-VASW | | CVCOND | FRESH WTR | 12/19/2012 9:52 | 12/20/2012 17:54 | 12/20/2012 17:54 | | |
| L57138-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 12/15/2012 0:00 | 12/20/2012 18:16 | 12/20/2012 18:16 | | |
| WG124773-1 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 16:29 | 12/20/2012 16:29 | | LEVEL1 |
| WG124773-2 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 16:30 | 12/20/2012 16:30 | | LEVEL2 |
| WG124773-3 | LD | | CVCOND | FRESH WTR | | 12/20/2012 16:42 | 12/20/2012 16:42 | | L57113-1 |
| WG124773-4 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 16:51 | 12/20/2012 16:51 | | LEVEL1 |
| WG124773-5 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 16:52 | 12/20/2012 16:52 | | LEVEL2 |
| WG124773-6 | LD | | CVCOND | FRESH WTR | | 12/20/2012 17:33 | 12/20/2012 17:33 | | L57113-3 |
| WG124773-7 | LD | | CVCOND | STORM WTR | | 12/20/2012 18:17 | 12/20/2012 18:17 | | L57138-1 |
| WG124773-8 | LD | | CVCOND | GRND WTR | | 12/20/2012 18:48 | 12/20/2012 18:48 | | L57104-1 |
| WG124773-9 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 20:12 | 12/20/2012 20:12 | | LEVEL1 |
| WG124773-10 | LCS | | CVCOND | BLANK WTR | | 12/20/2012 20:13 | 12/20/2012 20:13 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124815 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56802-1 | 421250-700 | Marine Phytoplankton Study | CVNH3-FL | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-6,-7 | |
| L56802-1 | 421250-700 | | CVNO23 | SALT WTR | 11/28/2012 9:00 | 12/17/2012 11:45 | 12/17/2012 13:07 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5 | |
| L57112-2 | 421879-210 | | CVORTHOP | STORM WTR | 12/11/2012 14:42 | 12/17/2012 11:45 | 12/17/2012 12:55 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57112-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5 | |
| L57112-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/12/2012 12:00 | 12/17/2012 11:45 | 12/17/2012 12:40 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-1 | 421879-210 | | CVNO23 | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5 | |
| L57129-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/13/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:57 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57129-5 | 421879-210 | | CVNO23 | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5 | |
| L57129-5 | 421879-210 | | CVORTHOP | BLANK WTR | 12/14/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:42 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-1 | 421879-210 | | CVNO23 | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5 | |
| L57138-1 | 421879-210 | | CVORTHOP | STORM WTR | 12/15/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:59 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| L57138-3 | 421879-210 | | CVNO23 | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5 | |
| L57138-3 | 421879-210 | | CVORTHOP | BLANK WTR | 12/16/2012 0:00 | 12/17/2012 11:45 | 12/17/2012 12:52 | WG124815-1,-2,-3,-4,-5,-6,-7 | |
| WG124815-1 | MB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5,-6,-7 | CONNNUTS3 |
| WG124815-1 | MB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:32 | WG124815-1,-2,-3,-4,-5 | CONNNUTS3 |
| WG124815-2 | SB | | CVNH3-FL | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVNO23 | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5,-6,-7 | WG124815-1 |
| WG124815-2 | SB | | CVORTHOP | BLANK WTR | | 12/17/2012 11:45 | 12/17/2012 12:34 | WG124815-1,-2,-3,-4,-5 | WG124815-1 |
| WG124815-3 | LCS | | CVNH3-FL | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-6,-7 | LEVEL1 |
| WG124815-3 | LCS | | CVNO23 | BLANK WTR | | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5,-6,-7 | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124815-3 | LCS | CVORTHOP | BLANK WTR | 12/17/2012 12:36 | 12/17/2012 12:36 | WG124815-1,-2,-3,-4,-5 | LEVEL1 |
| WG124815-4 | LD | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-4 | LD | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:01 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-5 | MS | CVNO23 | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5,-6,-7 | L57138-1 |
| WG124815-5 | MS | CVORTHOP | STORM WTR | 12/17/2012 11:45 | 12/17/2012 13:03 | WG124815-1,-2,-3,-4,-5 | L57138-1 |
| WG124815-6 | LD | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-6 | LD | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:09 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNH3-FL | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-6,-7 | L56802-1 |
| WG124815-7 | MS | CVNO23 | SALT WTR | 12/17/2012 11:45 | 12/17/2012 13:11 | WG124815-1,-2,-3,-4,-5,-6,-7 | L56802-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124752 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56807-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 11/23/2012 6:35 | 12/20/2012 10:50 | 12/24/2012 11:52 | WG124752-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L56807-2 | 421879-210 | | CVTKN | STORM WTR | 11/23/2012 9:50 | 12/20/2012 10:50 | 12/24/2012 12:01 | | |
| L56976-1 | 421430-300 | OCS-Lake Haven Utility | CVTKN | EFFLUENT | 12/3/2012 7:46 | 12/20/2012 10:50 | 12/24/2012 11:31 | | |
| L56976-3 | 421430-300 | District routine testing | CVTKN | EFFLUENT | 12/3/2012 7:19 | 12/20/2012 10:50 | 12/24/2012 11:33 | | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/9/2012 13:01 | 12/20/2012 10:50 | 12/24/2012 12:03 | | |
| L57066-1 | 421422-CHSW-M | SWD-CHSW M Cedar | CVTKN | FRESH WTR | 12/10/2012 8:32 | 12/20/2012 10:50 | 12/24/2012 12:21 | | |
| L57066-2 | 421422-CHSW-M | Hills Surface Water | CVTKN | FRESH WTR | 12/10/2012 8:07 | 12/20/2012 10:50 | 12/24/2012 12:30 | | |
| L57066-3 | 421422-CHSW-M | Monthly | CVTKN | FRESH WTR | 12/10/2012 7:30 | 12/20/2012 10:50 | 12/24/2012 12:32 | | |
| L57066-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:04 | 12/20/2012 10:50 | 12/24/2012 12:34 | | |
| L57066-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 6:40 | 12/20/2012 10:50 | 12/24/2012 12:36 | | |
| L57066-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/10/2012 9:31 | 12/20/2012 10:50 | 12/24/2012 12:38 | | |
| L57066-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 8:56 | 12/20/2012 10:50 | 12/24/2012 12:40 | | |
| L57066-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/11/2012 9:17 | 12/20/2012 10:50 | 12/24/2012 12:53 | | |
| L57098-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 10:50 | 12/24/2012 12:55 | | |
| L57098-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 10:50 | 12/24/2012 12:57 | | |
| L57098-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 12:59 | | |
| L57098-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 10:50 | 12/24/2012 13:01 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 12/11/2012 14:42 | 12/20/2012 10:50 | 12/24/2012 12:05 | | |
| L57129-1 | 421879-210 | | CVTKN | STORM WTR | 12/13/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:07 | | |
| L57138-1 | 421879-210 | | CVTKN | STORM WTR | 12/15/2012 0:00 | 12/20/2012 10:50 | 12/24/2012 12:09 | | |
| WG124752-1 | MB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:21 | | MB1 12/20/12 |
| WG124752-2 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:23 | | LEVEL1 |
| WG124752-3 | LCS | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:25 | | LEVEL2 |
| WG124752-4 | SB | | CVTKN | BLANK WTR | | 12/20/2012 10:50 | 12/24/2012 11:27 | | WG124752-1 |
| WG124752-5 | LD | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:36 | | L56976-3 |
| WG124752-6 | MS | | CVTKN | EFFLUENT | | 12/20/2012 10:50 | 12/24/2012 11:38 | | L56976-3 |
| WG124752-7 | LD | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:54 | | L56807-1 |
| WG124752-8 | MS | | CVTKN | STORM WTR | | 12/20/2012 10:50 | 12/24/2012 11:56 | | L56807-1 |
| WG124752-9 | LD | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:23 | | L57066-1 |
| WG124752-10 | MS | | CVTKN | FRESH WTR | | 12/20/2012 10:50 | 12/24/2012 12:26 | | L57066-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124809 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L55310-1 | 421195-140 | Lake Sawyer | CVTOTP | STORM WTR | 12/17/2012 11:05 | 12/19/2012 11:00 | 12/20/2012 10:20 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L55310-2 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:03 | 12/19/2012 11:00 | 12/20/2012 10:21 | | |
| L55310-3 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:36 | 12/19/2012 11:00 | 12/20/2012 10:23 | | |
| L55310-4 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:40 | 12/19/2012 11:00 | 12/20/2012 10:25 | | |
| L55310-5 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:55 | 12/19/2012 11:00 | 12/20/2012 10:27 | | |
| L55310-6 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 10:10 | 12/19/2012 11:00 | 12/20/2012 10:36 | | |
| L55310-7 | 421195-140 | | CVTOTP | STORM WTR | 12/17/2012 9:04 | 12/19/2012 11:00 | 12/20/2012 10:38 | | |
| L56674-1 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:15 | 12/19/2012 11:00 | 12/20/2012 10:01 | | |
| L56674-2 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:00 | 12/19/2012 11:00 | 12/20/2012 10:16 | | |
| L56674-3 | 421195-140 | | CVTOTP | FRESH WTR | 12/16/2012 11:30 | 12/19/2012 11:00 | 12/20/2012 10:18 | | |
| L56981-1 | 421874-100 | City of Shoreline Monthly Water Quality Monitoring | CVTOTN | FRESH WTR | 12/18/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:27 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-1 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:27 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-2 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 10:50 | 12/19/2012 11:00 | 12/20/2012 11:29 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-2 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:50 | 12/19/2012 11:00 | 12/20/2012 11:29 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-3 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 10:00 | 12/19/2012 11:00 | 12/20/2012 11:31 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L56981-3 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 10:00 | 12/19/2012 11:00 | 12/20/2012 11:31 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L56981-4 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:45 | 12/19/2012 11:00 | 12/20/2012 11:33 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L56981-4 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:45 | 12/19/2012 11:00 | 12/20/2012 11:33 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-5 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 8:40 | 12/19/2012 11:00 | 12/20/2012 11:35 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-5 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 8:40 | 12/19/2012 11:00 | 12/20/2012 11:35 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-6 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:10 | 12/19/2012 11:00 | 12/20/2012 11:37 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-6 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:10 | 12/19/2012 11:00 | 12/20/2012 11:37 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56981-7 | 421874-100 | | CVTOTN | FRESH WTR | 12/18/2012 9:00 | 12/19/2012 11:00 | 12/20/2012 11:38 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56981-7 | 421874-100 | | CVTOTP | FRESH WTR | 12/18/2012 9:00 | 12/19/2012 11:00 | 12/20/2012 11:38 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTOTN | FRESH WTR | 12/17/2012 13:42 | 12/19/2012 11:00 | 12/20/2012 10:45 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-1 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 13:42 | 12/19/2012 11:00 | 12/20/2012 10:45 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-2 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 12:21 | 12/19/2012 11:00 | 12/20/2012 10:47 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L56988-2 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 12:21 | 12/19/2012 11:00 | 12/20/2012 10:47 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-3 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 12:05 | 12/19/2012 11:00 | 12/20/2012 10:49 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-3 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 12:05 | 12/19/2012 11:00 | 12/20/2012 10:49 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-4 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 11:39 | 12/19/2012 11:00 | 12/20/2012 11:04 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-4 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 11:39 | 12/19/2012 11:00 | 12/20/2012 11:04 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-5 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 11:13 | 12/19/2012 11:00 | 12/20/2012 11:05 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-5 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 11:13 | 12/19/2012 11:00 | 12/20/2012 11:05 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-6 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 10:45 | 12/19/2012 11:00 | 12/20/2012 11:07 | |
| L56988-7 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 10:11 | 12/19/2012 11:00 | 12/20/2012 11:09 | |
| L56988-8 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 9:43 | 12/19/2012 11:00 | 12/20/2012 11:11 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-8 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 9:43 | 12/19/2012 11:00 | 12/20/2012 11:11 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |

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|---|---|---|---|---|---|---|---|---|
| L56988-9 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 9:21 | 12/19/2012 11:00 | 12/20/2012 11:13 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-9 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 9:21 | 12/19/2012 11:00 | 12/20/2012 11:13 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-10 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:54 | 12/19/2012 11:00 | 12/20/2012 11:15 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-10 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 8:54 | 12/19/2012 11:00 | 12/20/2012 11:15 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L56988-11 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:33 | 12/19/2012 11:00 | 12/20/2012 11:16 | |
| L56988-12 | 422019 | | CVTOTN | FRESH WTR | 12/17/2012 8:15 | 12/19/2012 11:00 | 12/20/2012 11:18 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |
| L56988-12 | 422019 | | CVTOTP | FRESH WTR | 12/17/2012 8:15 | 12/19/2012 11:00 | 12/20/2012 11:18 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 |
| L57066-5 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/13/2012 6:40 | 12/19/2012 11:00 | 12/20/2012 9:25 | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall Surface Water Quarterly | CVTOTP | FRESH WTR | 12/13/2012 8:36 | 12/19/2012 11:00 | 12/20/2012 9:26 | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls Surface Water Quarterly | CVTOTP | FRESH WTR | 12/18/2012 6:39 | 12/19/2012 11:00 | 12/20/2012 9:34 | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 12/13/2012 4:25 | 12/19/2012 11:00 | 12/20/2012 9:36 | |
| L57098-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:00 | 12/19/2012 11:00 | 12/20/2012 9:45 | |
| L57098-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:30 | 12/19/2012 11:00 | 12/20/2012 9:47 | |
| L57098-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 5:30 | 12/19/2012 11:00 | 12/20/2012 9:48 | |
| L57098-5 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 12/13/2012 6:05 | 12/19/2012 11:00 | 12/20/2012 9:50 | |
| L57111-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 12/18/2012 10:05 | 12/19/2012 11:00 | 12/20/2012 11:53 | |
| L57111-2 | 421195-150 | | CVTOTP | FRESH WTR | 12/18/2012 9:50 | 12/19/2012 11:00 | 12/20/2012 12:00 | |
| L57113-3 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | CVTOTP | FRESH WTR | 12/19/2012 11:58 | 12/20/2012 9:35 | 12/20/2012 12:46 | |
| L57113-4 | 421422-VASW | | CVTOTP | FRESH WTR | 12/19/2012 10:58 | 12/20/2012 9:35 | 12/20/2012 12:47 | |
| L57113-5 | 421422-VASW | | CVTOTP | FRESH WTR | 12/19/2012 9:52 | 12/20/2012 9:35 | 12/20/2012 12:55 | |
| L57124-1 | 421195-280 | Des Moines Creek Basin Support | CVTOTN | FRESH WTR | 12/19/2012 11:56 | 12/20/2012 9:35 | 12/20/2012 12:57 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 |

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|---|---|---|---|---|---|---|---|---|---|
| L57124-1 | 421195-280 | | CVTOTP | FRESH WTR | 12/19/2012 11:56 | 12/20/2012 9:35 | 12/20/2012 12:57 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57124-4 | 421195-280 | | CVTOTN | FRESH WTR | 12/19/2012 12:26 | 12/20/2012 9:35 | 12/20/2012 13:06 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | |
| L57124-4 | 421195-280 | | CVTOTP | FRESH WTR | 12/19/2012 12:26 | 12/20/2012 9:35 | 12/20/2012 13:06 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:00 | 12/20/2012 9:52 | | |
| L57138-1 | 421879-210 | | CVTOTP | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:00 | 12/20/2012 9:59 | | |
| WG124809-1 | MB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:19 | | MB1 121219 |
| WG124809-2 | SB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:21 | | WG124809-1 |
| WG124809-3 | LCS | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 9:23 | | LEVEL1 |
| WG124809-4 | LD | | CVTOTP | FRESH WTR | | 12/19/2012 11:00 | 12/20/2012 9:28 | | L57075-2 |
| WG124809-5 | MS | | CVTOTP | FRESH WTR | | 12/19/2012 11:00 | 12/20/2012 9:30 | | L57075-2 |
| WG124809-6 | LD | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 9:54 | | L57129-1 |
| WG124809-7 | MS | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 9:56 | | L57129-1 |
| WG124809-8 | LD | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 10:10 | | L56674-1 |
| WG124809-9 | MS | | CVTOTP | STORM WTR | | 12/19/2012 11:00 | 12/20/2012 10:12 | | L56674-1 |
| WG124809-10 | MB | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:40 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | MB2 121219 |
| WG124809-10 | MB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:40 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB2 121219 |
| WG124809-11 | SB | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:42 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | WG124809-10 |
| WG124809-11 | SB | | CVTOTP | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:42 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124809-10 |
| WG124809-12 | LCS | | CVTOTN | BLANK WTR | | 12/19/2012 11:00 | 12/20/2012 10:43 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | LEVEL1 |

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|---|---|---|---|---|---|---|---|
| WG124809-12 | LCS | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 10:43 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | LEVEL1 |
| WG124809-13 | LD | CVTOTN | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:51 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L56988-3 |
| WG124809-13 | LD | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:51 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56988-3 |
| WG124809-14 | MS | CVTOTN | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:53 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L56988-3 |
| WG124809-14 | MS | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 10:53 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L56988-3 |
| WG124809-15 | MB | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:40 | | MB3 121219 |
| WG124809-16 | SB | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:42 | | WG124809-15 |
| WG124809-17 | LCS | CVTOTP | BLANK WTR | 12/19/2012 11:00 | 12/20/2012 11:44 | | LEVEL1 |
| WG124809-18 | LD | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 11:55 | | L57111-1 |
| WG124809-19 | MS | CVTOTP | FRESH WTR | 12/19/2012 11:00 | 12/20/2012 11:57 | | L57111-1 |
| WG124809-20 | MB | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:40 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | MB1 121220 |
| WG124809-20 | MB | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:40 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | MB1 121220 |
| WG124809-21 | SB | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:42 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | WG124809-20 |
| WG124809-21 | SB | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:42 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | WG124809-20 |
| WG124809-22 | LCS | CVTOTN | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:44 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | LEVEL1 |
| WG124809-22 | LCS | CVTOTP | BLANK WTR | 12/20/2012 9:35 | 12/20/2012 12:44 | WG124809-1,-2,-3,-4,- | LEVEL1 |

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|---|---|---|---|---|---|---|---|
| WG124809-23 | LD | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 12:49 | 5,-6,-7,-8,-9,-10,-11,- | L57113-4 |
| WG124809-24 | MS | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 12:51 | 12,-13,-14,-15,-16,- | L57113-4 |
| WG124809-25 | LD | CVTOTN | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:08 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L57124-4 |
| WG124809-25 | LD | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:08 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57124-4 |
| WG124809-26 | MS | CVTOTN | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:09 | WG124809-10,-11,-12,-13,-14,-20,-21,-22,-25,-26 | L57124-4 |
| WG124809-26 | MS | CVTOTP | FRESH WTR | 12/20/2012 9:35 | 12/20/2012 13:09 | WG124809-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-22,-23,-24,-25,-26 | L57124-4 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124758 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57054-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVTSS | GRND WTR | 12/18/2012 8:00 | 12/20/2012 16:10 | 12/28/2012 10:20 | WG124758-1,-2,-3,-4,-5 | |
| L57076-1 | 421422-PUGW | | CVTSS | GRND WTR | 12/18/2012 5:35 | 12/20/2012 16:10 | 12/28/2012 10:21 | | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVTSS | GRND WTR | 12/19/2012 10:31 | 12/20/2012 16:10 | 12/28/2012 10:22 | | |
| L57077-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 12/17/2012 7:22 | 12/20/2012 16:10 | 12/28/2012 10:23 | | |
| L57077-3 | 421422-DUGW | | CVTSS | GRND WTR | 12/17/2012 6:54 | 12/20/2012 16:10 | 12/28/2012 10:24 | | |
| L57080-1 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | CVTSS | GRND WTR | 12/14/2012 6:00 | 12/20/2012 16:10 | 12/28/2012 10:27 | | |
| L57080-3 | 421422-HTGW | | CVTSS | GRND WTR | 12/14/2012 7:45 | 12/20/2012 16:10 | 12/28/2012 10:28 | | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | CVTSS | GRND WTR | 12/18/2012 8:00 | 12/20/2012 16:10 | 12/28/2012 10:29 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTSS | FRESH WTR | 12/13/2012 4:25 | 12/20/2012 16:10 | 12/28/2012 11:03 | | |
| L57098-2 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:00 | 12/20/2012 16:10 | 12/28/2012 11:05 | | |
| L57098-3 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 16:10 | 12/28/2012 11:05 | | |
| L57098-4 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 5:30 | 12/20/2012 16:10 | 12/28/2012 11:06 | | |
| L57098-5 | 421422-CHSW-M | | CVTSS | FRESH WTR | 12/13/2012 6:05 | 12/20/2012 16:10 | 12/28/2012 11:06 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 12/13/2012 0:00 | 12/20/2012 16:10 | 12/28/2012 10:31 | | |
| L57138-1 | 421879-210 | | CVTSS | STORM WTR | 12/15/2012 0:00 | 12/20/2012 16:10 | 12/28/2012 10:32 | | |
| WG124758-1 | MB | | CVTSS | BLANK WTR | | 12/20/2012 16:10 | 12/28/2012 10:19 | | MB1 121220 |
| WG124758-2 | LD | | CVTSS | GRND WTR | | 12/20/2012 16:10 | 12/28/2012 10:30 | | L57080-4 |
| WG124758-3 | LD | | CVTSS | STORM WTR | | 12/20/2012 16:10 | 12/28/2012 10:33 | | L57138-1 |
| WG124758-4 | LCS | | CVTSS | BLANK WTR | | 12/20/2012 16:10 | 12/28/2012 10:58 | | LEVEL1 |
| WG124758-5 | LD | | CVTSS | FRESH WTR | | 12/20/2012 16:10 | 12/28/2012 11:04 | | L57098-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124696 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57138-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 12/15/2012 0:00 | 12/17/2012 15:41 | 12/17/2012 15:41 | WG124696-1,-2,-3 | |
| WG124696-1 | LCS | | CVTURB | BLANK WTR | | 12/17/2012 15:40 | 12/17/2012 15:40 | | LEVEL1 |
| WG124696-2 | LD | | CVTURB | STORM WTR | | 12/17/2012 15:42 | 12/17/2012 15:42 | | L57138-1 |
| WG124696-3 | LCS | | CVTURB | BLANK WTR | | 12/17/2012 15:42 | 12/17/2012 15:42 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124661 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57138-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 12/16/2012 0:00 | 12/16/2012 12:00 | 12/17/2012 12:25 | WG124661-1,-2,-3,-4,-5 | |
| WG124661-1 | LD | | MCFC-MF | STORM WTR | | 12/16/2012 12:00 | 12/17/2012 12:25 | | L57138-2 |
| WG124661-2 | PC | | MCFC-MF | BLANK WTR | | 12/16/2012 12:00 | 12/17/2012 12:25 | | QC-PERFORMED: 16-DEC-12 |
| WG124661-3 | NC | | MCFC-MF | BLANK WTR | | 12/16/2012 12:00 | 12/17/2012 12:25 | | QC-PERFORMED: 16-DEC-12 |
| WG124661-4 | BF | | MCFC-MF | BLANK WTR | | 12/16/2012 12:00 | 12/17/2012 12:25 | | QC-PERFORMED: 16-DEC-12 |
| WG124661-5 | AF | | MCFC-MF | BLANK WTR | | 12/16/2012 12:00 | 12/17/2012 12:25 | | QC-PERFORMED: 16-DEC-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124838 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56876-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 12/18/2012 10:00 | 1/3/2013 8:00 | 1/3/2013 15:09 | WG124838-1,-2,-3,-4 | |
| L57030-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57030-1 | 421879-210 | | MTICPMS | STORM WTR | 12/9/2012 13:01 | 1/3/2013 8:00 | 1/3/2013 15:15 | | |
| L57075-2 | 421422-DUSW | SWD-DUSW Duvall | MTHARD-ICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57075-2 | 421422-DUSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/13/2012 8:36 | 1/3/2013 8:00 | 1/3/2013 15:22 | | |
| L57079-1 | 421422-CFSW | SWD-CFSW Cedar Falls | MTHARD-ICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57079-1 | 421422-CFSW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/18/2012 6:39 | 1/3/2013 8:00 | 1/3/2013 15:28 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar | MTHARD-ICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-1 | 421422-CHSW-M | Hills Surface Water | MTICPMS | FRESH WTR | 12/13/2012 4:25 | 1/3/2013 8:00 | 1/3/2013 15:34 | | |
| L57098-2 | 421422-CHSW-M | Monthly | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:00 | 1/3/2013 8:00 | 1/3/2013 15:40 | | |
| L57098-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:46 | | |
| L57098-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 5:30 | 1/3/2013 8:00 | 1/3/2013 15:52 | | |
| L57098-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 12/13/2012 6:05 | 1/3/2013 8:00 | 1/3/2013 16:11 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57112-2 | 421879-210 | | MTICPMS | STORM WTR | 12/11/2012 14:42 | 1/3/2013 8:00 | 1/3/2013 16:17 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon | MTHARD-ICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-1 | 421422-VASW | Surface Water Quarterly | MTICPMS | FRESH WTR | 12/20/2012 10:30 | 1/3/2013 8:00 | 1/3/2013 16:23 | | |
| L57113-3 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-3 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 11:58 | 1/3/2013 8:00 | 1/3/2013 16:29 | | |
| L57113-4 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-4 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 10:58 | 1/3/2013 8:00 | 1/3/2013 16:35 | | |
| L57113-5 | 421422-VASW | | MTHARD-ICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57113-5 | 421422-VASW | | MTICPMS | FRESH WTR | 12/19/2012 9:52 | 1/3/2013 8:00 | 1/3/2013 16:42 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57129-1 | 421879-210 | | MTICPMS | STORM WTR | 12/13/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:00 | | |
| L57138-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/4/2013 11:33 | | |
| L57138-1 | 421879-210 | | MTICPMS | STORM WTR | 12/15/2012 0:00 | 1/3/2013 8:00 | 1/3/2013 17:06 | | |
| WG124838-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | METHOD BLANK |
| WG124838-1 | MB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 14:57 | | METHOD BLANK |
| WG124838-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | WG124838-1 MS-20 |
| WG124838-2 | SB | | MTICPMS | BLANK WTR | | 1/3/2013 8:00 | 1/3/2013 15:03 | | WG124838-1 MS-20 |
| WG124838-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:33 | | L57113-5 RPD-LIQ |
| WG124838-3 | LD | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:48 | | L57113-5 RPD-LIQ |
| WG124838-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/4/2013 11:34 | | L57113-5 MS-20 |
| WG124838-4 | MS | | MTICPMS | FRESH WTR | | 1/3/2013 8:00 | 1/3/2013 16:54 | | L57113-5 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124787 Total and Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57113-1 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | MTHG-MID | FRESH WTR | 12/20/2012 10:30 | 12/24/2012 10:00 | 12/27/2012 13:47 | WG124787-1,-2,-3,-4 | |
| L57113-3 | 421422-VASW | | MTHG-MID | FRESH WTR | 12/19/2012 11:58 | 12/24/2012 10:00 | 12/27/2012 13:49 | | |
| L57113-4 | 421422-VASW | | MTHG-MID | FRESH WTR | 12/19/2012 10:58 | 12/24/2012 10:00 | 12/27/2012 13:42 | | |
| L57113-5 | 421422-VASW | | MTHG-MID | FRESH WTR | 12/19/2012 9:52 | 12/24/2012 10:00 | 12/27/2012 13:51 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 12/13/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 13:53 | | |
| L57129-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 12/13/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 14:00 | WG124787-1 | |
| L57138-1 | 421879-210 | | MTHG-MID | STORM WTR | 12/15/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 13:55 | WG124787-1,-2,-3,-4 | |
| L57138-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 12/15/2012 0:00 | 12/24/2012 10:00 | 12/27/2012 14:02 | WG124787-1 | |
| WG124787-1 | MB | | MTHG-MID | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:38 | WG124787-1,-2,-3,-4 | METHOD BLANK |
| WG124787-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:38 | WG124787-1 | METHOD BLANK |
| WG124787-2 | SB | | MTHG-MID | BLANK WTR | | 12/24/2012 10:00 | 12/27/2012 13:40 | WG124787-1,-2,-3,-4 | WG124787-1 HG-LMID |
| WG124787-3 | MS | | MTHG-MID | FRESH WTR | | 12/24/2012 10:00 | 12/27/2012 13:44 | | L57113-4 HG-LMID |
| WG124787-4 | MSD | | MTHG-MID | FRESH WTR | | 12/24/2012 10:00 | 12/27/2012 13:46 | | WG124787-3 L57113-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124842 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56942-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/27/2012 9:40 | 1/2/2013 7:00 | 1/2/2013 9:03 | WG124842-1,-2,-3,-4 | |
| L57076-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/19/2012 10:31 | 1/2/2013 7:00 | 1/2/2013 9:09 | | |
| L57076-4 | 421422-HTGW | | MTICPMS-DISS | GRND WTR | 12/24/2012 7:10 | 1/2/2013 7:00 | 1/2/2013 9:14 | | |
| L57080-4 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/18/2012 8:00 | 1/2/2013 7:00 | 1/2/2013 9:20 | | |
| L57098-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 12/13/2012 4:25 | 1/2/2013 7:00 | 1/2/2013 9:26 | | |
| L57098-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:00 | 1/2/2013 7:00 | 1/2/2013 9:32 | | |
| L57098-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:37 | | |
| L57098-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 5:30 | 1/2/2013 7:00 | 1/2/2013 9:55 | | |
| L57098-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 12/13/2012 6:05 | 1/2/2013 7:00 | 1/2/2013 10:12 | | |
| L57107-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/20/2012 11:31 | 1/2/2013 7:00 | 1/2/2013 10:18 | | |
| L57107-3 | 421422-HTGW | SWD-HTGW Houghton Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/24/2012 6:30 | 1/2/2013 7:00 | 1/2/2013 10:24 | | |
| L57108-1 | 421422-PUGW | SWD-PUGW Puyallup Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 12/21/2012 8:05 | 1/2/2013 7:00 | 1/2/2013 10:29 | | |
| L57108-3 | 421422-PUGW | | MTICPMS-DISS | GRND WTR | 12/21/2012 10:59 | 1/2/2013 7:00 | 1/2/2013 10:35 | | |
| L57112-2 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/11/2012 14:42 | 1/2/2013 7:00 | 1/2/2013 10:41 | | |
| L57113-1 | 421422-VASW | SWD-VASW Vashon Surface Water Quarterly | MTICPMS-DISS | FRESH WTR | 12/20/2012 10:30 | 1/2/2013 7:00 | 1/2/2013 10:47 | | |
| L57113-3 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 11:58 | 1/2/2013 7:00 | 1/2/2013 11:04 | | |
| L57113-4 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 10:58 | 1/2/2013 7:00 | 1/2/2013 11:10 | | |
| L57113-5 | 421422-VASW | | MTICPMS-DISS | FRESH WTR | 12/19/2012 9:52 | 1/2/2013 7:00 | 1/2/2013 11:15 | | |
| L57129-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 12/13/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:21 | | |
| L57138-1 | 421879-210 | | MTICPMS-DISS | STORM WTR | 12/15/2012 0:00 | 1/2/2013 7:00 | 1/2/2013 11:27 | | |
| WG124842-1 | MB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:51 | | METHOD BLANK |
| WG124842-2 | SB | | MTICPMS-DISS | BLANK WTR | | 1/2/2013 7:00 | 1/2/2013 8:57 | | |
| WG124842-3 | LD | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:01 | | WG124842-1 MS-20<br>L57098-4 RPD-LIQ |
| WG124842-4 | MS | | MTICPMS-DISS | FRESH WTR | | 1/2/2013 7:00 | 1/2/2013 10:06 | | L57098-4 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124738 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 12/13/2012 0:00 | 12/20/2012 9:00 | 1/2/2013 14:48 | WG124738-1,-2,-3 | |
| L57138-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 12/15/2012 0:00 | 12/20/2012 9:00 | 1/2/2013 15:12 | | |
| WG124738-1 | MB | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 9:53 | | MB121220 |
| WG124738-2 | SB | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 10:17 | | WG124738-1 |
| WG124738-3 | SBD | | ORHERB-NPDES | BLANK WTR | | 12/20/2012 9:00 | 1/2/2013 10:41 | | WG124738-2<br>WG124738-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124716 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:30 | 1/4/2013 14:48 | WG124716-3,-1,-2 | |
| L57138-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:30 | 1/4/2013 15:14 | | |
| WG124716-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 13:32 | | MB121219 |
| WG124716-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 13:58 | | WG124716-1 |
| WG124716-3 | SBD | | OROPPEST-NPDES | BLANK WTR | | 12/19/2012 11:30 | 1/4/2013 14:23 | | WG124716-2 |
| | | | | | | | | | WG124716-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124717 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 12/13/2012 0:00 | 12/19/2012 11:30 | 1/7/2013 10:54 | WG124717-3,-1,-2 | |
| L57138-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 12/15/2012 0:00 | 12/19/2012 11:30 | 1/7/2013 11:29 | | |
| WG124717-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 9:08 | | MB121219 |
| WG124717-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 9:43 | | WG124717-1 |
| WG124717-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 12/19/2012 11:30 | 1/7/2013 10:19 | | WG124717-2 |
| | | | | | | | | | WG124717-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124715 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57112-4 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 12/12/2012 11:03 | 12/19/2012 11:30 | 12/28/2012 13:05 | WG124715-1,-2,-3,-4 | |
| L57129-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/14/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:29 | | |
| L57138-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 12/16/2012 0:00 | 12/19/2012 11:30 | 12/28/2012 13:52 | | |
| WG124715-1 | MB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:32 | | MB121219 |
| WG124715-2 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 11:55 | | WG124715-1 SB-MO |
| WG124715-3 | SB | | ORWTPH-DX | BLANK WTR | | 12/19/2012 11:30 | 12/28/2012 12:18 | | WG124715-1 SB-DSL |
| WG124715-4 | LD | | ORWTPH-DX | STORM WTR | | 12/19/2012 11:30 | 12/28/2012 12:42 | | L57138-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57138

**WG124680 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57129-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 12/14/2012 0:00 | 12/17/2012 16:58 | 12/17/2012 16:58 | WG124680-1,-2,-3 | |
| L57138-2 | 421879-210 | | ORWTPH-G | STORM WTR | 12/16/2012 0:00 | 12/17/2012 17:27 | 12/17/2012 17:27 | | |
| WG124680-1 | MB | | ORWTPH-G | BLANK WTR | | 12/17/2012 15:59 | 12/17/2012 15:59 | | MB121712 |
| WG124680-2 | SB | | ORWTPH-G | BLANK WTR | | 12/17/2012 15:00 | 12/17/2012 15:00 | | WG124680-1 |
| WG124680-3 | LD | | ORWTPH-G | STORM WTR | | 12/17/2012 16:29 | 12/17/2012 16:29 | | L57129-3 |

**Workgroup: WG124724 BOD**

**MB:WG124724-1 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:WG124724-2 MB:WG124724-1 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 | 185 | 94 | | 80--120 |

**Workgroup: WG124682 Anions**

**CS:WG124682-1 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 | 0.096 | 96 | | 70--130 |

**CS:WG124682-1 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 | 0.15 | 75 | | 70--130 |

**MB:WG124682-2 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:WG124682-2 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:WG124682-3 MB:WG124682-2 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 | 1.93 | 97 | | 80--120 |

**SB:WG124682-3 MB:WG124682-2 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 | 4.83 | 97 | | 80--120 |

**LCS:WG124682-4 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:WG124682-4 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 | 15.6 | 104 | | 85--115 |

**LD:WG124682-5 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 4.52 | 0 | | 0--20 |

**MS:WG124682-6 L57030-1 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 | 0.25 | 0.5 | mg/L | 4.54 | 10 | 14.8 | 102 | | 75--125 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 6.4 | 8 | | 0--20 |

**LD:WG124682-7 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 16.8 | 1 | | 0--20 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 0.5 | 1 | mg/L | 5.93 | 20 | 26.8 | 105 | | 75--125 |

**MS:WG124682-8 L57054-3 Matrix: GRND WTR Listtype:CVSO4 Method:SM4110B SO4 Project:421422-HTGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.5 | 1 | mg/L | 16.7 | 25 | 42 | 101 | | 75--125 |

**MB:WG124682-9 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:WG124682-9 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: WG124773 Conductivity**

**LCS:WG124773-1 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 | 74.8 | 101 | | 90--110 |

**LCS:WG124773-2 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 | 701 | 98 | | 90--110 |

**LD:WG124773-3 L57113-1 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 119 | 119 | 0 | | 0--10 |

**LCS:WG124773-4 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 | 74.8 | 101 | | 90--110 |

**LCS:WG124773-5 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 | 696 | 97 | | 90--110 |

**LD:WG124773-6 L57113-3 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 207 | 207 | 0 | | 0--10 |

**LD:WG124773-7 L57138-1 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 | 54.6 | 54.6 | 0 | | 0--10 |

**LD:WG124773-8 L57104-1 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 | 232 | 232 | 0 | | 0--10 |

**LCS:WG124773-9 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 | 73.9 | 75.8 | 103 | | 90--110 |

**LCS:WG124773-10 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 | 717.5 | 706 | 98 | | 90--110 |

**Workgroup: WG124815 Dissolved Nutrients**

**MB:WG124815-1 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:WG124815-1 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:WG124815-1 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:WG124815-2 MB:WG124815-1 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 | 0.0988 | 99 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.814 | 102 | | 80--120 |

**SB:WG124815-2 MB:WG124815-1 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 | 0.0398 | 100 | | 80--120 |

**LCS:WG124815-3 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:WG124815-3 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 | 0.834 | 104 | | 85--115 |

**LCS:WG124815-3 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 | 0.0396 | 99 | | 85--115 |

**LD:WG124815-4 L57138-1 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 | 0.179 | 0.178 | 0 | | 0--20 |

**LD:WG124815-4 L57138-1 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 | 0.00766 | 0.00792 | 3 | | 0--20 |

**MS:WG124815-5 L57138-1 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 | 0.179 | 0.8 | 0.978 | 100 | | 75--125 |

**MS:WG124815-5 L57138-1 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 | 0.00766 | 0.04 | 0.0459 | 95 | | 75--125 |

**LD:WG124815-6 L56802-1 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 | 0.026 | 0.0249 | 4 | | 0--20 |

**LD:WG124815-6 L56802-1 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 | 0.198 | 0.194 | 2 | | 0--20 |

**MS:WG124815-7 L56802-1 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 | 0.026 | 0.1 | 0.137 | 111 | | 75--125 |

**MS:WG124815-7 L56802-1 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 | 0.198 | 0.8 | 1.01 | 102 | | 75--125 |

**Workgroup: WG124752 TKN**

**MB:WG124752-1 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 | |

**LCS:WG124752-2 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 | 0.491 | 98 | | 80--120 |

**LCS:WG124752-3 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 | 5 | 5.14 | 103 | | 80--120 |

**SB:WG124752-4 MB:WG124752-1 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 | 5.23 | 105 | | 80--120 |

**LD:WG124752-5 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 7.72 | 5 | | 0--20 |

**MS:WG124752-6 L56976-3 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 | 0.5 | 1 | mg/L | 8.12 | 5 | 12.8 | 94 | | 70--130 |

**LD:WG124752-7 L56807-1 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 | 0.491 | 0.488 | 1 | | 0--20 |

**MS:WG124752-8 L56807-1 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 | 0.491 | 5 | 5.65 | 103 | | 70--130 |

**LD:WG124752-9 L57066-1 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 | 0.433 | 0.496 | 14 | | 0--20 |

**MS:WG124752-10 L57066-1 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 | 0.433 | 5 | 5.54 | 102 | | 70--130 |

**Workgroup: WG124809 Total Nutrients**

**MB:WG124809-1 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:WG124809-2 MB:WG124809-1 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 | 0.101 | 101 | | 80--120 |

**LCS:WG124809-3 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 | 0.101 | 101 | | 85--115 |

**LD:WG124809-4 L57075-2 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 | 0.0164 | 0.0157 | 4 | | 0--20 |

**MS:WG124809-5 L57075-2 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 | 0.0164 | 0.1 | 0.115 | 98 | | 75--125 |

**LD:WG124809-6 L57129-1 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 | 0.0979 | 0.104 | 6 | | 0--20 |

**MS:WG124809-7 L57129-1 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 | 0.0979 | 0.1 | 0.193 | 95 | | 75--125 |

**LD:WG124809-8 L56674-1 Matrix: STORM 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 | 0.029 | 0.0275 | 5 | | 0--20 |

**MS:WG124809-9 L56674-1 Matrix: STORM 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 | 0.029 | 0.1 | 0.125 | 96 | | 75--125 |

**MB:WG124809-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124809-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**SB:WG124809-11 MB:WG124809-10 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 | 1.01 | 101 | | 80--120 |

**SB:WG124809-11 MB:WG124809-10 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 | 0.102 | 102 | | 80--120 |

**LCS:WG124809-12 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 | 0.962 | 96 | | 85--115 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57138

**LCS:WG124809-12 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 | 0.0953 | 95 | | 85--115 |

**LD:WG124809-13 L56988-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.749 | 0.814 | 8 | | 0--20 |

**LD:WG124809-13 L56988-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0182 | 0.0187 | 3 | | 0--20 |

**MS:WG124809-14 L56988-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 0.749 | 1 | 1.84 | 109 | | 75--125 |

**MS:WG124809-14 L56988-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0182 | 0.1 | 0.116 | 98 | | 75--125 |

**MB:WG124809-15 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:WG124809-16 MB:WG124809-15 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Spike Blank, Method Blank)**

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

**LCS:WG124809-17 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 | 0.0897 | 90 | | 85--115 |

**LD:WG124809-18 L57111-1 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 | 0.0123 | 0.0137 | 11 | | 0--20 |

**MS:WG124809-19 L57111-1 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 | 0.0123 | 0.1 | 0.108 | 96 | | 75--125 |

**MB:WG124809-20 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:WG124809-20 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:WG124809-21 MB:WG124809-20 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 | 0.982 | 98 | | 80--120 |

**SB:WG124809-21 MB:WG124809-20 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 | 0.0995 | 99 | | 80--120 |

**LCS:WG124809-22 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 | 0.92 | 92 | | 85--115 |

**LCS:WG124809-22 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 | 0.0935 | 93 | | 85--115 |

**LD:WG124809-23 L57113-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0812 | 0.0807 | 1 | | 0--20 |

**MS:WG124809-24 L57113-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-VASW 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 | 0.0812 | 0.1 | 0.178 | 96 | | 75--125 |

**LD:WG124809-25 L57124-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.545 | 0.569 | 4 | | 0--20 |

**LD:WG124809-25 L57124-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0271 | 0.0293 | 8 | | 0--20 |

**MS:WG124809-26 L57124-4 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-280 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 | 0.545 | 1 | 1.55 | 100 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57138

**MS:WG124809-26 L57124-4 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-280 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 | 0.0271 | 0.1 | 0.123 | 96 | | 75--125 |

**Workgroup: WG124758 TSS**

**MB:WG124758-1 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 | |

**LD:WG124758-2 L57080-4 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 | 5 | 10 | mg/L | 54 | 58 | 7 | | 0--25 |

**LD:WG124758-3 L57138-1 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 | 124 | 114 | 8 | | 0--25 |

**LCS:WG124758-4 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:WG124758-5 L57098-1 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 | 1 | 2 | mg/L | <MDL | <MDL | | | 0--25 |

**Workgroup: WG124696 Turbidity**

**LCS:WG124696-1 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 | 9.64 | 96 | | 90--110 |

**LD:WG124696-2 L57138-1 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 | 137 | 136 | 1 | | 0--25 |

**LCS:WG124696-3 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 | 97.2 | 97 | | 90--110 |

**Workgroup: WG124661 Fecal coliform**

**LD:WG124661-1 L57138-2 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 | 2100 | 2700 | 0.11 | 0.49 | N8 |

**PC:WG124661-2 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:WG124661-3 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:WG124661-4 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:WG124661-5 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: WG124838 Total Metals and Hardness**

**MB:WG124838-1 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:WG124838-1 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:WG124838-2 MB:WG124838-1 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 | 93 | | 85--115 |

**SB:WG124838-2 MB:WG124838-1 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 | 19.2 | 96 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4560 | 91 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4720 | 94 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 21.7 | 109 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4830 | 97 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4580 | 92 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.9 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4860 | 97 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.9 | 100 | | 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 | 19.5 | 98 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 17.9 | 90 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 289 | 0 | | 0--20 |

**LD:WG124838-3 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 13500 | 1 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 38400 | 0 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 85.7 | 14 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 2550 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 52400 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.825 | 3 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 0.44 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 1080 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 269 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 0.19 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 2.53 | 2 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 0.67 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 0.9 | | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 1.84 | 0 | | 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 | 5.49 | 5.57 | 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 | 0.27 | 0.27 | | | 0--20 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Hardness, Calc | 0.331 | 0.331 | mg CaCO3/L | 290 | 33.1 | 320 | | 4xRule | 75--125 |

**MS:WG124838-4 L57113-5 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.2 | 96 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 13400 | 5000 | 18600 | 104 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 38500 | 5000 | 42500 | | 4xRule | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 98.9 | 20 | 106 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2560 | 5000 | 6790 | 85 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 52800 | 5000 | 58000 | | 4xRule | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 16.9 | 80 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.46 | 20 | 17 | 83 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 1100 | 5000 | 5250 | 83 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 268 | 20 | 286 | | 4xRule | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 20 | 17.5 | 86 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 20 | 21.9 | 97 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.72 | 20 | 19.7 | 95 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 0.87 | 20 | 20.1 | 96 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.85 | 20 | 20.8 | 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 | 18.9 | 94 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.4 | 92 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 17.2 | 86 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 17.8 | 89 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 5.49 | 20 | 23.2 | 88 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.27 | 20 | 19.7 | 97 | | 75--125 |

**Workgroup: WG124787 Total and Dissolved Mercury**

**MB:WG124787-1 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:WG124787-1 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:WG124787-2 MB:WG124787-1 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 | 0.905 | 90 | | 85--115 |

**MSD:WG124787-4 MS:WG124787-3 L57113-4 Matrix: FRESH WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-VASW 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 | 0.857 | 86 | | 75--125 | 1 | 0.893 | 89 | | 4 | | 0--20 |

**Workgroup: WG124842 Dissolved Metals**

**MB:WG124842-1 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:WG124842-2 MB:WG124842-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4530 | 91 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4910 | 98 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4780 | 96 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5180 | 104 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 97 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.7 | 94 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |

**LD:WG124842-3 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 2910 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 1050 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 45.2 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 628 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 4490 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 0.25 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 12 | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 0.925 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 0.17 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 0.44 | | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 1.7 | | | 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 |
| 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 | 5.84 | 5.77 | 1 | | 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:WG124842-4 L57098-4 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 2910 | 5000 | 7750 | 97 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1050 | 5000 | 5800 | 95 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 44.8 | 20 | 64.5 | 99 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 631 | 5000 | 5560 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 4460 | 5000 | 9180 | 94 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.26 | 20 | 19.4 | 96 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 12 | 5000 | 5220 | 104 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.923 | 20 | 20.9 | 100 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.18 | 20 | 20.8 | 103 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.7 | 20 | 22.2 | 102 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.14 | 20 | 20.3 | 101 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 105 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.5 | 97 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.84 | 20 | 25.2 | 97 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.5 | 107 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57138

**Workgroup: WG124738 Herbicides**

**MB:WG124738-1 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:WG124738-3 SB:WG124738-2 MB:WG124738-1 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 | 4.33 | 87 | | 21--147 | 5 | 3.99 | 80 | | 8 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.07 | 81 | | 10--175 | 5 | 4.19 | 84 | | 3 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.02 | 80 | | 59--151 | 5 | 4.14 | 83 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57129-1 | 95 | 109 |
| L57138-1 | 98 | 90 |
| WG124738-1 | 82 | 96 |
| WG124738-2 | 86 | 100 |
| WG124738-3 | 79 | 94 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57138

**Workgroup: WG124716 Organophosphorus Pesticides**

**MB:WG124716-1 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:WG124716-3 SB:WG124716-2 MB:WG124716-1 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 | BD Value | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.043 | 0.05 | ug/L | <MDL | 0.25 | 0.214 | 85 | | 52--129 | 0.25 | 0.222 | 89 | | 4 | | 0--40 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.262 | 105 | | 25--161 | 0.25 | 0.27 | 108 | | 3 | | 0--40 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.264 | 106 | | 57--127 | 0.25 | 0.261 | 105 | | 1 | | 0--40 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.244 | 98 | | 70--98 | 0.25 | 0.233 | 93 | | 5 | | 0--40 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.21 | 84 | | 40--160 | 0.25 | 0.235 | 94 | | 11 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57129-1 | 105 |
| L57138-1 | 103 |
| WG124716-1 | 102 |
| WG124716-2 | 115 |
| WG124716-3 | 110 |

**Workgroup: WG124717 Semi Volatile Organics**

**MB:WG124717-1 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 | <MDL | |
| 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 | 0.176 | 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 | |

**SBD:WG124717-3 SB:WG124717-2 MB:WG124717-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.97 | 79 | | 32--93 | 2.5 | 1.88 | 75 | | 5 | | 0--40 |
| 2-Methylnaphthalene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.8 | 72 | | 25--104 | 2.5 | 1.74 | 70 | | 3 | | 0--40 |
| Dimethyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 1.88 | 75 | | 31--119 | 2.5 | 1.78 | 71 | | 5 | | 0--40 |
| Acenaphthylene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.64 | 65 | | 49--107 | 2.5 | 1.83 | 73 | | 11 | | 0--40 |
| Acenaphthene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.98 | 79 | | 43--103 | 2.5 | 1.9 | 76 | | 4 | | 0--40 |
| Diethyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 1.79 | 72 | | 26--141 | 2.5 | 1.75 | 70 | | 3 | | 0--40 |
| Fluorene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 1.96 | 78 | | 43--127 | 2.5 | 1.75 | 70 | | 11 | | 0--40 |
| Pentachlorophenol | 1.3 | 2.5 | ug/L | <MDL | 2.5 | 1.6 | 64 | | 10--137 | 2.5 | 0.31 | 12 | | 135 | * | 0--40 |
| Phenanthrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.42 | 97 | | 57--114 | 2.5 | 2.33 | 93 | | 4 | | 0--40 |
| Anthracene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.01 | 80 | | 59--122 | 2.5 | 2.14 | 86 | | 7 | | 0--40 |
| Di-N-Butyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 2.08 | 83 | | 52--145 | 2.5 | 2.17 | 87 | | 4 | | 0--40 |
| Fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.35 | 94 | | 57--123 | 2.5 | 2.38 | 95 | | 1 | | 0--40 |
| Pyrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.56 | 103 | | 51--139 | 2.5 | 2.51 | 100 | | 2 | | 0--40 |
| Benzyl Butyl Phthalate | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.59 | 103 | | 49--145 | 2.5 | 2.64 | 106 | | 2 | | 0--40 |
| Benzo(a)anthracene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.64 | 106 | | 67--130 | 2.5 | 2.51 | 100 | | 5 | | 0--40 |
| Chrysene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.69 | 107 | | 58--114 | 2.5 | 2.65 | 106 | | 1 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.25 | 0.5 | ug/L | 0.176 | 2.5 | 3.41 | 130 | * | 48--128 | 2.5 | 3.41 | 130 | * | 0 | | 0--40 |
| Di-N-Octyl Phthalate | 0.25 | 0.5 | ug/L | <MDL | 2.5 | 2.49 | 99 | | 51--126 | 2.5 | 2.37 | 95 | | 5 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 1 | 2 | ug/L | <MDL | 7.5 | 7.02 | 94 | | 49--139 | 7.5 | 6.63 | 88 | | 6 | | 0--40 |
| Benzo(a)pyrene | 0.1 | 0.2 | ug/L | <MDL | 2.5 | 2.05 | 82 | | 55--132 | 2.5 | 2.07 | 83 | | 1 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.47 | 99 | | 53--122 | 2.5 | 2.24 | 90 | | 10 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.53 | 101 | | 47--134 | 2.5 | 2.31 | 92 | | 9 | | 0--40 |
| Benzo(g,h,i)perylene | 0.5 | 1 | ug/L | <MDL | 2.5 | 2.29 | 92 | | 32--130 | 2.5 | 2.2 | 88 | | 4 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57129-1 | 83 | 58 | 52 | 75 | 52 | 61 | 54 |
| L57138-1 | 86 | 63 | 51 | 79 | 50 | 66 | 53 |
| WG124717-1 | 63 | 61 | 66 | 85 | 67 | 73 | 76 |
| WG124717-2 | 67 | 80 | 61 | 93 | 66 | 77 | 55 |
| WG124717-3 | 48 | 66 | 60 | 84 | 64 | 74 | 68 |

**Workgroup: WG124715 WTPH-Dx**

**MB:WG124715-1 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:WG124715-2 MB:WG124715-1 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 | 0.894 | 89 | | 50--150 |

**SB:WG124715-3 MB:WG124715-1 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 | 0.71 | 71 | | 50--150 |

**LD:WG124715-4 L57138-2 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) | 0.19 | 0.19 | mg/L | 0.21 | 0.22 | 5 | | 0--40 |
| Lube Oil Range (>C24) | 0.19 | 0.19 | mg/L | 0.841 | 0.859 | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57112-4 | 74 | 92 |
| L57129-3 | 78 | 93 |
| L57138-2 | 72 | 92 |
| WG124715-1 | 68 | 87 |
| WG124715-2 | 76 | 87 |
| WG124715-3 | 80 | 87 |
| WG124715-4 | 65 | 93 |

**Workgroup: WG124680 WTPH-G**

**MB:WG124680-1 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:WG124680-2 MB:WG124680-1 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 | 446 | 89 | | 50--150 |

**LD:WG124680-3 L57129-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L57129-3 | 92 | 92 |
| L57138-2 | 92 | 92 |
| WG124680-1 | 91 | 92 |
| WG124680-2 | 89 | 92 |
| WG124680-3 | 92 | 92 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/11/12, 12/13/12, 12/15/12*

**WG #(s):** *WG124842*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57112-2, L57129-1, L57138-1*

**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)

## 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:** *11/23/12, 12/11/12, 12/13/12, 12/15/12*

**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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *12/27/12*

**WG #(s):** *WG124787*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57129-1, L57138-1*

**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:** David Chin | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** Fritz Grothkopp | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *07-JAN-13*

**WG #(s):** *WG124717*

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

**Project #(s):** *421879-210 NPDES STORM WATER*

**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: *7890E* |

## 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:**

*1. WG124717-1 MB had a reportable level of Bis(2 Ethyl Hexyl)Phthalate.*

*2. WG124717-2 SB and WG124717-3 SBD had 2 of 46 spiked compounds exceed QC Lab Limits.*

*9. WG124717-2 SB and WG124717-3 SBD had 1 of 23 RPDs 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, JL*
☐ 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 Bis(2-Ethylhexyl)Phthalate.*

*2. Compounds which exceeded QC Lab Limits were asterisked on the QC Lab Report.*

*9. Compounds which exceeded 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 because the concentration in the samples was less than ten times the blank concentration.*

*2. The recoveries for Bis (2EH) Phthalate were recovered slightly high in the SB/SBD. Bis (2EH) Phthalate was flagged "JL" for the data set indicating a possible high bias.*

*9. The asterisked compound was reported without qualification.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2012*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *Dave Hunn* | | |
| **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
February 7, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57131-1, -3, collected January 3-4, 2013.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on January 5, 2013. The samples were analyzed in the Trace Organics, Trace Metals and Conventionals units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15163 was prepared and sent via e-mail on February 7, 2013.

**Sample Collection:**
Sample L57131-2, a grab sample, were not collected for location RSW1UP due to failed storm criteria. BOD, Herbicides, Organophosphorus Pesticides and Semivolatile Organics were not analyzed for this sample due to limited sample volume.

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

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.



1202M

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:**
There were not trace organic samples in the batch.

**Microbiology:**
There were not microbiology samples in the batch.

**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 |
| Locator: | RSW1UP | Locator: | FFBLANK |
| Descrip: | 148TH AVE SE UPSTR | Descrip: | FIELD FILTER BLANK |
| Sample: | L57131-1 | Sample: | L57131-3 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 1/3/13 18:58 | ColDate: | 1/5/12 9:00 |
| TimeSpan: | 24.58 | 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 | 0.229 | SH | 0.1 | 0.2 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.13 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | |
| Turbidity | 4.61 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | |
| Conductivity | 65.8 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | |
| Total Suspended Solids | 6.25 | | 1.3 | 2.5 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | |
| Chloride | 3.12 | | 0.25 | 0.5 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.858 | | 0.01 | 0.04 | mg/L | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | |
| Total Phosphorus | 0.0311 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.0133 | H | 0.002 | 0.005 | mg/L | | <MDL | 0.002 | 0.005 | mg/L |
| **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 | 5270 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | 1.7 | <RDL,H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | 2.01 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | 0.31 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | 0.694 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | 1470 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | 16.2 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | 18.3 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | |
| Hardness, Calc | 19.2 | | 0.331 | 0.331 | mg CaCO3/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 | 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 | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | mg CaCO3/L |
| RSW1UP | 421879-210 | L57131-1 | 0.229 | 0.13 | 4.61 | 65.8 | 6.25 | 3.12 | 0.858 | 0.0311 | 0.0133 | 5270 | 1.7 | 2.01 | 0.31 | 0.694 | 1470 | 16.2 | 18.3 | 19.2 |
| * 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 codes | | | | | | | | | | | | | | | | | | | | |

Login: P57131 | NPDES SW Monitoring | Personnel: Crawford

Project: 421879-210

CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by | Date 1-5-13 | Time 0920 |
| Received by Tony Case | Date 1/5/13 | Time 0930 |
| Sample Numbers 57131-1, -3 TS 1/5/13 | | [All] |

| Sample Number | P57131-1 | P57131-2 | P57131-3 |
|---|---|---|---|
| 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 | 1-3-13 - 18:58 | | 1-5-13 |
| End Date/Time | 1-4-13 19:33 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 ~~LG BOD~~ Delete 1/8/13<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>~~7 LG HERB-NPDES~~<br>~~7 LG OPPEST-NPDES~~<br>~~7 LG PAHPHTH-SUR~~ } Delete 1/8/13 | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G<br><br>Delete Sample TS 1/8/13 | 3 LN NO23<br>3 LN ORTHOP |

Note- Limited Sample Volume.

No organics or BOD for 57131-1 TS 1/8/13

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

***Professional Analytical Services***

Jan 8 2013
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 |
|---|---|---|---|
| P57131-1 | Water | 13-A000185 | CONV |

Your sample was received on Saturday, January 5, 2013. 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

cc: Fritz Grothkopp
Project #: 1047106
PO Number: N/A

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

**Am Test Inc.**
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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
PO Number: N/A
All results reported on an as received basis.

Date Received: 01/05/13
Date Reported: 1/ 8/13

---

**AMTEST Identification Number** **13-A000185**
**Client Identification** **P57131-1**
**Sampling Date** **01/04/13, 19:33**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.128 | mg/l | | 0.025 | SM 5540C | SS | 01/05/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A000185**

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.113 | 90.4 % |

## 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 1380130

Project Name: Date Received: 1/ 5/13 Received By: N/A

Samples received at AmTest by: CLIENT

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 11.6 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.

# CHAIN OF CUSTODY RECORD

**Project Number:** 1047106
**Purchase Order Number:** n/a
**Subcontract Laboratory:** Am Test
**LPM/TC:** Fritz Grothkopp

**Shipment Number:** EL-13-01
**Shipment Method:** Jason Kinnard
**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***

13A 18F 18K 11.6

| Sample ID | Collect Date | Matrix | QC Required | Requested Parameters: MBAS | | | | | | | | | | | | No. of Containers | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P57131-1 | 1/4/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 19:33 |
| | | | | | | | | | | | | | | | | | |
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**Additional Comments/Instructions:** Test has 48 hour hold time.

**Total Number of Containers:** 1

***Please return signed original CoC with data package.***

**Requested TAT:** 14 **Days**
**Data Package Due:** 1/22/2013

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 1-5-13 | Signature | | 1/5/13 |
| Printed Name | Jason Kinnard | Time | Printed Name | Suzanne Scott | Time |
| Organization | King County DNR, Environmental Laboratory | 1000 | Organization | Am Test | 1050 am |

* Nok - only brought in ~360mL

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG125166 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 1/3/2013 18:58 | 1/28/2013 13:14 | 1/28/2013 13:14 | WG125166-1,-2,-3,-4,-5,-6 | |
| L57139-1 | 421879-210 | | CVCL | STORM WTR | 1/23/2013 16:12 | 1/28/2013 17:17 | 1/28/2013 17:17 | | |
| L57139-2 | 421879-210 | | CVCL | STORM WTR | 1/23/2013 16:40 | 1/28/2013 13:44 | 1/28/2013 13:44 | | |
| WG125166-1 | CS | | CVCL | BLANK WTR | | 1/28/2013 10:41 | 1/28/2013 10:41 | | RDL_LEVEL |
| WG125166-2 | MB | | CVCL | BLANK WTR | | 1/28/2013 11:42 | 1/28/2013 11:42 | | MB 1/28/13 |
| WG125166-3 | SB | | CVCL | BLANK WTR | | 1/28/2013 12:13 | 1/28/2013 12:13 | | WG125166-2 |
| WG125166-4 | LCS | | CVCL | BLANK WTR | | 1/28/2013 12:43 | 1/28/2013 12:43 | | LEVEL1 |
| WG125166-5 | LD | | CVCL | STORM WTR | | 1/28/2013 14:15 | 1/28/2013 14:15 | | L57139-2 |
| WG125166-6 | MS | | CVCL | STORM WTR | | 1/28/2013 14:45 | 1/28/2013 14:45 | | L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124937 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 1/3/2013 18:58 | 1/9/2013 19:31 | 1/9/2013 19:31 | WG124937-3,-4,-5,-6,-1,-2,-7,-8,-9,-10 | |
| L57156-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 1/3/2013 8:00 | 1/9/2013 17:59 | 1/9/2013 17:59 | | |
| L57158-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/7/2013 7:10 | 1/9/2013 18:09 | 1/9/2013 18:09 | | |
| L57158-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/8/2013 5:55 | 1/9/2013 18:19 | 1/9/2013 18:19 | | |
| L57158-6 | 421422-CHGW | | CVCOND | GRND WTR | 1/8/2013 7:20 | 1/9/2013 18:26 | 1/9/2013 18:26 | | |
| L57180-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVCOND | LEACHATE | 1/9/2013 6:30 | 1/9/2013 19:44 | 1/9/2013 19:44 | | |
| L57181-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVCOND | LEACHATE | 1/9/2013 4:20 | 1/9/2013 19:56 | 1/9/2013 19:56 | | |
| L57181-3 | 421422-CHLS-M | | CVCOND | LEACHATE | 1/9/2013 8:28 | 1/9/2013 20:05 | 1/9/2013 20:05 | | |
| L57181-4 | 421422-CHLS-M | | CVCOND | LEACHATE | 1/9/2013 9:49 | 1/9/2013 20:26 | 1/9/2013 20:26 | | |
| L57181-5 | 421422-CHLS-M | | CVCOND | LEACHATE | 1/9/2013 7:13 | 1/9/2013 20:37 | 1/9/2013 20:37 | | |
| L57181-7 | 421422-CHLS-M | | CVCOND | LEACHATE | 1/9/2013 9:24 | 1/9/2013 20:48 | 1/9/2013 20:48 | | |
| L57183-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 1/8/2013 9:32 | 1/9/2013 18:49 | 1/9/2013 18:49 | | |
| L57183-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/8/2013 5:50 | 1/9/2013 18:58 | 1/9/2013 18:58 | | |
| L57183-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/8/2013 8:44 | 1/9/2013 19:10 | 1/9/2013 19:10 | | |
| L57198-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/3/2013 6:35 | 1/9/2013 19:21 | 1/9/2013 19:21 | | |
| WG124937-1 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 17:05 | 1/9/2013 17:05 | | LEVEL1 |
| WG124937-2 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 17:06 | 1/9/2013 17:06 | | LEVEL2 |
| WG124937-3 | LD | | CVCOND | GRND WTR | | 1/9/2013 18:38 | 1/9/2013 18:38 | | L57158-6 |
| WG124937-4 | LD | | CVCOND | STORM WTR | | 1/9/2013 19:32 | 1/9/2013 19:32 | | L57131-1 |
| WG124937-5 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 19:33 | 1/9/2013 19:33 | | LEVEL1 |
| WG124937-6 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 19:34 | 1/9/2013 19:34 | | LEVEL2 |
| WG124937-7 | LD | | CVCOND | LEACHATE | | 1/9/2013 20:16 | 1/9/2013 20:16 | | L57181-3 |
| WG124937-8 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 20:57 | 1/9/2013 20:57 | | LEVEL1 |
| WG124937-9 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 20:58 | 1/9/2013 20:58 | | LEVEL2 |
| WG124937-10 | LCS | | CVCOND | BLANK WTR | | 1/9/2013 21:00 | 1/9/2013 21:00 | | LEVEL3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124924 Dissolved Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 1/3/2013 18:58 | 1/9/2013 9:15 | 1/9/2013 10:49 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57131-1 | 421879-210 | | CVORTHOP | STORM WTR | 1/3/2013 18:58 | 1/9/2013 9:15 | 1/9/2013 10:49 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57131-3 | 421879-210 | | CVNO23 | BLANK WTR | 1/5/2012 9:00 | 1/9/2013 9:15 | 1/9/2013 10:47 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57131-3 | 421879-210 | | CVORTHOP | BLANK WTR | 1/5/2012 9:00 | 1/9/2013 9:15 | 1/9/2013 10:47 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-1 | 421240A | STREAMS MONITOR (surf wtr) | CVNH3-FL | FRESH WTR | 1/8/2013 9:27 | 1/9/2013 9:15 | 1/9/2013 11:10 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-1 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 9:27 | 1/9/2013 9:15 | 1/9/2013 11:10 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57206-1 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 9:27 | 1/9/2013 9:15 | 1/9/2013 11:10 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-2 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 10:25 | 1/9/2013 9:15 | 1/9/2013 11:12 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-2 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 10:25 | 1/9/2013 9:15 | 1/9/2013 11:12 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57206-2 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 10:25 | 1/9/2013 9:15 | 1/9/2013 11:12 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-3 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 10:50 | 1/9/2013 9:15 | 1/9/2013 11:14 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-3 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 10:50 | 1/9/2013 9:15 | 1/9/2013 12:27 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57206-3 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 10:50 | 1/9/2013 9:15 | 1/9/2013 11:14 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-4 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 11:13 | 1/9/2013 9:15 | 1/9/2013 11:29 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-4 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 11:13 | 1/9/2013 9:15 | 1/9/2013 11:29 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57206-4 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 11:13 | 1/9/2013 9:15 | 1/9/2013 11:29 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-5 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 11:35 | 1/9/2013 9:15 | 1/9/2013 11:31 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-5 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 11:35 | 1/9/2013 9:15 | 1/9/2013 11:31 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57206-5 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 11:35 | 1/9/2013 9:15 | 1/9/2013 11:31 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57206-6 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 12:02 | 1/9/2013 9:15 | 1/9/2013 11:33 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57206-6 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 12:02 | 1/9/2013 9:15 | 1/9/2013 11:33 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| L57206-6 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 12:02 | 1/9/2013 9:15 | 1/9/2013 11:33 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-7 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 12:25 | 1/9/2013 9:15 | 1/9/2013 11:35 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-7 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 12:25 | 1/9/2013 9:15 | 1/9/2013 11:35 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-7 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 12:25 | 1/9/2013 9:15 | 1/9/2013 11:35 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-8 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 13:00 | 1/9/2013 9:15 | 1/9/2013 11:37 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-8 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 13:00 | 1/9/2013 9:15 | 1/9/2013 11:37 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-8 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 13:00 | 1/9/2013 9:15 | 1/9/2013 11:37 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-9 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 13:25 | 1/9/2013 9:15 | 1/9/2013 11:39 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-9 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 13:25 | 1/9/2013 9:15 | 1/9/2013 11:39 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-9 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 13:25 | 1/9/2013 9:15 | 1/9/2013 11:39 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-10 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 13:50 | 1/9/2013 9:15 | 1/9/2013 11:41 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-10 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 13:50 | 1/9/2013 9:15 | 1/9/2013 11:41 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-10 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 13:50 | 1/9/2013 9:15 | 1/9/2013 11:41 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-11 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 14:15 | 1/9/2013 9:15 | 1/9/2013 11:43 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-11 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 14:15 | 1/9/2013 9:15 | 1/9/2013 12:33 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-11 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 14:15 | 1/9/2013 9:15 | 1/9/2013 11:43 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-12 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 14:35 | 1/9/2013 9:15 | 1/9/2013 11:45 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-12 | 421240A | | CVNO23 | FRESH WTR | 1/8/2013 14:35 | 1/9/2013 9:15 | 1/9/2013 11:45 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-12 | 421240A | | CVORTHOP | FRESH WTR | 1/8/2013 14:35 | 1/9/2013 9:15 | 1/9/2013 11:45 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57206-13 | 421240A | | CVNH3-FL | BLANK WTR | 1/8/2013 9:20 | 1/9/2013 9:15 | 1/9/2013 11:06 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57206-13 | 421240A | | CVNO23 | BLANK WTR | 1/8/2013 9:20 | 1/9/2013 9:15 | 1/9/2013 11:06 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57206-13 | 421240A | | CVORTHOP | BLANK WTR | 1/8/2013 9:20 | 1/9/2013 9:15 | 1/9/2013 11:06 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-1 | 421240A | | CVNH3-FL | FRESH WTR | 1/8/2013 8:58 | 1/9/2013 9:15 | 1/9/2013 11:47 | WG124924-1,-2,-3,-6,-7,-8,-9 |

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|---|---|---|---|---|---|---|---|
| L57207-1 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 8:58 | 1/9/2013 9:15 | 1/9/2013 11:47 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-1 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 8:58 | 1/9/2013 9:15 | 1/9/2013 11:47 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-2 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 9:09 | 1/9/2013 9:15 | 1/9/2013 12:04 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-2 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 9:09 | 1/9/2013 9:15 | 1/9/2013 12:04 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-2 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 9:09 | 1/9/2013 9:15 | 1/9/2013 12:04 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-3 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 9:51 | 1/9/2013 9:15 | 1/9/2013 12:06 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-3 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 9:51 | 1/9/2013 9:15 | 1/9/2013 12:06 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-3 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 9:51 | 1/9/2013 9:15 | 1/9/2013 12:06 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-4 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 10:33 | 1/9/2013 9:15 | 1/9/2013 12:08 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-4 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 10:33 | 1/9/2013 9:15 | 1/9/2013 12:08 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-4 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 10:33 | 1/9/2013 9:15 | 1/9/2013 12:08 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-5 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 10:47 | 1/9/2013 9:15 | 1/9/2013 12:10 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-5 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 10:47 | 1/9/2013 9:15 | 1/9/2013 12:10 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-5 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 10:47 | 1/9/2013 9:15 | 1/9/2013 12:10 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-6 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 11:23 | 1/9/2013 9:15 | 1/9/2013 12:12 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-6 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 11:23 | 1/9/2013 9:15 | 1/9/2013 12:12 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-6 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 11:23 | 1/9/2013 9:15 | 1/9/2013 12:12 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-7 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 12:18 | 1/9/2013 9:15 | 1/9/2013 12:14 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-7 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 12:18 | 1/9/2013 9:15 | 1/9/2013 12:14 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-7 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 12:18 | 1/9/2013 9:15 | 1/9/2013 12:14 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57207-8 | 421240A | CVNH3-FL | FRESH WTR | 1/8/2013 13:01 | 1/9/2013 9:15 | 1/9/2013 12:17 | WG124924-1,-2,-3,-6,-7,-8,-9 |
| L57207-8 | 421240A | CVNO23 | FRESH WTR | 1/8/2013 13:01 | 1/9/2013 9:15 | 1/9/2013 12:17 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 |
| L57207-8 | 421240A | CVORTHOP | FRESH WTR | 1/8/2013 13:01 | 1/9/2013 9:15 | 1/9/2013 12:17 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57207-9 | 421240A | | CVNH3-FL | BLANK WTR | 1/8/2013 8:50 | 1/9/2013 9:15 | 1/9/2013 11:08 | WG124924-1,-2,-3,-6,-7,-8,-9 | |
| L57207-9 | 421240A | | CVNO23 | BLANK WTR | 1/8/2013 8:50 | 1/9/2013 9:15 | 1/9/2013 11:08 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | |
| L57207-9 | 421240A | | CVORTHOP | BLANK WTR | 1/8/2013 8:50 | 1/9/2013 9:15 | 1/9/2013 11:08 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| WG124924-1 | MB | | CVNH3-FL | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:39 | WG124924-1,-2,-3,-6,-7,-8,-9 | CONNUTS3 |
| WG124924-1 | MB | | CVNO23 | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:39 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | CONNUTS3 |
| WG124924-1 | MB | | CVORTHOP | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:39 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | CONNUTS3 |
| WG124924-2 | SB | | CVNH3-FL | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:41 | WG124924-1,-2,-3,-6,-7,-8,-9 | WG124924-1 |
| WG124924-2 | SB | | CVNO23 | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:41 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | WG124924-1 |
| WG124924-2 | SB | | CVORTHOP | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 10:41 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG124924-1 |
| WG124924-3 | LCS | | CVNH3-FL | BLANK WTR | | 1/9/2013 10:43 | 1/9/2013 10:43 | WG124924-1,-2,-3,-6,-7,-8,-9 | LEVEL1 |
| WG124924-3 | LCS | | CVNO23 | BLANK WTR | | 1/9/2013 10:43 | 1/9/2013 10:43 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | LEVEL1 |
| WG124924-3 | LCS | | CVORTHOP | BLANK WTR | | 1/9/2013 10:43 | 1/9/2013 10:43 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG124924-4 | LD | | CVNO23 | STORM WTR | | 1/9/2013 9:15 | 1/9/2013 10:59 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | L57131-1 |
| WG124924-4 | LD | | CVORTHOP | STORM WTR | | 1/9/2013 9:15 | 1/9/2013 10:59 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57131-1 |
| WG124924-5 | MS | | CVNO23 | STORM WTR | | 1/9/2013 9:15 | 1/9/2013 11:02 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | L57131-1 |
| WG124924-5 | MS | | CVORTHOP | STORM WTR | | 1/9/2013 9:15 | 1/9/2013 11:02 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57131-1 |
| WG124924-6 | LD | | CVNH3-FL | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 11:16 | WG124924-1,-2,-3,-6,-7,-8,-9 | L57206-3 |
| WG124924-6 | LD | | CVNO23 | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 12:29 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | L57206-3 |
| WG124924-6 | LD | | CVORTHOP | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 11:16 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57206-3 |
| WG124924-7 | MS | | CVNH3-FL | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 11:18 | WG124924-1,-2,-3,-6,-7,-8,-9 | L57206-3 |
| WG124924-7 | MS | | CVNO23 | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 12:31 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | L57206-3 |
| WG124924-7 | MS | | CVORTHOP | FRESH WTR | | 1/9/2013 9:15 | 1/9/2013 11:18 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57206-3 |
| WG124924-8 | MB | | CVNH3-FL | BLANK WTR | | 1/9/2013 9:15 | 1/9/2013 11:58 | WG124924-1,-2,-3,-6,-7,-8,-9 | CONNUTS3 |

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|---|---|---|---|---|---|---|---|
| WG124924-8 | MB | CVNO23 | BLANK WTR | 1/9/2013 9:15 | 1/9/2013 11:58 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | CONNUTS3 |
| WG124924-8 | MB | CVORTHOP | BLANK WTR | 1/9/2013 9:15 | 1/9/2013 11:58 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | CONNUTS3 |
| WG124924-9 | LCS | CVNH3-FL | BLANK WTR | 1/9/2013 12:00 | 1/9/2013 12:00 | WG124924-1,-2,-3,-6,-7,-8,-9 | LEVEL1 |
| WG124924-9 | LCS | CVNO23 | BLANK WTR | 1/9/2013 12:00 | 1/9/2013 12:00 | WG124924-2,-3,-1,-4,-5,-8,-9,-6,-7 | LEVEL1 |
| WG124924-9 | LCS | CVORTHOP | BLANK WTR | 1/9/2013 12:00 | 1/9/2013 12:00 | WG124924-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG125018 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 1/3/2013 18:58 | 1/16/2013 12:00 | 1/25/2013 16:17 | WG125018-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57148-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 1/7/2013 7:06 | 1/16/2013 12:00 | 1/25/2013 15:27 | | |
| L57148-3 | 421430-300 | | CVTKN | EFFLUENT | 1/7/2013 7:20 | 1/16/2013 12:00 | 1/25/2013 15:45 | | |
| L57180-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVTKN | LEACHATE | 1/9/2013 6:30 | 1/16/2013 12:00 | 1/25/2013 14:49 | | |
| L57181-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 1/9/2013 4:20 | 1/16/2013 12:00 | 1/25/2013 14:51 | | |
| L57181-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 1/9/2013 8:28 | 1/16/2013 12:00 | 1/25/2013 15:10 | | |
| L57181-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 1/9/2013 9:49 | 1/16/2013 12:00 | 1/25/2013 15:12 | | |
| L57181-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 1/9/2013 7:13 | 1/16/2013 12:00 | 1/25/2013 15:14 | | |
| L57181-7 | 421422-CHLS-M | | CVTKN | LEACHATE | 1/9/2013 9:24 | 1/16/2013 12:00 | 1/25/2013 15:16 | | |
| WG125018-1 | MB | | CVTKN | BLANK WTR | | 1/16/2013 12:00 | 1/25/2013 14:39 | | MB1 1/16/13 |
| WG125018-2 | LCS | | CVTKN | BLANK WTR | | 1/16/2013 12:00 | 1/25/2013 14:41 | | LEVEL1 |
| WG125018-3 | LCS | | CVTKN | BLANK WTR | | 1/16/2013 12:00 | 1/25/2013 14:43 | | LEVEL2 |
| WG125018-4 | SB | | CVTKN | BLANK WTR | | 1/16/2013 12:00 | 1/25/2013 14:45 | | WG125018-1 |
| WG125018-5 | LD | | CVTKN | LEACHATE | | 1/16/2013 12:00 | 1/25/2013 14:53 | | L57181-1 |
| WG125018-6 | MS | | CVTKN | LEACHATE | | 1/16/2013 12:00 | 1/25/2013 14:55 | | L57181-1 |
| WG125018-7 | LD | | CVTKN | EFFLUENT | | 1/16/2013 12:00 | 1/25/2013 15:39 | | L57148-1 |
| WG125018-8 | MS | | CVTKN | EFFLUENT | | 1/16/2013 12:00 | 1/25/2013 15:41 | | L57148-1 |
| WG125018-9 | LD | | CVTKN | STORM WTR | | 1/16/2013 12:00 | 1/25/2013 16:19 | | L57131-1 |
| WG125018-10 | MS | | CVTKN | STORM WTR | | 1/16/2013 12:00 | 1/25/2013 16:21 | | L57131-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124948 Total Nutrients**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 1/3/2013 18:58 | 1/10/2013 9:42 | 1/11/2013 11:26 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57148-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTOTP | EFFLUENT | 1/7/2013 7:06 | 1/10/2013 9:42 | 1/11/2013 11:41 | | |
| L57148-3 | 421430-300 | | CVTOTP | EFFLUENT | 1/7/2013 7:20 | 1/10/2013 9:42 | 1/11/2013 11:42 | | |
| L57200-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | CVTOTP | STORM WTR | 1/9/2013 7:25 | 1/11/2013 7:35 | 1/11/2013 12:38 | | |
| L57201-1 | 421185 | | CVTOTP | STORM WTR | 1/9/2013 7:50 | 1/11/2013 7:35 | 1/11/2013 12:45 | | |
| L57206-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTOTN | FRESH WTR | 1/8/2013 9:27 | 1/10/2013 9:42 | 1/11/2013 10:24 | WG124948-1,-2,-3,-4,-5 | |
| L57206-1 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 9:27 | 1/10/2013 9:42 | 1/11/2013 10:24 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-2 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 10:25 | 1/10/2013 9:42 | 1/11/2013 10:25 | WG124948-1,-2,-3,-4,-5 | |
| L57206-2 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 10:25 | 1/10/2013 9:42 | 1/11/2013 10:25 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-3 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 10:50 | 1/10/2013 9:42 | 1/11/2013 10:27 | WG124948-1,-2,-3,-4,-5 | |
| L57206-3 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 10:50 | 1/10/2013 9:42 | 1/11/2013 10:27 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-4 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 11:13 | 1/10/2013 9:42 | 1/11/2013 10:29 | WG124948-1,-2,-3,-4,-5 | |
| L57206-4 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 11:13 | 1/10/2013 9:42 | 1/11/2013 10:29 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-5 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 11:35 | 1/10/2013 9:42 | 1/11/2013 10:31 | WG124948-1,-2,-3,-4,-5 | |
| L57206-5 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 11:35 | 1/10/2013 9:42 | 1/11/2013 10:31 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-6 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 12:02 | 1/10/2013 9:42 | 1/11/2013 10:33 | WG124948-1,-2,-3,-4,-5 | |
| L57206-6 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 12:02 | 1/10/2013 9:42 | 1/11/2013 10:33 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57206-7 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 12:25 | 1/10/2013 9:42 | 1/11/2013 10:47 | WG124948-1,-2,-3,-4,-5 | |

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|---|---|---|---|---|---|---|---|---|
| L57206-7 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 12:25 | 1/10/2013 9:42 | 1/11/2013 10:47 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57206-8 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 13:00 | 1/10/2013 9:42 | 1/11/2013 10:49 | WG124948-1,-2,-3,-4,-5 |
| L57206-8 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 13:00 | 1/10/2013 9:42 | 1/11/2013 10:49 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57206-9 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 13:25 | 1/10/2013 9:42 | 1/11/2013 10:51 | WG124948-1,-2,-3,-4,-5 |
| L57206-9 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 13:25 | 1/10/2013 9:42 | 1/11/2013 10:51 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57206-10 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 13:50 | 1/10/2013 9:42 | 1/11/2013 10:53 | WG124948-1,-2,-3,-4,-5 |
| L57206-10 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 13:50 | 1/10/2013 9:42 | 1/11/2013 10:53 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57206-11 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 14:15 | 1/10/2013 9:42 | 1/11/2013 10:55 | WG124948-1,-2,-3,-4,-5 |
| L57206-11 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 14:15 | 1/10/2013 9:42 | 1/11/2013 10:55 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57206-12 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 14:35 | 1/10/2013 9:42 | 1/11/2013 10:57 | WG124948-1,-2,-3,-4,-5 |
| L57206-12 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 14:35 | 1/10/2013 9:42 | 1/11/2013 10:57 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57207-1 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 8:58 | 1/10/2013 9:42 | 1/11/2013 10:58 | WG124948-1,-2,-3,-4,-5 |
| L57207-1 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 8:58 | 1/10/2013 9:42 | 1/11/2013 10:58 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |
| L57207-2 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 9:09 | 1/10/2013 9:42 | 1/11/2013 11:00 | WG124948-1,-2,-3,-4,-5 |
| L57207-2 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 9:09 | 1/10/2013 9:42 | 1/11/2013 11:00 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57207-3 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 9:51 | 1/10/2013 9:42 | 1/11/2013 11:09 | WG124948-1,-2,-3,-4,-5 | |
| L57207-3 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 9:51 | 1/10/2013 9:42 | 1/11/2013 11:09 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57207-4 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 10:33 | 1/10/2013 9:42 | 1/11/2013 11:11 | WG124948-1,-2,-3,-4,-5 | |
| L57207-4 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 10:33 | 1/10/2013 9:42 | 1/11/2013 11:11 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57207-5 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 10:47 | 1/10/2013 9:42 | 1/11/2013 11:13 | WG124948-1,-2,-3,-4,-5 | |
| L57207-5 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 10:47 | 1/10/2013 9:42 | 1/11/2013 11:13 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57207-6 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 11:23 | 1/10/2013 9:42 | 1/11/2013 11:15 | WG124948-1,-2,-3,-4,-5 | |
| L57207-6 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 11:23 | 1/10/2013 9:42 | 1/11/2013 11:15 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57207-7 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 12:18 | 1/10/2013 9:42 | 1/11/2013 11:17 | WG124948-1,-2,-3,-4,-5 | |
| L57207-7 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 12:18 | 1/10/2013 9:42 | 1/11/2013 11:17 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| L57207-8 | 421240A | | CVTOTN | FRESH WTR | 1/8/2013 13:01 | 1/10/2013 9:42 | 1/11/2013 11:19 | WG124948-1,-2,-3,-4,-5 | |
| L57207-8 | 421240A | | CVTOTP | FRESH WTR | 1/8/2013 13:01 | 1/10/2013 9:42 | 1/11/2013 11:19 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | |
| WG124948-1 | MB | | CVTOTN | BLANK WTR | | 1/10/2013 9:42 | 1/11/2013 10:18 | WG124948-1,-2,-3,-4,-5 | MB1 130110 |
| WG124948-1 | MB | | CVTOTP | BLANK WTR | | 1/10/2013 9:42 | 1/11/2013 10:18 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | MB1 130110 |
| WG124948-2 | SB | | CVTOTN | BLANK WTR | | 1/10/2013 9:42 | 1/11/2013 10:20 | WG124948-1,-2,-3,-4,-5 | WG124948-1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG124948-2 | SB | CVTOTP | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 10:20 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | WG124948-1 |
| WG124948-3 | LCS | CVTOTN | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 10:22 | WG124948-1,-2,-3,-4,-5 | LEVEL1 |
| WG124948-3 | LCS | CVTOTP | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 10:22 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | LEVEL1 |
| WG124948-4 | LD | CVTOTN | FRESH WTR | 1/10/2013 9:42 | 1/11/2013 10:35 | WG124948-1,-2,-3,-4,-5 | L57206-6 |
| WG124948-4 | LD | CVTOTP | FRESH WTR | 1/10/2013 9:42 | 1/11/2013 10:35 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | L57206-6 |
| WG124948-5 | MS | CVTOTN | FRESH WTR | 1/10/2013 9:42 | 1/11/2013 10:44 | WG124948-1,-2,-3,-4,-5 | L57206-6 |
| WG124948-5 | MS | CVTOTP | FRESH WTR | 1/10/2013 9:42 | 1/11/2013 10:44 | WG124948-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14,-15,-16,-17 | L57206-6 |
| WG124948-6 | MB | CVTOTP | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 11:20 | | MB2 130110 |
| WG124948-7 | SB | CVTOTP | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 11:22 | | WG124948-6 |
| WG124948-8 | LCS | CVTOTP | BLANK WTR | 1/10/2013 9:42 | 1/11/2013 11:24 | | LEVEL1 |
| WG124948-9 | LD | CVTOTP | STORM WTR | 1/10/2013 9:42 | 1/11/2013 11:35 | | L57131-1 |
| WG124948-10 | MS | CVTOTP | STORM WTR | 1/10/2013 9:42 | 1/11/2013 11:37 | | L57131-1 |
| WG124948-11 | LD | CVTOTP | EFFLUENT | 1/10/2013 9:42 | 1/11/2013 11:44 | | L57148-3 |
| WG124948-12 | MS | CVTOTP | EFFLUENT | 1/10/2013 9:42 | 1/11/2013 11:46 | | L57148-3 |
| WG124948-13 | MB | CVTOTP | BLANK WTR | 1/11/2013 7:35 | 1/11/2013 11:50 | | MB1 130111 |
| WG124948-14 | SB | CVTOTP | BLANK WTR | 1/11/2013 7:35 | 1/11/2013 11:52 | | WG124948-13 |
| WG124948-15 | LCS | CVTOTP | BLANK WTR | 1/11/2013 7:35 | 1/11/2013 12:01 | | LEVEL1 |
| WG124948-16 | LD | CVTOTP | STORM WTR | 1/11/2013 7:35 | 1/11/2013 12:40 | | L57200-1 |
| WG124948-17 | MS | CVTOTP | STORM WTR | 1/11/2013 7:35 | 1/11/2013 12:41 | | L57200-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124942 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 1/3/2013 18:58 | 1/10/2012 16:15 | 1/16/2013 17:14 | WG124942-1,-2,-3,-4,-5,-6 | |
| L57157-1 | 421422-CHSW-P | SWD-CHSW P Cedar Hills Surface Water Permit | CVTSS | FRESH WTR | 1/4/2013 4:45 | 1/10/2012 16:15 | 1/16/2013 17:15 | | |
| L57157-2 | 421422-CHSW-P | | CVTSS | FRESH WTR | 1/4/2013 5:50 | 1/10/2012 16:15 | 1/16/2013 17:17 | | |
| L57157-3 | 421422-CHSW-P | | CVTSS | FRESH WTR | 1/4/2013 5:30 | 1/10/2012 16:15 | 1/16/2013 17:19 | | |
| L57158-2 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVTSS | GRND WTR | 1/7/2013 7:10 | 1/10/2012 16:15 | 1/16/2013 17:20 | | |
| L57158-5 | 421422-CHGW | | CVTSS | GRND WTR | 1/8/2013 5:55 | 1/10/2012 16:15 | 1/16/2013 17:21 | | |
| L57158-6 | 421422-CHGW | | CVTSS | GRND WTR | 1/8/2013 7:20 | 1/10/2012 16:15 | 1/16/2013 17:26 | | |
| L57161-1 | 421422-ENLS | SWD-ENLS Enumclaw Wastewater Permit | CVTSS | IW WTR | 1/8/2013 8:25 | 1/10/2012 16:15 | 1/16/2013 17:27 | | |
| L57183-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVTSS | GRND WTR | 1/8/2013 9:32 | 1/10/2012 16:15 | 1/16/2013 17:31 | | |
| L57183-2 | 421422-CHGW | | CVTSS | GRND WTR | 1/8/2013 5:50 | 1/10/2012 16:15 | 1/16/2013 17:32 | | |
| L57183-5 | 421422-CHGW | | CVTSS | GRND WTR | 1/8/2013 8:44 | 1/10/2012 16:15 | 1/16/2013 17:35 | | |
| L57183-6 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 8:30 | 1/10/2012 16:15 | 1/16/2013 17:36 | | |
| L57184-1 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 7:00 | 1/10/2012 16:15 | 1/16/2013 17:37 | | |
| L57184-2 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 5:40 | 1/10/2012 16:15 | 1/16/2013 17:38 | | |
| L57184-6 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 9:20 | 1/10/2012 16:15 | 1/16/2013 17:39 | | |
| L57185-1 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 9:20 | 1/10/2012 16:15 | 1/16/2013 17:39 | | |
| L57185-5 | 421422-CHGW | | CVTSS | GRND WTR | 1/10/2013 7:40 | 1/10/2012 16:15 | 1/16/2013 17:40 | | |
| WG124942-1 | MB | | CVTSS | BLANK WTR | | 1/10/2012 16:15 | 1/16/2013 17:10 | | MB1 120110 |
| WG124942-2 | LCS | | CVTSS | BLANK WTR | | 1/10/2012 16:15 | 1/16/2013 17:12 | | LEVEL1 |
| WG124942-3 | LD | | CVTSS | STORM WTR | | 1/10/2012 16:15 | 1/16/2013 17:14 | | L57131-1 |
| WG124942-4 | LD | | CVTSS | FRESH WTR | | 1/10/2012 16:15 | 1/16/2013 17:16 | | L57157-1 |
| WG124942-5 | LD | | CVTSS | IW WTR | | 1/10/2012 16:15 | 1/16/2013 17:29 | | L57161-1 |
| WG124942-6 | LD | | CVTSS | GRND WTR | | 1/10/2012 16:15 | 1/16/2013 17:42 | | L57185-5 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124895 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 1/3/2013 18:58 | 1/5/2013 9:56 | 1/5/2013 9:56 | WG124895-1,-2 | |
| WG124895-1 | LCS | | CVTURB | BLANK WTR | | 1/5/2013 9:53 | 1/5/2013 9:53 | | LEVEL1 |
| WG124895-2 | LD | | CVTURB | STORM WTR | | 1/5/2013 9:57 | 1/5/2013 9:57 | | L57131-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG125010 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57036-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 1/14/2013 9:30 | 1/16/2013 14:00 | 1/17/2013 10:14 | WG125010-1,-2,-3,-4 | |
| L57131-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 1/3/2013 18:58 | 1/16/2013 14:00 | 1/17/2013 14:11 | | |
| L57131-1 | 421879-210 | | MTICPMS | STORM WTR | 1/3/2013 18:58 | 1/16/2013 14:00 | 1/17/2013 10:19 | | |
| L57147-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 1/6/2013 7:30 | 1/16/2013 14:00 | 1/17/2013 10:25 | | |
| L57147-3 | 421184-110 | | MTICPMS | INFLUENT | 1/6/2013 7:40 | 1/16/2013 14:00 | 1/17/2013 10:30 | | |
| L57149-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | MTICPMS | EFFLUENT | 1/7/2013 7:06 | 1/16/2013 14:00 | 1/17/2013 10:36 | | |
| L57157-1 | 421422-CHSW-P | SWD-CHSW P Cedar Hills Surface Water Permit | MTICPMS | FRESH WTR | 1/4/2013 4:45 | 1/16/2013 14:00 | 1/17/2013 10:41 | | |
| L57157-2 | 421422-CHSW-P | | MTICPMS | FRESH WTR | 1/4/2013 5:50 | 1/16/2013 14:00 | 1/17/2013 10:47 | | |
| L57157-3 | 421422-CHSW-P | | MTICPMS | FRESH WTR | 1/4/2013 5:30 | 1/16/2013 14:00 | 1/17/2013 10:52 | | |
| L57164-1 | 421937 | Brightwater Operations | MTICPMS | STORM WTR | 1/9/2013 11:36 | 1/16/2013 14:00 | 1/17/2013 11:09 | | |
| L57164-2 | 421937 | | MTICPMS | STORM WTR | 1/9/2013 11:28 | 1/16/2013 14:00 | 1/17/2013 11:14 | | |
| L57164-4 | 421937 | | MTICPMS | STORM WTR | 1/9/2013 11:16 | 1/16/2013 14:00 | 1/17/2013 11:20 | | |
| L57164-6 | 421937 | | MTICPMS | STORM WTR | 1/9/2013 11:00 | 1/16/2013 14:00 | 1/17/2013 11:25 | | |
| L57164-7 | 421937 | | MTICPMS | STORM WTR | 1/9/2013 10:57 | 1/16/2013 14:00 | 1/17/2013 11:30 | | |
| L57189-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | INFLUENT | 1/13/2013 7:30 | 1/16/2013 14:00 | 1/17/2013 11:36 | | |
| L57189-2 | 421184-110 | | MTICPMS | EFFLUENT | 1/13/2013 7:40 | 1/16/2013 14:00 | 1/17/2013 11:41 | | |
| L57200-1 | 421185 | WP INPLANT 3 Day INTENSIVE STUDY | MTHARD-ICPMS | STORM WTR | 1/9/2013 7:25 | 1/16/2013 14:00 | 1/17/2013 14:11 | | |
| L57200-1 | 421185 | | MTICPMS | STORM WTR | 1/9/2013 7:25 | 1/16/2013 14:00 | 1/17/2013 11:47 | | |
| L57201-1 | 421185 | | MTHARD-ICPMS | STORM WTR | 1/9/2013 7:50 | 1/16/2013 14:00 | 1/17/2013 14:11 | | |
| L57201-1 | 421185 | | MTICPMS | STORM WTR | 1/9/2013 7:50 | 1/16/2013 14:00 | 1/17/2013 12:14 | | |
| L57227-1 | 421185 | | MTICPMS | INFLUENT | 1/9/2013 7:20 | 1/16/2013 14:00 | 1/17/2013 12:20 | | |
| L57227-4 | 421185 | | MTICPMS | EFFLUENT | 1/9/2013 7:33 | 1/16/2013 14:00 | 1/17/2013 12:25 | | |
| WG125010-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 1/16/2013 14:00 | 1/17/2013 14:11 | | METHOD BLANK |
| WG125010-1 | MB | | MTICPMS | BLANK WTR | | 1/16/2013 14:00 | 1/17/2013 10:03 | | METHOD BLANK |
| WG125010-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 1/16/2013 14:00 | 1/17/2013 14:11 | | WG125010-1 MS-20 |
| WG125010-2 | SB | | MTICPMS | BLANK WTR | | 1/16/2013 14:00 | 1/17/2013 10:08 | | WG125010-1 MS-20 |
| WG125010-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 1/16/2013 14:00 | 1/17/2013 14:11 | | L57200-1 RPD-LIQ |
| WG125010-3 | LD | | MTICPMS | FRESH WTR | | 1/16/2013 14:00 | 1/17/2013 11:52 | | L57200-1 RPD-LIQ |
| WG125010-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 1/16/2013 14:00 | 1/17/2013 14:11 | | L57200-1 MS-20 |
| WG125010-4 | MS | | MTICPMS | FRESH WTR | | 1/16/2013 14:00 | 1/17/2013 11:58 | | L57200-1 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57131

**WG124985 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 1/3/2013 18:58 | 1/14/2013 14:00 | 1/15/2013 13:13 | WG124985-1,-2,-4,-3 | |
| L57156-1 | 421422-CHGW | SWD-CHGW Cedar Hills | MTICPMS-DISS | GRND WTR | 1/3/2013 8:00 | 1/14/2013 14:00 | 1/15/2013 13:19 | | |
| L57158-2 | 421422-CHGW | Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 1/7/2013 7:10 | 1/14/2013 14:00 | 1/15/2013 13:26 | | |
| L57158-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/8/2013 5:55 | 1/14/2013 14:00 | 1/15/2013 13:32 | | |
| L57158-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/8/2013 7:20 | 1/14/2013 14:00 | 1/15/2013 13:39 | | |
| L57183-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/8/2013 9:32 | 1/14/2013 14:00 | 1/15/2013 13:45 | | |
| L57183-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/8/2013 5:50 | 1/14/2013 14:00 | 1/15/2013 13:51 | | |
| L57183-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/8/2013 8:44 | 1/14/2013 14:00 | 1/15/2013 13:58 | | |
| L57183-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 8:30 | 1/14/2013 14:00 | 1/15/2013 14:17 | | |
| L57184-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 7:00 | 1/14/2013 14:00 | 1/15/2013 14:23 | | |
| L57184-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 5:40 | 1/14/2013 14:00 | 1/15/2013 14:30 | | |
| L57184-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/11/2013 6:30 | 1/14/2013 14:00 | 1/15/2013 15:14 | | |
| L57184-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 9:20 | 1/14/2013 14:00 | 1/15/2013 14:42 | | |
| L57185-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 9:20 | 1/14/2013 14:00 | 1/15/2013 14:49 | | |
| L57185-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/11/2013 5:25 | 1/14/2013 14:00 | 1/15/2013 15:08 | | |
| L57185-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/10/2013 7:40 | 1/14/2013 14:00 | 1/15/2013 14:36 | | |
| L57185-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/11/2013 7:25 | 1/14/2013 14:00 | 1/15/2013 15:33 | | |
| L57198-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/3/2013 6:35 | 1/14/2013 14:00 | 1/15/2013 15:40 | | |
| L57236-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/11/2013 10:30 | 1/14/2013 14:00 | 1/15/2013 15:46 | | |
| L57236-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/11/2013 8:30 | 1/14/2013 14:00 | 1/15/2013 15:52 | | |
| WG124985-1 | MB | | MTICPMS-DISS | BLANK WTR | | 1/14/2013 14:00 | 1/15/2013 13:00 | | METHOD BLANK |
| WG124985-2 | SB | | MTICPMS-DISS | BLANK WTR | | 1/14/2013 14:00 | 1/15/2013 13:07 | | |
| | | | | | | | | | WG124985-1 MS-20 |
| WG124985-3 | LD | | MTICPMS-DISS | GRND WTR | | 1/14/2013 14:00 | 1/15/2013 14:55 | | L57185-1 RPD-LIQ |
| WG124985-4 | MS | | MTICPMS-DISS | GRND WTR | | 1/14/2013 14:00 | 1/15/2013 15:01 | | L57185-1 MS-20 |

**Workgroup: WG125166 Anions**

**CS:WG125166-1 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 | 0.107 | 107 | | 70--130 |

**MB:WG125166-2 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 | |

**SB:WG125166-3 MB:WG125166-2 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 | 2.07 | 103 | | 80--120 |

**LCS:WG125166-4 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 | 2.99 | 100 | | 85--115 |

**LD:WG125166-5 L57139-2 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 | 0.5 | 1 | mg/L | 11.5 | 11.7 | 2 | | 0--20 |

**MS:WG125166-6 L57139-2 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 | 0.5 | 1 | mg/L | 11.5 | 20 | 32.3 | 104 | | 75--125 |

**Workgroup: WG124937 Conductivity**

**LCS:WG124937-1 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 | 75.9 | 103 | | 90--110 |

**LCS:WG124937-2 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 | 698 | 97 | | 90--110 |

**LD:WG124937-3 L57158-6 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 | 195 | 195 | 0 | | 0--10 |

**LD:WG124937-4 L57131-1 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 | 65.8 | 64.5 | 2 | | 0--10 |

**LCS:WG124937-5 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 | 77.4 | 105 | | 90--110 |

**LCS:WG124937-6 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 | 704 | 98 | | 90--110 |

**LD:WG124937-7 L57181-3 Matrix: LEACHATE Listtype:CVCOND Method:SM2510-B Project:421422-CHLS-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 252 | 251 | 0 | | 0--10 |

**LCS:WG124937-8 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 | 76.5 | 104 | | 90--110 |

**LCS:WG124937-9 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 | 706 | 98 | | 90--110 |

**LCS:WG124937-10 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 | 6667 | 6630 | 100 | | 90--110 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57131

**Workgroup: WG124924 Dissolved Nutrients**

**MB:WG124924-1 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:WG124924-1 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:WG124924-1 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:WG124924-2 MB:WG124924-1 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 | 0.101 | 101 | | 80--120 |

**SB:WG124924-2 MB:WG124924-1 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 | 0.827 | 103 | | 80--120 |

**SB:WG124924-2 MB:WG124924-1 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 | 0.0402 | 100 | | 80--120 |

**LCS:WG124924-3 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 | 0.109 | 109 | | 85--115 |

**LCS:WG124924-3 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 | 0.848 | 106 | | 85--115 |

**LCS:WG124924-3 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 | 0.04 | 100 | | 85--115 |

**LD:WG124924-4 L57131-1 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 | 0.858 | 0.861 | 0 | | 0--20 |

**LD:WG124924-4 L57131-1 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 | 0.0133 | 0.0133 | 1 | | 0--20 |

**MS:WG124924-5 L57131-1 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 | 0.858 | 0.8 | 1.66 | 100 | | 75--125 |

**MS:WG124924-5 L57131-1 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 | 0.0133 | 0.04 | 0.0521 | 97 | | 75--125 |

**LD:WG124924-6 L57206-3 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 | 0.0315 | 0.0315 | 0 | | 0--20 |

**LD:WG124924-6 L57206-3 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 | 0.02 | 0.08 | mg/L | 0.952 | 0.959 | 1 | | 0--20 |

**LD:WG124924-6 L57206-3 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 | 0.0161 | 0.0165 | 3 | | 0--20 |

**MS:WG124924-7 L57206-3 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 | 0.0315 | 0.1 | 0.135 | 103 | | 75--125 |

**MS:WG124924-7 L57206-3 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 | 0.02 | 0.08 | mg/L | 0.952 | 0.8 | 2.56 | 101 | | 75--125 |

**MS:WG124924-7 L57206-3 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 | 0.0161 | 0.04 | 0.0544 | 96 | | 75--125 |

**MB:WG124924-8 Matrix: BLANK WTR Listtype:CVNH3-FL Method:KEROUEL & AMINOT 1997 Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124924-8 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG124924-8 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG124924-9 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 | 0.107 | 107 | | 85--115 |

**LCS:WG124924-9 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 | 0.834 | 104 | | 85--115 |

**LCS:WG124924-9 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 | 0.0378 | 95 | | 85--115 |

**Workgroup: WG125018 TKN**

**MB:WG125018-1 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 | |

**LCS:WG125018-2 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 | 0.506 | 101 | | 80--120 |

**LCS:WG125018-3 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 | 5 | 5.16 | 103 | | 80--120 |

**SB:WG125018-4 MB:WG125018-1 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 | 5.04 | 101 | | 80--120 |

**LD:WG125018-5 L57181-1 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 | 10 | 20 | mg/L | 213 | 207 | 3 | | 0--20 |

**MS:WG125018-6 L57181-1 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 | 10 | 20 | mg/L | 213 | 5 | 697 | 97 | | 70--130 |

**LD:WG125018-7 L57148-1 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 | 30.3 | 33.3 | 9 | | 0--20 |

**MS:WG125018-8 L57148-1 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 | 30.3 | 5 | 83 | 105 | | 70--130 |

**LD:WG125018-9 L57131-1 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 | 0.229 | 0.233 | 2 | | 0--20 |

**MS:WG125018-10 L57131-1 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 | 0.229 | 5 | 5.37 | 103 | | 70--130 |

**Workgroup: WG124948 Total Nutrients**

**MB:WG124948-1 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:WG124948-1 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:WG124948-2 MB:WG124948-1 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 | 0.98 | 98 | | 80--120 |

**SB:WG124948-2 MB:WG124948-1 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 | 0.0991 | 99 | | 80--120 |

**LCS:WG124948-3 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 | 0.923 | 92 | | 85--115 |

**LCS:WG124948-3 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 | 0.0933 | 93 | | 85--115 |

**LD:WG124948-4 L57206-6 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.17 | 1.18 | 1 | | 0--20 |

**LD:WG124948-4 L57206-6 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0518 | 0.0485 | 7 | | 0--20 |

**MS:WG124948-5 L57206-6 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.17 | 1 | 2.18 | 101 | | 75--125 |

**MS:WG124948-5 L57206-6 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0518 | 0.1 | 0.147 | 95 | | 75--125 |

**MB:WG124948-6 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:WG124948-7 MB:WG124948-6 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 | 0.0983 | 98 | | 80--120 |

**LCS:WG124948-8 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 | 0.0973 | 97 | | 85--115 |

**LD:WG124948-9 L57131-1 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 | 0.0311 | 0.0293 | 6 | | 0--20 |

**MS:WG124948-10 L57131-1 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 | 0.0311 | 0.1 | 0.127 | 95 | | 75--125 |

**LD:WG124948-11 L57148-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.05 | 0.1 | mg/L | 2.76 | 2.67 | 3 | | 0--20 |

**MS:WG124948-12 L57148-3 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 | 0.05 | 0.1 | mg/L | 2.76 | 1 | 3.66 | 90 | | 75--125 |

**MB:WG124948-13 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:WG124948-14 MB:WG124948-13 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 | 0.102 | 102 | | 80--120 |

**LCS:WG124948-15 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 | 0.0937 | 94 | | 85--115 |

**LD:WG124948-16 L57200-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421185 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.025 | 0.05 | mg/L | 0.836 | 0.819 | 2 | | 0--20 |

**MS:WG124948-17 L57200-1 Matrix: STORM WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421185 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.025 | 0.05 | mg/L | 0.836 | 0.1 | 0.926 | 90 | | 75--125 |

**Workgroup: WG124942 TSS**

**MB:WG124942-1 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:WG124942-2 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 | 82 | 82 | | 80--120 |

**LD:WG124942-3 L57131-1 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 | 1.3 | 2.5 | mg/L | 6.25 | 5.5 | 13 | | 0--25 |

**LD:WG124942-4 L57157-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P 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 | | | 0--25 |

**LD:WG124942-5 L57161-1 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 | 2 | 4 | mg/L | 51.6 | 65.2 | 23 | | 0--25 |

**LD:WG124942-6 L57185-5 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD**
**(Lab Duplicate)**

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

**Workgroup: WG124895 Turbidity**

**LCS:WG124895-1 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 | 9.66 | 97 | | 90--110 |

**LD:WG124895-2 L57131-1 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 | 4.61 | 4.43 | 4 | | 0--25 |

**Workgroup: WG125010 Total Metals and Hardness**

**MB:WG125010-1 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:WG125010-1 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 | |
| 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:WG125010-2 MB:WG125010-1 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 | 32.9 | 100 | | 85--115 |

**SB:WG125010-2 MB:WG125010-1 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 | 19.9 | 100 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4930 | 99 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20 | 100 | | 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 | 19.6 | 98 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |

**LD:WG125010-3 L57200-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185 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 | 35.6 | 35.6 | 0 | | 0--20 |

**LD:WG125010-3 L57200-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3810 | 3830 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 7960 | 7950 | 0 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 2.07 | 2.03 | 2 | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.95 | 3.02 | 2 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.9 | 10.8 | 1 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 40.4 | 40.3 | 0 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2 | 2.07 | 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 | 0.053 | 0.056 | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.06 | 0.064 | | | 0--20 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | 0.48 | 0.48 | | | 0--20 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 10.8 | 9.83 | 9 | | 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 | 4.66 | 4.58 | 2 | | 0--20 |

**MS:WG125010-4 L57200-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421185 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 | 35.6 | 33.1 | 67.5 | 97 | | 75--125 |

**MS:WG125010-4 L57200-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421185 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3810 | 5000 | 8630 | 96 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 7960 | 5000 | 12800 | 97 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 2.07 | 20 | 21.6 | 98 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.95 | 20 | 23.1 | 101 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.9 | 20 | 30.9 | 100 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 40.4 | 20 | 59.9 | 98 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2 | 20 | 21.5 | 97 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 19.4 | 97 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | 0.053 | 20 | 18.9 | 94 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.06 | 20 | 19.8 | 99 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | 0.48 | 20 | 19.8 | 97 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 10.8 | 20 | 30.3 | 98 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 4.66 | 20 | 25 | 102 | | 75--125 |

**Workgroup: WG124985 Dissolved Metals**

**MB:WG124985-1 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:WG124985-2 MB:WG124985-1 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 | 19.8 | 99 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5370 | 107 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5390 | 108 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5010 | 100 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5000 | 100 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5130 | 103 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.2 | 106 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 22.4 | 112 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 22 | 110 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.6 | 108 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21.6 | 108 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |

**LD:WG124985-3 L57185-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 20100 | 19900 | 1 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 68500 | 68000 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 4790 | 4780 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 172000 | 156000 | 10 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.414 | 0.422 | 2 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 673 | 669 | 1 | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1670 | 1670 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.485 | 0.488 | 1 | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 2.34 | 2.35 | 1 | | 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 | <MDL | 0.77 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.973 | 0.97 | 0 | | 0--20 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.053 | 0.057 | | | 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 | 38.9 | 40 | 3 | | 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:WG124985-4 L57185-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.5 | 92 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 20100 | 5000 | 24600 | | 4xRule | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 68500 | 5000 | 72000 | | 4xRule | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 4790 | 5000 | 9590 | 96 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 172000 | 5000 | 171000 | | 4xRule | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.414 | 20 | 20 | 98 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.7 | 98 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 673 | 5000 | 5680 | 100 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1670 | 20 | 1670 | | 4xRule | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.485 | 20 | 17.8 | 87 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 2.34 | 20 | 21.6 | 96 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 19.3 | 96 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.973 | 20 | 20.3 | 96 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 16.5 | 82 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.053 | 20 | 20.6 | 103 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 38.9 | 20 | 61 | 110 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.8 | 104 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 75--125 |

==========

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

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

February 26, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57139-1 to 5, collected January 23, 2013.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on January 24, 2013. The samples were 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 #15182 was prepared and sent via e-mail on February 26, 2013.

**Sample Collection:**
There were no sampling anomalies to report.

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

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.



1202M

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.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

The following two tables list the QC results that were outside their respective control ranges in the Semi Volatile Organic analysis. These results have all been flagged as indicated in the QC report. All 2-methyl naphthalene results for this batch of samples have been flagged with a "JG" qualifier to indicate a possible low bias.

Spike Blank

| Parameter | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|
| 2-Methylnaphthalene | 0.612 | 24 | * | 25--104 |
| Indeno(1,2,3-Cd)Pyrene | 4.21 | 169 | * | 53--122 |
| Dibenzo(a,h)anthracene | 4.1 | 164 | * | 47--134 |
| Benzo(g,h,i)perylene | 4.74 | 190 | * | 32--130 |

Matrix Spike and Matrix Spike Duplicate

| Parameter | % Rec. | Qual | Lab Limit | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 38 | * | 40--121 | 37 | * | 0 | | 0--40 |

Prometon recovery in the matrix spike for Organophosphorus Pesticide analysis was outside the upper control range at 173% (range: 40 – 160%). All other QC results for Prometon were within control. The result was flagged with an "*" in the QC report. No other corrective action was taken.

Chlorpyrifos-D10 surrogate recovery for Organophosphorus Pesticide analysis in sample L57139-1 was outside the lower control range at 36% (range: 41 – 166%). The result was flagged with an "*" in the QC report. All the sample results for L57139-1 were flagged with a "JG" qualifier to indicate possible low bias.

**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: | L57139-1 | L57139-2 | L57139-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 1/23/13 16:12 | 1/23/13 16:40 | 1/24/13 9:47 |
| TimeSpan: | 5.08 | 1.25 | |
| 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 | 6.74 | SH | 0.2 | 0.4 | mg/L | 1.07 | SH | 0.2 | 0.4 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | | | | | | 0.062 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 500 | | 2 | 5 | NTU | 15 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 2150 | | 1 | 5 | umhos/cm | 75.6 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 428 | | 10 | 20 | mg/L | 22.5 | | 2.5 | 5 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 652 | | 25 | 50 | mg/L | 11.5 | | 0.5 | 1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.455 | | 0.01 | 0.04 | mg/L | 0.399 | | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.522 | | 0.05 | 0.1 | mg/L | 0.11 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.00599 | H | 0.002 | 0.005 | mg/L | 0.0381 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 45.5 | | 2 | 2 | mg/L | 8.35 | | 2 | 2 | mg/L | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | | | | | | 560 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | 0.968 | H | 0.05 | 0.25 | ug/L | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | 1.4 | | 0.05 | 0.25 | ug/L | 0.065 | <RDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | 146000 | | 50 | 50 | ug/L | 6940 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | 21 | H | 0.4 | 2 | ug/L | 3.7 | H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | 71.2 | | 0.4 | 2 | ug/L | 6.91 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | 0.21 | <RDL,H | 0.1 | 0.5 | ug/L | 0.29 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | 32.7 | | 0.1 | 0.5 | ug/L | 2.91 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | 13000 | | 50 | 50 | ug/L | 749 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | 123 | H | 0.5 | 2.5 | ug/L | 10.9 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | 396 | | 0.5 | 2.5 | ug/L | 20.2 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 419 | | 0.331 | 0.331 | mg CaCO3/L | 20.4 | | 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,JG | 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 | FCSW02 | FCSW01 |
| Descrip: | FALL CITY HD COMME | FALL CITY HD RESID | FALL CITY HD COMME |
| Sample: | L57139-1 | L57139-2 | L57139-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 1/23/13 16:12 | 1/23/13 16:40 | 1/24/13 9:47 |
| TimeSpan: | 5.08 | 1.25 | |
| 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 | | | | | |
| Benzo(a)anthracene | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(a)pyrene | | | | | | 0.0233 | | 0.0094 | 0.0189 | ug/L | | | | | |
| 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 | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | | | | | | 0.396 | B | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | | | | | | 0.0405 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | | | | | | 0.155 | | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | | | | | | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | | | | | | 0.073 | | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | | | | | | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | | | | | | 0.0593 | | 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 | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | | | | | | 0.0501 | | 0.0094 | 0.0189 | ug/L | | | | | |
| **OR SW846 3520C*SW846 8270D SIM** | | | | | | | | | | | | | | | |
| Chlorpyrifos | | <MDL,JG | 0.032 | 0.0472 | ug/L | | <MDL | 0.032 | 0.0472 | ug/L | | | | | |
| Diazinon | | <MDL,JG | 0.041 | 0.0472 | ug/L | | <MDL | 0.041 | 0.0472 | ug/L | | | | | |
| Dichlobenil | | <MDL,JG | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Malathion | | <MDL,JG | 0.045 | 0.0472 | ug/L | | <MDL | 0.045 | 0.0472 | ug/L | | | | | |
| Prometon | | <MDL,JG | 0.047 | 0.0943 | ug/L | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| **OR SW846 3535A/8151A*8270D SIM** | | | | | | | | | | | | | | | |
| 2,4-D | | <MDL | 0.5 | 0.99 | ug/L | | <MDL | 0.5 | 1 | ug/L | | | | | |
| MCPP | | <MDL | 0.5 | 0.99 | ug/L | | <MDL | 0.5 | 1 | ug/L | | | | | |
| Triclopyr | | <MDL | 0.5 | 0.99 | 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) | | | | | | | | | | | 0.385 | | 0.19 | 0.19 | mg/L |
| **OR WDOE NWTPH-GX** | | | | | | | | | | | | | | | |
| Gasoline Range (C7-C12) | | | | | | | | | | | | <MDL | 100 | 250 | ug/L |

# King County Environmental Lab Analytical Report

| | | | |
|---|---|---|---|
| Project: | 421879-210 | Project: | 421879-210 |
| Locator: | FCSW02 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD RESID | Descrip: | FIELD FILTER BLANK |
| Sample: | L57139-4 | Sample: | L57139-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 1/24/13 10:10 | ColDate: | 1/24/13 11:45 |
| 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 | 9 | | | | 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: | FCSW02 | | | | | Locator: | FFBLANK | | | | |
| Descrip: | FALL CITY HD RESID | | | | | Descrip: | FIELD FILTER BLANK | | | | |
| Sample: | L57139-4 | | | | | Sample: | L57139-5 | | | | |
| Matrix: | LG STORM WTR | | | | | Matrix: | LN BLANK WTR | | | | |
| ColDate: | 1/24/13 10:10 | | | | | ColDate: | 1/24/13 11:45 | | | | |
| 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 | 0.19 | 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 | Turbidity | Conductivity | Total Suspended Solids | Chloride | Nitrite + Nitrate Nitrogen | Total Phosphorus | Orthophosphate Phosphorus | Biochemical Oxygen Demand | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 | ug/L |
| FCSW01 | 421879-210 | L57139-1 | 6.74 | 500 | 2150 | 428 | 652 | 0.455 | 0.522 | 0.00599 | 45.5 | 0.968 | 1.4 | 146000 | 21 | 71.2 | 0.21 | 32.7 | 13000 | 123 | 396 |
| FCSW02 | 421879-210 | L57139-2 | 1.07 | 15 | 75.6 | 22.5 | 11.5 | 0.399 | 0.11 | 0.0381 | 8.35 | | 0.065 | 6940 | 3.7 | 6.91 | 0.29 | 2.91 | 749 | 10.9 | 20.2 |
| FCSW01 | 421879-210 | L57139-3 | | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57139-4 | | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | Methylene Blue Act. Substance | Benzo(a)pyrene | Bis(2-Ethylhexyl)Phthalate | Chrysene | Di-N-Butyl Phthalate | Diethyl Phthalate | Fluoranthene | Pyrene | Fecal Coliform | Lube Oil Range (>C24) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/L | mg/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | CFU/100ml | mg/L |
| FCSW01 | 421879-210 | L57139-1 | 419 | | | | | | | | | | |
| FCSW02 | 421879-210 | L57139-2 | 20.4 | 0.062 | 0.0233 | 0.396 | 0.0405 | 0.073 | 0.155 | 0.0593 | 0.0501 | | |
| FCSW01 | 421879-210 | L57139-3 | | | | | | | | | | 560 | 0.385 |
| FCSW02 | 421879-210 | L57139-4 | | | | | | | | | | 9 | |
| * Not converted to dry weight basis | | | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | | | |

Login: P57139 NPDES Stormwater Permit Monitoring Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| *Relinquished by* | *Date* | *Time* |
|---|---|---|
| *Received by* | *Date* 1-24-13 | *Time* 1330 |
| *Sample Numbers* | | *[All]* |

| Sample Number | P57139-1 | P57139-2 | P57139-3 |
|---|---|---|---|
| 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 | 1/23/13 ~~9~~ 1612 | 1/23/13 1640 | 1/24/13 947 |
| End Date/Time | 1/23/13 2117 | 1/23/13 1755 | |
| 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 ✓ | 35 grabs | |
| | ~~7 LG PAHPHTH-SUR~~ | 17.5 L | |
| | 9 grabs | ~~P5~~ | |
| | 4.5 L | | |

Split 1145

P/U 945
1110 M at lab
Lab temp 2.9°C

PU 1008
Lab Temp 5.5°C

Login: P57139 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P57139-4 | P57139-5 | |
|---|---|---|---|
| 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 | 1/24/13 1010 | 1/24/13 1145 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G<br>~~35 grabs~~<br>~~17.5 L~~ | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Jan 29 2013
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 |
|---|---|---|---|
| P57139-2 | Water | 13-A000888 | CONV |

Your sample was received on Friday, January 25, 2013. 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 #: 1047106

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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: 01/25/13
Date Reported: 1/29/13

---

**AMTEST Identification Number** **13-A000888**
**Client Identification** **P57139-2**
**Sampling Date** **01/23/13, 17:55**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.062 | mg/l | | 0.025 | SM 5540C | EB | 01/25/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A000888**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A000888 | Surfactants | mg/l | 0.062 | 0.199 | 0.125 | 109.60 % |
| 13-A000888 | Surfactants | mg/l | 0.062 | 0.195 | 0.125 | 106.40 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.199 | 0.195 | 2.0 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.113 | 90.4 % |

## 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 1380331

Project Name: _____  Date Received: 1/25/13  Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.3 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.

# CHAIN OF CUSTODY RECORD

**Project Number:** 1047106
**Purchase Order Number:** n/a
**Subcontract Laboratory:** Am Test
**LPM/TC:** Fritz Grothkopp

**Shipment Number:** EL-13-05
**Shipment Method:** ENA
**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***

T= 6.3 °C

888

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | **Collect Date** | **Matrix** | **QC Required** | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57139-2 | 1/23/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 17:55 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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**Additional Comments/Instructions:** Test has 48 hour hold time.

**Total Number of Containers:** 1

***Please return signed original CoC with data package.***

**Requested TAT:** 14 **Days**
**Data Package Due:** 2/23/2013

| | | | | | |
|---|---|---|---|---|---|
| **RELINQUISHED BY** | | Date | 1-25-13 | **RECEIVED BY** | Date 1-25-13 |
| Signature | | Time | 0900 | Signature | Time 1035 |
| Printed Name | Jason Kinnard | | | Printed Name | Olsen |
| Organization | King County DNR, Environmental Laboratory | | | Organization | Am Test |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125152 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 1/23/2013 16:12 | 1/25/2013 14:04 | 1/25/2013 14:04 | WG125152-1,-2 | |
| L57139-2 | 421879-210 | | CVBOD | STORM WTR | 1/23/2013 16:40 | 1/25/2013 14:06 | 1/25/2013 14:06 | | |
| L57221-9 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVBOD | FRESH WTR | 1/23/2013 6:15 | 1/25/2013 13:54 | 1/25/2013 13:54 | | |
| L57221-10 | 421422-CHSW-Q | | CVBOD | FRESH WTR | 1/23/2013 6:45 | 1/25/2013 13:55 | 1/25/2013 13:55 | | |
| L57221-11 | 421422-CHSW-Q | | CVBOD | FRESH WTR | 1/23/2013 7:30 | 1/25/2013 13:58 | 1/25/2013 13:58 | | |
| L57221-13 | 421422-CHSW-Q | | CVBOD | FRESH WTR | 1/23/2013 8:53 | 1/25/2013 14:00 | 1/25/2013 14:00 | | |
| L57221-14 | 421422-CHSW-Q | | CVBOD | FRESH WTR | 1/23/2013 9:17 | 1/25/2013 14:02 | 1/25/2013 14:02 | | |
| WG125152-1 | MB | | CVBOD | BLANK WTR | | 1/25/2013 13:45 | 1/25/2013 13:45 | | MB1 1/25/13 |
| WG125152-2 | SB | | CVBOD | BLANK WTR | | 1/25/2013 13:46 | 1/25/2013 13:46 | | WG125152-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125166 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57131-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 1/3/2013 18:58 | 1/28/2013 13:14 | 1/28/2013 13:14 | WG125166-1,-2,-3,-4,-5,-6 | |
| L57139-1 | 421879-210 | | CVCL | STORM WTR | 1/23/2013 16:12 | 1/28/2013 17:17 | 1/28/2013 17:17 | | |
| L57139-2 | 421879-210 | | CVCL | STORM WTR | 1/23/2013 16:40 | 1/28/2013 13:44 | 1/28/2013 13:44 | | |
| WG125166-1 | CS | | CVCL | BLANK WTR | | 1/28/2013 10:41 | 1/28/2013 10:41 | | RDL_LEVEL |
| WG125166-2 | MB | | CVCL | BLANK WTR | | 1/28/2013 11:42 | 1/28/2013 11:42 | | MB 1/28/13 |
| WG125166-3 | SB | | CVCL | BLANK WTR | | 1/28/2013 12:13 | 1/28/2013 12:13 | | WG125166-2 |
| WG125166-4 | LCS | | CVCL | BLANK WTR | | 1/28/2013 12:43 | 1/28/2013 12:43 | | LEVEL1 |
| WG125166-5 | LD | | CVCL | STORM WTR | | 1/28/2013 14:15 | 1/28/2013 14:15 | | L57139-2 |
| WG125166-6 | MS | | CVCL | STORM WTR | | 1/28/2013 14:45 | 1/28/2013 14:45 | | L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125201 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56675-1 | 421195-140 | Lake Sawyer | CVCOND | FRESH WTR | 1/28/2013 10:30 | 1/29/2013 15:00 | 1/29/2013 15:00 | WG125201-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13,-14 | |
| L56675-2 | 421195-140 | | CVCOND | FRESH WTR | 1/28/2013 10:25 | 1/29/2013 15:11 | 1/29/2013 15:11 | | |
| L56675-3 | 421195-140 | | CVCOND | FRESH WTR | 1/28/2013 10:40 | 1/29/2013 15:22 | 1/29/2013 15:22 | | |
| L57133-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 1/18/2013 7:10 | 1/29/2013 20:26 | 1/29/2013 20:26 | | |
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 1/23/2013 16:12 | 1/29/2013 20:27 | 1/29/2013 20:27 | | |
| L57139-2 | 421879-210 | | CVCOND | STORM WTR | 1/23/2013 16:40 | 1/29/2013 20:28 | 1/29/2013 20:28 | | |
| L57216-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 1/14/2013 5:45 | 1/29/2013 20:30 | 1/29/2013 20:30 | | |
| L57216-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/14/2013 6:45 | 1/29/2013 20:32 | 1/29/2013 20:32 | | |
| L57219-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/16/2013 5:35 | 1/29/2013 20:33 | 1/29/2013 20:33 | | |
| L57219-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/16/2013 5:35 | 1/29/2013 20:34 | 1/29/2013 20:34 | | |
| L57219-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/15/2013 9:17 | 1/29/2013 20:38 | 1/29/2013 20:38 | | |
| L57219-6 | 421422-CHGW | | CVCOND | GRND WTR | 1/16/2013 7:35 | 1/29/2013 20:40 | 1/29/2013 20:40 | | |
| L57220-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/17/2013 8:43 | 1/29/2013 20:41 | 1/29/2013 20:41 | | |
| L57220-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/17/2013 6:10 | 1/29/2013 20:43 | 1/29/2013 20:43 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVCOND | FRESH WTR | 1/23/2013 5:05 | 1/29/2013 15:43 | 1/29/2013 15:43 | | |
| L57221-2 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 5:45 | 1/29/2013 15:53 | 1/29/2013 15:53 | | |
| L57221-3 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 8:13 | 1/29/2013 16:01 | 1/29/2013 16:01 | | |
| L57221-4 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 9:41 | 1/29/2013 16:09 | 1/29/2013 16:09 | | |
| L57221-5 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 9:17 | 1/29/2013 16:19 | 1/29/2013 16:19 | | |
| L57221-6 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 8:37 | 1/29/2013 16:27 | 1/29/2013 16:27 | | |
| L57221-7 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 9:03 | 1/29/2013 16:37 | 1/29/2013 16:37 | | |
| L57221-8 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/22/2013 7:33 | 1/29/2013 16:47 | 1/29/2013 16:47 | | |
| L57221-9 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 6:15 | 1/29/2013 16:55 | 1/29/2013 16:55 | | |
| L57221-10 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 6:45 | 1/29/2013 17:05 | 1/29/2013 17:05 | | |
| L57221-11 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 7:30 | 1/29/2013 17:15 | 1/29/2013 17:15 | | |
| L57221-13 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 8:53 | 1/29/2013 17:25 | 1/29/2013 17:25 | | |
| L57221-14 | 421422-CHSW-Q | | CVCOND | FRESH WTR | 1/23/2013 9:17 | 1/29/2013 17:33 | 1/29/2013 17:33 | | |
| L57253-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVCOND | GRND WTR | 1/24/2013 9:35 | 1/29/2013 17:52 | 1/29/2013 17:52 | | |
| L57253-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/23/2013 7:35 | 1/29/2013 18:02 | 1/29/2013 18:02 | | |
| L57255-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/25/2013 8:10 | 1/29/2013 18:28 | 1/29/2013 18:28 | | |
| L57255-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/24/2013 6:10 | 1/29/2013 18:48 | 1/29/2013 18:48 | | |
| L57255-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/24/2013 8:17 | 1/29/2013 18:59 | 1/29/2013 18:59 | | |
| L57255-6 | 421422-CHGW | | CVCOND | GRND WTR | 1/25/2013 10:53 | 1/29/2013 19:10 | 1/29/2013 19:10 | | |
| L57256-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/25/2013 9:52 | 1/29/2013 19:20 | 1/29/2013 19:20 | | |
| L57256-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/25/2013 6:30 | 1/29/2013 19:32 | 1/29/2013 19:32 | | |
| L57256-5 | 421422-CHGW | | CVCOND | GRND WTR | 1/25/2013 8:18 | 1/29/2013 19:42 | 1/29/2013 19:42 | | |
| L57256-6 | 421422-CHGW | | CVCOND | GRND WTR | 1/28/2013 6:45 | 1/29/2013 19:53 | 1/29/2013 19:53 | | |
| L57257-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/28/2013 10:45 | 1/29/2013 20:05 | 1/29/2013 20:05 | | |
| L57257-2 | 421422-CHGW | | CVCOND | GRND WTR | 1/28/2013 9:06 | 1/29/2013 20:14 | 1/29/2013 20:14 | | |
| L57293-1 | 421422-CHGW | | CVCOND | GRND WTR | 1/22/2013 5:35 | 1/29/2013 20:25 | 1/29/2013 20:25 | | |
| WG125201-1 | LCS | | CVCOND | BLANK WTR | | 1/29/2013 14:29 | 1/29/2013 14:29 | | LEVEL1 |
| WG125201-2 | LCS | | CVCOND | BLANK WTR | | 1/29/2013 14:31 | 1/29/2013 14:31 | | LEVEL2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125201-3 | LD | CVCOND | FRESH WTR | 1/29/2013 15:32 | 1/29/2013 15:32 | | L56675-3 |
| WG125201-4 | LD | CVCOND | FRESH WTR | 1/29/2013 17:43 | 1/29/2013 17:43 | | L57221-14 |
| WG125201-5 | LCS | CVCOND | BLANK WTR | 1/29/2013 18:14 | 1/29/2013 18:14 | | LEVEL1 |
| WG125201-6 | LCS | CVCOND | BLANK WTR | 1/29/2013 18:16 | 1/29/2013 18:16 | | LEVEL2 |
| WG125201-7 | LD | CVCOND | GRND WTR | 1/29/2013 18:37 | 1/29/2013 18:37 | | L57255-1 |
| WG125201-8 | LD | CVCOND | STORM WTR | 1/29/2013 20:29 | 1/29/2013 20:29 | | L57139-2 |
| WG125201-9 | LCS | CVCOND | BLANK WTR | 1/29/2013 20:36 | 1/29/2013 20:36 | | LEVEL1 |
| WG125201-10 | LCS | CVCOND | BLANK WTR | 1/29/2013 20:37 | 1/29/2013 20:37 | | LEVEL2 |
| WG125201-11 | LD | CVCOND | GRND WTR | 1/29/2013 20:42 | 1/29/2013 20:42 | | L57220-2 |
| WG125201-12 | LCS | CVCOND | BLANK WTR | 1/29/2013 20:46 | 1/29/2013 20:46 | | LEVEL1 |
| WG125201-13 | LCS | CVCOND | BLANK WTR | 1/29/2013 20:47 | 1/29/2013 20:47 | | LEVEL2 |
| WG125201-14 | LCS | CVCOND | BLANK WTR | 1/29/2013 20:48 | 1/29/2013 20:48 | | LEVEL3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125228 Nitrate Nitrogen**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 1/23/2013 16:12 | 2/1/2013 16:00 | 2/1/2013 17:18 | WG125228-1,-2,-3,-9,-10,-11 | |
| L57139-2 | 421879-210 | | CVNO23 | STORM WTR | 1/23/2013 16:40 | 2/1/2013 16:00 | 2/1/2013 17:16 | | |
| L57139-5 | 421879-210 | | CVNO23 | BLANK WTR | 1/24/2013 11:45 | 2/1/2013 16:00 | 2/1/2013 17:14 | | |
| L57284-5 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | CVNO3 | GRND WTR | 1/30/2013 10:42 | 1/31/2013 15:45 | 2/1/2013 16:53 | WG125228-1,-2,-3,-4,-5 | |
| WG125228-1 | MB | | CVNO23 | BLANK WTR | | 1/31/2013 15:45 | 2/1/2013 16:45 | WG125228-1,-2,-3,-9,-10,-11 | CONNUTS1 |
| WG125228-1 | MB | | CVNO3 | BLANK WTR | | 1/31/2013 15:45 | 2/1/2013 16:45 | WG125228-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125228-2 | SB | | CVNO23 | BLANK WTR | | 1/31/2013 15:45 | 2/1/2013 16:47 | WG125228-1,-2,-3,-9,-10,-11 | WG125228-1 |
| WG125228-2 | SB | | CVNO3 | BLANK WTR | | 1/31/2013 15:45 | 2/1/2013 16:47 | WG125228-1,-2,-3,-4,-5 | WG125228-1 |
| WG125228-3 | LCS | | CVNO23 | BLANK WTR | | 2/1/2013 16:49 | 2/1/2013 16:49 | WG125228-1,-2,-3,-9,-10,-11 | LEVEL1 |
| WG125228-3 | LCS | | CVNO3 | BLANK WTR | | 2/1/2013 16:49 | 2/1/2013 16:49 | WG125228-1,-2,-3,-4,-5 | LEVEL1 |
| WG125228-4 | LD | | CVNO3 | GRND WTR | | 1/31/2013 15:45 | 2/1/2013 16:55 | | L57284-5 |
| WG125228-5 | MS | | CVNO3 | GRND WTR | | 1/31/2013 15:45 | 2/1/2013 16:57 | | L57284-5 |
| WG125228-9 | MB | | CVNO23 | BLANK WTR | | 2/1/2013 16:00 | 2/1/2013 17:01 | WG125228-1,-2,-3,-9,-10,-11 | CONNUTS1 |
| WG125228-10 | LD | | CVNO23 | STORM WTR | | 2/1/2013 16:00 | 2/1/2013 17:20 | | L57139-1 |
| WG125228-11 | MS | | CVNO23 | STORM WTR | | 2/1/2013 16:00 | 2/1/2013 17:22 | | L57139-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125229 Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56675-1 | 421195-140 | Lake Sawyer | CVORTHOP | FRESH WTR | 1/28/2013 10:30 | 1/31/2013 12:30 | 1/31/2013 14:52 | WG125229-10,-11,-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L56675-2 | 421195-140 | | CVORTHOP | FRESH WTR | 1/28/2013 10:25 | 1/31/2013 12:30 | 1/31/2013 15:03 | | |
| L56675-3 | 421195-140 | | CVORTHOP | FRESH WTR | 1/28/2013 10:40 | 1/31/2013 12:30 | 1/31/2013 13:58 | | |
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 1/23/2013 16:12 | 1/31/2013 12:30 | 1/31/2013 14:42 | | |
| L57139-2 | 421879-210 | | CVORTHOP | STORM WTR | 1/23/2013 16:40 | 1/31/2013 12:30 | 1/31/2013 14:40 | | |
| L57139-5 | 421879-210 | | CVORTHOP | BLANK WTR | 1/24/2013 11:45 | 1/31/2013 12:30 | 1/31/2013 14:38 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVORTHOP | FRESH WTR | 1/23/2013 5:05 | 1/31/2013 12:30 | 1/31/2013 15:06 | | |
| L57221-2 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 5:45 | 1/31/2013 12:30 | 1/31/2013 15:08 | | |
| L57221-9 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 6:15 | 1/31/2013 12:30 | 1/31/2013 15:10 | | |
| L57221-10 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 6:45 | 1/31/2013 12:30 | 1/31/2013 17:14 | | |
| L57221-11 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 7:30 | 1/31/2013 12:30 | 1/31/2013 15:22 | | |
| L57221-13 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 8:53 | 1/31/2013 12:30 | 1/31/2013 15:24 | | |
| L57221-14 | 421422-CHSW-Q | | CVORTHOP | FRESH WTR | 1/23/2013 9:17 | 1/31/2013 12:30 | 1/31/2013 15:36 | | |
| L57301-1 | 421195-150 | Beaver Lake | CVORTHOP | FRESH WTR | 1/29/2013 10:05 | 1/31/2013 12:30 | 1/31/2013 14:19 | | |
| L57301-2 | 421195-150 | | CVORTHOP | FRESH WTR | 1/29/2013 10:15 | 1/31/2013 12:30 | 1/31/2013 14:17 | | |
| WG125229-1 | MB | | CVORTHOP | BLANK WTR | | 1/31/2013 12:30 | 1/31/2013 14:07 | | CONNUTS1 |
| WG125229-2 | SB | | CVORTHOP | BLANK WTR | | 1/31/2013 12:30 | 1/31/2013 14:10 | | WG125229-1 |
| WG125229-3 | LCS | | CVORTHOP | BLANK WTR | | 1/31/2013 13:04 | 1/31/2013 14:12 | | LEVEL1 |
| WG125229-4 | LD | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 14:31 | | L57301-1 |
| WG125229-5 | MS | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 14:33 | | L57301-1 |
| WG125229-6 | LD | | CVORTHOP | STORM WTR | | 1/31/2013 12:30 | 1/31/2013 14:45 | | L57139-1 |
| WG125229-7 | MS | | CVORTHOP | STORM WTR | | 1/31/2013 12:30 | 1/31/2013 14:47 | | L57139-1 |
| WG125229-8 | LD | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 17:16 | | L57221-10 |
| WG125229-9 | MS | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 17:19 | | L57221-10 |
| WG125229-10 | LD | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 14:00 | | L56675-3 |
| WG125229-11 | MS | | CVORTHOP | FRESH WTR | | 1/31/2013 12:30 | 1/31/2013 14:03 | | L56675-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125366 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 1/23/2013 16:12 | 2/13/2013 7:44 | 2/13/2013 16:42 | WG125366-7,-8,-9,-10,-1,-2,-3,-4,-5,-6 | |
| L57139-2 | 421879-210 | | CVTKN | STORM WTR | 1/23/2013 16:40 | 2/13/2013 7:44 | 2/13/2013 16:44 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVTKN | FRESH WTR | 1/23/2013 5:05 | 2/13/2013 7:44 | 2/13/2013 15:40 | | |
| L57221-2 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 5:45 | 2/13/2013 7:44 | 2/13/2013 15:42 | | |
| L57221-3 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 8:13 | 2/13/2013 7:44 | 2/13/2013 15:44 | | |
| L57221-4 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:41 | 2/13/2013 7:44 | 2/13/2013 15:46 | | |
| L57221-5 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:17 | 2/13/2013 7:44 | 2/13/2013 15:59 | | |
| L57221-6 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 8:37 | 2/13/2013 7:44 | 2/13/2013 16:01 | | |
| L57221-7 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:03 | 2/13/2013 7:44 | 2/13/2013 16:03 | | |
| L57221-8 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 7:33 | 2/13/2013 7:44 | 2/13/2013 16:05 | | |
| L57221-9 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 6:15 | 2/13/2013 7:44 | 2/13/2013 16:07 | | |
| L57221-10 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 6:45 | 2/13/2013 7:44 | 2/13/2013 16:09 | | |
| L57221-11 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 7:30 | 2/13/2013 7:44 | 2/13/2013 16:11 | | |
| L57221-13 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 8:53 | 2/13/2013 7:44 | 2/13/2013 16:13 | | |
| L57221-14 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 9:17 | 2/13/2013 7:44 | 2/13/2013 17:07 | | |
| L57246-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 2/4/2013 7:13 | 2/13/2013 7:44 | 2/13/2013 16:46 | | |
| L57246-3 | 421430-300 | | CVTKN | EFFLUENT | 2/4/2013 7:20 | 2/13/2013 7:44 | 2/13/2013 16:49 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 2/5/2013 5:43 | 2/13/2013 7:44 | 2/13/2013 16:34 | | |
| WG125366-1 | MB | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:29 | | MB 130213 |
| WG125366-2 | LCS | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:31 | | LEVEL1 |
| WG125366-3 | LCS | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:34 | | LEVEL2 |
| WG125366-4 | SB | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:36 | | WG125366-1 |
| WG125366-5 | LD | | CVTKN | STORM WTR | | 2/13/2013 7:44 | 2/13/2013 16:36 | | L57311-1 |
| WG125366-6 | MS | | CVTKN | STORM WTR | | 2/13/2013 7:44 | 2/13/2013 16:38 | | L57311-1 |
| WG125366-7 | LD | | CVTKN | EFFLUENT | | 2/13/2013 7:44 | 2/13/2013 17:01 | | L57246-3 |
| WG125366-8 | MS | | CVTKN | EFFLUENT | | 2/13/2013 7:44 | 2/13/2013 17:03 | | L57246-3 |
| WG125366-9 | LD | | CVTKN | FRESH WTR | | 2/13/2013 7:44 | 2/13/2013 17:09 | | L57221-14 |
| WG125366-10 | MS | | CVTKN | FRESH WTR | | 2/13/2013 7:44 | 2/13/2013 17:11 | | L57221-14 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125224 Total Nitrogen, Total Phosphorus**
**fc**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L56675-1 | 421195-140 | Lake Sawyer | CVTOTP | FRESH WTR | 1/28/2013 10:30 | 1/30/2013 10:00 | 2/1/2013 12:33 | WG125224-1,-2,-3,-4,-5,-7,-6 | |
| L56675-2 | 421195-140 | | CVTOTP | FRESH WTR | 1/28/2013 10:25 | 1/30/2013 10:00 | 2/1/2013 12:42 | | |
| L56675-3 | 421195-140 | | CVTOTP | FRESH WTR | 1/28/2013 10:40 | 1/30/2013 10:00 | 2/1/2013 12:44 | | |
| L57016-33 | 421195-250 | CDC Grant | CVTOTN | FRESH WTR | 1/28/2013 12:00 | 1/30/2013 10:00 | 2/1/2013 12:46 | WG125224-1,-2,-3,-6,-7 | |
| L57016-33 | 421195-250 | | CVTOTP | FRESH WTR | 1/28/2013 12:00 | 1/30/2013 10:00 | 2/1/2013 12:46 | WG125224-1,-2,-3,-4,-5,-7,-6 | |
| L57016-38 | 421195-250 | | CVTOTN | FRESH WTR | 1/28/2013 15:30 | 1/30/2013 10:00 | 2/1/2013 12:47 | WG125224-1,-2,-3,-6,-7 | |
| L57016-38 | 421195-250 | | CVTOTP | FRESH WTR | 1/28/2013 15:30 | 1/30/2013 10:00 | 2/1/2013 12:47 | WG125224-1,-2,-3,-4,-5,-7,-6 | |
| L57016-43 | 421195-250 | | CVTOTN | FRESH WTR | 1/28/2013 9:30 | 1/30/2013 10:00 | 2/1/2013 12:53 | WG125224-1,-2,-3,-6,-7 | |
| L57016-43 | 421195-250 | | CVTOTP | FRESH WTR | 1/28/2013 9:30 | 1/30/2013 10:00 | 2/1/2013 12:53 | WG125224-1,-2,-3,-4,-5,-7,-6 | |
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 1/23/2013 16:12 | 1/30/2013 10:00 | 2/1/2013 12:22 | | |
| L57139-2 | 421879-210 | | CVTOTP | STORM WTR | 1/23/2013 16:40 | 1/30/2013 10:00 | 2/1/2013 12:24 | | |
| L57301-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 1/29/2013 10:05 | 1/30/2013 10:00 | 2/1/2013 12:29 | | |
| L57301-2 | 421195-150 | | CVTOTP | FRESH WTR | 1/29/2013 10:15 | 1/30/2013 10:00 | 2/1/2013 12:31 | | |
| WG125224-1 | MB | | CVTOTN | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:16 | WG125224-1,-2,-3,-6,-7 | MB1 |
| WG125224-1 | MB | | CVTOTP | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:16 | WG125224-1,-2,-3,-4,-5,-7,-6 | MB1 |
| WG125224-2 | SB | | CVTOTN | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:18 | WG125224-1,-2,-3,-6,-7 | WG125224-1 |
| WG125224-2 | SB | | CVTOTP | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:18 | WG125224-1,-2,-3,-4,-5,-7,-6 | WG125224-1 |
| WG125224-3 | LCS | | CVTOTN | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:20 | WG125224-1,-2,-3,-6,-7 | LEVEL1 |
| WG125224-3 | LCS | | CVTOTP | BLANK WTR | | 1/30/2013 10:00 | 2/1/2013 12:20 | WG125224-1,-2,-3,-4,-5,-7,-6 | LEVEL1 |
| WG125224-4 | LD | | CVTOTP | STORM WTR | | 1/30/2013 10:00 | 2/1/2013 12:25 | | L57139-2 |
| WG125224-5 | MS | | CVTOTP | STORM WTR | | 1/30/2013 10:00 | 2/1/2013 12:27 | | L57139-2 |
| WG125224-6 | LD | | CVTOTN | FRESH WTR | | 1/30/2013 10:00 | 2/1/2013 12:49 | WG125224-1,-2,-3,-6,-7 | L57016-38 |
| WG125224-6 | LD | | CVTOTP | FRESH WTR | | 1/30/2013 10:00 | 2/1/2013 13:18 | WG125224-1,-2,-3,-4,-5,-7,-6 | L57016-38 |
| WG125224-7 | MS | | CVTOTN | FRESH WTR | | 1/30/2013 10:00 | 2/1/2013 12:51 | WG125224-1,-2,-3,-6,-7 | L57016-38 |
| WG125224-7 | MS | | CVTOTP | FRESH WTR | | 1/30/2013 10:00 | 2/1/2013 12:51 | WG125224-1,-2,-3,-4,-5,-7,-6 | L57016-38 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125128 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57110-1 | 421874-100 | City of Shoreline Monthly Water Quality Monitoring | CVTSS | FRESH WTR | 1/22/2013 10:05 | 1/25/2013 14:15 | 2/8/2013 11:54 | WG125128-1,-2,-7,-3,-4,-5,-6 | |
| L57110-2 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 9:21 | 1/25/2013 14:15 | 2/8/2013 11:57 | | |
| L57110-3 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 9:45 | 1/25/2013 14:15 | 2/8/2013 11:57 | | |
| L57110-4 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 9:25 | 1/25/2013 14:15 | 2/8/2013 11:57 | | |
| L57110-5 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 8:20 | 1/25/2013 14:15 | 2/8/2013 11:58 | | |
| L57110-6 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 8:57 | 1/25/2013 14:15 | 2/8/2013 11:58 | | |
| L57110-7 | 421874-100 | | CVTSS | FRESH WTR | 1/22/2013 8:30 | 1/25/2013 14:15 | 2/8/2013 11:59 | | |
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 1/23/2013 16:12 | 1/25/2013 14:15 | 2/8/2013 12:00 | | |
| L57139-2 | 421879-210 | | CVTSS | STORM WTR | 1/23/2013 16:40 | 1/25/2013 14:15 | 2/8/2013 12:03 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVTSS | FRESH WTR | 1/23/2013 5:05 | 1/25/2013 14:15 | 2/8/2013 12:09 | | |
| L57221-2 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 5:45 | 1/25/2013 14:15 | 2/8/2013 12:09 | | |
| L57221-3 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 8:13 | 1/25/2013 14:15 | 2/8/2013 12:10 | | |
| L57221-4 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 9:41 | 1/25/2013 14:15 | 2/8/2013 12:11 | | |
| L57221-5 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 9:17 | 1/25/2013 14:15 | 2/8/2013 12:12 | | |
| L57221-6 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 8:37 | 1/25/2013 14:15 | 2/8/2013 12:13 | | |
| L57221-7 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 9:03 | 1/25/2013 14:15 | 2/8/2013 12:14 | | |
| L57221-8 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/22/2013 7:33 | 1/25/2013 14:15 | 2/8/2013 12:15 | | |
| L57221-9 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 6:15 | 1/25/2013 14:15 | 2/8/2013 12:15 | | |
| L57221-10 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 6:45 | 1/25/2013 14:15 | 2/8/2013 12:16 | | |
| L57221-11 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 7:30 | 1/25/2013 14:15 | 2/8/2013 12:16 | | |
| L57221-13 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 8:53 | 1/25/2013 14:15 | 2/8/2013 12:17 | | |
| L57221-14 | 421422-CHSW-Q | | CVTSS | FRESH WTR | 1/23/2013 9:17 | 1/25/2013 14:15 | 2/8/2013 12:18 | | |
| WG125128-1 | MB | | CVTSS | BLANK WTR | | 1/25/2013 14:15 | 2/8/2013 11:52 | | MB1 130125 |
| WG125128-2 | LCS | | CVTSS | BLANK WTR | | 1/25/2013 14:15 | 2/8/2013 11:53 | | LEVEL1 |
| WG125128-3 | LD | | CVTSS | FRESH WTR | | 1/25/2013 14:15 | 2/8/2013 11:56 | | L57110-1 |
| WG125128-4 | LD | | CVTSS | STORM WTR | | 1/25/2013 14:15 | 2/8/2013 12:04 | | L57139-2 |
| WG125128-5 | MB | | CVTSS | BLANK WTR | | 1/25/2013 14:15 | 2/8/2013 12:05 | | MB2 130125 |
| WG125128-6 | LCS | | CVTSS | BLANK WTR | | 1/25/2013 14:15 | 2/8/2013 12:07 | | LEVEL1 |
| WG125128-7 | LD | | CVTSS | FRESH WTR | | 1/25/2013 14:15 | 2/8/2013 12:11 | | L57221-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125135 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 1/23/2013 16:12 | 1/25/2013 15:34 | 1/25/2013 15:34 | WG125135-1,-2,-3 | |
| L57139-2 | 421879-210 | | CVTURB | STORM WTR | 1/23/2013 16:40 | 1/25/2013 15:35 | 1/25/2013 15:35 | | |
| WG125135-1 | LCS | | CVTURB | BLANK WTR | | 1/25/2013 15:30 | 1/25/2013 15:30 | | LEVEL1 |
| WG125135-2 | LCS | | CVTURB | BLANK WTR | | 1/25/2013 15:31 | 1/25/2013 15:31 | | LEVEL2 |
| WG125135-3 | LD | | CVTURB | STORM WTR | | 1/25/2013 15:37 | 1/25/2013 15:37 | | L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125114 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 1/24/2013 9:47 | 1/24/2013 13:00 | 1/25/2013 13:10 | WG125114-1,-2,-3,-4 | |
| L57139-4 | 421879-210 | | MCFC-MF | STORM WTR | 1/24/2013 10:10 | 1/24/2013 13:00 | 1/25/2013 13:10 | | |
| WG125114-1 | PC | | | | | | | | QC-PERFORMED: |
| | | | MCFC-MF | BLANK WTR | | 1/24/2013 13:00 | 1/25/2013 13:10 | | 24-JAN-13 |
| WG125114-2 | NC | | | | | | | | QC-PERFORMED: |
| | | | MCFC-MF | BLANK WTR | | 1/24/2013 13:00 | 1/25/2013 13:10 | | 24-JAN-13 |
| WG125114-3 | BF | | | | | | | | QC-PERFORMED: |
| | | | MCFC-MF | BLANK WTR | | 1/24/2013 13:00 | 1/25/2013 13:10 | | 24-JAN-13 |
| WG125114-4 | AF | | | | | | | | QC-PERFORMED: |
| | | | MCFC-MF | BLANK WTR | | 1/24/2013 13:00 | 1/25/2013 13:10 | | 24-JAN-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125279 Total Metals and Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 1/23/2013 16:12 | 2/7/2013 8:00 | 2/13/2013 7:37 | WG125279-1,-2,-3,-4 | |
| L57139-1 | 421879-210 | | MTICPMS | STORM WTR | 1/23/2013 16:12 | 2/7/2013 8:00 | 2/8/2013 13:27 | | |
| L57139-2 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 1/23/2013 16:40 | 2/7/2013 8:00 | 2/13/2013 7:37 | | |
| L57139-2 | 421879-210 | | MTICPMS | STORM WTR | 1/23/2013 16:40 | 2/7/2013 8:00 | 2/8/2013 13:34 | | |
| L57160-1 | 421422-CHGW-OS | SWD-CHGW-OS Cedar Hills Groundwater Off-Site | MTICPMS | GRND WTR | 2/5/2013 8:03 | 2/7/2013 8:00 | 2/8/2013 13:40 | | |
| L57278-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 2/3/2013 7:30 | 2/7/2013 8:00 | 2/8/2013 13:47 | | |
| L57278-3 | 421184-110 | | MTICPMS | INFLUENT | 2/3/2013 7:40 | 2/7/2013 8:00 | 2/8/2013 13:53 | | |
| L57326-1 | 421186B | RTP INPLNT 3 DAY INT (inf,eff,sl) | MTICPMS | INFLUENT | 2/4/2013 0:00 | 2/7/2013 8:00 | 2/8/2013 13:59 | | |
| L57326-4 | 421186B | | MTICPMS | EFFLUENT | 2/4/2013 0:00 | 2/7/2013 8:00 | 2/8/2013 14:06 | | |
| L57326-7 | 421186B | | MTICPMS | EFFLUENT | 2/4/2013 0:00 | 2/7/2013 8:00 | 2/8/2013 14:12 | | |
| L57342-1 | 421184 | Other AGENCIES-General | MTHARD-ICPMS | GRND WTR | 2/5/2013 11:05 | 2/7/2013 8:00 | 2/13/2013 7:37 | | |
| L57342-1 | 421184 | | MTICPMS | GRND WTR | 2/5/2013 11:05 | 2/7/2013 8:00 | 2/8/2013 14:31 | | |
| L57342-4 | 421184 | | MTHARD-ICPMS | GRND WTR | 2/5/2013 12:05 | 2/7/2013 8:00 | 2/13/2013 7:37 | | |
| L57342-4 | 421184 | | MTICPMS | GRND WTR | 2/5/2013 12:05 | 2/7/2013 8:00 | 2/8/2013 14:50 | | |
| L57342-5 | 421184 | | MTHARD-ICPMS | GRND WTR | 2/5/2013 11:30 | 2/7/2013 8:00 | 2/13/2013 7:37 | | |
| L57342-5 | 421184 | | MTICPMS | GRND WTR | 2/5/2013 11:30 | 2/7/2013 8:00 | 2/8/2013 14:57 | | |
| L57342-7 | 421184 | | MTHARD-ICPMS | GRND WTR | 2/5/2013 12:35 | 2/7/2013 8:00 | 2/13/2013 7:37 | | |
| L57342-7 | 421184 | | MTICPMS | GRND WTR | 2/5/2013 12:35 | 2/7/2013 8:00 | 2/8/2013 15:03 | | |
| WG125279-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 2/7/2013 8:00 | 2/13/2013 7:37 | | METHOD BLANK |
| WG125279-1 | MB | | MTICPMS | BLANK WTR | | 2/7/2013 8:00 | 2/8/2013 12:56 | | METHOD BLANK |
| WG125279-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 2/7/2013 8:00 | 2/13/2013 7:37 | | WG125279-1 MS-20 SPIKE BLANK |
| WG125279-2 | SB | | MTICPMS | BLANK WTR | | 2/7/2013 8:00 | 2/8/2013 13:02 | | WG125279-1 MS-20 SPIKE BLANK |
| WG125279-3 | LD | | MTHARD-ICPMS | GRND WTR | | 2/7/2013 8:00 | 2/13/2013 7:37 | | L57342-1 RPD-LIQ LAB DUPLICATE |
| WG125279-3 | LD | | MTICPMS | GRND WTR | | 2/7/2013 8:00 | 2/8/2013 14:37 | | L57342-1 RPD-LIQ LAB DUPLICATE |
| WG125279-4 | MS | | MTHARD-ICPMS | GRND WTR | | 2/7/2013 8:00 | 2/13/2013 7:37 | | L57342-1 MS-20 MATRIX SPIKE |
| WG125279-4 | MS | | MTICPMS | GRND WTR | | 2/7/2013 8:00 | 2/8/2013 14:44 | | L57342-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125210 Total Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 1/23/2013 16:12 | 1/31/2013 12:30 | 2/1/2013 14:10 | WG125210-1,-2,-3,-4 | |
| L57158-1 | 421422-CHGW-NP | SWD-CHGW-NP Cedar Hills Groundwater Non-Potable | MTHG-MID | GRND WTR | 1/29/2013 7:45 | 1/31/2013 12:30 | 2/1/2013 14:06 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | MTHG-MID | FRESH WTR | 1/23/2013 5:05 | 1/31/2013 12:30 | 2/1/2013 13:36 | | |
| L57221-2 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 5:45 | 1/31/2013 12:30 | 2/1/2013 13:41 | | |
| L57221-3 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 8:13 | 1/31/2013 12:30 | 2/1/2013 13:43 | | |
| L57221-4 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 9:41 | 1/31/2013 12:30 | 2/1/2013 13:45 | | |
| L57221-5 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 9:17 | 1/31/2013 12:30 | 2/1/2013 13:46 | | |
| L57221-6 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 8:37 | 1/31/2013 12:30 | 2/1/2013 13:48 | | |
| L57221-7 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 9:03 | 1/31/2013 12:30 | 2/1/2013 13:54 | | |
| L57221-8 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/22/2013 7:33 | 1/31/2013 12:30 | 2/1/2013 13:55 | | |
| L57221-9 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 6:15 | 1/31/2013 12:30 | 2/1/2013 13:57 | | |
| L57221-10 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 6:45 | 1/31/2013 12:30 | 2/1/2013 13:59 | | |
| L57221-11 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 7:30 | 1/31/2013 12:30 | 2/1/2013 14:01 | | |
| L57221-13 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 8:53 | 1/31/2013 12:30 | 2/1/2013 14:03 | | |
| L57221-14 | 421422-CHSW-Q | | MTHG-MID | FRESH WTR | 1/23/2013 9:17 | 1/31/2013 12:30 | 2/1/2013 14:04 | | |
| L57255-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 1/25/2013 8:10 | 1/31/2013 12:30 | 2/1/2013 14:15 | WG125210-1 | |
| L57255-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/25/2013 10:53 | 1/31/2013 12:30 | 2/1/2013 14:17 | | |
| L57257-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/28/2013 10:45 | 1/31/2013 12:30 | 2/1/2013 14:19 | | |
| L57257-2 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/28/2013 9:06 | 1/31/2013 12:30 | 2/1/2013 14:21 | | |
| L57285-1 | 421422-CHGW-NP | SWD-CHGW-NP Cedar Hills Groundwater Non-Potable | MTHG-MID | GRND WTR | 1/29/2013 7:30 | 1/31/2013 12:30 | 2/1/2013 14:08 | WG125210-1,-2,-3,-4 | |
| WG125210-1 | MB | | MTHG-MID | BLANK WTR | | 1/31/2013 12:30 | 2/1/2013 13:32 | | METHOD BLANK |
| WG125210-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 1/31/2013 12:30 | 2/1/2013 13:32 | WG125210-1 | METHOD BLANK |
| WG125210-2 | SB | | MTHG-MID | BLANK WTR | | 1/31/2013 12:30 | 2/1/2013 13:34 | WG125210-1,-2,-3,-4 | WG125210-1 HG-LMID |
| WG125210-3 | MS | | MTHG-MID | FRESH WTR | | 1/31/2013 12:30 | 2/1/2013 13:37 | | L57221-1 HG-LMID |
| WG125210-4 | MSD | | MTHG-MID | FRESH WTR | | 1/31/2013 12:30 | 2/1/2013 13:39 | | WG125210-3 L57221-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125173 Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57133-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 1/18/2013 7:10 | 1/28/2013 13:00 | 1/30/2013 14:24 | WG125173-1,-2,-3,-4 | |
| L57139-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 1/23/2013 16:12 | 1/28/2013 13:00 | 1/30/2013 14:29 | | |
| L57215-1 | 421422-CHGW-E | SWD-CHGW-E Cedar Hills GW Quarterly FFB | MTHG-MID-DISS | BLANK WTR | 1/17/2013 8:04 | 1/28/2013 13:00 | 1/30/2013 14:26 | | |
| L57215-2 | 421422-CHGW-E | | MTHG-MID-DISS | BLANK WTR | 1/17/2013 7:56 | 1/28/2013 13:00 | 1/30/2013 14:28 | | |
| L57219-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 1/16/2013 5:35 | 1/28/2013 13:00 | 1/30/2013 14:03 | | |
| L57219-2 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/16/2013 5:35 | 1/28/2013 13:00 | 1/30/2013 14:04 | | |
| L57219-5 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/15/2013 9:17 | 1/28/2013 13:00 | 1/30/2013 14:06 | | |
| L57219-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/16/2013 7:35 | 1/28/2013 13:00 | 1/30/2013 14:08 | | |
| L57220-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/17/2013 10:10 | 1/28/2013 13:00 | 1/30/2013 14:10 | | |
| L57220-2 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/17/2013 8:43 | 1/28/2013 13:00 | 1/30/2013 14:11 | | |
| L57220-5 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/17/2013 6:10 | 1/28/2013 13:00 | 1/30/2013 14:13 | | |
| L57220-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/22/2013 7:00 | 1/28/2013 13:00 | 1/30/2013 13:50 | | |
| L57253-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/24/2013 9:35 | 1/28/2013 13:00 | 1/30/2013 13:44 | | |
| L57253-2 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/23/2013 7:35 | 1/28/2013 13:00 | 1/30/2013 13:52 | | |
| L57253-5 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/18/2013 10:14 | 1/28/2013 13:00 | 1/30/2013 14:15 | | |
| L57253-6 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/18/2013 8:16 | 1/28/2013 13:00 | 1/30/2013 14:17 | | |
| L57255-2 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/24/2013 6:10 | 1/28/2013 13:00 | 1/30/2013 13:53 | | |
| L57255-5 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/24/2013 8:17 | 1/28/2013 13:00 | 1/30/2013 13:55 | | |
| L57276-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/18/2013 6:05 | 1/28/2013 13:00 | 1/30/2013 14:19 | | |
| L57293-1 | 421422-CHGW | | MTHG-MID-DISS | GRND WTR | 1/22/2013 5:35 | 1/28/2013 13:00 | 1/30/2013 13:57 | | |
| WG125173-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 1/28/2013 13:00 | 1/30/2013 13:41 | | METHOD BLANK |
| WG125173-2 | SB | | MTHG-MID-DISS | BLANK WTR | | 1/28/2013 13:00 | 1/30/2013 13:43 | | WG125173-1 HG-LMID |
| WG125173-3 | MS | | MTHG-MID-DISS | GRND WTR | | 1/28/2013 13:00 | 1/30/2013 13:46 | | L57253-1 HG-LMID |
| WG125173-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 1/28/2013 13:00 | 1/30/2013 13:48 | | WG125173-3 L57253-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125234 Dissoved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 1/23/2013 16:12 | 2/4/2013 9:00 | 2/4/2013 13:35 | WG125234-1,-2,-3,-4 | |
| L57139-2 | 421879-210 | | MTICPMS-DISS | STORM WTR | 1/23/2013 16:40 | 2/4/2013 9:00 | 2/4/2013 13:41 | | |
| L57255-1 | 421422-CHGW | SWD-CHGW Cedar Hills Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 1/25/2013 8:10 | 2/4/2013 9:00 | 2/4/2013 13:48 | | |
| L57255-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/25/2013 10:53 | 2/4/2013 9:00 | 2/4/2013 13:54 | | |
| L57256-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/25/2013 9:52 | 2/4/2013 9:00 | 2/4/2013 14:00 | | |
| L57256-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/25/2013 6:30 | 2/4/2013 9:00 | 2/4/2013 14:19 | | |
| L57256-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/25/2013 8:18 | 2/4/2013 9:00 | 2/4/2013 14:38 | | |
| L57256-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/28/2013 6:45 | 2/4/2013 9:00 | 2/4/2013 14:45 | | |
| L57257-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/28/2013 10:45 | 2/4/2013 9:00 | 2/4/2013 14:51 | | |
| L57257-2 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/28/2013 9:06 | 2/4/2013 9:00 | 2/4/2013 14:58 | | |
| L57257-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/29/2013 7:44 | 2/4/2013 9:00 | 2/4/2013 15:04 | | |
| L57257-6 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/29/2013 9:11 | 2/4/2013 9:00 | 2/4/2013 15:10 | | |
| L57284-1 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/29/2013 9:11 | 2/4/2013 9:00 | 2/4/2013 15:17 | | |
| L57284-5 | 421422-CHGW | | MTICPMS-DISS | GRND WTR | 1/30/2013 10:42 | 2/4/2013 9:00 | 2/4/2013 15:23 | | |
| L57318-1 | 421422-CHSW-A5-TD | SWD-CHSW - A5 TD Cedar Hills Surface Area 5 Top Deck | MTICPMS-DISS | FRESH WTR | 1/30/2013 4:40 | 2/4/2013 9:00 | 2/4/2013 15:29 | | |
| L57318-2 | 421422-CHSW-A5-TD | | MTICPMS-DISS | FRESH WTR | 1/30/2013 5:45 | 2/4/2013 9:00 | 2/4/2013 15:36 | | |
| L57318-3 | 421422-CHSW-A5-TD | | MTICPMS-DISS | FRESH WTR | 1/30/2013 6:10 | 2/4/2013 9:00 | 2/4/2013 15:55 | | |
| L57318-4 | 421422-CHSW-A5-TD | | MTICPMS-DISS | FRESH WTR | 1/30/2013 6:45 | 2/4/2013 9:00 | 2/4/2013 16:01 | | |
| WG125234-1 | MB | | MTICPMS-DISS | BLANK WTR | | 2/4/2013 9:00 | 2/4/2013 13:22 | | METHOD BLANK |
| WG125234-2 | SB | | MTICPMS-DISS | BLANK WTR | | 2/4/2013 9:00 | 2/4/2013 13:29 | | WG125234-1 MS-20 SPIKE BLANK |
| WG125234-3 | LD | | MTICPMS-DISS | GRND WTR | | 2/4/2013 9:00 | 2/4/2013 14:07 | | L57256-1 RPD-LIQ LAB DUPLICATE |
| WG125234-4 | MS | | MTICPMS-DISS | GRND WTR | | 2/4/2013 9:00 | 2/4/2013 14:13 | | L57256-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125167 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 1/23/2013 16:12 | 1/29/2013 6:50 | 2/4/2013 11:20 | WG125167-4,-1,-2,-3 | |
| L57139-2 | 421879-210 | | ORHERB-NPDES | STORM WTR | 1/23/2013 16:40 | 1/29/2013 6:50 | 2/4/2013 10:55 | | |
| WG125167-1 | MB | | ORHERB-NPDES | BLANK WTR | | 1/29/2013 6:50 | 2/4/2013 9:13 | | MB130129 |
| WG125167-2 | SB | | ORHERB-NPDES | BLANK WTR | | 1/29/2013 6:50 | 2/4/2013 9:38 | | WG125167-1 |
| WG125167-3 | MS | | ORHERB-NPDES | STORM WTR | | 1/29/2013 6:50 | 2/4/2013 10:04 | | L57139-2 |
| WG125167-4 | MSD | | ORHERB-NPDES | STORM WTR | | 1/29/2013 6:50 | 2/4/2013 10:29 | | WG125167-3 L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125156 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 1/23/2013 16:12 | 1/28/2013 17:00 | 2/1/2013 15:06 | WG125156-4,-1,-2,-3 | |
| L57139-2 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 1/23/2013 16:40 | 1/28/2013 17:00 | 2/1/2013 14:39 | | |
| WG125156-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 1/28/2013 17:00 | 2/1/2013 12:51 | | MB130128 |
| WG125156-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 1/28/2013 17:00 | 2/1/2013 13:18 | | WG125156-1 |
| WG125156-3 | MS | | OROPPEST-NPDES | STORM WTR | | 1/28/2013 17:00 | 2/1/2013 13:45 | | L57139-2 |
| WG125156-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 1/28/2013 17:00 | 2/1/2013 14:12 | | WG125156-3 L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125157 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-2 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 1/23/2013 16:40 | 1/28/2013 17:00 | 1/31/2013 16:06 | WG125157-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57139-2 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 1/23/2013 16:40 | 1/28/2013 17:00 | 1/31/2013 16:06 | WG125157-4,-1,-2,-3 | |
| WG125157-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 1/28/2013 17:00 | 1/31/2013 13:44 | WG125157-4,-4,-1,-1,-2,-2,-3,-3 | MB130128 |
| WG125157-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 1/28/2013 17:00 | 1/31/2013 13:44 | WG125157-4,-1,-2,-3 | MB130128 |
| WG125157-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 1/28/2013 17:00 | 1/31/2013 14:20 | WG125157-4,-4,-1,-1,-2,-2,-3,-3 | WG125157-1 |
| WG125157-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 1/28/2013 17:00 | 1/31/2013 14:20 | WG125157-4,-1,-2,-3 | WG125157-1 |
| WG125157-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 1/28/2013 17:00 | 1/31/2013 14:55 | WG125157-4,-4,-1,-1,-2,-2,-3,-3 | L57139-2 |
| WG125157-3 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 1/28/2013 17:00 | 1/31/2013 14:55 | WG125157-4,-1,-2,-3 | L57139-2 |
| WG125157-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 1/28/2013 17:00 | 1/31/2013 15:31 | WG125157-4,-4,-1,-1,-2,-2,-3,-3 | WG125157-3 L57139-2 |
| WG125157-4 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 1/28/2013 17:00 | 1/31/2013 15:31 | WG125157-4,-1,-2,-3 | WG125157-3 L57139-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125185 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 1/24/2013 9:47 | 1/30/2013 10:00 | 2/4/2013 17:41 | WG125185-1,-2,-3,-4,-5 | |
| L57139-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 1/24/2013 10:10 | 1/30/2013 10:00 | 2/4/2013 18:05 | | |
| L57295-1 | 421422-100 | SWD , Brownfield Program | ORWTPH-DX | GRND WTR | 1/25/2013 11:37 | 1/30/2013 10:00 | 2/4/2013 18:29 | | |
| L57295-2 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/25/2013 12:30 | 1/30/2013 10:00 | 2/4/2013 18:54 | | |
| L57295-3 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/25/2013 13:27 | 1/30/2013 10:00 | 2/4/2013 20:29 | | |
| L57295-4 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/29/2013 12:21 | 1/30/2013 10:00 | 2/4/2013 20:52 | | |
| L57295-5 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/29/2013 12:55 | 1/30/2013 10:00 | 2/4/2013 21:16 | | |
| L57295-6 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/29/2013 10:37 | 1/30/2013 10:00 | 2/4/2013 21:41 | | |
| L57295-7 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/29/2013 10:47 | 1/30/2013 10:00 | 2/4/2013 22:04 | | |
| L57295-8 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/24/2013 8:45 | 1/30/2013 10:00 | 2/4/2013 22:28 | | |
| L57295-9 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/24/2013 9:15 | 1/30/2013 10:00 | 2/4/2013 22:52 | | |
| L57295-10 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/24/2013 10:15 | 1/30/2013 10:00 | 2/4/2013 23:18 | | |
| L57295-11 | 421422-100 | | ORWTPH-DX | GRND WTR | 1/29/2013 13:10 | 1/30/2013 10:00 | 2/4/2013 23:43 | | |
| WG125185-1 | MB | | ORWTPH-DX | BLANK WTR | | 1/30/2013 10:00 | 2/4/2013 15:40 | | MB130130 |
| WG125185-2 | SB | | ORWTPH-DX | BLANK WTR | | 1/30/2013 10:00 | 2/4/2013 16:04 | | WG125185-1 SB-MO |
| WG125185-3 | SB | | ORWTPH-DX | BLANK WTR | | 1/30/2013 10:00 | 2/4/2013 16:27 | | WG125185-1 SB-DSL |
| WG125185-4 | LD | | ORWTPH-DX | STORM WTR | | 1/30/2013 10:00 | 2/4/2013 16:52 | | L57139-3 |
| WG125185-5 | LD | | ORWTPH-DX | GRND WTR | | 1/30/2013 10:00 | 2/4/2013 17:16 | | L57295-11 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City, L57139

**WG125131 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 1/24/2013 9:47 | 1/25/2013 18:21 | 1/25/2013 18:21 | WG125131-1,-2,-3 | |
| L57139-4 | 421879-210 | | ORWTPH-G | STORM WTR | 1/24/2013 10:10 | 1/25/2013 18:51 | 1/25/2013 18:51 | | |
| L57295-8 | 421422-100 | SWD , Brownfield Program | ORWTPH-G | GRND WTR | 1/24/2013 8:45 | 1/25/2013 16:53 | 1/25/2013 16:53 | | |
| L57295-9 | 421422-100 | | ORWTPH-G | GRND WTR | 1/24/2013 9:15 | 1/25/2013 17:23 | 1/25/2013 17:23 | | |
| L57295-10 | 421422-100 | | ORWTPH-G | GRND WTR | 1/24/2013 10:15 | 1/25/2013 17:52 | 1/25/2013 17:52 | | |
| WG125131-1 | MB | | ORWTPH-G | BLANK WTR | | 1/25/2013 13:57 | 1/25/2013 13:57 | | MB130125 |
| WG125131-2 | SB | | ORWTPH-G | BLANK WTR | | 1/25/2013 15:54 | 1/25/2013 15:54 | | WG125131-1 |
| WG125131-3 | LD | | ORWTPH-G | STORM WTR | | 1/25/2013 19:20 | 1/25/2013 19:20 | | L57139-3 |

**Workgroup: WG125152 BOD**

**MB:WG125152-1 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:WG125152-2 MB:WG125152-1 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 | 184 | 93 | | 80--120 |

**Workgroup: WG125166 Anions**

**CS:WG125166-1 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 | 0.107 | 107 | | 70--130 |

**MB:WG125166-2 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 | |

**SB:WG125166-3 MB:WG125166-2 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 | 2.07 | 103 | | 80--120 |

**LCS:WG125166-4 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 | 2.99 | 100 | | 85--115 |

**LD:WG125166-5 L57139-2 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 | 0.5 | 1 | mg/L | 11.5 | 11.7 | 2 | | 0--20 |

**MS:WG125166-6 L57139-2 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 | 0.5 | 1 | mg/L | 11.5 | 20 | 32.3 | 104 | | 75--125 |

**Workgroup: WG125201 Conductivity**

**LCS:WG125201-1 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:WG125201-2 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 | 703 | 98 | | 90--110 |

**LD:WG125201-3 L56675-3 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 147 | 147 | 0 | | 0--10 |

**LD:WG125201-4 L57221-14 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 | 99.6 | 99.3 | 0 | | 0--10 |

**LCS:WG125201-5 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 | 75.3 | 102 | | 90--110 |

**LCS:WG125201-6 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 | 708 | 99 | | 90--110 |

**LD:WG125201-7 L57255-1 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 | 178 | 179 | 0 | | 0--10 |

**LD:WG125201-8 L57139-2 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 | 75.6 | 72.8 | 4 | | 0--10 |

**LCS:WG125201-9 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 | 73.9 | 75.6 | 102 | | 90--110 |

**LCS:WG125201-10 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 | 717.5 | 712 | 99 | | 90--110 |

**LD:WG125201-11 L57220-2 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 | 219 | 219 | 0 | | 0--10 |

**LCS:WG125201-12 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 | 75.7 | 102 | | 90--110 |

**LCS:WG125201-13 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 717.5 | 713 | 99 | | 90--110 |

**LCS:WG125201-14 Matrix: BLANK WTR Listtype:CVCOND Method:SM2510-B Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 6667 | 6570 | 99 | | 90--110 |

**Workgroup: WG125228 Nitrate Nitrogen**

**MB:WG125228-1 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:WG125228-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125228-2 MB:WG125228-1 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:WG125228-2 MB:WG125228-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.383 | 96 | | 80--120 |

**LCS:WG125228-3 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 | 0.809 | 101 | | 85--115 |

**LCS:WG125228-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.39 | 97 | | 85--115 |

**LD:WG125228-4 L57284-5 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG125228-5 L57284-5 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.384 | 96 | | 75--125 |

**MB:WG125228-9 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 | |

**LD:WG125228-10 L57139-1 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 | 0.455 | 0.457 | 0 | | 0--20 |

**MS:WG125228-11 L57139-1 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 | 0.455 | 0.8 | 1.25 | 99 | | 75--125 |

**Workgroup: WG125229 Orthophosphate Phosphorus**

**MB:WG125229-1 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:WG125229-2 MB:WG125229-1 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 | 0.0357 | 89 | | 80--120 |

**LCS:WG125229-3 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:WG125229-4 L57301-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00746 | 0.00799 | 7 | | 0--20 |

**MS:WG125229-5 L57301-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00746 | 0.04 | 0.048 | 101 | | 75--125 |

**LD:WG125229-6 L57139-1 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 | 0.00599 | 0.0055 | 9 | | 0--20 |

**MS:WG125229-7 L57139-1 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 | 0.00599 | 0.04 | 0.0412 | 88 | | 75--125 |

**LD:WG125229-8 L57221-10 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-Q Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.011 | 0.01 | | | 0--20 |

**MS:WG125229-9 L57221-10 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-Q Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.011 | 0.04 | 0.22 | 105 | | 75--125 |

**LD:WG125229-10 L56675-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.004 | 0.0039 | | | 0--20 |

**MS:WG125229-11 L56675-3 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 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 | 0.004 | 0.04 | 0.043 | 98 | | 75--125 |

**Workgroup: WG125366 TKN**

**MB:WG125366-1 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 | |

**LCS:WG125366-2 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 | 0.514 | 103 | | 80--120 |

**LCS:WG125366-3 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 | 5 | 5.04 | 101 | | 80--120 |

**SB:WG125366-4 MB:WG125366-1 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 | 4.87 | 97 | | 80--120 |

**LD:WG125366-5 L57311-1 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 | 1.91 | 1.94 | 1 | | 0--20 |

**MS:WG125366-6 L57311-1 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 | 1.91 | 5 | 7.12 | 104 | | 70--130 |

**LD:WG125366-7 L57246-3 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 | 16.3 | 16.5 | 1 | | 0--20 |

**MS:WG125366-8 L57246-3 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 | 16.3 | 5 | 66.8 | 101 | | 70--130 |

**LD:WG125366-9 L57221-14 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 | 0.268 | 0.251 | 7 | | 0--20 |

**MS:WG125366-10 L57221-14 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 | 0.268 | 5 | 5.09 | 96 | | 70--130 |

**Workgroup: WG125224 Total Nitrogen, Total Phosphorus**

**MB:WG125224-1 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:WG125224-1 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:WG125224-2 MB:WG125224-1 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 | 1.02 | 102 | | 80--120 |

**SB:WG125224-2 MB:WG125224-1 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 | 0.0993 | 99 | | 80--120 |

**LCS:WG125224-3 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 | 0.968 | 97 | | 85--115 |

**LCS:WG125224-3 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 | 0.0944 | 94 | | 85--115 |

**LD:WG125224-4 L57139-2 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 | 0.11 | 0.11 | 0 | | 0--20 |

**MS:WG125224-5 L57139-2 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 | 0.11 | 0.1 | 0.214 | 104 | | 75--125 |

**LD:WG125224-6 L57016-38 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.15 | 1.22 | 6 | | 0--20 |

**LD:WG125224-6 L57016-38 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0276 | 0.028 | 1 | | 0--20 |

**MS:WG125224-7 L57016-38 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421195-250 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 | 1.15 | 1 | 2.23 | 108 | | 75--125 |

**MS:WG125224-7 L57016-38 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421195-250 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 | 0.0276 | 0.1 | 0.128 | 101 | | 75--125 |

**Workgroup: WG125128 TSS**

**MB:WG125128-1 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:WG125128-2 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 | 81 | 81 | | 80--120 |

**LD:WG125128-3 L57110-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421874-100 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 1.4 | 1.4 | | | 0--25 |

**LD:WG125128-4 L57139-2 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 | 2.5 | 5 | mg/L | 22.5 | 21.5 | 5 | | 0--25 |

**MB:WG125128-5 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:WG125128-6 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 | 98 | 98 | | 80--120 |

**LD:WG125128-7 L57221-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-Q Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 9.2 | 9.4 | 2 | | 0--25 |

**Workgroup: WG125135 Turbidity**

**LCS:WG125135-1 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 | 10 | 100 | | 90--110 |

**LCS:WG125135-2 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 | 96.7 | 97 | | 90--110 |

**LD:WG125135-3 L57139-2 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 | 15 | 14.2 | 5 | | 0--25 |

**Workgroup: WG125114 Fecal coliform**

**PC:WG125114-1 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:WG125114-2 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:WG125114-3 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:WG125114-4 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: WG125279 Total Metals and Hardness**

**MB:WG125279-1 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:WG125279-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD (Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Copper, Total, ICP-MS | 0.4 | 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 | |
| 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:WG125279-2 MB:WG125279-1 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 | 33 | 100 | | 85--115 |

**SB:WG125279-2 MB:WG125279-1 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 | 20.7 | 104 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5000 | 100 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5200 | 104 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4810 | 96 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4640 | 93 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19.1 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4990 | 100 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.7 | 93 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.6 | 103 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 21.7 | 108 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 99 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.6 | 108 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.3 | 96 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |

**LD:WG125279-3 L57342-1 Matrix: GRND WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421184 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 | 45.1 | 46.3 | 3 | | 0--20 |

**LD:WG125279-3 L57342-1 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421184 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 | 0.67 | 0.665 | 1 | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 107000 | 110000 | 3 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 6800 | 6970 | 3 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2200 | 2340 | 6 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 6860 | 7050 | 3 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 52.6 | 52.6 | 0 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 14.8 | 14.4 | 3 | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 21100 | 20600 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 438 | 444 | 1 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.1 | 0.5 | ug/L | 6.27 | 6.28 | 0 | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 10.6 | 10.7 | 1 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 15.8 | 15.7 | 1 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 29.7 | 29.8 | 0 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.62 | 1.69 | 4 | | 0--20 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 0.53 | | | 0--20 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | 0.409 | 0.41 | 0 | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 63.4 | 63.5 | 0 | | 0--20 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | 0.057 | 0.054 | | | 0--20 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 3.78 | 3.64 | 4 | | 0--20 |

**MS:WG125279-4 L57342-1 Matrix: GRND WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421184 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 | 45.1 | 33.1 | 74 | 87 | | 75--125 |

**MS:WG125279-4 L57342-1 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421184 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 | 0.67 | 20 | 21.6 | 104 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 107000 | 5000 | 118000 | | 4xRule | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 6800 | 5000 | 11300 | 89 | | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 2200 | 5000 | 6060 | 77 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 6860 | 5000 | 11100 | 84 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 52.6 | 20 | 68.5 | 79 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 14.8 | 20 | 30.4 | 78 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 21100 | 5000 | 24300 | | 4xRule | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 438 | 20 | 457 | | 4xRule | 75--125 |
| Cobalt, Total, ICP-MS | 0.1 | 0.5 | ug/L | 6.27 | 20 | 24.9 | 93 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 10.6 | 20 | 26.1 | 77 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 15.8 | 20 | 31.6 | 79 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 29.7 | 20 | 46.8 | 86 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.62 | 20 | 17.7 | 80 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 16.5 | 83 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | 0.409 | 20 | 19.9 | 98 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.7 | 99 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 63.4 | 20 | 81.2 | 89 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | 0.057 | 20 | 20.4 | 102 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 3.78 | 20 | 23.8 | 100 | | 75--125 |

**Workgroup: WG125210 Total Mercury**

**MB:WG125210-1 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:WG125210-1 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:WG125210-2 MB:WG125210-1 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 | 0.917 | 92 | | 85--115 |

**MSD:WG125210-4 MS:WG125210-3 L57221-1 Matrix: FRESH WTR Listtype:MTHG-MID Method:EPA 245.1*SW846 7470A Project:421422-CHSW-Q 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 | 0.883 | 88 | | 75--125 | 1 | 0.915 | 91 | | 3 | | 0--20 |

**Workgroup: WG125173 Dissolved Mercury**

**MB:WG125173-1 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:WG125173-2 MB:WG125173-1 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 | 0.938 | 94 | | 85--115 |

**MSD:WG125173-4 MS:WG125173-3 L57253-1 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 | 1.03 | 103 | | 75--125 | 1 | 0.992 | 99 | | 4 | | 0--20 |

**Workgroup: WG125234 Dissolved Metals**

**MB:WG125234-1 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:WG125234-2 MB:WG125234-1 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 | 4600 | 92 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5020 | 100 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5200 | 104 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4970 | 99 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5100 | 102 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.7 | 109 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 21.4 | 107 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.7 | 98 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.2 | 96 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.9 | 95 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |

**LD:WG125234-3 L57256-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 6970 | 6970 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 11600 | 11500 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1510 | 1490 | 1 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 22300 | 22400 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.806 | 0.815 | 1 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | <MDL | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 2.02 | 2.02 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.15 | 0.15 | | | 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 | <MDL | <MDL | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.22 | 0.22 | | | 0--20 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | 0.96 | 0.95 | | | 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 | 0.11 | | | 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 | 2.75 | 2.73 | 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:WG125234-4 L57256-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 6970 | 5000 | 11600 | 93 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 11600 | 5000 | 16200 | 92 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1510 | 5000 | 6950 | 109 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 22300 | 5000 | 27100 | | 4xRule | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.806 | 20 | 22.6 | 109 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 21.9 | 109 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5450 | 109 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 2.02 | 20 | 22 | 100 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.15 | 20 | 22 | 109 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 22.7 | 113 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.5 | 103 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.22 | 20 | 22 | 109 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | 0.96 | 20 | 23.3 | 112 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 2.75 | 20 | 23.3 | 103 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.2 | 106 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.9 | 104 | | 75--125 |

**Workgroup: WG125167 Herbicides**

**MB:WG125167-1 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 | |

**SB:WG125167-2 MB:WG125167-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.66 | 93 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.04 | 101 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.86 | 97 | | 59--151 |

**MSD:WG125167-4 MS:WG125167-3 L57139-2 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 | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.82 | 97 | | 20--162 | 4.95 | 4.56 | 92 | | 6 | | 0--40 |
| 2,4-D | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 5.41 | 109 | | 10--196 | 4.95 | 5.37 | 108 | | 1 | | 0--40 |
| Triclopyr | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.97 | 100 | | 30--150 | 4.95 | 4.47 | 90 | | 11 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57139-1 | 91 | 54 |
| L57139-2 | 88 | 93 |
| WG125167-1 | 83 | 69 |
| WG125167-2 | 88 | 81 |
| WG125167-3 | 91 | 98 |
| WG125167-4 | 87 | 92 |

**Workgroup: WG125156 Organophosphorus Pesticides**

**MB:WG125156-1 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:WG125156-2 MB:WG125156-1 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 | 0.25 | 0.216 | 87 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.243 | 97 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.219 | 88 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.18 | 72 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.252 | 101 | | 40--160 |

**MSD:WG125156-4 MS:WG125156-3 L57139-2 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 | 0.236 | 0.26 | 110 | | 67--148 | 0.236 | 0.235 | 100 | | 10 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.312 | 132 | | 52--190 | 0.236 | 0.292 | 124 | | 7 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.221 | 94 | | 57--141 | 0.236 | 0.2 | 85 | | 10 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.171 | 73 | | 40--160 | 0.236 | 0.169 | 72 | | 1 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.407 | 173 | * | 40--160 | 0.236 | 0.377 | 160 | | 8 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 | |
|---|---|---|
| L57139-1 | 36 | * |
| L57139-2 | 83 | |
| WG125156-1 | 89 | |
| WG125156-2 | 92 | |
| WG125156-3 | 87 | |
| WG125156-4 | 82 | |

**Workgroup: WG125157 Semi Volatile Organics**

**MB:WG125157-1 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 | <MDL | |
| 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 | 0.145 | 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:WG125157-2 MB:WG125157-1 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 | 0.825 | 33 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.612 | 24 | * | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.39 | 95 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.34 | 53 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.08 | 43 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.55 | 102 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.62 | 65 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 2.23 | 89 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.19 | 88 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.26 | 90 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.59 | 104 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.65 | 106 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.34 | 94 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.12 | 85 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.76 | 110 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.65 | 106 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.145 | 2.5 | 2.27 | 85 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 1.3 | 52 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.19 | 96 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.85 | 114 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 4.21 | 169 | * | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 4.1 | 164 | * | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 4.74 | 190 | * | 32--130 |

**MSD:WG125157-4 MS:WG125157-3 L57139-2 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 | <MDL | 2.36 | 0.863 | 37 | | 37--95 | 2.36 | 0.959 | 41 | | 10 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 0.887 | 38 | * | 40--121 | 2.36 | 0.884 | 37 | * | 0 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.21 | 94 | | 34--134 | 2.36 | 2.12 | 90 | | 4 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.75 | 74 | | 46--122 | 2.36 | 1.59 | 67 | | 10 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.57 | 67 | | 47--105 | 2.36 | 1.38 | 58 | | 13 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.155 | 2.36 | 2.43 | 96 | | 33--140 | 2.36 | 2.33 | 92 | | 4 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.94 | 82 | | 44--137 | 2.36 | 1.8 | 76 | | 7 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.78 | 118 | | 44--145 | 2.36 | 2.69 | 114 | | 3 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.25 | 95 | | 62--116 | 2.36 | 2.14 | 91 | | 5 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.14 | 91 | | 32--140 | 2.36 | 2.04 | 86 | | 5 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.073 | 2.36 | 2.32 | 95 | | 44--134 | 2.36 | 2.28 | 94 | | 2 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0593 | 2.36 | 2.38 | 98 | | 49--123 | 2.36 | 2.29 | 94 | | 4 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.0501 | 2.36 | 2.16 | 90 | | 37--147 | 2.36 | 2.1 | 87 | | 3 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.05 | 87 | | 39--151 | 2.36 | 1.98 | 84 | | 4 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.54 | 108 | | 50--120 | 2.36 | 2.44 | 103 | | 4 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.0405 | 2.36 | 2.39 | 100 | | 42--115 | 2.36 | 2.28 | 95 | | 5 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 0.396 | 2.36 | 2.36 | 83 | | 11--188 | 2.36 | 2.63 | 95 | | 11 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 1.48 | 63 | | 48--150 | 2.36 | 1.47 | 62 | | 1 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 7.27 | 103 | | 42--123 | 7.08 | 7.05 | 100 | | 3 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.0233 | 2.36 | 2.65 | 111 | | 45--121 | 2.36 | 2.52 | 106 | | 5 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.7 | 115 | | 39--122 | 2.36 | 2.34 | 99 | | 15 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.57 | 109 | | 31--121 | 2.36 | 2.27 | 96 | | 12 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.69 | 114 | | 22--125 | 2.36 | 2.28 | 97 | | 17 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57139-2 | 114 | 57 | 52 | 76 | 51 | 57 | 65 |
| WG125157-1 | 108 | 68 | 65 | 84 | 68 | 79 | 83 |
| WG125157-2 | 98 | 47 | 74 | 80 | 72 | 75 | 87 |
| WG125157-3 | 113 | 56 | 55 | 77 | 51 | 59 | 63 |
| WG125157-4 | 108 | 57 | 53 | 75 | 51 | 57 | 62 |

**Workgroup: WG125185 WTPH-Dx**

**MB:WG125185-1 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:WG125185-2 MB:WG125185-1 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 | 0.94 | 94 | | 50--150 |

**SB:WG125185-3 MB:WG125185-1 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 | 0.748 | 75 | | 50--150 |

**LD:WG125185-4 L57139-3 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 | 0.385 | 0.307 | 22 | | 0--40 |

**LD:WG125185-5 L57295-11 Matrix: GRND WTR Listtype:ORWTPH-DX Method:WDOE NWTPH-DX Project:421422-100 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 |
|---|---|---|
| L57139-3 | 82 | 94 |
| L57139-4 | 79 | 97 |
| L57295-1 | 71 | 96 |
| L57295-2 | 40 * | 98 |
| L57295-3 | 68 | 96 |
| L57295-4 | 71 | 98 |
| L57295-5 | 73 | 88 |
| L57295-6 | 64 | 96 |
| L57295-7 | 62 | 95 |
| L57295-8 | 71 | 88 |
| L57295-9 | 65 | 93 |
| L57295-10 | 66 | 90 |
| L57295-11 | 67 | 93 |
| WG125185-1 | 27 * | 95 |
| WG125185-2 | 65 | 96 |
| WG125185-3 | 81 | 96 |
| WG125185-4 | 77 | 97 |
| WG125185-5 | 49 * | 96 |

**Workgroup: WG125131 WTPH-G**

**MB:WG125131-1 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:WG125131-2 MB:WG125131-1 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 | 386 | 77 | | 50--150 |

**LD:WG125131-3 L57139-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57139-3 | 90 | 99 |
| L57139-4 | 89 | 100 |
| L57295-8 | 91 | 99 |
| L57295-9 | 92 | 99 |
| L57295-10 | 92 | 98 |
| WG125131-1 | 90 | 97 |
| WG125131-2 | 88 | 97 |
| WG125131-3 | 91 | 99 |

# FSU Field Observations – WG

**Date: 1/23/2013**

**Reported By:** JD

**Sample #(s):** L57139

**Project Name:** NPDES Stormwater Permit Monitoring – Fall City

**Project Number:** 421879-210 / 1047106

**Field Personnel:** JD

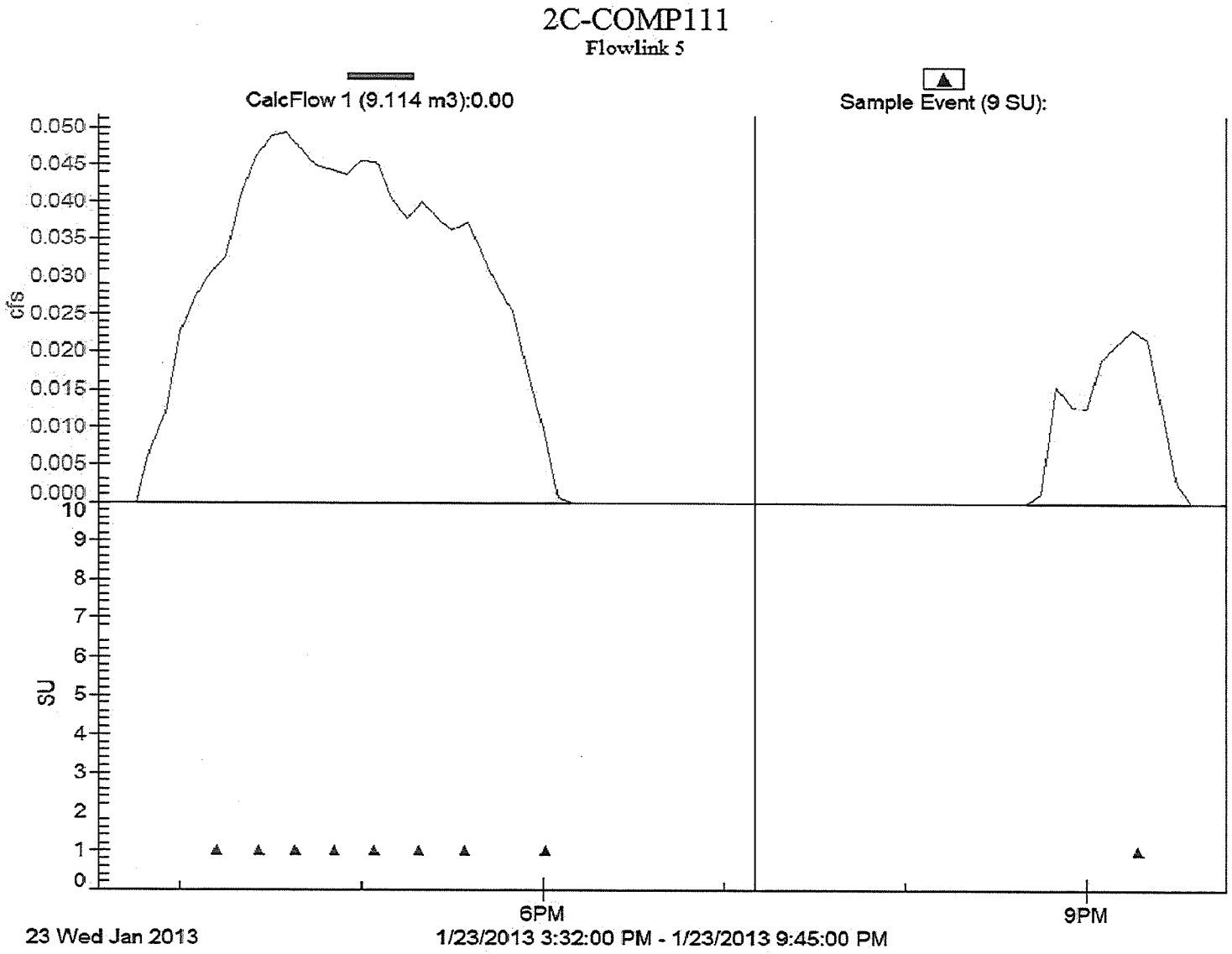
**Weather during sampling run – mid to upper '40's; no wind; no rain**

**Recent weather or conditions that may have an affect on water quality/quantity:**
There has been no rain for 15 days prior to today.

**Specific observations that may affect results:**
Collected grabs and composites at same time on same day.
Expected 0.35" rain and received 0.2"
FC-COM 9 samples will not be able to do every composite test
FC-RES 35 samples covering 75% of the hydrograph

**Other observations:**
Collected both sites:

| **FC-COM** | **FC-RES** |
|---|---|
| ON: 1/23 9:09 | ON: 1/23 9:13 |
| Sample 1 1/23 16:12 | Sample 1 1/23 16:40 |
| Sample 9 1/23 21:17 | Sample 35 1/23 17:55 |
| Total Volume 9 @ 500ml=4.5L | Total Volume 35 @ 500ml=17.5L |
| Split at lab: 1145 | |
| Samp Temp at lab= 2.9°C | Samp Temp at lab=5.5°C |


2C-COMP111
Flowlink 5
CalcFlow 1 (9.114 m3):0.00
Sample Event (9 SU):
cfs
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
SU
10
9
8
7
6
5
4
3
2
1
0
6PM
9PM
23 Wed Jan 2013
1/23/2013 3:32:00 PM - 1/23/2013 9:45:00 PM

```
SAMPLER ID# 1261311898  08:31 24-JAN-13
  Hardware:     A1  Software: 2.33
********** PROGRAM SETTINGS **********
     ----------
   PROGRAM NAME:
    "EXTENDED 1"
 SITE DESCRIPTION:
    "2C"COMP111"
     ----------
   UNITS SELECTED:
     LENGTH: ft


     ----------
   UNITS SELECTED:
   FLOW RATE: cfs
  FLOW VOLUME: cf

     ----------
   BUBBLER MODULE:
    DATA POINTS
    "DATA SET 2"
 17 POINTS ENTERED
     ----------

      5 MINUTE
   DATA INTERVAL

     ----------
   1, 100  lit BTLS
 38 ft SUCTION LINE
 AUTO SUCTION HEAD
1 RINSES, 1 RETRIES
     ----------

  ONE-PART PROGRAM


     ----------
      PACING:
    FLOW, EVERY
      35.00 cf
NO SAMPLE AT START
     ----------
     COMPOSITE:

     35 SAMPLES

     ----------
      VOLUME:

   500 ml SAMPLES

     ----------
      ENABLE:

  LEVEL >2.480 ft

     ----------
      ENABLE:
   ONCE ENABLED,
    STAY ENABLED
NO SAMPLE AT ENABLE
```

---

ENABLE:
0 MINUTE DELAY TO
START OF SAMPLING

---

ENABLE:
0 PAUSE & RESUMES

---

NO DELAY TO START

---

---

---

LIQUID DETECT ON

QUICK VIEW/CHANGE

---

TAKE MEASUREMENTS
EVERY 1 MINUTES

---

DUAL SAMPLER OFF
BTL FULL DETECT OFF
CONTINUOUS BACKLIGHT

---

EVENT MARK SENT
DURING PUMP CYCLE

---

PUMP COUNTS FOR
EACH PURGE CYCLE:
200 PRE-SAMPLE
AUTO POST-SAMPLE

---

NO PERIODIC
SERIAL OUTPUT

---

INTERROGATOR
CONNECTOR
POWER ALWAYS ON

---

---

---

NO RAIN GAUGE

---

NO SDI-12 SONDE

AUTO SDI-12 SCAN OFF

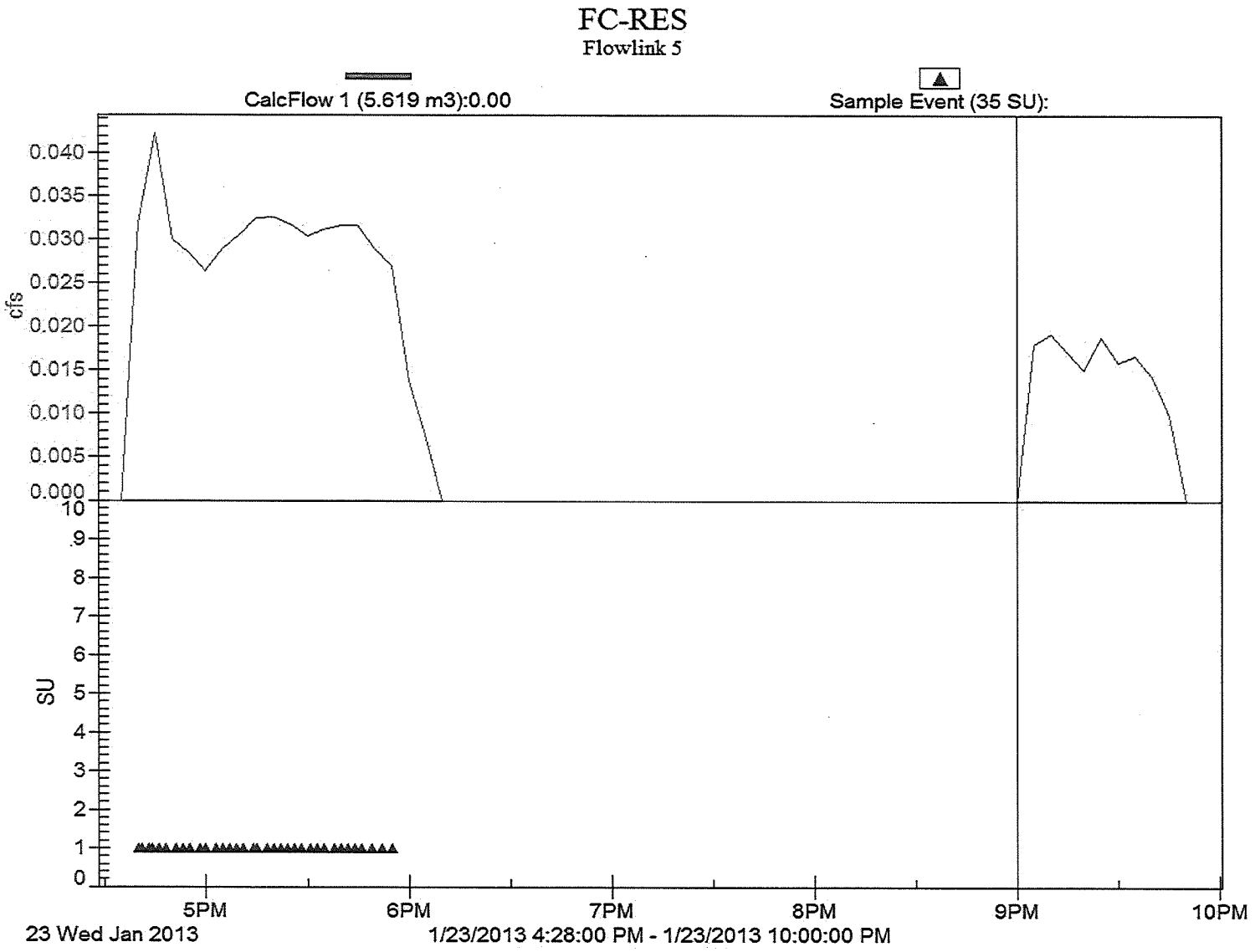
```
     ----------
 I/O1= NONE
 I/O2= NONE
 I/O3= NONE

     ----------

  0 ANALOG OUTPUTS


     ----------

 NO EXTERNAL MODEM


     ----------

      NO ALARM
   CONDITIONS SET

     ----------
     ----------
-----------------------------------------



SAMPLER ID# 1261311898  08:32 24-JAN-13
  Hardware:     A1  Software: 2.33
*********** SAMPLING RESULTS ***********
   SITE: 2C"COMP111
PROGRAM: EXTENDED 1
Program Started at 09:09 WE 23-JAN-13
Nominal Sample Volume =  500 ml
                                      COUNT
                                        TO
SAMPLE  BOTTLE TIME  SOURCE ERROR LIQUID
------- ------ ----  ------ ----- ------
               09:09  PGM DISABLED
               15:12  PGM ENABLED
    1      1   16:12       F          1060
    2      1   16:26       F          1064
    3      1   16:38       F          1062
    4      1   16:51       F          1066
    5      1   17:04       F          1067
    6      1   17:19       F          1072
    7      1   17:34       F          1068
    8      1   18:01       F          1064
    9      1   21:17       F          1050
------------- TH 24-JAN-13 -------------
               07:17  MANUAL PAUSE
               07:17  MANUAL RESUME
               07:17  MANUAL PAUSE
               07:17  PGM STOPPED 24-JAN


   SOURCE F  ==> FLOW
-----------------------------------------
```

| Site Name | 2C-COMP111 | 2C-COMP111 |
|---|---|---|
| Isco Quantity | Flow Rate | Sample Event |
| Label | CalcFlow 1 | Sample Event |
| Units | cfs | SU |
| Resolution | 0.1 | 0.1 |
| Significant Digits | 0 | 0 |
| 1/23/2013 15:35 | 0 | |
| 1/23/2013 15:40 | 0 | |
| 1/23/2013 15:45 | 0 | |
| 1/23/2013 15:50 | 0.007 | |
| 1/23/2013 15:55 | 0.012 | |
| 1/23/2013 16:00 | 0.023 | |
| 1/23/2013 16:05 | 0.027 | |
| 1/23/2013 16:10 | 0.03 | |
| 1/23/2013 16:12 | | 0 |
| 1/23/2013 16:15 | 0.033 | |
| 1/23/2013 16:20 | 0.041 | |
| 1/23/2013 16:25 | 0.046 | |
| 1/23/2013 16:26 | | 0 |
| 1/23/2013 16:30 | 0.049 | |
| 1/23/2013 16:35 | 0.049 | |
| 1/23/2013 16:38 | | 0 |
| 1/23/2013 16:40 | 0.047 | |
| 1/23/2013 16:45 | 0.045 | |
| 1/23/2013 16:50 | 0.044 | |
| 1/23/2013 16:51 | | 0 |
| 1/23/2013 16:55 | 0.044 | |
| 1/23/2013 17:00 | 0.046 | |
| 1/23/2013 17:04 | | 0 |
| 1/23/2013 17:05 | 0.045 | |
| 1/23/2013 17:10 | 0.04 | |
| 1/23/2013 17:15 | 0.038 | |
| 1/23/2013 17:19 | | 0 |
| 1/23/2013 17:20 | 0.04 | |
| 1/23/2013 17:25 | 0.038 | |
| 1/23/2013 17:30 | 0.036 | |
| 1/23/2013 17:34 | | 0 |
| 1/23/2013 17:35 | 0.037 | |
| 1/23/2013 17:40 | 0.033 | |
| 1/23/2013 17:45 | 0.029 | |
| 1/23/2013 17:50 | 0.025 | |
| 1/23/2013 17:55 | 0.017 | |
| 1/23/2013 18:00 | 0.01 | |
| 1/23/2013 18:01 | | 0 |
| 1/23/2013 18:05 | 0.001 | |
| 1/23/2013 18:10 | 0 | |
| 1/23/2013 18:15 | 0 | |
| 1/23/2013 18:20 | 0 | |
| 1/23/2013 18:25 | 0 | |
| 1/23/2013 18:30 | 0 | |
| 1/23/2013 18:35 | 0 | |
| 1/23/2013 18:40 | 0 | |
| 1/23/2013 18:45 | 0 | |
| 1/23/2013 18:50 | 0 | |

| | | | |
|---|---|---|---|
| 1/23/2013 18:55 | 0 | | |
| 1/23/2013 19:00 | 0 | | |
| 1/23/2013 19:05 | 0 | | |
| 1/23/2013 19:10 | 0 | | |
| 1/23/2013 19:15 | 0 | | |
| 1/23/2013 19:20 | 0 | | |
| 1/23/2013 19:25 | 0 | | |
| 1/23/2013 19:30 | 0 | | |
| 1/23/2013 19:35 | 0 | | |
| 1/23/2013 19:40 | 0 | | |
| 1/23/2013 19:45 | 0 | | |
| 1/23/2013 19:50 | 0 | | |
| 1/23/2013 19:55 | 0 | | |
| 1/23/2013 20:00 | 0 | | |
| 1/23/2013 20:05 | 0 | | |
| 1/23/2013 20:10 | 0 | | |
| 1/23/2013 20:15 | 0 | | |
| 1/23/2013 20:20 | 0 | | |
| 1/23/2013 20:25 | 0 | | |
| 1/23/2013 20:30 | 0 | | |
| 1/23/2013 20:35 | 0 | | |
| 1/23/2013 20:40 | 0 | | |
| 1/23/2013 20:45 | 0.001 | | |
| 1/23/2013 20:50 | 0.016 | | |
| 1/23/2013 20:55 | 0.013 | | |
| 1/23/2013 21:00 | 0.013 | | |
| 1/23/2013 21:05 | 0.019 | | |
| 1/23/2013 21:10 | 0.021 | | |
| 1/23/2013 21:15 | 0.023 | | |
| 1/23/2013 21:17 | | 0 | |
| 1/23/2013 21:20 | 0.022 | | |
| 1/23/2013 21:25 | 0.012 | | |
| 1/23/2013 21:30 | 0.003 | | |
| 1/23/2013 21:35 | 0 | | |
| 1/23/2013 21:40 | 0 | | |
| 1/23/2013 21:45 | 0 | TOTAL | 1.075 cfs |

Gage: 19U - Rain Gage at Residential NPDES monitoring site in Fall City; inlet to residential stormwater facility

| Collect Date (UTC) | Precipitatio | E = Estima | W = Warni | S = Snow Or Ice | | |
|---|---|---|---|---|---|---|
| | | PST date | PST time | | | |
| 1/23/2013 0:00 | 0 | 1/22/2013 | 1600 | | | |
| 1/23/2013 1:00 | 0 | | 1700 | | | |
| 1/23/2013 2:00 | 0 | | 1800 | | | |
| 1/23/2013 3:00 | 0 | | 1900 | | | |
| 1/23/2013 4:00 | 0 | | 2000 | | | |
| 1/23/2013 5:00 | 0 | | 2100 | | | |
| 1/23/2013 6:00 | 0 | | 2200 | | | |
| 1/23/2013 7:00 | 0 | | 2300 | | | |
| 1/23/2013 8:00 | 0 | 1/23/2013 | 0000 | | | |
| 1/23/2013 9:00 | 0 | | 0100 | | | |
| 1/23/2013 10:00 | 0 | | 0200 | | | |
| 1/23/2013 11:00 | 0 | | 0300 | | | |
| 1/23/2013 12:00 | 0 | | 0400 | | | |
| 1/23/2013 13:00 | 0 | | 0500 | | | |
| 1/23/2013 14:00 | 0 | | 0600 | | | |
| 1/23/2013 15:00 | 0 | | 0700 | | | |
| 1/23/2013 16:00 | 0 | | 0800 | | | |
| 1/23/2013 17:00 | 0 | | 0900 | | | |
| 1/23/2013 18:00 | 0 | | 1000 | | | |
| 1/23/2013 19:00 | 0 | | 1100 | | | |
| 1/23/2013 20:00 | 0 | | 1200 | | | |
| 1/23/2013 21:00 | 0 | | 1300 | | | |
| 1/23/2013 22:00 | 0 | | 1400 | | | |
| 1/23/2013 23:00 | 0.04 | | 1500 | | | |
| 1/24/2013 0:00 | 0.07 | | 1600 | | | |
| 1/24/2013 1:00 | 0.04 | | 1700 | | | |
| 1/24/2013 2:00 | 0 | | 1800 | | | |
| 1/24/2013 3:00 | 0 | | 1900 | | | |
| 1/24/2013 4:00 | 0.02 | | 2000 | | | |
| 1/24/2013 5:00 | 0.02 | | 2100 | | | |
| 1/24/2013 6:00 | 0 | | 2200 | | | |
| 1/24/2013 7:00 | 0 | | 2300 | | | |
| 1/24/2013 8:00 | 0 | 1/24/2013 | 0000 | | | |
| 1/24/2013 9:00 | 0.01 | | 0100 | total rain | 0.2 " | |
| 1/24/2013 10:00 | 0 | | 0200 | | | |
| 1/24/2013 11:00 | 0 | | 0300 | | | |
| 1/24/2013 12:00 | 0 | | 0400 | | | |
| 1/24/2013 13:00 | 0 | | 0500 | | | |
| 1/24/2013 14:00 | 0 | | 0600 | | | |
| 1/24/2013 15:00 | 0 | | 0700 | | | |
| 1/24/2013 16:00 | 0 | | 0800 | | | |
| 1/24/2013 17:00 | 0 | | 0900 | | | |
| 1/24/2013 18:00 | 0 | | 1000 | | | |


FC-RES
Flowlink 5
CalcFlow 1 (5.619 m3):0.00
Sample Event (35 SU):
cfs
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
SU
10
9
8
7
6
5
4
3
2
1
0
5PM
6PM
7PM
8PM
9PM
10PM
23 Wed Jan 2013
1/23/2013 4:28:00 PM - 1/23/2013 10:00:00 PM

```
SAMPLER ID# 1261482546  07:47 24-JAN-13
  Hardware:     A1  Software: 2.33
********** PROGRAM SETTINGS **********
     ----------
   PROGRAM NAME:
    "EXTENDED 1"
 SITE DESCRIPTION:
    "FC-RES    "
     ----------
   UNITS SELECTED:
     LENGTH: ft


     ----------
   UNITS SELECTED:
    FLOW RATE: cfs
  FLOW VOLUME: cf
   VELOCITY: fps
     ----------
  AREA-VEL MODULE:
   AREA*VELOCITY
     ROUND PIPE

     ----------

      5 MINUTE
   DATA INTERVAL

     ----------
   1, 100  lit BTLS
 12 ft SUCTION LINE
 AUTO SUCTION HEAD
1 RINSES, 1 RETRIES
     ----------

  ONE-PART PROGRAM


     ----------
      PACING:
    FLOW, EVERY
      4.000 cf
NO SAMPLE AT START
     ----------
     COMPOSITE:

     35 SAMPLES

     ----------
      VOLUME:

   500 ml SAMPLES

     ----------
      ENABLE:

  NONE PROGRAMMED

     ----------
      ENABLE:
   ONCE ENABLED,
    STAY ENABLED
NO SAMPLE AT ENABLE
```

---

ENABLE:
0 MINUTE DELAY TO
START OF SAMPLING

---

ENABLE:
0 PAUSE & RESUMES

---

NO DELAY TO START

300 HOURS RUN TIME

---

---

---

LIQUID DETECT ON

QUICK VIEW/CHANGE

---

TAKE MEASUREMENTS
EVERY 1 MINUTES

---

DUAL SAMPLER OFF
BTL FULL DETECT OFF
CONTINUOUS BACKLIGHT

---

EVENT MARK SENT
DURING PUMP CYCLE

---

PUMP COUNTS FOR
EACH PURGE CYCLE:
200 PRE-SAMPLE
AUTO POST-SAMPLE

---

NO PERIODIC
SERIAL OUTPUT

---

INTERROGATOR
CONNECTOR
POWER ALWAYS ON

---

---

---

0.01 inch TIP
RAIN GAUGE

---

NO SDI-12 SONDE

AUTO SDI-12 SCAN OFF

```
    ----------
I/O1= NONE
I/O2= NONE
I/O3= NONE

    ----------

 0 ANALOG OUTPUTS


    ----------

NO EXTERNAL MODEM


    ----------

     NO ALARM
  CONDITIONS SET

    ----------
    ----------
-----------------------------------------


SAMPLER ID# 1261482546  07:48 24-JAN-13
  Hardware:     A1  Software: 2.33
********** SAMPLING RESULTS **********
   SITE: FC-RES
PROGRAM: EXTENDED 1
Program Started at 09:13 WE 23-JAN-13
Nominal Sample Volume =  500 ml
                                      COUNT
                                        TO
SAMPLE  BOTTLE TIME  SOURCE ERROR LIQUID
------- ------ ----  ------ ----- ------
               09:13  PGM ENABLED
     1      1  16:40       F          364
     2      1  16:41       F          362
     3      1  16:43       F          363
     4      1  16:44       F          364
     5      1  16:46       F          364
     6      1  16:48       F          363
     7      1  16:51       F          367
     8      1  16:53       F          366
     9      1  16:55       F          365
    10      1  16:58       F          366
    11      1  17:00       F          366
    12      1  17:03       F          367
    13      1  17:05       F          365
    14      1  17:07       F          369
    15      1  17:09       F          367
    16      1  17:11       F          367
    17      1  17:14       F          365
    18      1  17:15       F          369
    19      1  17:18       F          365
    20      1  17:20       F          366
    21      1  17:22       F          366
    22      1  17:24       F          368
    23      1  17:26       F          366
    24      1  17:28       F          368
```

| | | | | |
|---|---|---|---|---|
| 25 | 1 | 17:31 | F | 366 |
| 26 | 1 | 17:33 | F | 368 |
| 27 | 1 | 17:35 | F | 366 |
| 28 | 1 | 17:38 | F | 368 |
| 29 | 1 | 17:40 | F | 365 |
| 30 | 1 | 17:42 | F | 369 |
| 31 | 1 | 17:44 | F | 366 |
| 32 | 1 | 17:46 | F | 368 |
| 33 | 1 | 17:49 | F | 368 |
| 34 | 1 | 17:52 | F | 368 |
| 35 | 1 | 17:55 | F | 369 |
| | | 17:55 | PGM DONE 23-JAN | |

SOURCE F ==> FLOW

---

SAMPLER ID# 1261482546 07:48 24-JAN-13
Hardware: A1 Software: 2.33
AREA-VEL MODULE: 1260684038
Hardware: A0 Software: 1.04
********** COMBINED RESULTS **********
SITE: FC-RES
PROGRAM: EXTENDED 1
Program Started at 09:13 WE 23-JAN-13
Nominal Sample Volume = 500 ml

| SAMPLE | BOTTLE | TIME | LEVEL ft | VELOCITY fps | FLOW RATE cfs | TOTAL FLOW cf |
|---|---|---|---|---|---|---|
| 1 | 1 | 16:40 | 0.156 | 0.56 | 0.043 | 0000004.02 |
| 2 | 1 | 16:41 | 0.157 | 0.53 | 0.042 | 0000008.02 |
| 3 | 1 | 16:43 | 0.153 | 0.58 | 0.043 | 0000012.02 |
| 4 | 1 | 16:44 | 0.146 | 0.56 | 0.039 | 0000016.02 |
| 5 | 1 | 16:46 | 0.137 | 0.48 | 0.031 | 0000020.02 |
| 6 | 1 | 16:48 | 0.132 | 0.49 | 0.030 | 0000024.02 |
| 7 | 1 | 16:51 | 0.131 | 0.48 | 0.029 | 0000028.01 |
| 8 | 1 | 16:53 | 0.127 | 0.48 | 0.027 | 0000032.00 |
| 9 | 1 | 16:55 | 0.127 | 0.43 | 0.025 | 0000036.01 |
| 10 | 1 | 16:58 | 0.129 | 0.48 | 0.028 | 0000040.01 |
| 11 | 1 | 17:00 | 0.132 | 0.48 | 0.029 | 0000044.02 |
| 12 | 1 | 17:03 | 0.134 | 0.45 | 0.028 | 0000048.01 |
| 13 | 1 | 17:05 | 0.139 | 0.46 | 0.030 | 0000052.01 |
| 14 | 1 | 17:07 | 0.142 | 0.45 | 0.030 | 0000056.01 |
| 15 | 1 | 17:09 | 0.146 | 0.44 | 0.031 | 0000060.02 |
| 16 | 1 | 17:11 | 0.149 | 0.42 | 0.030 | 0000064.00 |
| 17 | 1 | 17:14 | 0.151 | 0.46 | 0.034 | 0000068.03 |
| 18 | 1 | 17:15 | 0.151 | 0.47 | 0.034 | 0000072.01 |
| 19 | 1 | 17:18 | 0.153 | 0.45 | 0.034 | 0000076.01 |
| 20 | 1 | 17:20 | 0.153 | 0.41 | 0.031 | 0000080.01 |
| 21 | 1 | 17:22 | 0.151 | 0.42 | 0.031 | 0000084.00 |
| 22 | 1 | 17:24 | 0.151 | 0.43 | 0.031 | 0000088.01 |
| 23 | 1 | 17:26 | 0.151 | 0.42 | 0.031 | 0000092.20 |
| 24 | 1 | 17:28 | 0.151 | 0.40 | 0.029 | 0000096.00 |
| 25 | 1 | 17:31 | 0.157 | 0.36 | 0.028 | 0000100.02 |
| 26 | 1 | 17:33 | 0.159 | 0.41 | 0.033 | 0000104.03 |
| 27 | 1 | 17:35 | 0.161 | 0.41 | 0.033 | 0000108.01 |
| 28 | 1 | 17:38 | 0.164 | 0.38 | 0.032 | 0000112.00 |
| 29 | 1 | 17:40 | 0.167 | 0.34 | 0.029 | 0000116.01 |
| 30 | 1 | 17:42 | 0.166 | 0.37 | 0.031 | 0000120.00 |
| 31 | 1 | 17:44 | 0.166 | 0.36 | 0.030 | 0000124.01 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 32 | 1 | 17:46 | 0.167 | 0.34 | 0.029 | 0000128.01 |
| 33 | 1 | 17:49 | 0.171 | 0.33 | 0.029 | 0000132.01 |
| 34 | 1 | 17:52 | 0.173 | 0.31 | 0.028 | 0000136.01 |
| 35 | 1 | 17:55 | 0.174 | 0.31 | 0.028 | 0000140.01 |

| Site Name | FC-RES | FC-RES |
|---|---|---|
| Isco Quantity | Flow Rate | Sample Event |
| Label | CalcFlow 1 | Sample Event |
| Units | cfs | SU |
| Resolution | 0.1 | 0.1 |
| Significant Digits | 0 | 0 |
| 1/23/2013 16:30 | 0 | |
| 1/23/2013 16:35 | 0 | |
| 1/23/2013 16:40 | 0.032 | 0 |
| 1/23/2013 16:41 | | 0 |
| 1/23/2013 16:43 | | 0 |
| 1/23/2013 16:44 | | 0 |
| 1/23/2013 16:45 | 0.042 | |
| 1/23/2013 16:46 | | 0 |
| 1/23/2013 16:48 | | 0 |
| 1/23/2013 16:50 | 0.03 | |
| 1/23/2013 16:51 | | 0 |
| 1/23/2013 16:53 | | 0 |
| 1/23/2013 16:55 | 0.028 | 0 |
| 1/23/2013 16:58 | | 0 |
| 1/23/2013 17:00 | 0.026 | 0 |
| 1/23/2013 17:03 | | 0 |
| 1/23/2013 17:05 | 0.029 | 0 |
| 1/23/2013 17:07 | | 0 |
| 1/23/2013 17:09 | | 0 |
| 1/23/2013 17:10 | 0.03 | |
| 1/23/2013 17:11 | | 0 |
| 1/23/2013 17:14 | | 0 |
| 1/23/2013 17:15 | 0.032 | 0 |
| 1/23/2013 17:18 | | 0 |
| 1/23/2013 17:20 | 0.033 | 0 |
| 1/23/2013 17:22 | | 0 |
| 1/23/2013 17:24 | | 0 |
| 1/23/2013 17:25 | 0.032 | |
| 1/23/2013 17:26 | | 0 |
| 1/23/2013 17:28 | | 0 |
| 1/23/2013 17:30 | 0.03 | |
| 1/23/2013 17:31 | | 0 |
| 1/23/2013 17:33 | | 0 |
| 1/23/2013 17:35 | 0.031 | 0 |
| 1/23/2013 17:38 | | 0 |
| 1/23/2013 17:40 | 0.032 | 0 |
| 1/23/2013 17:42 | | 0 |
| 1/23/2013 17:44 | | 0 |
| 1/23/2013 17:45 | 0.032 | |
| 1/23/2013 17:46 | | 0 |

| | | | | |
|---|---|---|---|---|
| 1/23/2013 17:49 | | 0 | | |
| 1/23/2013 17:50 | 0.029 | | | |
| 1/23/2013 17:52 | | 0 | | |
| 1/23/2013 17:55 | 0.027 | 0 | sampling total | 0.495 |
| 1/23/2013 18:00 | 0.014 | | | |
| 1/23/2013 18:05 | 0.008 | | | |
| 1/23/2013 18:10 | 0 | | | |
| 1/23/2013 18:15 | 0 | | | |
| 1/23/2013 18:20 | 0 | | | |
| 1/23/2013 18:25 | 0 | | | |
| 1/23/2013 18:30 | 0 | | | |
| 1/23/2013 18:35 | 0 | | | |
| 1/23/2013 18:40 | 0 | | | |
| 1/23/2013 18:45 | 0 | | | |
| 1/23/2013 18:50 | 0 | | | |
| 1/23/2013 18:55 | 0 | | | |
| 1/23/2013 19:00 | 0 | | | |
| 1/23/2013 19:05 | 0 | | | |
| 1/23/2013 19:10 | 0 | | | |
| 1/23/2013 19:15 | 0 | | | |
| 1/23/2013 19:20 | 0 | | | |
| 1/23/2013 19:25 | 0 | | | |
| 1/23/2013 19:30 | 0 | | | |
| 1/23/2013 19:35 | 0 | | | |
| 1/23/2013 19:40 | 0 | | | |
| 1/23/2013 19:45 | 0 | | | |
| 1/23/2013 19:50 | 0 | | | |
| 1/23/2013 19:55 | 0 | | | |
| 1/23/2013 20:00 | 0 | | | |
| 1/23/2013 20:05 | 0 | | | |
| 1/23/2013 20:10 | 0 | | | |
| 1/23/2013 20:15 | 0 | | | |
| 1/23/2013 20:20 | 0 | | | |
| 1/23/2013 20:25 | 0 | | | |
| 1/23/2013 20:30 | 0 | | | |
| 1/23/2013 20:35 | 0 | | | |
| 1/23/2013 20:40 | 0 | | | |
| 1/23/2013 20:45 | 0 | | | |
| 1/23/2013 20:50 | 0 | | | |
| 1/23/2013 20:55 | 0 | | | |
| 1/23/2013 21:00 | 0 | | | |
| 1/23/2013 21:05 | 0.018 | | | |
| 1/23/2013 21:10 | 0.019 | | | |
| 1/23/2013 21:15 | 0.017 | | | |
| 1/23/2013 21:20 | 0.015 | | | |
| 1/23/2013 21:25 | 0.019 | | | |
| 1/23/2013 21:30 | 0.016 | | | |

| | | | | |
|---|---|---|---|---|
| 1/23/2013 21:35 | 0.017 | | | |
| 1/23/2013 21:40 | 0.014 | | | |
| 1/23/2013 21:45 | 0.01 | TOTAL | 0.662 | |
| 1/23/2013 21:50 | 0 | | | |
| 1/23/2013 21:55 | 0 | | total hydrograph | 75% |
| 1/23/2013 22:00 | 0 | | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *1/30/2013*

**WG #(s):** *WG125173*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57139*

**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 in the King County environmental laboratory, 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 are qualified with an "H".*

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

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

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Anthony Ocana | | |
| **Reviewer:** David Chin | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *31-JAN-13*

**WG #(s):** *WG125157*

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

**Project #(s):** *421879-210 NPDES STORM WATER*

**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: *7890E* |

## 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:**

*1. WG125157-1 MB had a reportable level of Bis(2 Ethyl Hexyl)Phthalate.*

*2. WG125157-2 SB had 4 of 23 spiked compounds exceed QC Lab Limits.*

*3. WG125157-3 MS and WG125157-4 MSD had 2 of 46 spiked compounds 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, JG*
☐ 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 Bis(2-Ethylhexyl)Phthalate.*

*2. Compounds which exceeded QC Lab Limits were asterisked on the QC Lab Report.*

*9. Compounds which exceeded 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 because the concentration in the samples was less than ten times the blank concentration.*

*2. 2-Methylnaphthalene, SEE #3 for data quality info. The remaining asterisked compound were reported without qualification.*

*3. Since the BS/MS/MSD were recovered slightly low, 2-Methylnaphthalene was flagged "JG" for the data set indicating a possible low bias.*

| | 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:** *01-Feb-13*

**WG #(s):** *WG125156*

☒ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57139-1*

**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: *7890G* |

## 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. Prometon is above the QC recovery limit in the MS.*
*8. Chlorpyrofos-d10 is below the QC surrogate recovery limit for sample L57139-1.*

## 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: *JG*
☐ Other
☐ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

**Corrective Action Description:**
*3. An "*" was applied to the QC report.*
*8. An "*" was applied to the QC report and a JG qualifier for all associated parametes in the sample.*

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

*3. Given that the MS failed high, Prometon was within established limits in the SB and MSD, and all associated samples were "ND", no bias is suggested for the reported results.*
*8) Since Chlorpyrofos-d10 recovery was within established limits for all remaining samples and QC, a low bias is only suggested for L57139-1.*

| | 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:** *2013*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *1/23/2013 and 2/5/2013*

**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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **Reviewer:** *Dave Hunn* | _____ | _____ |
| **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

January 23, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57213-2,L57311-1, -3, -4, -5, collected February 5-6, 2013.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on February 5 & 6, 2013. The samples were 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 #15186 was prepared and sent via e-mail on March 18, 2013.

**Sample Collection:**
The composite samples was not collected for locations RSW1UP (LDR) and FCSW02 (HDR) due to failed collection conditions.

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

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.



1202M

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.

The recovery of prometon in the spike blank and spike blank duplicate for organophosphorus pesticide analysis was outside the lower control range at 0 and 0%. These results were flagged with an "*" in the QC report. The sample data has been flagged with an "R" qualifier to indicate that the data has been rejected and is not usable because the Prometon was not recovered at all from the spike samples.

Bis (2-ethylhexyl) phthalate and diethyl phthalate were detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

The recovery of acenaphthene in the spike blank for semi volatile analysis was outside the lower control range at 42%. All other QC was within control. The acenaphthene result in the QC report has been flagged with an '*". No other corrective actions were 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 | 421879-210 | 421879-210 |
| Locator: | RSW1UP | FCSW01 | FCSW01 |
| Descrip: | 148TH AVE SE UPSTR | FALL CITY HD COMME | FALL CITY HD COMME |
| Sample: | L57213-2 | L57311-1 | L57311-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 2/5/13 12:10 | 2/5/13 5:43 | 2/5/13 14:33 |
| TimeSpan: | | 23.28 | |
| 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 | | | | | | 1.91 | SH | 0.1 | 0.2 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | | | | | | 0.075 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | | | | | | 316 | | 1 | 2.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | | | | | | 80.2 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | | | | | | 298 | | 10 | 20 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | | | | | | 14 | | 0.5 | 1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | | | | | | 0.269 | | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | | | | | | 0.459 | | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | | | | | | 0.00647 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | | | | | 7.18 | | 2 | 2 | mg/L | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | 5 | | | | CFU/100ml | | | | | | 1200 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | | | | | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | | | | | | 0.307 | | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | | | | | | 8410 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | | | | | | 4.7 | H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | | | | | | 45.5 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | | | | | | 0.26 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | | | | | | 26.1 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | | | | | | 5380 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | | | | | | 12.7 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | | | | | | 180 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | | | | | | 43.2 | | 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 | | | | | | 0.105 | | 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: | RSW1UP | FCSW01 | FCSW01 |
| Descrip: | 148TH AVE SE UPSTR | FALL CITY HD COMME | FALL CITY HD COMME |
| Sample: | L57213-2 | L57311-1 | L57311-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 2/5/13 12:10 | 2/5/13 5:43 | 2/5/13 14:33 |
| TimeSpan: | | 23.28 | |
| 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 | | | | | |
| Benzo(a)anthracene | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(a)pyrene | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Benzo(b,j,k)fluoranthene | | | | | | | <MDL | 0.47 | 0.943 | ug/L | | | | | |
| Benzo(g,h,i)perylene | | | | | | | <MDL | 0.24 | 0.472 | ug/L | | | | | |
| Benzyl Butyl Phthalate | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | | | | | | 2.86 | | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | | | | | | 0.182 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | <MDL | 0.24 | 0.472 | ug/L | | | | | |
| Diethyl Phthalate | | | | | | 0.218 | | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | | | | | | 0.0797 | | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | | | | | | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | | | | | | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Fluoranthene | | | | | | 0.129 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Fluorene | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Indeno(1,2,3-Cd)Pyrene | | | | | | | <MDL | 0.24 | 0.472 | ug/L | | | | | |
| Naphthalene | | | | | | 0.0772 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pentachlorophenol | | | | | | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Phenanthrene | | | | | | 0.116 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | | | | | | 0.265 | | 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 | | | | | | | <MDL | 0.19 | 0.19 | mg/L |
| Lube Oil Range (>C24) | | <MDL | 0.19 | 0.19 | mg/L | | | | | | 0.46 | | 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: | FCSW02 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD RESID | Descrip: | FIELD FILTER BLANK |
| Sample: | L57311-4 | Sample: | L57311-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 2/5/13 14:15 | ColDate: | 2/6/13 11:00 |
| 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 | 20 | | | | 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: | FCSW02 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD RESID | Descrip: | FIELD FILTER BLANK |
| Sample: | L57311-4 | Sample: | L57311-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 2/5/13 14:15 | ColDate: | 2/6/13 11:00 |
| 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 | 0.19 | 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 | Fecal Coliform | Lube Oil Range (>C24) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFU/100ml | mg/L | 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 |
| RSW1UP | 421879-210 | L57213-2 | 5 | | | | | | | | | | | | | | | | | | | |
| FCSW01 | 421879-210 | L57311-1 | | | 1.91 | 0.075 | 316 | 80.2 | 298 | 14 | 0.269 | 0.459 | 0.00647 | 7.18 | 0.307 | 8410 | 4.7 | 45.5 | 0.26 | 26.1 | 5380 | 12.7 |
| FCSW01 | 421879-210 | L57311-3 | 1200 | 0.46 | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57311-4 | 20 | | | | | | | | | | | | | | | | | | | |
| * 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 | Zinc, Total, ICP-MS | Hardness, Calc | 2-Methylnaphthalene | Bis(2-Ethylhexyl)Phthalate | Chrysene | Diethyl Phthalate | Dimethyl Phthalate | Fluoranthene | Naphthalene | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ug/L | mg CaCO3/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| RSW1UP | 421879-210 | L57213-2 | | | | | | | | | | | |
| FCSW01 | 421879-210 | L57311-1 | 180 | 43.2 | 0.105 | 2.86 | 0.182 | 0.218 | 0.0797 | 0.129 | 0.0772 | 0.116 | 0.265 |
| FCSW01 | 421879-210 | L57311-3 | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57311-4 | | | | | | | | | | | |
| * Not converted to dry weight basis | | | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | | | |

Login: P57213 | NPDES Stormwater Permit Monitoring - Rural | Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 2-5-2013 | *Time* 12:10 |
| *Received by* | *Date* 2-5-13 | *Time* 1310 |
| *Sample Numbers* 57213-2 | | *[All]* |

| Sample Number | P57213-1 | P57213-2 | P57213-3 |
|---|---|---|---|
| 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 | | 2-5-13 @ 12:10 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| **Dept, Matrix, Prod** | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

Login: P57311 | NPDES SW Permit - Fall City | Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* Frederick Frothkopp | *Date* 2-6-13 | *Time* 1120 |
| *Received by* [signature] | *Date* 2-6-13 | *Time* 1120 |
| *Sample Numbers* 1, 5 | | *[All]* |

| Sample Number | P57311-1 | P57311-2 | P57311-3 |
|---|---|---|---|
| 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 | 2/5/13 (1) 0543 | | 2/5/13 1433 |
| End Date/Time | 2/6/13 (24) 0500 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD SPLIT @ 11 AM<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23 24 SAMPLES<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP JD, FG split<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>T at lab = 5.2°C<br>9 | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>done | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

100% J sample

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* [signature] | *Date* 2/5/13 | *Time* 1530 |
| *Received by* [signature] | *Date* 2/5/13 | *Time* 1530 |
| *Sample Numbers* 57311 3, 4 | | *[All]* |

Login: P57311 NPDES SW Permit - Fall City Personnel: _____

Project: 421879-210

| Sample Number | P57311-4 | P57311-5 | |
|---|---|---|---|
| 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 | 2/5/13 1415 | 2/6/13 1100 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Feb 8 2013
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 |
|---|---|---|---|
| P57311-1 | Water | 13-A001296 | CONV |

Your sample was received on Wednesday, February 6, 2013. 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 #: 421195-490

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals
APC=Aerobic Plate Count

**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 #: 421195-490
All results reported on an as received basis.

Date Received: 02/06/13
Date Reported: 2/ 8/13

---

**AMTEST Identification Number** **13-A001296**
**Client Identification** **P57311-1**
**Sampling Date** **02/06/13, 05:00**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.075 | mg/l | | 0.025 | SM 5540C | EB | 02/07/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A001296**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A001305 | Surfactants | mg/l | < 0.025 | 0.148 | 0.125 | 118.40 % |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.129 | 103. % |

## 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 1380467

Project Name: _____ Date Received: 2/ 6/13 Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 8.5 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.

# CHAIN OF CUSTODY RECORD

Project Number: 421195-490
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-07
Shipment Method: ENA
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***

1200

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57311-1 | 2/6/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 5:00AM |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

Requested TAT: 14 Days
Data Package Due: 2/28/2013

***Please return signed original CoC with data package.***

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 2-6-13 | Signature | | 2/6/13 |
| Printed Name | Jason Kinnard | Time 1340 | Printed Name | Fritz Grothkopp | Time 320 |
| Organization | King County DNR, Environmental Laboratory | | Organization | Am Test | |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125315 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 2/5/2013 5:43 | 2/7/2013 14:28 | 2/7/2013 14:28 | WG125315-1,-2 | |
| L57334-1 | 421422-CHLS-M | SWD-CHLS-M Cedar | CVBOD | LEACHATE | 2/6/2013 4:30 | 2/7/2013 14:23 | 2/7/2013 14:23 | | |
| L57334-3 | 421422-CHLS-M | Hills Leachate Monthly | CVBOD | LEACHATE | 2/6/2013 5:45 | 2/7/2013 14:24 | 2/7/2013 14:24 | | |
| L57334-4 | 421422-CHLS-M | | CVBOD | LEACHATE | 2/6/2013 6:45 | 2/7/2013 14:26 | 2/7/2013 14:26 | | |
| WG125315-1 | MB | | CVBOD | BLANK WTR | | 2/7/2013 14:16 | 2/7/2013 14:16 | | MB1 2/7/13 |
| WG125315-2 | SB | | CVBOD | BLANK WTR | | 2/7/2013 14:22 | 2/7/2013 14:22 | | WG125315-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125615 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57163-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 2/7/2013 12:05 | 2/28/2013 15:43 | 2/28/2013 15:43 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 2/5/2013 5:43 | 2/28/2013 20:17 | 2/28/2013 20:17 | | |
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCL | GRND WTR | 2/20/2013 10:23 | 2/28/2013 23:50 | 2/28/2013 23:50 | | |
| L57338-1 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 10:23 | 3/1/2013 1:22 | 3/1/2013 1:22 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57352-4 | 421422-VAGW | | CVCL | GRND WTR | 2/20/2013 9:09 | 2/28/2013 15:13 | 2/28/2013 15:13 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57352-4 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 9:09 | 2/28/2013 15:13 | 2/28/2013 15:13 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | CVCL | GRND WTR | 2/22/2013 8:46 | 3/1/2013 6:26 | 3/1/2013 6:26 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57366-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/22/2013 8:46 | 3/1/2013 6:56 | 3/1/2013 6:56 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCL | GRND WTR | 2/22/2013 8:15 | 3/1/2013 7:27 | 3/1/2013 7:27 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57369-1 | 421422-CFGW | | CVSO4 | GRND WTR | 2/22/2013 8:15 | 3/1/2013 7:57 | 3/1/2013 7:57 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57369-3 | 421422-CFGW | | CVCL | GRND WTR | 2/22/2013 8:15 | 3/1/2013 8:28 | 3/1/2013 8:28 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57369-3 | 421422-CFGW | | CVSO4 | GRND WTR | 2/22/2013 8:15 | 3/1/2013 8:58 | 3/1/2013 8:58 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | CVCL | GRND WTR | 2/21/2013 10:09 | 3/1/2013 3:54 | 3/1/2013 3:54 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57372-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/21/2013 10:09 | 3/1/2013 4:24 | 3/1/2013 4:24 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57372-3 | 421422-ENGW | | CVCL | GRND WTR | 2/21/2013 10:52 | 3/1/2013 5:25 | 3/1/2013 5:25 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57372-3 | 421422-ENGW | | CVSO4 | GRND WTR | 2/21/2013 10:52 | 3/1/2013 5:55 | 3/1/2013 5:55 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57373-1 | 421422-ENGW | | CVCL | GRND WTR | 2/22/2013 10:24 | 3/1/2013 9:29 | 3/1/2013 9:29 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57373-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/22/2013 10:24 | 3/1/2013 9:59 | 3/1/2013 9:59 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 2/25/2013 0:46 | 2/28/2013 19:16 | 2/28/2013 19:16 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCL | GRND WTR | 2/20/2013 8:40 | 3/1/2013 2:53 | 3/1/2013 2:53 | | |
| L57445-1 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 8:40 | 3/1/2013 3:23 | 3/1/2013 3:23 | WG125615-1,-2,-3,-4,-9,-10 | |
| WG125615-1 | CS | | CVCL | BLANK WTR | | 2/28/2013 12:40 | 2/28/2013 12:40 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | RDL_LEVEL |
| WG125615-1 | CS | | CVSO4 | BLANK WTR | | 2/28/2013 12:40 | 2/28/2013 12:40 | WG125615-1,-2,-3,-4,-9,-10 | RDL_LEVEL |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125615-2 | MB | CVCL | BLANK WTR | 2/28/2013 13:41 | 2/28/2013 13:41 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | MB 2/28/13 |
| WG125615-2 | MB | CVSO4 | BLANK WTR | 2/28/2013 13:41 | 2/28/2013 13:41 | WG125615-1,-2,-3,-4,-9,-10 | MB 2/28/13 |
| WG125615-3 | SB | CVCL | BLANK WTR | 2/28/2013 14:12 | 2/28/2013 14:12 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | WG125615-2 |
| WG125615-3 | SB | CVSO4 | BLANK WTR | 2/28/2013 14:12 | 2/28/2013 14:12 | WG125615-1,-2,-3,-4,-9,-10 | WG125615-2 |
| WG125615-4 | LCS | CVCL | BLANK WTR | 2/28/2013 14:42 | 2/28/2013 14:42 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | LEVEL1 |
| WG125615-4 | LCS | CVSO4 | BLANK WTR | 2/28/2013 14:42 | 2/28/2013 14:42 | WG125615-1,-2,-3,-4,-9,-10 | LEVEL1 |
| WG125615-5 | LD | CVCL | GRND WTR | 2/28/2013 16:14 | 2/28/2013 16:14 | WG125615-2,-3,-4,-5,- | L57163-1 |
| WG125615-6 | MS | CVCL | GRND WTR | 2/28/2013 16:44 | 2/28/2013 16:44 | 6,-7,-8,-9,-10,-1 | L57163-1 |
| WG125615-7 | LD | CVCL | STORM WTR | 2/28/2013 20:47 | 2/28/2013 20:47 | | L57311-1 |
| WG125615-8 | MS | CVCL | STORM WTR | 2/28/2013 21:18 | 2/28/2013 21:18 | | L57311-1 |
| WG125615-9 | LD | CVCL | GRND WTR | 3/1/2013 0:21 | 3/1/2013 0:21 | | L57338-1 |
| WG125615-9 | LD | CVSO4 | GRND WTR | 3/1/2013 1:52 | 3/1/2013 1:52 | WG125615-1,-2,-3,-4,-9,-10 | L57338-1 |
| WG125615-10 | MS | CVCL | GRND WTR | 3/1/2013 0:51 | 3/1/2013 0:51 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | L57338-1 |
| WG125615-10 | MS | CVSO4 | GRND WTR | 3/1/2013 2:22 | 3/1/2013 2:22 | WG125615-1,-2,-3,-4,-9,-10 | L57338-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125484 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57160-1 | 421422-CHGW-OS | SWD-CHGW-OS Cedar Hills Groundwater Off-Site | CVCOND | GRND WTR | 2/5/2013 8:03 | 2/14/2013 13:31 | 2/14/2013 13:31 | WG125484-1,-2,-3,-4 | |
| L57284-6 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCOND | GRND WTR | 2/8/2013 8:25 | 2/14/2013 15:44 | 2/14/2013 15:44 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 2/5/2013 5:43 | 2/14/2013 15:24 | 2/14/2013 15:24 | | |
| L57332-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCOND | GRND WTR | 2/5/2013 6:40 | 2/14/2013 13:53 | 2/14/2013 13:53 | | |
| L57332-2 | 421422-VAGW | | CVCOND | GRND WTR | 2/5/2013 6:35 | 2/14/2013 14:04 | 2/14/2013 14:04 | | |
| L57332-4 | 421422-VAGW | | CVCOND | GRND WTR | 2/5/2013 7:35 | 2/14/2013 14:22 | 2/14/2013 14:22 | | |
| L57332-5 | 421422-VAGW | | CVCOND | GRND WTR | 2/8/2013 6:50 | 2/14/2013 14:31 | 2/14/2013 14:31 | | |
| L57337-1 | 421422-VAGW | | CVCOND | GRND WTR | 2/4/2013 10:29 | 2/14/2013 14:43 | 2/14/2013 14:43 | | |
| L57337-2 | 421422-VAGW | | CVCOND | GRND WTR | 2/4/2013 11:34 | 2/14/2013 14:53 | 2/14/2013 14:53 | | |
| L57340-1 | 421422-VAGW | | CVCOND | GRND WTR | 2/8/2013 7:45 | 2/14/2013 15:05 | 2/14/2013 15:05 | | |
| L57340-2 | 421422-VAGW | | CVCOND | GRND WTR | 2/7/2013 7:50 | 2/14/2013 15:14 | 2/14/2013 15:14 | | |
| WG125484-1 | LCS | | CVCOND | BLANK WTR | | 2/14/2013 13:20 | 2/14/2013 13:20 | | LEVEL1 |
| WG125484-2 | LCS | | CVCOND | BLANK WTR | | 2/14/2013 13:22 | 2/14/2013 13:22 | | LEVEL2 |
| WG125484-3 | LD | | CVCOND | GRND WTR | | 2/14/2013 13:43 | 2/14/2013 13:43 | | L57160-1 |
| WG125484-4 | LD | | CVCOND | STORM WTR | | 2/14/2013 15:34 | 2/14/2013 15:34 | | L57311-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125298 Nitrate, Nitrogen**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57160-1 | 421422-CHGW-OS | SWD-CHGW-OS Cedar Hills Groundwater Off-Site | CVNO3 | GRND WTR | 2/5/2013 8:03 | 2/5/2013 17:20 | 2/6/2013 14:26 | WG125298-1,-2,-3,-4,-5 | |
| L57246-2 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVNO23 | EFFLUENT | 2/5/2013 7:44 | 2/6/2013 13:40 | 2/6/2013 15:29 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | |
| L57246-4 | 421430-300 | | CVNO23 | EFFLUENT | 2/5/2013 7:07 | 2/6/2013 13:40 | 2/6/2013 15:37 | | |
| L57246-5 | 421430-300 | | CVNO23 | BLANK WTR | 2/5/2013 7:54 | 2/6/2013 13:40 | 2/6/2013 15:52 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 2/5/2013 5:43 | 2/6/2013 13:40 | 2/6/2013 15:21 | | |
| L57311-5 | 421879-210 | | CVNO23 | BLANK WTR | 2/6/2013 11:00 | 2/6/2013 13:40 | 2/6/2013 15:18 | | |
| L57332-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVNO3 | GRND WTR | 2/5/2013 6:40 | 2/5/2013 17:20 | 2/6/2013 14:49 | WG125298-1,-2,-3,-4,-5 | |
| L57332-2 | 421422-VAGW | | CVNO3 | GRND WTR | 2/5/2013 6:35 | 2/5/2013 17:20 | 2/6/2013 14:51 | | |
| L57332-4 | 421422-VAGW | | CVNO3 | GRND WTR | 2/5/2013 7:35 | 2/5/2013 17:20 | 2/6/2013 14:53 | | |
| L57334-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVNO23 | LEACHATE | 2/6/2013 4:30 | 2/6/2013 13:40 | 2/6/2013 17:15 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | |
| L57334-3 | 421422-CHLS-M | | CVNO23 | LEACHATE | 2/6/2013 5:45 | 2/6/2013 13:40 | 2/6/2013 16:08 | | |
| L57334-4 | 421422-CHLS-M | | CVNO23 | LEACHATE | 2/6/2013 6:45 | 2/6/2013 13:40 | 2/6/2013 16:27 | | |
| L57337-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVNO3 | GRND WTR | 2/4/2013 10:29 | 2/5/2013 17:20 | 2/6/2013 14:35 | WG125298-1,-2,-3,-4,-5 | |
| L57337-2 | 421422-VAGW | | CVNO3 | GRND WTR | 2/4/2013 11:34 | 2/5/2013 17:20 | 2/6/2013 14:47 | | |
| L57342-1 | 421184 | Other AGENCIES-General | CVNO23 | GRND WTR | 2/5/2013 11:05 | 2/5/2013 17:20 | 2/6/2013 15:54 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | |
| L57342-4 | 421184 | | CVNO23 | GRND WTR | 2/5/2013 12:05 | 2/5/2013 17:20 | 2/6/2013 16:02 | | |
| L57342-5 | 421184 | | CVNO23 | GRND WTR | 2/5/2013 11:30 | 2/5/2013 17:20 | 2/6/2013 16:04 | | |
| L57342-7 | 421184 | | CVNO23 | GRND WTR | 2/5/2013 12:35 | 2/5/2013 17:20 | 2/6/2013 15:04 | | |
| WG125298-1 | MB | | CVNO23 | BLANK WTR | | 2/5/2013 17:20 | 2/6/2013 14:18 | | CONNUTS1 |
| WG125298-1 | MB | | CVNO3 | BLANK WTR | | 2/5/2013 17:20 | 2/6/2013 14:18 | WG125298-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125298-2 | SB | | CVNO23 | BLANK WTR | | 2/5/2013 17:20 | 2/6/2013 14:20 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | WG125298-1 |
| WG125298-2 | SB | | CVNO3 | BLANK WTR | | 2/5/2013 17:20 | 2/6/2013 14:20 | WG125298-1,-2,-3,-4,-5 | WG125298-1 |
| WG125298-3 | LCS | | CVNO23 | BLANK WTR | | 2/6/2013 14:22 | 2/6/2013 14:22 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | LEVEL1 |
| WG125298-3 | LCS | | CVNO3 | BLANK WTR | | 2/6/2013 14:22 | 2/6/2013 14:22 | WG125298-1,-2,-3,-4,-5 | LEVEL1 |
| WG125298-4 | LD | | CVNO3 | GRND WTR | | 2/5/2013 17:20 | 2/6/2013 14:28 | | L57160-1 |
| WG125298-5 | MS | | CVNO3 | GRND WTR | | 2/5/2013 17:20 | 2/6/2013 14:31 | | L57160-1 |
| WG125298-6 | MB | | CVNO23 | BLANK WTR | | 2/6/2013 13:40 | 2/6/2013 15:06 | WG125298-1,-2,-3,-6,-7,-8,-9,-10,-11,-12,-13,-14 | CONNUTS1 |
| WG125298-7 | LD | | CVNO23 | STORM WTR | | 2/6/2013 13:40 | 2/6/2013 15:23 | | L57311-1 |
| WG125298-8 | MS | | CVNO23 | STORM WTR | | 2/6/2013 13:40 | 2/6/2013 15:25 | | L57311-1 |
| WG125298-9 | LD | | CVNO23 | EFFLUENT | | 2/6/2013 13:40 | 2/6/2013 15:31 | | L57246-2 |
| WG125298-10 | MS | | CVNO23 | EFFLUENT | | 2/6/2013 13:40 | 2/6/2013 15:33 | | L57246-2 |
| WG125298-11 | LD | | CVNO23 | GRND WTR | | 2/6/2013 13:40 | 2/6/2013 15:56 | | L57342-1 |
| WG125298-12 | MS | | CVNO23 | GRND WTR | | 2/6/2013 13:40 | 2/6/2013 15:58 | | L57342-1 |
| WG125298-13 | LD | | CVNO23 | LEACHATE | | 2/6/2013 13:40 | 2/6/2013 16:21 | | L57334-3 |
| WG125298-14 | MS | | CVNO23 | LEACHATE | | 2/6/2013 13:40 | 2/6/2013 16:23 | | L57334-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125410 Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57246-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVORTHOP | EFFLUENT | 2/4/2013 7:13 | 2/13/2013 13:30 | 2/13/2013 15:35 | WG125410-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-13 | |
| L57246-3 | 421430-300 | | CVORTHOP | EFFLUENT | 2/4/2013 7:20 | 2/13/2013 13:30 | 2/13/2013 15:33 | | |
| L57246-5 | 421430-300 | | CVORTHOP | BLANK WTR | 2/5/2013 7:54 | 2/13/2013 13:30 | 2/13/2013 14:35 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 2/5/2013 5:43 | 2/13/2013 13:30 | 2/13/2013 14:58 | | |
| L57311-5 | 421879-210 | | CVORTHOP | BLANK WTR | 2/6/2013 11:00 | 2/13/2013 13:30 | 2/13/2013 14:56 | | |
| L57333-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | CVORTHOP | LEACHATE | 2/7/2013 9:43 | 2/13/2013 13:30 | 2/13/2013 15:06 | | |
| L57334-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 2/6/2013 4:30 | 2/13/2013 13:30 | 2/13/2013 15:08 | | |
| L57334-3 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 2/6/2013 5:45 | 2/13/2013 13:30 | 2/13/2013 15:10 | | |
| L57334-4 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 2/6/2013 6:45 | 2/13/2013 13:30 | 2/13/2013 15:13 | | |
| L57334-5 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 2/7/2013 7:30 | 2/13/2013 13:30 | 2/13/2013 15:15 | | |
| L57341-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVORTHOP | FRESH WTR | 2/11/2013 9:13 | 2/13/2013 13:30 | 2/13/2013 16:21 | | |
| L57341-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/11/2013 9:54 | 2/13/2013 13:30 | 2/13/2013 16:23 | | |
| L57341-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/11/2013 10:21 | 2/13/2013 13:30 | 2/13/2013 16:25 | | |
| L57341-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/11/2013 10:47 | 2/13/2013 13:30 | 2/13/2013 16:27 | | |
| L57350-1 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 4:40 | 2/13/2013 13:30 | 2/13/2013 16:29 | | |
| L57350-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 5:20 | 2/13/2013 13:30 | 2/13/2013 16:46 | | |
| L57350-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 5:40 | 2/13/2013 13:30 | 2/13/2013 16:48 | | |
| L57350-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 6:00 | 2/13/2013 13:30 | 2/13/2013 16:50 | | |
| L57350-5 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 6:40 | 2/13/2013 13:30 | 2/13/2013 16:52 | | |
| L57350-6 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 2/12/2013 7:15 | 2/13/2013 13:30 | 2/13/2013 16:54 | | |
| WG125410-1 | MB | | CVORTHOP | BLANK WTR | | 2/13/2013 13:30 | 2/13/2013 14:27 | | CONNUTS3 |
| WG125410-2 | SB | | CVORTHOP | BLANK WTR | | 2/13/2013 13:30 | 2/13/2013 14:29 | | WG125410-1 |
| WG125410-3 | LCS | | CVORTHOP | BLANK WTR | | 2/13/2013 14:31 | 2/13/2013 14:31 | | LEVEL1 |
| WG125410-4 | LD | | CVORTHOP | STORM WTR | | 2/13/2013 13:30 | 2/13/2013 15:00 | | L57311-1 |
| WG125410-5 | MS | | CVORTHOP | STORM WTR | | 2/13/2013 13:30 | 2/13/2013 15:02 | | L57311-1 |
| WG125410-6 | LD | | CVORTHOP | LEACHATE | | 2/13/2013 13:30 | 2/13/2013 15:25 | | L57334-5 |
| WG125410-7 | MS | | CVORTHOP | LEACHATE | | 2/13/2013 13:30 | 2/13/2013 15:27 | | L57334-5 |
| WG125410-8 | LD | | CVORTHOP | EFFLUENT | | 2/13/2013 13:30 | 2/13/2013 15:38 | | L57246-1 |
| WG125410-9 | MS | | CVORTHOP | EFFLUENT | | 2/13/2013 13:30 | 2/13/2013 15:40 | | L57246-1 |
| WG125410-10 | MB | | CVORTHOP | BLANK WTR | | 2/13/2013 13:30 | 2/13/2013 16:15 | | CONNUTS3 |
| WG125410-11 | LCS | | CVORTHOP | BLANK WTR | | 2/13/2013 16:17 | 2/13/2013 16:17 | | LEVEL1 |
| WG125410-12 | LD | | CVORTHOP | FRESH WTR | | 2/13/2013 13:30 | 2/13/2013 16:31 | | L57350-1 |
| WG125410-13 | MS | | CVORTHOP | FRESH WTR | | 2/13/2013 13:30 | 2/13/2013 16:33 | | L57350-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125366 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57139-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 1/23/2013 16:12 | 2/13/2013 7:44 | 2/13/2013 16:42 | WG125366-7,-8,-9,-10,-1,-2,-3,-4,-5,-6 | |
| L57139-2 | 421879-210 | | CVTKN | STORM WTR | 1/23/2013 16:40 | 2/13/2013 7:44 | 2/13/2013 16:44 | | |
| L57221-1 | 421422-CHSW-Q | SWD-CHSW Q Cedar Hills Surface Water Quarterly | CVTKN | FRESH WTR | 1/23/2013 5:05 | 2/13/2013 7:44 | 2/13/2013 15:40 | | |
| L57221-2 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 5:45 | 2/13/2013 7:44 | 2/13/2013 15:42 | | |
| L57221-3 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 8:13 | 2/13/2013 7:44 | 2/13/2013 15:44 | | |
| L57221-4 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:41 | 2/13/2013 7:44 | 2/13/2013 15:46 | | |
| L57221-5 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:17 | 2/13/2013 7:44 | 2/13/2013 15:59 | | |
| L57221-6 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 8:37 | 2/13/2013 7:44 | 2/13/2013 16:01 | | |
| L57221-7 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 9:03 | 2/13/2013 7:44 | 2/13/2013 16:03 | | |
| L57221-8 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/22/2013 7:33 | 2/13/2013 7:44 | 2/13/2013 16:05 | | |
| L57221-9 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 6:15 | 2/13/2013 7:44 | 2/13/2013 16:07 | | |
| L57221-10 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 6:45 | 2/13/2013 7:44 | 2/13/2013 16:09 | | |
| L57221-11 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 7:30 | 2/13/2013 7:44 | 2/13/2013 16:11 | | |
| L57221-13 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 8:53 | 2/13/2013 7:44 | 2/13/2013 16:13 | | |
| L57221-14 | 421422-CHSW-Q | | CVTKN | FRESH WTR | 1/23/2013 9:17 | 2/13/2013 7:44 | 2/13/2013 17:07 | | |
| L57246-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 2/4/2013 7:13 | 2/13/2013 7:44 | 2/13/2013 16:46 | | |
| L57246-3 | 421430-300 | | CVTKN | EFFLUENT | 2/4/2013 7:20 | 2/13/2013 7:44 | 2/13/2013 16:49 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 2/5/2013 5:43 | 2/13/2013 7:44 | 2/13/2013 16:34 | | |
| WG125366-1 | MB | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:29 | | MB 130213 |
| WG125366-2 | LCS | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:31 | | LEVEL1 |
| WG125366-3 | LCS | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:34 | | LEVEL2 |
| WG125366-4 | SB | | CVTKN | BLANK WTR | | 2/13/2013 7:44 | 2/13/2013 15:36 | | WG125366-1 |
| WG125366-5 | LD | | CVTKN | STORM WTR | | 2/13/2013 7:44 | 2/13/2013 16:36 | | L57311-1 |
| WG125366-6 | MS | | CVTKN | STORM WTR | | 2/13/2013 7:44 | 2/13/2013 16:38 | | L57311-1 |
| WG125366-7 | LD | | CVTKN | EFFLUENT | | 2/13/2013 7:44 | 2/13/2013 17:01 | | L57246-3 |
| WG125366-8 | MS | | CVTKN | EFFLUENT | | 2/13/2013 7:44 | 2/13/2013 17:03 | | L57246-3 |
| WG125366-9 | LD | | CVTKN | FRESH WTR | | 2/13/2013 7:44 | 2/13/2013 17:09 | | L57221-14 |
| WG125366-10 | MS | | CVTKN | FRESH WTR | | 2/13/2013 7:44 | 2/13/2013 17:11 | | L57221-14 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125435 Total Nitrogen & Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57171-1 | 421195-140 | Lake Sawyer | CVTOTP | FRESH WTR | 2/12/2013 11:46 | 2/13/2013 11:10 | 2/14/2013 13:36 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57171-2 | 421195-140 | | CVTOTP | FRESH WTR | 2/12/2013 11:35 | 2/13/2013 11:10 | 2/14/2013 13:38 | | |
| L57171-3 | 421195-140 | | CVTOTP | FRESH WTR | 2/12/2013 12:15 | 2/13/2013 11:10 | 2/14/2013 13:51 | | |
| L57246-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTOTP | EFFLUENT | 2/4/2013 7:13 | 2/13/2013 11:10 | 2/14/2013 14:44 | | |
| L57246-3 | 421430-300 | | CVTOTP | EFFLUENT | 2/4/2013 7:20 | 2/13/2013 11:10 | 2/14/2013 14:50 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 2/5/2013 5:43 | 2/13/2013 11:10 | 2/14/2013 14:52 | | |
| L57313-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTOTN | FRESH WTR | 2/11/2013 13:16 | 2/13/2013 11:10 | 2/14/2013 13:00 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-1 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 13:16 | 2/13/2013 11:10 | 2/14/2013 13:00 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57313-2 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 12:17 | 2/13/2013 11:10 | 2/14/2013 13:02 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-2 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 12:17 | 2/13/2013 11:10 | 2/14/2013 13:02 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57313-3 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 12:06 | 2/13/2013 11:10 | 2/14/2013 13:03 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-3 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 12:06 | 2/13/2013 11:10 | 2/14/2013 13:03 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57313-4 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 11:42 | 2/13/2013 11:10 | 2/14/2013 13:09 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-4 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 11:42 | 2/13/2013 11:10 | 2/14/2013 13:09 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57313-5 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 11:23 | 2/13/2013 11:10 | 2/14/2013 13:11 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-5 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 11:23 | 2/13/2013 11:10 | 2/14/2013 13:11 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57313-6 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 11:00 | 2/13/2013 11:10 | 2/14/2013 13:13 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57313-6 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 11:00 | 2/13/2013 11:10 | 2/14/2013 13:13 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |

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|---|---|---|---|---|---|---|---|---|
| L57313-7 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 10:36 | 2/13/2013 11:10 | 2/14/2013 13:22 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-7 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 10:36 | 2/13/2013 11:10 | 2/14/2013 13:22 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57313-8 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 10:10 | 2/13/2013 11:10 | 2/14/2013 13:24 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-8 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 10:10 | 2/13/2013 11:10 | 2/14/2013 13:24 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57313-9 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 9:58 | 2/13/2013 11:10 | 2/14/2013 13:29 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-9 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 9:58 | 2/13/2013 11:10 | 2/14/2013 13:29 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57313-10 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 9:31 | 2/13/2013 11:10 | 2/14/2013 13:31 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-10 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 9:31 | 2/13/2013 11:10 | 2/14/2013 13:31 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57313-11 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 9:13 | 2/13/2013 11:10 | 2/14/2013 13:33 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-11 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 9:13 | 2/13/2013 11:10 | 2/14/2013 13:33 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57313-12 | 422019 | | CVTOTN | FRESH WTR | 2/11/2013 9:01 | 2/13/2013 11:10 | 2/14/2013 13:35 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57313-12 | 422019 | | CVTOTP | FRESH WTR | 2/11/2013 9:01 | 2/13/2013 11:10 | 2/14/2013 13:35 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57341-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 2/11/2013 9:13 | 2/13/2013 11:10 | 2/14/2013 13:57 | |
| L57341-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/11/2013 9:54 | 2/13/2013 11:10 | 2/14/2013 13:58 | |
| L57341-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/11/2013 10:21 | 2/13/2013 11:10 | 2/14/2013 14:00 | |
| L57341-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/11/2013 10:47 | 2/13/2013 11:10 | 2/14/2013 14:02 | |
| L57350-1 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 4:40 | 2/13/2013 11:10 | 2/14/2013 14:15 | |
| L57350-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 5:20 | 2/13/2013 11:10 | 2/14/2013 14:17 | |
| L57350-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 5:40 | 2/13/2013 11:10 | 2/14/2013 14:22 | |
| L57350-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 6:00 | 2/13/2013 11:10 | 2/14/2013 14:24 | |
| L57350-5 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 6:40 | 2/13/2013 11:10 | 2/14/2013 14:26 | |
| L57350-6 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 7:15 | 2/13/2013 11:10 | 2/14/2013 14:28 | |
| L57350-7 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 9:16 | 2/13/2013 11:10 | 2/14/2013 14:30 | |
| L57350-8 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 9:15 | 2/13/2013 11:10 | 2/14/2013 14:39 | |
| L57350-9 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 10:10 | 2/13/2013 11:10 | 2/14/2013 14:41 | |

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|---|---|---|---|---|---|---|---|---|
| L57350-10 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 2/12/2013 10:37 | 2/13/2013 11:10 | 2/14/2013 14:42 | |
| L57361-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 2/12/2013 10:38 | 2/13/2013 11:10 | 2/14/2013 13:53 | |
| L57361-2 | 421195-150 | | CVTOTP | FRESH WTR | 2/12/2013 10:30 | 2/13/2013 11:10 | 2/14/2013 13:55 | |
| L57378-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 2/11/2013 8:19 | 2/13/2013 11:10 | 2/14/2013 12:10 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-1 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 8:19 | 2/13/2013 11:10 | 2/14/2013 12:10 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-2 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 8:22 | 2/13/2013 11:10 | 2/14/2013 12:12 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-2 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 8:22 | 2/13/2013 11:10 | 2/14/2013 12:12 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-3 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 9:03 | 2/13/2013 11:10 | 2/14/2013 12:14 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-3 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 9:03 | 2/13/2013 11:10 | 2/14/2013 12:14 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-4 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 9:06 | 2/13/2013 11:10 | 2/14/2013 12:16 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-4 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 9:06 | 2/13/2013 11:10 | 2/14/2013 12:16 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-6 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 9:38 | 2/13/2013 11:10 | 2/14/2013 12:18 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-6 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 9:38 | 2/13/2013 11:10 | 2/14/2013 12:18 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-7 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 9:41 | 2/13/2013 11:10 | 2/14/2013 12:19 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-7 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 9:41 | 2/13/2013 11:10 | 2/14/2013 12:19 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-8 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 13:01 | 2/13/2013 11:10 | 2/14/2013 12:21 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-8 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 13:01 | 2/13/2013 11:10 | 2/14/2013 12:21 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |

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|---|---|---|---|---|---|---|---|---|
| L57378-9 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 12:27 | 2/13/2013 11:10 | 2/14/2013 12:30 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-9 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 12:27 | 2/13/2013 11:10 | 2/14/2013 12:30 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-11 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 10:07 | 2/13/2013 11:10 | 2/14/2013 12:32 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-11 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 10:07 | 2/13/2013 11:10 | 2/14/2013 12:32 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-12 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 10:06 | 2/13/2013 11:10 | 2/14/2013 12:34 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-12 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 10:06 | 2/13/2013 11:10 | 2/14/2013 12:34 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-13 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 10:05 | 2/13/2013 11:10 | 2/14/2013 12:36 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-13 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 10:05 | 2/13/2013 11:10 | 2/14/2013 12:36 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-15 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 11:29 | 2/13/2013 11:10 | 2/14/2013 12:38 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-15 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 11:29 | 2/13/2013 11:10 | 2/14/2013 12:38 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-16 | 421235 | | CVTOTN | FRESH WTR | 2/11/2013 11:28 | 2/13/2013 11:10 | 2/14/2013 12:40 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-16 | 421235 | | CVTOTP | FRESH WTR | 2/11/2013 11:28 | 2/13/2013 11:10 | 2/14/2013 12:40 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-19 | 421235 | | CVTOTN | FRESH WTR | 2/12/2013 10:10 | 2/13/2013 11:10 | 2/14/2013 12:45 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |
| L57378-19 | 421235 | | CVTOTP | FRESH WTR | 2/12/2013 10:10 | 2/13/2013 11:10 | 2/14/2013 12:45 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 |
| L57378-20 | 421235 | | CVTOTN | FRESH WTR | 2/12/2013 10:05 | 2/13/2013 11:10 | 2/14/2013 12:47 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 |

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|---|---|---|---|---|---|---|---|---|---|
| L57378-20 | 421235 | | CVTOTP | FRESH WTR | 2/12/2013 10:05 | 2/13/2013 11:10 | 2/14/2013 12:47 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57378-22 | 421235 | | CVTOTN | FRESH WTR | 2/12/2013 9:30 | 2/13/2013 11:10 | 2/14/2013 12:56 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57378-22 | 421235 | | CVTOTP | FRESH WTR | 2/12/2013 9:30 | 2/13/2013 11:10 | 2/14/2013 12:56 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| L57378-23 | 421235 | | CVTOTN | FRESH WTR | 2/12/2013 9:35 | 2/13/2013 11:10 | 2/14/2013 12:58 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57378-23 | 421235 | | CVTOTP | FRESH WTR | 2/12/2013 9:35 | 2/13/2013 11:10 | 2/14/2013 12:58 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | |
| WG125435-1 | MB | | CVTOTN | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:05 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB1 |
| WG125435-1 | MB | | CVTOTP | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:05 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | MB1 |
| WG125435-2 | SB | | CVTOTN | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:07 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG125435-1 |
| WG125435-2 | SB | | CVTOTP | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:07 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | WG125435-1 |
| WG125435-3 | LCS | | CVTOTN | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:08 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG125435-3 | LCS | | CVTOTP | BLANK WTR | | 2/13/2013 11:10 | 2/14/2013 12:08 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | LEVEL1 |
| WG125435-4 | LD | | CVTOTN | FRESH WTR | | 2/13/2013 11:10 | 2/14/2013 12:41 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57378-16 |
| WG125435-4 | LD | | CVTOTP | FRESH WTR | | 2/13/2013 11:10 | 2/14/2013 12:41 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L57378-16 |
| WG125435-5 | MS | | CVTOTN | FRESH WTR | | 2/13/2013 11:10 | 2/14/2013 12:43 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57378-16 |
| WG125435-5 | MS | | CVTOTP | FRESH WTR | | 2/13/2013 11:10 | 2/14/2013 12:43 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L57378-16 |

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|---|---|---|---|---|---|---|---|
| WG125435-6 | MB | CVTOTN | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 13:05 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB2 |
| WG125435-6 | MB | CVTOTP | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 13:05 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | MB2 |
| WG125435-7 | LCS | CVTOTN | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 13:07 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG125435-7 | LCS | CVTOTP | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 13:07 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | LEVEL1 |
| WG125435-8 | LD | CVTOTN | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:25 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57313-8 |
| WG125435-8 | LD | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:25 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L57313-8 |
| WG125435-9 | MS | CVTOTN | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:27 | WG125435-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57313-8 |
| WG125435-9 | MS | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:27 | WG125435-8,-9,-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19 | L57313-8 |
| WG125435-10 | LD | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:47 | | L57171-2 |
| WG125435-11 | MS | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 13:49 | | L57171-2 |
| WG125435-12 | LD | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 14:04 | | L57341-4 |
| WG125435-13 | MS | CVTOTP | FRESH WTR | 2/13/2013 11:10 | 2/14/2013 14:13 | | L57341-4 |
| WG125435-14 | MB | CVTOTP | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 14:19 | | MB3 |
| WG125435-15 | LCS | CVTOTP | BLANK WTR | 2/13/2013 11:10 | 2/14/2013 14:20 | | LEVEL1 |
| WG125435-16 | LD | CVTOTP | EFFLUENT | 2/13/2013 11:10 | 2/14/2013 14:46 | | L57246-1 |
| WG125435-17 | MS | CVTOTP | EFFLUENT | 2/13/2013 11:10 | 2/14/2013 14:48 | | L57246-1 |
| WG125435-18 | LD | CVTOTP | STORM WTR | 2/13/2013 11:10 | 2/14/2013 14:53 | | L57311-1 |
| WG125435-19 | MS | CVTOTP | STORM WTR | 2/13/2013 11:10 | 2/14/2013 14:55 | | L57311-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125371 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57160-1 | 421422-CHGW-OS | SWD-CHGW-OS Cedar Hills Groundwater Off-Site | CVTSS | GRND WTR | 2/5/2013 8:03 | 2/11/2013 14:35 | 2/20/2013 12:35 | WG125371-1,-2,-3,-4,-5,-7,-8,-6 | |
| L57192-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTSS | FRESH WTR | 2/5/2013 7:59 | 2/11/2013 14:35 | 2/20/2013 12:37 | | |
| L57192-2 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 8:17 | 2/11/2013 14:35 | 2/20/2013 12:38 | | |
| L57192-3 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 8:41 | 2/11/2013 14:35 | 2/20/2013 12:43 | | |
| L57192-4 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:01 | 2/11/2013 14:35 | 2/20/2013 12:44 | | |
| L57192-5 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:22 | 2/11/2013 14:35 | 2/20/2013 12:44 | | |
| L57192-6 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:29 | 2/11/2013 14:35 | 2/20/2013 12:46 | | |
| L57192-7 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:42 | 2/11/2013 14:35 | 2/20/2013 12:46 | | |
| L57192-8 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:51 | 2/11/2013 14:35 | 2/20/2013 12:46 | | |
| L57192-9 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:07 | 2/11/2013 14:35 | 2/20/2013 12:47 | | |
| L57192-10 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:17 | 2/11/2013 14:35 | 2/20/2013 12:47 | | |
| L57192-11 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:29 | 2/11/2013 14:35 | 2/20/2013 12:48 | | |
| L57192-12 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 11:00 | 2/11/2013 14:35 | 2/20/2013 12:49 | | |
| L57192-13 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 11:22 | 2/11/2013 14:35 | 2/20/2013 12:49 | | |
| L57194-1 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 9:32 | 2/11/2013 14:35 | 2/20/2013 12:49 | | |
| L57194-2 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:02 | 2/11/2013 14:35 | 2/20/2013 12:50 | | |
| L57194-3 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:16 | 2/11/2013 14:35 | 2/20/2013 12:50 | | |
| L57194-4 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:35 | 2/11/2013 14:35 | 2/20/2013 12:51 | | |
| L57194-5 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 10:58 | 2/11/2013 14:35 | 2/20/2013 12:55 | | |
| L57194-6 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 11:25 | 2/11/2013 14:35 | 2/20/2013 12:56 | | |
| L57194-7 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 11:38 | 2/11/2013 14:35 | 2/20/2013 13:02 | | |
| L57194-8 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 12:20 | 2/11/2013 14:35 | 2/20/2013 13:08 | | |
| L57194-9 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 12:48 | 2/11/2013 14:35 | 2/20/2013 13:09 | | |
| L57194-10 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 13:04 | 2/11/2013 14:35 | 2/20/2013 13:10 | | |
| L57194-11 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 13:18 | 2/11/2013 14:35 | 2/20/2013 13:11 | | |
| L57194-12 | 421240A | | CVTSS | FRESH WTR | 2/5/2013 13:38 | 2/11/2013 14:35 | 2/20/2013 13:11 | | |
| L57284-6 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVTSS | GRND WTR | 2/8/2013 8:25 | 2/11/2013 14:35 | 2/20/2013 13:12 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 2/5/2013 5:43 | 2/11/2013 14:35 | 2/20/2013 13:18 | | |
| L57332-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVTSS | GRND WTR | 2/5/2013 6:40 | 2/11/2013 14:35 | 2/20/2013 13:20 | | |
| L57332-2 | 421422-VAGW | | CVTSS | GRND WTR | 2/5/2013 6:35 | 2/11/2013 14:35 | 2/20/2013 13:20 | | |
| L57332-4 | 421422-VAGW | | CVTSS | GRND WTR | 2/5/2013 7:35 | 2/11/2013 14:35 | 2/20/2013 13:21 | | |
| L57332-5 | 421422-VAGW | | CVTSS | GRND WTR | 2/8/2013 6:50 | 2/11/2013 14:35 | 2/20/2013 13:21 | | |
| L57351-2 | 421422-VAGW | | CVTSS | GRND WTR | 2/11/2013 7:25 | 2/11/2013 14:35 | 2/20/2013 13:22 | | |
| WG125371-1 | MB | | CVTSS | BLANK WTR | | 2/11/2013 14:35 | 2/20/2013 12:34 | | MB1 130211 |
| WG125371-2 | LCS | | CVTSS | BLANK WTR | | 2/11/2013 14:35 | 2/20/2013 12:35 | | LEVEL1 |
| WG125371-3 | LD | | CVTSS | GRND WTR | | 2/11/2013 14:35 | 2/20/2013 12:36 | | L57160-1 |
| WG125371-4 | LD | | CVTSS | FRESH WTR | | 2/11/2013 14:35 | 2/20/2013 12:42 | | L57192-2 |
| WG125371-5 | MB | | CVTSS | BLANK WTR | | 2/11/2013 14:35 | 2/20/2013 12:57 | | MB2 130211 |
| WG125371-6 | LCS | | CVTSS | BLANK WTR | | 2/11/2013 14:35 | 2/20/2013 13:01 | | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125371-7 | LD | CVTSS | FRESH WTR | 2/11/2013 14:35 | 2/20/2013 13:08 | | L57194-7 |
| WG125371-8 | LD | CVTSS | STORM WTR | 2/11/2013 14:35 | 2/20/2013 13:19 | | L57311-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125285 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57191-1 | 421240A | STREAMS MONITOR | CVTURB | FRESH WTR | 2/4/2013 11:45 | 2/6/2013 12:43 | 2/6/2013 12:43 | WG125285-2,-3,-1,-4,- | |
| L57191-2 | 421240A | (surf wtr) | CVTURB | FRESH WTR | 2/4/2013 12:18 | 2/6/2013 12:46 | 2/6/2013 12:46 | 5,-6,-7,-8 | |
| L57191-3 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 12:56 | 2/6/2013 12:47 | 2/6/2013 12:47 | | |
| L57191-4 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 14:11 | 2/6/2013 12:49 | 2/6/2013 12:49 | | |
| L57191-5 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 14:32 | 2/6/2013 12:51 | 2/6/2013 12:51 | | |
| L57192-1 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 7:59 | 2/6/2013 12:53 | 2/6/2013 12:53 | | |
| L57192-2 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 8:17 | 2/6/2013 12:55 | 2/6/2013 12:55 | | |
| L57192-3 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 8:41 | 2/6/2013 12:56 | 2/6/2013 12:56 | | |
| L57192-4 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:01 | 2/6/2013 12:57 | 2/6/2013 12:57 | | |
| L57192-5 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:22 | 2/6/2013 12:59 | 2/6/2013 12:59 | | |
| L57192-6 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:29 | 2/6/2013 13:01 | 2/6/2013 13:01 | | |
| L57192-7 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:42 | 2/6/2013 13:02 | 2/6/2013 13:02 | | |
| L57192-8 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:51 | 2/6/2013 13:03 | 2/6/2013 13:03 | | |
| L57192-9 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:07 | 2/6/2013 13:08 | 2/6/2013 13:08 | | |
| L57192-10 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:17 | 2/6/2013 13:12 | 2/6/2013 13:12 | | |
| L57192-11 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:29 | 2/6/2013 13:14 | 2/6/2013 13:14 | | |
| L57192-12 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 11:00 | 2/6/2013 13:16 | 2/6/2013 13:16 | | |
| L57192-13 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 11:22 | 2/6/2013 13:18 | 2/6/2013 13:18 | | |
| L57193-1 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 9:20 | 2/6/2013 13:20 | 2/6/2013 13:20 | | |
| L57193-2 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 9:38 | 2/6/2013 13:21 | 2/6/2013 13:21 | | |
| L57193-3 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 9:50 | 2/6/2013 13:23 | 2/6/2013 13:23 | | |
| L57193-4 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 10:10 | 2/6/2013 13:25 | 2/6/2013 13:25 | | |
| L57193-5 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 10:25 | 2/6/2013 13:27 | 2/6/2013 13:27 | | |
| L57193-6 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 10:38 | 2/6/2013 13:29 | 2/6/2013 13:29 | | |
| L57193-7 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 11:06 | 2/6/2013 13:31 | 2/6/2013 13:31 | | |
| L57193-8 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 11:37 | 2/6/2013 13:32 | 2/6/2013 13:32 | | |
| L57193-9 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 12:04 | 2/6/2013 13:34 | 2/6/2013 13:34 | | |
| L57193-10 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 12:53 | 2/6/2013 13:36 | 2/6/2013 13:36 | | |
| L57193-11 | 421240A | | CVTURB | FRESH WTR | 2/4/2013 13:50 | 2/6/2013 13:38 | 2/6/2013 13:38 | | |
| L57194-1 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 9:32 | 2/6/2013 13:39 | 2/6/2013 13:39 | | |
| L57194-2 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:02 | 2/6/2013 13:41 | 2/6/2013 13:41 | | |
| L57194-3 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:16 | 2/6/2013 13:42 | 2/6/2013 13:42 | | |
| L57194-4 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:35 | 2/6/2013 13:43 | 2/6/2013 13:43 | | |
| L57194-5 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 10:58 | 2/6/2013 13:45 | 2/6/2013 13:45 | | |
| L57194-6 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 11:25 | 2/6/2013 13:47 | 2/6/2013 13:47 | | |
| L57194-7 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 11:38 | 2/6/2013 13:50 | 2/6/2013 13:50 | | |
| L57194-8 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 12:20 | 2/6/2013 13:51 | 2/6/2013 13:51 | | |
| L57194-9 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 12:48 | 2/6/2013 13:53 | 2/6/2013 13:53 | | |
| L57194-10 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 13:04 | 2/6/2013 13:54 | 2/6/2013 13:54 | | |
| L57194-11 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 13:18 | 2/6/2013 13:56 | 2/6/2013 13:56 | | |
| L57194-12 | 421240A | | CVTURB | FRESH WTR | 2/5/2013 13:38 | 2/6/2013 13:59 | 2/6/2013 13:59 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 2/5/2013 5:43 | 2/6/2013 14:04 | 2/6/2013 14:04 | | |
| WG125285-1 | LCS | | CVTURB | BLANK WTR | | 2/6/2013 12:42 | 2/6/2013 12:42 | | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125285-2 | LD | CVTURB | FRESH WTR | 2/6/2013 13:09 | 2/6/2013 13:09 | | L57192-9 |
| WG125285-3 | LCS | CVTURB | BLANK WTR | 2/6/2013 13:19 | 2/6/2013 13:19 | | LEVEL1 |
| WG125285-4 | LD | CVTURB | FRESH WTR | 2/6/2013 13:48 | 2/6/2013 13:48 | | L57194-6 |
| WG125285-5 | LCS | CVTURB | BLANK WTR | 2/6/2013 13:54 | 2/6/2013 13:54 | | LEVEL1 |
| WG125285-6 | LD | CVTURB | FRESH WTR | 2/6/2013 14:01 | 2/6/2013 14:01 | | L57194-12 |
| WG125285-7 | LD | CVTURB | STORM WTR | 2/6/2013 14:06 | 2/6/2013 14:06 | | L57311-1 |
| WG125285-8 | LCS | CVTURB | BLANK WTR | 2/6/2013 14:10 | 2/6/2013 14:10 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125266 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57213-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 2/5/2013 12:10 | 2/5/2013 14:30 | 2/6/2013 13:30 | WG125242-3,-4,WG125249-2,-3 | |
| WG125242-3 | BF | | MCSWTC-MF | BLANK WTR | | 2/5/2013 11:00 | 2/6/2013 9:20 | | QC-PERFORMED:05-FEB-13 |
| WG125242-4 | AF | | MCSWTC-MF | BLANK WTR | | 2/5/2013 11:00 | 2/6/2013 9:20 | | QC-PERFORMED:05-FEB-13 |
| WG125249-2 | PC | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |
| WG125249-3 | NC | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125270 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 2/5/2013 14:33 | 2/5/2013 16:00 | 2/6/2013 17:00 | WG125249-2,-3,-4,-5 | |
| L57311-4 | 421879-210 | | MCFC-MF | STORM WTR | 2/5/2013 14:15 | 2/5/2013 16:00 | 2/6/2013 17:00 | | |
| WG125249-2 | PC | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |
| WG125249-3 | NC | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |
| WG125249-4 | BF | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |
| WG125249-5 | AF | | MCFC-MF | BLANK WTR | | 2/5/2013 15:20 | 2/6/2013 15:00 | | QC-PERFORMED:05-FEB-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125590 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57156-3 | 421422-CHGW-OS | SWD-CHGW-OS Cedar | MTICPMS | GRND WTR | 2/14/2013 8:40 | 2/26/2013 13:00 | 2/27/2013 13:40 | WG125590-1,-2,-3,-4 | |
| L57160-4 | 421422-CHGW-OS | Hills Groundwater Off-Site | MTICPMS | GRND WTR | 2/14/2013 7:45 | 2/26/2013 13:00 | 2/27/2013 13:47 | | |
| L57165-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 2/13/2013 10:35 | 2/26/2013 13:00 | 2/27/2013 13:53 | | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 2/5/2013 5:43 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57311-1 | 421879-210 | | MTICPMS | STORM WTR | 2/5/2013 5:43 | 2/26/2013 13:00 | 2/27/2013 13:59 | | |
| L57341-1 | 421422-CHSW-M | SWD-CHSW M Cedar | MTHARD-ICPMS | FRESH WTR | 2/11/2013 9:13 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57341-1 | 421422-CHSW-M | Hills Surface Water | MTICPMS | FRESH WTR | 2/11/2013 9:13 | 2/26/2013 13:00 | 2/27/2013 14:05 | | |
| L57341-2 | 421422-CHSW-M | Monthly | MTHARD-ICPMS | FRESH WTR | 2/11/2013 9:54 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57341-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/11/2013 9:54 | 2/26/2013 13:00 | 2/27/2013 14:11 | | |
| L57341-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/11/2013 10:21 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57341-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/11/2013 10:21 | 2/26/2013 13:00 | 2/27/2013 14:18 | | |
| L57341-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/11/2013 10:47 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57341-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/11/2013 10:47 | 2/26/2013 13:00 | 2/27/2013 14:24 | | |
| L57350-1 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 4:40 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-1 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 4:40 | 2/26/2013 13:00 | 2/27/2013 14:42 | | |
| L57350-2 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 5:20 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 5:20 | 2/26/2013 13:00 | 2/27/2013 14:48 | | |
| L57350-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 5:40 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 5:40 | 2/26/2013 13:00 | 2/27/2013 14:55 | | |
| L57350-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 6:00 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 6:00 | 2/26/2013 13:00 | 2/27/2013 15:01 | | |
| L57350-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 6:40 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 6:40 | 2/26/2013 13:00 | 2/27/2013 15:19 | | |
| L57350-6 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 7:15 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-6 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 7:15 | 2/26/2013 13:00 | 2/27/2013 15:26 | | |
| L57350-7 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 9:16 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-7 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 9:16 | 2/26/2013 13:00 | 2/27/2013 15:32 | | |
| L57350-8 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 9:15 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-8 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 9:15 | 2/26/2013 13:00 | 2/27/2013 15:38 | | |
| L57350-9 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 10:10 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-9 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 10:10 | 2/26/2013 13:00 | 2/27/2013 15:57 | | |
| L57350-10 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 2/12/2013 10:37 | 2/26/2013 13:00 | 3/1/2013 7:41 | | |
| L57350-10 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 2/12/2013 10:37 | 2/26/2013 13:00 | 2/27/2013 16:03 | | |
| L57395-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar | MTICPMS | FRESH WTR | 2/25/2013 9:55 | 2/26/2013 13:00 | 2/27/2013 16:09 | | |
| L57395-2 | 421422-CHSW-P2 | Hills Surface Water | MTICPMS | FRESH WTR | 2/25/2013 10:13 | 2/26/2013 13:00 | 2/27/2013 16:15 | | |
| WG125590-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 2/26/2013 13:00 | 3/1/2013 7:41 | | METHOD BLANK |
| WG125590-1 | MB | | MTICPMS | BLANK WTR | | 2/26/2013 13:00 | 2/27/2013 13:28 | | METHOD BLANK |
| WG125590-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 2/26/2013 13:00 | 3/1/2013 7:41 | | WG125590-1 MS-20 |
| WG125590-2 | SB | | MTICPMS | BLANK WTR | | 2/26/2013 13:00 | 2/27/2013 13:34 | | WG125590-1 MS-20 |
| WG125590-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 2/26/2013 13:00 | 3/1/2013 7:41 | | L57350-4 RPD-LIQ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125590-3 | LD | MTICPMS | FRESH WTR | 2/26/2013 13:00 | 2/27/2013 15:07 | | L57350-4 RPD-LIQ |
| WG125590-4 | MS | MTHARD-ICPMS | FRESH WTR | 2/26/2013 13:00 | 3/1/2013 7:41 | | L57350-4 MS-20 |
| WG125590-4 | MS | MTICPMS | FRESH WTR | 2/26/2013 13:00 | 2/27/2013 15:13 | | L57350-4 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125448 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57160-1 | 421422-CHGW-OS | SWD-CHGW-OS Cedar Hills Groundwater Off-Site | MTHG-MID | GRND WTR | 2/5/2013 8:03 | 2/14/2013 13:00 | 2/19/2013 15:32 | WG125448-1,-2 | |
| L57278-1 | 421184-110 | OCS-City of Enumclaw | MTHG-MID | EFFLUENT | 2/3/2013 7:30 | 2/14/2013 13:00 | 2/19/2013 15:35 | | |
| L57284-6 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/8/2013 8:25 | 2/14/2013 13:00 | 2/19/2013 15:28 | WG125448-1,-3,-4,-5,-6 | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 2/5/2013 5:43 | 2/14/2013 13:00 | 2/19/2013 15:33 | WG125448-1,-2 | |
| L57311-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 2/5/2013 5:43 | 2/14/2013 13:00 | 2/19/2013 15:24 | WG125448-1,-3,-4,-5,-6 | |
| L57332-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/5/2013 6:40 | 2/14/2013 13:00 | 2/19/2013 15:19 | | |
| L57332-2 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/5/2013 6:35 | 2/14/2013 13:00 | 2/19/2013 15:21 | | |
| L57332-4 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/5/2013 7:35 | 2/14/2013 13:00 | 2/19/2013 15:23 | | |
| L57332-5 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/8/2013 6:50 | 2/14/2013 13:00 | 2/19/2013 15:30 | | |
| L57333-1 | 421422-VALS-M | SWD-VALS-M Vashon Leachate Monthly | MTHG-MID | LEACHATE | 2/7/2013 9:43 | 2/14/2013 13:00 | 2/19/2013 15:41 | WG125448-1,-2 | |
| L57333-1 | 421422-VALS-M | | MTHG-MID-DISS | LEACHATE | 2/7/2013 9:43 | 2/14/2013 13:00 | 2/19/2013 15:06 | WG125448-1,-3,-4,-5,-6 | |
| L57334-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | MTHG-MID | LEACHATE | 2/6/2013 4:30 | 2/14/2013 13:00 | 2/19/2013 15:42 | WG125448-1,-2 | |
| L57334-3 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 2/6/2013 5:45 | 2/14/2013 13:00 | 2/19/2013 15:44 | | |
| L57334-4 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 2/6/2013 6:45 | 2/14/2013 13:00 | 2/19/2013 15:46 | | |
| L57334-5 | 421422-CHLS-M | | MTHG-MID | LEACHATE | 2/7/2013 7:30 | 2/14/2013 13:00 | 2/19/2013 15:48 | | |
| L57337-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/4/2013 10:29 | 2/14/2013 13:00 | 2/19/2013 15:12 | WG125448-1,-3,-4,-5,-6 | |
| L57337-2 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/4/2013 11:34 | 2/14/2013 13:00 | 2/19/2013 15:14 | | |
| L57340-1 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/8/2013 7:45 | 2/14/2013 13:00 | 2/19/2013 15:01 | | |
| L57340-2 | 421422-VAGW | | MTHG-MID-DISS | GRND WTR | 2/7/2013 7:50 | 2/14/2013 13:00 | 2/19/2013 15:26 | | |
| WG125448-1 | MB | | MTHG-MID | BLANK WTR | | 2/14/2013 13:00 | 2/19/2013 14:57 | WG125448-1,-2 | METHOD BLANK |
| WG125448-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 2/14/2013 13:00 | 2/19/2013 14:57 | WG125448-1,-3,-4,-5,-6 | METHOD BLANK |
| WG125448-2 | SB | | MTHG-MID | BLANK WTR | | 2/14/2013 13:00 | 2/19/2013 14:59 | WG125448-1,-2 | WG125448-1 HG-LMID |
| WG125448-3 | MS | | MTHG-MID-DISS | GRND WTR | | 2/14/2013 13:00 | 2/19/2013 15:03 | WG125448-1,-3,-4,-5,-6 | L57340-1 HG-LMID |
| WG125448-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 2/14/2013 13:00 | 2/19/2013 15:05 | | WG125448-3 L57340-1 HG-LMID-MSD |
| WG125448-5 | MS | | MTHG-MID-DISS | LEACHATE | | 2/14/2013 13:00 | 2/19/2013 15:08 | | L57333-1 HG-LMID |
| WG125448-6 | MSD | | MTHG-MID-DISS | LEACHATE | | 2/14/2013 13:00 | 2/19/2013 15:10 | | WG125448-5 L57333-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125642 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 2/5/2013 5:43 | 3/4/2013 8:00 | 3/5/2013 11:05 | WG125642-1,-2,-3,-4 | |
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 10:23 | 3/4/2013 8:00 | 3/5/2013 11:12 | | |
| L57350-9 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | MTICPMS-DISS | FRESH WTR | 2/12/2013 10:10 | 3/4/2013 8:00 | 3/5/2013 13:25 | | |
| L57350-10 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 2/12/2013 10:37 | 3/4/2013 8:00 | 3/5/2013 11:37 | | |
| L57352-4 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 9:09 | 3/4/2013 8:00 | 3/5/2013 11:43 | | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/22/2013 8:46 | 3/4/2013 8:00 | 3/5/2013 11:50 | | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/22/2013 8:15 | 3/4/2013 8:00 | 3/5/2013 12:09 | | |
| L57369-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/22/2013 8:15 | 3/4/2013 8:00 | 3/5/2013 12:15 | | |
| L57371-1 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/27/2013 8:35 | 3/4/2013 8:00 | 3/5/2013 12:22 | | |
| L57371-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/27/2013 7:35 | 3/4/2013 8:00 | 3/5/2013 12:28 | | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/21/2013 10:09 | 3/4/2013 8:00 | 3/5/2013 12:34 | | |
| L57372-3 | 421422-ENGW | | MTICPMS-DISS | GRND WTR | 2/21/2013 10:52 | 3/4/2013 8:00 | 3/5/2013 12:41 | | |
| L57373-1 | 421422-ENGW | | MTICPMS-DISS | GRND WTR | 2/22/2013 10:24 | 3/4/2013 8:00 | 3/5/2013 12:47 | | |
| L57376-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/27/2013 8:54 | 3/4/2013 8:00 | 3/5/2013 12:53 | | |
| L57376-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/25/2013 8:27 | 3/4/2013 8:00 | 3/5/2013 13:00 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 2/25/2013 0:46 | 3/4/2013 8:00 | 3/5/2013 13:06 | | |
| L57393-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/25/2013 6:05 | 3/4/2013 8:00 | 3/5/2013 13:38 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/26/2013 8:20 | 3/4/2013 8:00 | 3/5/2013 13:44 | | |
| L57394-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 3/1/2013 7:50 | 3/4/2013 8:00 | 3/5/2013 13:51 | | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 8:40 | 3/4/2013 8:00 | 3/5/2013 13:57 | | |
| WG125642-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/4/2013 8:00 | 3/5/2013 10:53 | | METHOD BLANK |
| WG125642-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/4/2013 8:00 | 3/5/2013 10:59 | | WG125642-1 MS-20 SPIKE BLANK |
| WG125642-3 | LD | | MTICPMS-DISS | FRESH WTR | | 3/4/2013 8:00 | 3/5/2013 13:32 | | L57350-9 RPD-LIQ LAB DUPLICATE |
| WG125642-4 | MS | | MTICPMS-DISS | FRESH WTR | | 3/4/2013 8:00 | 3/5/2013 11:31 | | L57350-9 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125376 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 2/5/2013 5:43 | 2/12/2013 7:00 | 2/15/2013 11:49 | WG125376-4,-1,-2,-3 | |
| WG125376-1 | MB | | ORHERB-NPDES | BLANK WTR | | 2/12/2013 7:00 | 2/15/2013 10:07 | | MB130212 |
| WG125376-2 | SB | | ORHERB-NPDES | BLANK WTR | | 2/12/2013 7:00 | 2/15/2013 10:33 | | WG125376-1 |
| WG125376-3 | MS | | ORHERB-NPDES | STORM WTR | | 2/12/2013 7:00 | 2/15/2013 10:58 | | L57311-1 |
| WG125376-4 | MSD | | ORHERB-NPDES | STORM WTR | | 2/12/2013 7:00 | 2/15/2013 11:24 | | WG125376-3 L57311-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125307 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 2/5/2013 5:43 | 2/12/2013 17:00 | 2/26/2013 18:52 | WG125307-1,-3,-2 | |
| WG125307-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 2/12/2013 17:00 | 2/26/2013 17:32 | | MB130207 |
| WG125307-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 2/12/2013 17:00 | 2/26/2013 17:58 | | WG125307-1 |
| WG125307-3 | SBD | | OROPPEST-NPDES | BLANK WTR | | 2/12/2013 17:00 | 2/26/2013 18:26 | | WG125307-2<br>WG125307-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125349 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 2/5/2013 5:43 | 2/11/2013 17:00 | 2/22/2013 15:01 | WG125349-3,-3,-1,-1,-2,-2 | |
| L57311-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 2/5/2013 5:43 | 2/11/2013 17:00 | 2/22/2013 15:01 | WG125349-3,-1,-2 | |
| WG125349-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 13:05 | WG125349-3,-3,-1,-1,-2,-2 | MB130211 |
| WG125349-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 13:05 | WG125349-3,-1,-2 | MB130211 |
| WG125349-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 13:44 | WG125349-3,-3,-1,-1,-2,-2 | WG125349-1 |
| WG125349-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 13:44 | WG125349-3,-1,-2 | WG125349-1 |
| WG125349-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 14:22 | WG125349-3,-3,-1,-1,-2,-2 | WG125349-2 WG125349-1 |
| WG125349-3 | SBD | | TICORPAHPHTH-SUR | BLANK WTR | | 2/11/2013 17:00 | 2/22/2013 14:22 | WG125349-3,-1,-2 | WG125349-2 WG125349-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125308 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57213-2 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 2/5/2013 12:10 | 2/7/2013 17:00 | 2/19/2013 18:21 | WG125308-1,-2,-3,-4 | |
| L57311-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 2/5/2013 14:33 | 2/7/2013 17:00 | 2/19/2013 18:44 | | |
| L57311-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 2/5/2013 14:15 | 2/7/2013 17:00 | 2/19/2013 19:08 | | |
| WG125308-1 | MB | | ORWTPH-DX | BLANK WTR | | 2/7/2013 17:00 | 2/19/2013 16:47 | | MB130207 |
| WG125308-2 | SB | | ORWTPH-DX | BLANK WTR | | 2/7/2013 17:00 | 2/19/2013 17:10 | | WG125308-1 SB-MO |
| WG125308-3 | SB | | ORWTPH-DX | BLANK WTR | | 2/7/2013 17:00 | 2/19/2013 17:34 | | WG125308-1 SB-DSL |
| WG125308-4 | LD | | ORWTPH-DX | STORM WTR | | 2/7/2013 17:00 | 2/19/2013 17:57 | | L57311-4 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, Fall City Renton, L57213, L57311

**WG125283 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57213-2 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 2/5/2013 12:10 | 2/6/2013 19:12 | 2/6/2013 19:12 | WG125283-1,-2,-3 | |
| L57311-3 | 421879-210 | | ORWTPH-G | STORM WTR | 2/5/2013 14:33 | 2/6/2013 19:42 | 2/6/2013 19:42 | | |
| L57311-4 | 421879-210 | | ORWTPH-G | STORM WTR | 2/5/2013 14:15 | 2/6/2013 20:12 | 2/6/2013 20:12 | | |
| WG125283-1 | MB | | ORWTPH-G | BLANK WTR | | 2/6/2013 18:12 | 2/6/2013 18:12 | | MB130206 |
| WG125283-2 | SB | | ORWTPH-G | BLANK WTR | | 2/6/2013 20:43 | 2/6/2013 20:43 | | WG125283-1 |
| WG125283-3 | LD | | ORWTPH-G | STORM WTR | | 2/6/2013 18:42 | 2/6/2013 18:42 | | L57213-2 |

**Workgroup: WG125315 BOD**

**MB:WG125315-1 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:WG125315-2 MB:WG125315-1 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: WG125615 Anions**

**CS:WG125615-1 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 | 0.099 | 99 | | 70--130 |

**CS:WG125615-1 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 | 92 | | 70--130 |

**MB:WG125615-2 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:WG125615-2 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:WG125615-3 MB:WG125615-2 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 | 2.06 | 103 | | 80--120 |

**SB:WG125615-3 MB:WG125615-2 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 | 5.19 | 104 | | 80--120 |

**LCS:WG125615-4 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 | 2.99 | 100 | | 85--115 |

**LCS:WG125615-4 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 | 15.5 | 103 | | 85--115 |

**LD:WG125615-5 L57163-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 2.54 | 2.43 | 4 | | 0--20 |

**MS:WG125615-6 L57163-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 2.54 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125615-7 L57311-1 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 | 0.5 | 1 | mg/L | 14 | 14.2 | 1 | | 0--20 |

**MS:WG125615-8 L57311-1 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 | 0.5 | 1 | mg/L | 14 | 20 | 34.8 | 104 | | 75--125 |

**LD:WG125615-9 L57338-1 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 | 0.5 | 1 | mg/L | 3.65 | 3.68 | 1 | | 0--20 |

**LD:WG125615-9 L57338-1 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 | 0.5 | 1 | mg/L | 16.8 | 16.8 | 0 | | 0--20 |

**MS:WG125615-10 L57338-1 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 | 0.5 | 1 | mg/L | 3.65 | 20 | 24.5 | 104 | | 75--125 |

**MS:WG125615-10 L57338-1 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 | 0.5 | 1 | mg/L | 16.8 | 25 | 42.8 | 104 | | 75--125 |

**Workgroup: WG125484 Conductivity**

**LCS:WG125484-1 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 | 74.1 | 100 | | 90--110 |

**LCS:WG125484-2 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 | 708 | 99 | | 90--110 |

**LD:WG125484-3 L57160-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CHGW-OS Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 160 | 160 | 0 | | 0--10 |

**LD:WG125484-4 L57311-1 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 | 80.2 | 80.3 | 0 | | 0--10 |

**Workgroup: WG125298 Nitrate, Nitrogen**

**MB:WG125298-1 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:WG125298-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125298-2 MB:WG125298-1 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 | 0.797 | 100 | | 80--120 |

**SB:WG125298-2 MB:WG125298-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.387 | 97 | | 80--120 |

**LCS:WG125298-3 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 | 0.813 | 102 | | 85--115 |

**LCS:WG125298-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.392 | 98 | | 85--115 |

**LD:WG125298-4 L57160-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW-OS Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.159 | 0.158 | 1 | | 0--20 |

**MS:WG125298-5 L57160-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CHGW-OS Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.159 | 0.4 | 0.54 | 95 | | 75--125 |

**MB:WG125298-6 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:WG125298-7 L57311-1 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 | 0.269 | 0.27 | 0 | | 0--20 |

**MS:WG125298-8 L57311-1 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 | 0.269 | 0.8 | 1.06 | 99 | | 75--125 |

**LD:WG125298-9 L57246-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.1 | 0.4 | mg/L | 9.82 | 10 | 2 | | 0--20 |

**MS:WG125298-10 L57246-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.1 | 0.4 | mg/L | 9.82 | 0.8 | 17.6 | 98 | | 75--125 |

**LD:WG125298-11 L57342-1 Matrix: GRND WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421184 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 | 0.018 | 0.017 | | | 0--20 |

**MS:WG125298-12 L57342-1 Matrix: GRND WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:421184 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 | 0.018 | 0.8 | 0.796 | 97 | | 75--125 |

**LD:WG125298-13 L57334-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.05 | 0.2 | mg/L | 1.93 | 1.92 | 1 | | 0--20 |

**MS:WG125298-14 L57334-3 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-CHLS-M 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 | 1.93 | 0.8 | 5.78 | 96 | | 75--125 |

**Workgroup: WG125410 Orthophosphate Phosphorus**

**MB:WG125410-1 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:WG125410-2 MB:WG125410-1 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 | 0.0377 | 94 | | 80--120 |

**LCS:WG125410-3 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 | 0.0398 | 99 | | 85--115 |

**LD:WG125410-4 L57311-1 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 | 0.00647 | 0.00562 | 14 | | 0--20 |

**MS:WG125410-5 L57311-1 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 | 0.00647 | 0.04 | 0.0429 | 91 | | 75--125 |

**LD:WG125410-6 L57334-5 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHLS-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.02 | 0.05 | mg/L | 0.537 | 0.523 | 3 | | 0--20 |

**MS:WG125410-7 L57334-5 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHLS-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.02 | 0.05 | mg/L | 0.537 | 0.04 | 0.916 | 95 | | 75--125 |

**LD:WG125410-8 L57246-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 2.71 | 2.74 | 1 | | 0--20 |

**MS:WG125410-9 L57246-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 2.71 | 0.08 | 6.6 | 97 | | 75--125 |

**MB:WG125410-10 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:WG125410-11 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 | 0.0378 | 95 | | 85--115 |

**LD:WG125410-12 L57350-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | <MDL | | | 0--20 |

**MS:WG125410-13 L57350-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | 0.04 | 0.188 | 94 | | 75--125 |

**Workgroup: WG125366 TKN**

**MB:WG125366-1 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 | |

**LCS:WG125366-2 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 | 0.514 | 103 | | 80--120 |

**LCS:WG125366-3 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 | 5 | 5.04 | 101 | | 80--120 |

**SB:WG125366-4 MB:WG125366-1 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 | 4.87 | 97 | | 80--120 |

**LD:WG125366-5 L57311-1 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 | 1.91 | 1.94 | 1 | | 0--20 |

**MS:WG125366-6 L57311-1 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 | 1.91 | 5 | 7.12 | 104 | | 70--130 |

**LD:WG125366-7 L57246-3 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 | 16.3 | 16.5 | 1 | | 0--20 |

**MS:WG125366-8 L57246-3 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 | 16.3 | 5 | 66.8 | 101 | | 70--130 |

**LD:WG125366-9 L57221-14 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 | 0.268 | 0.251 | 7 | | 0--20 |

**MS:WG125366-10 L57221-14 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 | 0.268 | 5 | 5.09 | 96 | | 70--130 |

**Workgroup: WG125435 Total Nitrogen & Total Phosphorus**

**MB:WG125435-1 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:WG125435-1 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:WG125435-2 MB:WG125435-1 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 | 0.959 | 96 | | 80--120 |

**SB:WG125435-2 MB:WG125435-1 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 | 0.1 | 100 | | 80--120 |

**LCS:WG125435-3 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 | 0.908 | 91 | | 85--115 |

**LCS:WG125435-3 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 | 0.0961 | 96 | | 85--115 |

**LD:WG125435-4 L57378-16 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.319 | 0.313 | 2 | | 0--20 |

**LD:WG125435-4 L57378-16 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0097 | 0.0095 | | | 0--20 |

**MS:WG125435-5 L57378-16 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 | 0.319 | 1 | 1.27 | 95 | | 75--125 |

**MS:WG125435-5 L57378-16 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 | 0.0097 | 0.1 | 0.107 | 97 | | 75--125 |

**MB:WG125435-6 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:WG125435-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD (Method Blank)**

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

**LCS:WG125435-7 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 | 0.92 | 92 | | 85--115 |

**LCS:WG125435-7 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 | 0.0939 | 94 | | 85--115 |

**LD:WG125435-8 L57313-8 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.918 | 0.939 | 2 | | 0--20 |

**LD:WG125435-8 L57313-8 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0324 | 0.0347 | 7 | | 0--20 |

**MS:WG125435-9 L57313-8 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 0.918 | 1 | 1.85 | 94 | | 75--125 |

**MS:WG125435-9 L57313-8 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0324 | 0.1 | 0.131 | 99 | | 75--125 |

**LD:WG125435-10 L57171-2 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 | 0.0054 | 0.0064 | | | 0--20 |

**MS:WG125435-11 L57171-2 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 | 0.0054 | 0.1 | 0.103 | 97 | | 75--125 |

**LD:WG125435-12 L57341-4 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 | 0.0189 | 0.0195 | 3 | | 0--20 |

**MS:WG125435-13 L57341-4 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 | 0.0189 | 0.1 | 0.116 | 97 | | 75--125 |

**MB:WG125435-14 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125435-15 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 | 0.0936 | 94 | | 85--115 |

**LD:WG125435-16 L57246-1 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 | 0.05 | 0.1 | mg/L | 2.94 | 2.92 | 0 | | 0--20 |

**MS:WG125435-17 L57246-1 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 | 0.05 | 0.1 | mg/L | 2.94 | 0.1 | 3.94 | 101 | | 75--125 |

**LD:WG125435-18 L57311-1 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 | 0.05 | 0.1 | mg/L | 0.459 | 0.426 | 8 | | 0--20 |

**MS:WG125435-19 L57311-1 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 | 0.05 | 0.1 | mg/L | 0.459 | 0.1 | 1.4 | 94 | | 75--125 |

**Workgroup: WG125371 TSS**

**MB:WG125371-1 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:WG125371-2 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 | 91 | 91 | | 80--120 |

**LD:WG125371-3 L57160-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW-OS Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 6.8 | 7.4 | 8 | | 0--25 |

**LD:WG125371-4 L57192-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 4.2 | 3.6 | 15 | | 0--25 |

**MB:WG125371-5 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:WG125371-6 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 | 87 | 87 | | 80--120 |

**LD:WG125371-7 L57194-7 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421240A 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 | | | 0--25 |

**LD:WG125371-8 L57311-1 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 | 298 | 260 | 14 | | 0--25 |

**Workgroup: WG125285 Turbidity**

**LCS:WG125285-1 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 | 9.65 | 97 | | 90--110 |

**LD:WG125285-2 L57192-9 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 1.04 | 1.07 | 3 | | 0--25 |

**LCS:WG125285-3 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 | 10 | 9.82 | 98 | | 90--110 |

**LD:WG125285-4 L57194-6 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 2.36 | 2.34 | 1 | | 0--25 |

**LCS:WG125285-5 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 |

**LD:WG125285-6 L57194-12 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 6.03 | 6.05 | 0 | | 0--25 |

**LD:WG125285-7 L57311-1 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 | 1 | 2.5 | NTU | 316 | 308 | 3 | | 0--25 |

**LCS:WG125285-8 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 | 97.4 | 97 | | 90--110 |

**Workgroup: WG125266 Fecal coliform**

**BF:WG125242-3 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:WG125242-4 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 | 1 | PASS |

**PC:WG125249-2 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:WG125249-3 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 |

**Workgroup: WG125270 Fecal coliform**

**PC:WG125249-2 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:WG125249-3 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:WG125249-4 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:WG125249-5 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: WG125590 Total Metals & Hardness**

**MB:WG125590-1 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:WG125590-1 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:WG125590-2 MB:WG125590-1 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:WG125590-2 MB:WG125590-1 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 | 20.5 | 103 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5060 | 101 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5290 | 106 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 20.9 | 105 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4890 | 98 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5270 | 105 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.9 | 104 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.8 | 104 | | 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 | 20.2 | 101 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.1 | 105 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 20.1 | 101 | | 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 | 19.7 | 98 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.6 | 103 | | 85--115 |

**LD:WG125590-3 L57350-4 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 | 17.3 | 17.2 | 0 | | 0--20 |

**LD:WG125590-3 L57350-4 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 | 3160 | 3210 | 2 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 1200 | 1200 | 1 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 111 | 112 | 0 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 520 | 522 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4950 | 4920 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.37 | 0.37 | | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 66.2 | 66.3 | 0 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 4.28 | 4.29 | 0 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.065 | 0.066 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.22 | 0.23 | | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.4 | 0.45 | | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 1.5 | | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 0.16 | | | 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 | 6.9 | 7.02 | 2 | | 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 | 0.12 | 0.13 | | | 0--20 |

**MS:WG125590-4 L57350-4 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 | 17.3 | 33.1 | 49.8 | 98 | | 75--125 |

**MS:WG125590-4 L57350-4 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 | 20 | 100 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 3160 | 5000 | 8070 | 98 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 1200 | 5000 | 6280 | 102 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 111 | 20 | 127 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 520 | 5000 | 5570 | 101 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4950 | 5000 | 9600 | 93 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.37 | 20 | 20.1 | 99 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 66.2 | 5000 | 5140 | 102 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 4.28 | 20 | 24 | 98 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.065 | 20 | 20 | 100 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.22 | 20 | 20.9 | 104 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 0.4 | 20 | 21 | 103 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 1.6 | 20 | 21.4 | 99 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 20 | 19.8 | 98 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 19.3 | 96 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.3 | 96 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 6.9 | 20 | 26.4 | 97 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.12 | 20 | 20.7 | 103 | | 75--125 |

**Workgroup: WG125448 Total & Dissolved Mercury**

**MB:WG125448-1 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:WG125448-1 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:WG125448-2 MB:WG125448-1 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 | 0.919 | 92 | | 85--115 |

**MSD:WG125448-4 MS:WG125448-3 L57340-1 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-VAGW 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 | 0.838 | 84 | | 75--125 | 1 | 0.856 | 86 | | 2 | | 0--20 |

**MSD:WG125448-6 MS:WG125448-5 L57333-1 Matrix: LEACHATE Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-VALS-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, Dissolved, CVAA | 0.1 | 0.2 | ug/L | <MDL | 2 | 1.84 | 92 | | 75--125 | 2 | 1.84 | 92 | | 0 | | 0--20 |

**Workgroup: WG125642 Dissolved Metals**

**MB:WG125642-1 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:WG125642-2 MB:WG125642-1 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 | 21.1 | 106 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5170 | 103 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5190 | 104 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 22.7 | 113 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5260 | 105 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5290 | 106 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 21.9 | 110 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.5 | 112 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 23 | 115 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 22.3 | 111 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.1 | 110 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 22.5 | 113 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 21.6 | 108 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 21.3 | 107 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21.8 | 109 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 22.7 | 114 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.8 | 114 | | 85--115 |

**LD:WG125642-3 L57350-9 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5150 | 5260 | 2 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2490 | 2500 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 73.8 | 74 | 0 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 995 | 984 | 1 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9090 | 9110 | 0 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.876 | 3 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.22 | 0.22 | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 162 | 161 | 1 | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 27.4 | 27.3 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.14 | 0.14 | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.4 | 0.4 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 5.27 | 5.22 | 1 | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 3.04 | 3.01 | 1 | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.45 | 0.46 | | | 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 | 4.7 | 4.73 | 1 | | 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:WG125642-4 L57350-9 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5150 | 5000 | 10700 | 112 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2490 | 5000 | 7730 | 105 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 73.8 | 20 | 95.3 | 108 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 995 | 5000 | 6240 | 105 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9090 | 5000 | 13800 | 93 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 21.9 | 105 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.22 | 20 | 21.3 | 105 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 162 | 5000 | 5240 | 102 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 27.4 | 20 | 49.8 | 112 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.14 | 20 | 20.7 | 103 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.4 | 20 | 22 | 108 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 5.27 | 20 | 25.5 | 101 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 3.04 | 20 | 24.3 | 106 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.45 | 20 | 21.4 | 105 | | 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 | 20.5 | 103 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.9 | 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 | 20.6 | 103 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 4.7 | 20 | 25.5 | 104 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.5 | 107 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.7 | 108 | | 75--125 |

**Workgroup: WG125376 Herbicides**

**MB:WG125376-1 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 | |

**SB:WG125376-2 MB:WG125376-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.41 | 88 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.01 | 100 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.11 | 102 | | 59--151 |

**MSD:WG125376-4 MS:WG125376-3 L57311-1 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 | 4.77 | 95 | | 20--162 | 5 | 4.83 | 97 | | 1 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.6 | 112 | | 10--196 | 5 | 5.74 | 115 | | 3 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.62 | 92 | | 30--150 | 5 | 6.3 | 126 | | 31 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57311-1 | 83 | 69 |
| WG125376-1 | 74 | 88 |
| WG125376-2 | 83 | 107 |
| WG125376-3 | 89 | 84 |
| WG125376-4 | 90 | 78 |

**Workgroup: WG125307 Organo Phosphorus Pesticides**

**MB:WG125307-1 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:WG125307-3 SB:WG125307-2 MB:WG125307-1 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 | BD Value | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.043 | 0.05 | ug/L | <MDL | 0.25 | 0.19 | 76 | | 52--129 | 0.25 | 0.182 | 73 | | 4 | | 0--40 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.192 | 77 | | 25--161 | 0.25 | 0.188 | 75 | | 2 | | 0--40 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.211 | 84 | | 57--127 | 0.25 | 0.196 | 78 | | 7 | | 0--40 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.205 | 82 | | 70--98 | 0.25 | 0.211 | 84 | | 3 | | 0--40 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | <MDL | 0 | * | 40--160 | 0.25 | <MDL | 0 | * | | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57311-1 | 94 |
| WG125307-1 | 71 |
| WG125307-2 | 85 |
| WG125307-3 | 83 |

**Workgroup: WG125349 Semi Volatile Organics**

**MB:WG125349-1 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 | 0.0698 | B |
| 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 | <MDL | |
| 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 | 0.165 | 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 | |

**SBD:WG125349-3 SB:WG125349-2 MB:WG125349-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.16 | 46 | | 32--93 | 2.5 | 1.5 | 60 | | 26 | | 0--40 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.757 | 30 | | 25--104 | 2.5 | 1.1 | 44 | | 37 | | 0--40 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.14 | 85 | | 31--119 | 2.5 | 2.18 | 87 | | 2 | | 0--40 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.23 | 49 | | 49--107 | 2.5 | 1.48 | 59 | | 18 | | 0--40 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.05 | 42 | * | 43--103 | 2.5 | 1.3 | 52 | | 21 | | 0--40 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | 0.0698 | 2.5 | 2.26 | 88 | | 26--141 | 2.5 | 2.33 | 90 | | 3 | | 0--40 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.22 | 49 | | 43--127 | 2.5 | 1.44 | 58 | | 17 | | 0--40 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 2.24 | 90 | | 10--137 | 2.5 | 2.48 | 99 | | 10 | | 0--40 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.66 | 66 | | 57--114 | 2.5 | 1.87 | 75 | | 12 | | 0--40 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.71 | 68 | | 59--122 | 2.5 | 1.91 | 76 | | 11 | | 0--40 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.38 | 95 | | 52--145 | 2.5 | 2.57 | 103 | | 7 | | 0--40 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.22 | 89 | | 57--123 | 2.5 | 2.34 | 94 | | 5 | | 0--40 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.27 | 91 | | 51--139 | 2.5 | 2.39 | 95 | | 5 | | 0--40 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.69 | 108 | | 49--145 | 2.5 | 2.83 | 113 | | 5 | | 0--40 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.34 | 93 | | 67--130 | 2.5 | 2.47 | 99 | | 6 | | 0--40 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.37 | 95 | | 58--114 | 2.5 | 2.5 | 100 | | 5 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.165 | 2.5 | 2.29 | 85 | | 48--128 | 2.5 | 2.49 | 93 | | 8 | | 0--40 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.17 | 87 | | 51--126 | 2.5 | 2.34 | 94 | | 8 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.22 | 96 | | 49--139 | 7.5 | 7.45 | 99 | | 3 | | 0--40 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.38 | 95 | | 55--132 | 2.5 | 2.47 | 99 | | 4 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.13 | 85 | | 53--122 | 2.5 | 2.25 | 90 | | 6 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.15 | 86 | | 47--134 | 2.5 | 2.25 | 90 | | 5 | | 0--40 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 1.75 | 70 | | 32--130 | 2.5 | 1.8 | 72 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57311-1 | 97 | 55 | 59 | 90 | 56 | 66 | 70 |
| WG125349-1 | 88 | 75 | 75 | 85 | 71 | 81 | 86 |
| WG125349-2 | 68 | 44 | 66 | 80 | 65 | 74 | 76 |
| WG125349-3 | 69 | 47 | 75 | 84 | 72 | 82 | 80 |

**Workgroup: WG125308 WTPH-Dx**

**MB:WG125308-1 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:WG125308-2 MB:WG125308-1 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 | 0.994 | 99 | | 50--150 |

**SB:WG125308-3 MB:WG125308-1 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 | 0.873 | 87 | | 50--150 |

**LD:WG125308-4 L57311-4 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 | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57213-2 | 82 | 99 |
| L57311-3 | 85 | 96 |
| L57311-4 | 86 | 98 |
| WG125308-1 | 80 | 98 |
| WG125308-2 | 88 | 100 |
| WG125308-3 | 93 | 99 |
| WG125308-4 | 88 | 98 |

**Workgroup: WG125283 WTPH-G**

**MB:WG125283-1 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:WG125283-2 MB:WG125283-1 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 | 416 | 83 | | 50--150 |

**LD:WG125283-3 L57213-2 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-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L57213-2 | 84 | 92 |
| L57311-3 | 85 | 92 |
| L57311-4 | 86 | 91 |
| WG125283-1 | 85 | 93 |
| WG125283-2 | 83 | 91 |
| WG125283-3 | 85 | 93 |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *1/23/2013 and 2/5/2013*

**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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **Reviewer:** *Dave Hunn* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *2/20/2013*

**WG #(s):** *WG125448*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57311-1*

**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:** David Chin | _____ | _____ |
| **Supervisor:** *Diane McElhany* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** Fritz Grothkopp | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *2/5/13*

**WG #(s):** *WG125642*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57311-1, L57385-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *26-Feb-13*

**WG #(s):** *WG125307*

☒ **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: *7890G* |

## 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. There was no recovery of Prometon in the SB or 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: *R*
☐ Other
☒ Sample(s) re-prepared and re-analyzed
☒ Asterisk(s) applied to QC Report outlier(s)

**Corrective Action Description:**
*2. The sample was re-extracted and re-analyzed with similar results. The re-analysis was reported. An"*" was applied to the QC report and a "R" qualifier applied to Prometon for all associated samples.*

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

*2. Given there was no recovery in the SB and SBD, the analytical results for Prometon are unusable.*

| | 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

May 6, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57385-1, 5, collected February 25, 2013.

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on February 25, 2013. The samples were 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 #15212 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
There were no sampling anomalies to report. The grab samples for location FCSW01 and FCSW02 and the composite sample for location FCSW02 were not collected during this event.

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

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.



1202M

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.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

Prometon recovery in the matrix spike (L57435-1) for Organophosphorus Pesticide analysis was outside the upper control range at 212% (range: 40 – 160%). All other QC results for Prometon were within control. The result was flagged with an "*" in the QC report. 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 infomation, please call me at 684-2327.

# King County Environmental Lab Analytical Report

| | | | |
|---|---|---|---|
| Project: | 421879-210 | Project: | 421879-210 |
| Locator: | FCSW01 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD COMME | Descrip: | FIELD FILTER BLANK |
| Sample: | L57385-1 | Sample: | L57385-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 2/25/13 0:46 | ColDate: | 2/25/13 13:35 |
| TimeSpan: | 3.07 | 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 | 0.77 | SH | 0.1 | 0.2 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.033 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | |
| Turbidity | 58.7 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | |
| Conductivity | 33.4 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | |
| Total Suspended Solids | 60 | | 5 | 10 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | |
| Chloride | 3.87 | | 0.25 | 0.5 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.168 | | 0.01 | 0.04 | mg/L | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | |
| Total Phosphorus | 0.073 | <RDL | 0.05 | 0.1 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.0106 | H | 0.002 | 0.005 | mg/L | | <MDL | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | |
| Biochemical Oxygen Demand | 2.82 | | 2 | 2 | mg/L | | | | | |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | 0.066 | <RDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | 3100 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | 3.22 | H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | 14.1 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | 0.29 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | 6.16 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | 1130 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | 9.8 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | 46.7 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | |
| Hardness, Calc | 12.4 | | 0.331 | 0.331 | mg CaCO3/L | | | | | |
| **MT EPA 245.1*SW846 7470A** | | | | | | | | | | |
| Mercury, Dissolved, CVAA | | <MDL | 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 | | | | | |
| Anthracene | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Benzo(a)anthracene | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |

# King County Environmental Lab Analytical Report

| | | | |
|---|---|---|---|
| Project: | 421879-210 | Project: | 421879-210 |
| Locator: | FCSW01 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD COMME | Descrip: | FIELD FILTER BLANK |
| Sample: | L57385-1 | Sample: | L57385-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 2/25/13 0:46 | ColDate: | 2/25/13 13:35 |
| TimeSpan: | 3.07 | 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(a)pyrene | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| 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 | 0.069 | <RDL | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 1.75 | B | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | 0.0507 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | 0.144 | | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | 0.057 | | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | 0.529 | | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | 0.035 | | 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 | 0.0263 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pentachlorophenol | | <MDL | 0.12 | 0.236 | ug/L | | | | | |
| Phenanthrene | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | 0.0806 | | 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 | 0.49 | 0.98 | ug/L | | | | | |
| MCPP | | <MDL | 0.49 | 0.98 | ug/L | | | | | |
| Triclopyr | | <MDL | 0.49 | 0.98 | 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 | L57385-1 | 0.77 | 0.033 | 58.7 | 33.4 | 60 | 3.87 | 0.168 | 0.073 | 0.0106 | 2.82 | 0.066 | 3100 | 3.22 | 14.1 | 0.29 | 6.16 | 1130 | 9.8 | 46.7 | 12.4 |
| * 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 | Chrysene | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Naphthalene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| FCSW01 | 421879-210 | L57385-1 | 0.069 | 1.75 | 0.0507 | 0.057 | 0.529 | 0.144 | 0.035 | 0.0263 | 0.0806 |
| * Not converted to dry weight basis | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | |

Fall City

Login: P57385

NPDES Stormwater Permit Monitoring

Personnel: RWG, JD

Project: 421879-210

CHAIN OF CUSTODY

| Relinquished by | Date | Time |
|---|---|---|
| [signature] | 2-25-13 | 1350 |
| Received by [signature] | Date 2-25-13 | Time 1350 |
| Sample Numbers | | [All] |

| Sample Number | P57385-1 | P57385-2 | P57385-3 |
|---|---|---|---|
| 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 Samp 1 | 2/25/13 0046 | | |
| End Date/Time Samp 17 | 2/25/13 0350 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 2/25/13<br>3 LG BOD STOPPED<br>3 LG CL<br>3 LG COND 1044<br>3 LG MBAS<br>3 LG NO23 out @<br>3 LG ORTHOP 1150<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB SPLIT @<br>6 LG CA-ICPMS 1335<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>Samp temp at lab = 4.0°c | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

CHAIN OF CUSTODY

| Relinquished by | Date | Time |
|---|---|---|
| Received by | Date | Time |
| Sample Numbers | | [All] |

Login: P57385 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P57385-4 | P57385-5 | |
|---|---|---|---|
| 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 | | 2/25/13 1335 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

*Professional Analytical Services*

Feb 27 2013
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 |
|---|---|---|---|
| P57385-1 | Water | 13-A002142 | CONV |

Your sample was received on Tuesday, February 26, 2013. 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

**Am Test Inc.**
13600 NE 126TH PL
Suite C
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(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 #: 421879-210
All results reported on an as received basis.

Date Received: 02/26/13
Date Reported: 2/27/13

---

**AMTEST Identification Number** 13-A002142
**Client Identification** P57385-1
**Sampling Date** 02/25/13, 03:50

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.033 | mg/l | | 0.025 | SM 5540C | EB | 02/27/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A002142**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A002142 | Surfactants | mg/l | 0.033 | 0.181 | 0.125 | 118.40 % |
| 13-A002142 | Surfactants | mg/l | 0.033 | 0.180 | 0.125 | 117.60 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.181 | 0.180 | 0.55 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.132 | 106. % |

## 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 1380661

Project Name: _____ Date Received: 2/26/13 Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 9.1 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):

_____

_____

_____

_____

_____

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.

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-11
Shipment Method: ENA
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*

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| P57385-1 | 2/25/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 3:50AM |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

*Please return signed original CoC with data package.*

T=9.1°C

Requested TAT: 14 Days
Data Package Due: 3/18/2013

| | | | |
|---|---|---|---|
| RELINQUISHED BY Signature | | Date 2-26-13 | RECEIVED BY Signature |
| Printed Name | Jason Kinnard | Time 0930 | Printed Name Jeffrey Hunt |
| Organization | King County DNR, Environmental Laboratory | | Organization Am Test |

Date 2/26/13
Time 1130

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125596 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 2/25/2013 0:46 | 2/27/2013 14:13 | 2/27/2013 14:13 | WG125596-2,-1 | |
| L57395-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVBOD | FRESH WTR | 2/25/2013 9:55 | 2/27/2013 14:15 | 2/27/2013 14:15 | | |
| L57395-2 | 421422-CHSW-P2 | | CVBOD | FRESH WTR | 2/25/2013 10:13 | 2/27/2013 14:17 | 2/27/2013 14:17 | | |
| L57395-4 | 421422-CHSW-P2 | | CVBOD | FRESH WTR | 2/25/2013 9:35 | 2/27/2013 14:19 | 2/27/2013 14:19 | | |
| WG125596-1 | MB | | CVBOD | BLANK WTR | | 2/27/2013 14:02 | 2/27/2013 14:02 | | MB1 2/27/13 |
| WG125596-2 | SB | | CVBOD | BLANK WTR | | 2/27/2013 14:12 | 2/27/2013 14:12 | | WG125596-1 |

# King County Environmental Laboratory Batch Report

## NPDES SW Permit, SWM, L57385

**WG125615 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57163-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 2/7/2013 12:05 | 2/28/2013 15:43 | 2/28/2013 15:43 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57311-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 2/5/2013 5:43 | 2/28/2013 20:17 | 2/28/2013 20:17 | | |
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCL | GRND WTR | 2/20/2013 10:23 | 2/28/2013 23:50 | 2/28/2013 23:50 | | |
| L57338-1 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 10:23 | 3/1/2013 1:22 | 3/1/2013 1:22 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57352-4 | 421422-VAGW | | CVCL | GRND WTR | 2/20/2013 9:09 | 2/28/2013 15:13 | 2/28/2013 15:13 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57352-4 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 9:09 | 2/28/2013 15:13 | 2/28/2013 15:13 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | CVCL | GRND WTR | 2/22/2013 8:46 | 3/1/2013 6:26 | 3/1/2013 6:26 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57366-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/22/2013 8:46 | 3/1/2013 6:56 | 3/1/2013 6:56 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCL | GRND WTR | 2/22/2013 8:15 | 3/1/2013 7:27 | 3/1/2013 7:27 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57369-1 | 421422-CFGW | | CVSO4 | GRND WTR | 2/22/2013 8:15 | 3/1/2013 7:57 | 3/1/2013 7:57 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57369-3 | 421422-CFGW | | CVCL | GRND WTR | 2/22/2013 8:15 | 3/1/2013 8:28 | 3/1/2013 8:28 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57369-3 | 421422-CFGW | | CVSO4 | GRND WTR | 2/22/2013 8:15 | 3/1/2013 8:58 | 3/1/2013 8:58 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | CVCL | GRND WTR | 2/21/2013 10:09 | 3/1/2013 3:54 | 3/1/2013 3:54 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57372-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/21/2013 10:09 | 3/1/2013 4:24 | 3/1/2013 4:24 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57372-3 | 421422-ENGW | | CVCL | GRND WTR | 2/21/2013 10:52 | 3/1/2013 5:25 | 3/1/2013 5:25 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57372-3 | 421422-ENGW | | CVSO4 | GRND WTR | 2/21/2013 10:52 | 3/1/2013 5:55 | 3/1/2013 5:55 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57373-1 | 421422-ENGW | | CVCL | GRND WTR | 2/22/2013 10:24 | 3/1/2013 9:29 | 3/1/2013 9:29 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57373-1 | 421422-ENGW | | CVSO4 | GRND WTR | 2/22/2013 10:24 | 3/1/2013 9:59 | 3/1/2013 9:59 | WG125615-1,-2,-3,-4,-9,-10 | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 2/25/2013 0:46 | 2/28/2013 19:16 | 2/28/2013 19:16 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | CVCL | GRND WTR | 2/20/2013 8:40 | 3/1/2013 2:53 | 3/1/2013 2:53 | | |
| L57445-1 | 421422-VAGW | | CVSO4 | GRND WTR | 2/20/2013 8:40 | 3/1/2013 3:23 | 3/1/2013 3:23 | WG125615-1,-2,-3,-4,-9,-10 | |
| WG125615-1 | CS | | CVCL | BLANK WTR | | 2/28/2013 12:40 | 2/28/2013 12:40 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | RDL_LEVEL |
| WG125615-1 | CS | | CVSO4 | BLANK WTR | | 2/28/2013 12:40 | 2/28/2013 12:40 | WG125615-1,-2,-3,-4,-9,-10 | RDL_LEVEL |
| WG125615-2 | MB | | CVCL | BLANK WTR | | 2/28/2013 13:41 | 2/28/2013 13:41 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | MB 2/28/13 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125615-2 | MB | CVSO4 | BLANK WTR | 2/28/2013 13:41 | 2/28/2013 13:41 | WG125615-1,-2,-3,-4,-9,-10 | MB 2/28/13 |
| WG125615-3 | SB | CVCL | BLANK WTR | 2/28/2013 14:12 | 2/28/2013 14:12 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | WG125615-2 |
| WG125615-3 | SB | CVSO4 | BLANK WTR | 2/28/2013 14:12 | 2/28/2013 14:12 | WG125615-1,-2,-3,-4,-9,-10 | WG125615-2 |
| WG125615-4 | LCS | CVCL | BLANK WTR | 2/28/2013 14:42 | 2/28/2013 14:42 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | LEVEL1 |
| WG125615-4 | LCS | CVSO4 | BLANK WTR | 2/28/2013 14:42 | 2/28/2013 14:42 | WG125615-1,-2,-3,-4,-9,-10 | LEVEL1 |
| WG125615-5 | LD | CVCL | GRND WTR | 2/28/2013 16:14 | 2/28/2013 16:14 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | L57163-1 |
| WG125615-6 | MS | CVCL | GRND WTR | 2/28/2013 16:44 | 2/28/2013 16:44 | | L57163-1 |
| WG125615-7 | LD | CVCL | STORM WTR | 2/28/2013 20:47 | 2/28/2013 20:47 | | L57311-1 |
| WG125615-8 | MS | CVCL | STORM WTR | 2/28/2013 21:18 | 2/28/2013 21:18 | | L57311-1 |
| WG125615-9 | LD | CVCL | GRND WTR | 3/1/2013 0:21 | 3/1/2013 0:21 | | L57338-1 |
| WG125615-9 | LD | CVSO4 | GRND WTR | 3/1/2013 1:52 | 3/1/2013 1:52 | WG125615-1,-2,-3,-4,-9,-10 | L57338-1 |
| WG125615-10 | MS | CVCL | GRND WTR | 3/1/2013 0:51 | 3/1/2013 0:51 | WG125615-2,-3,-4,-5,-6,-7,-8,-9,-10,-1 | L57338-1 |
| WG125615-10 | MS | CVSO4 | GRND WTR | 3/1/2013 2:22 | 3/1/2013 2:22 | WG125615-1,-2,-3,-4,-9,-10 | L57338-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125712 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/4/2013 8:00 | 3/5/2013 14:00 | 3/5/2013 14:00 | WG125712-4,-5,-6,-1,-2,-3 | |
| L57371-1 | 421422-CFGW | | CVCOND | GRND WTR | 2/27/2013 8:35 | 3/5/2013 14:08 | 3/5/2013 14:08 | | |
| L57371-3 | 421422-CFGW | | CVCOND | GRND WTR | 2/27/2013 7:35 | 3/5/2013 14:28 | 3/5/2013 14:28 | | |
| L57374-1 | 421422-CFGW | | CVCOND | GRND WTR | 3/1/2013 7:10 | 3/5/2013 14:37 | 3/5/2013 14:37 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCOND | GRND WTR | 3/1/2013 11:57 | 3/5/2013 14:45 | 3/5/2013 14:45 | | |
| L57376-1 | 421422-HOGW | | CVCOND | GRND WTR | 2/27/2013 8:54 | 3/5/2013 14:55 | 3/5/2013 14:55 | | |
| L57377-1 | 421422-HOGW | | CVCOND | GRND WTR | 3/1/2013 10:30 | 3/5/2013 15:04 | 3/5/2013 15:04 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/4/2013 9:00 | 3/5/2013 15:12 | 3/5/2013 15:12 | | |
| L57377-4 | 421422-CFGW | | CVCOND | GRND WTR | 3/4/2013 7:20 | 3/5/2013 15:20 | 3/5/2013 15:20 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 2/25/2013 0:46 | 3/5/2013 13:55 | 3/5/2013 13:55 | | |
| L57386-1 | 421879-210 | | CVCOND | STORM WTR | 3/2/2013 16:24 | 3/5/2013 13:56 | 3/5/2013 13:56 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 2/26/2013 8:20 | 3/5/2013 15:28 | 3/5/2013 15:28 | | |
| L57394-3 | 421422-CFGW | | CVCOND | GRND WTR | 3/1/2013 7:50 | 3/5/2013 15:37 | 3/5/2013 15:37 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCOND | GRND WTR | 2/26/2013 9:35 | 3/5/2013 15:45 | 3/5/2013 15:45 | | |
| L57398-3 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 10:45 | 3/5/2013 15:54 | 3/5/2013 15:54 | | |
| L57398-4 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 10:03 | 3/5/2013 16:03 | 3/5/2013 16:03 | | |
| L57398-5 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 9:03 | 3/5/2013 16:11 | 3/5/2013 16:11 | | |
| L57398-6 | 421422-HOGW | | CVCOND | GRND WTR | 2/27/2013 7:58 | 3/5/2013 16:19 | 3/5/2013 16:19 | | |
| L57398-9 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 9:03 | 3/5/2013 16:27 | 3/5/2013 16:27 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/2/2013 17:42 | 3/5/2013 13:58 | 3/5/2013 13:58 | | |
| WG125712-1 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 13:44 | 3/5/2013 13:44 | | LEVEL1 |
| WG125712-2 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 13:45 | 3/5/2013 13:45 | | LEVEL2 |
| WG125712-3 | LD | | CVCOND | STORM WTR | | 3/5/2013 13:59 | 3/5/2013 13:59 | | L57435-1 |
| WG125712-4 | LD | | CVCOND | GRND WTR | | 3/5/2013 16:35 | 3/5/2013 16:35 | | L57398-9 |
| WG125712-5 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 16:45 | 3/5/2013 16:45 | | LEVEL1 |
| WG125712-6 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 16:46 | 3/5/2013 16:46 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125660 Dissolved Nutrients - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57371-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 2/27/2013 8:35 | 2/28/2013 13:05 | 3/1/2013 14:08 | WG125660-1,-2,-3,-4,-5,-6 | |
| L57371-3 | 421422-CFGW | | CVNO3 | GRND WTR | 2/27/2013 7:35 | 2/28/2013 13:05 | 3/1/2013 14:16 | | |
| L57374-1 | 421422-CFGW | | CVNO3 | GRND WTR | 3/1/2013 7:10 | 3/1/2013 13:50 | 3/1/2013 14:45 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVNO3 | GRND WTR | 3/1/2013 11:57 | 3/1/2013 13:50 | 3/1/2013 14:47 | | |
| L57376-1 | 421422-HOGW | | CVNO3 | GRND WTR | 2/27/2013 8:54 | 2/28/2013 13:05 | 3/1/2013 14:29 | | |
| L57377-1 | 421422-HOGW | | CVNO3 | GRND WTR | 3/1/2013 10:30 | 3/1/2013 13:50 | 3/1/2013 15:00 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 2/25/2013 0:46 | 3/1/2013 13:50 | 3/1/2013 15:04 | | |
| L57385-5 | 421879-210 | | CVNO23 | BLANK WTR | 2/25/2013 13:35 | 3/1/2013 13:50 | 3/1/2013 15:12 | | |
| L57394-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/1/2013 7:50 | 3/1/2013 13:50 | 3/1/2013 15:02 | | |
| L57398-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVNO3 | GRND WTR | 2/28/2013 10:45 | 2/28/2013 13:05 | 3/1/2013 14:31 | | |
| L57398-4 | 421422-HOGW | | CVNO3 | GRND WTR | 2/28/2013 10:03 | 2/28/2013 13:05 | 3/1/2013 14:33 | | |
| L57398-5 | 421422-HOGW | | CVNO3 | GRND WTR | 2/28/2013 9:03 | 2/28/2013 13:05 | 3/1/2013 14:35 | | |
| L57398-6 | 421422-HOGW | | CVNO3 | GRND WTR | 2/27/2013 7:58 | 2/28/2013 13:05 | 3/1/2013 14:37 | | |
| L57398-9 | 421422-HOGW | | CVNO3 | GRND WTR | 2/28/2013 9:03 | 2/28/2013 13:05 | 3/1/2013 14:39 | | |
| WG125660-1 | MB | | CVNO23 | BLANK WTR | | 2/28/2013 13:05 | 3/1/2013 14:00 | | CONNUTS1 |
| WG125660-1 | MB | | CVNO3 | BLANK WTR | | 2/28/2013 13:05 | 3/1/2013 14:00 | | CONNUTS1 |
| WG125660-2 | SB | | CVNO23 | BLANK WTR | | 2/28/2013 13:05 | 3/1/2013 14:02 | | WG125660-1 |
| WG125660-2 | SB | | CVNO3 | BLANK WTR | | 2/28/2013 13:05 | 3/1/2013 14:02 | | WG125660-1 |
| WG125660-3 | LCS | | CVNO23 | BLANK WTR | | 3/1/2013 14:04 | 3/1/2013 14:04 | | LEVEL1 |
| WG125660-3 | LCS | | CVNO3 | BLANK WTR | | 3/1/2013 14:04 | 3/1/2013 14:04 | | LEVEL1 |
| WG125660-4 | LD | | CVNO3 | GRND WTR | | 2/28/2013 13:05 | 3/1/2013 14:10 | | L57371-1 |
| WG125660-5 | MS | | CVNO3 | GRND WTR | | 2/28/2013 13:05 | 3/1/2013 14:12 | | L57371-1 |
| WG125660-6 | MB | | CVNO23 | BLANK WTR | | 3/1/2013 13:50 | 3/1/2013 14:43 | | CONNUTS1 |
| WG125660-6 | MB | | CVNO3 | BLANK WTR | | 3/1/2013 13:50 | 3/1/2013 14:43 | | CONNUTS1 |
| WG125660-7 | LD | | CVNO23 | STORM WTR | | 3/1/2013 13:50 | 3/1/2013 15:06 | | L57385-1 |
| WG125660-8 | MS | | CVNO23 | STORM WTR | | 3/1/2013 13:50 | 3/1/2013 15:08 | | L57385-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125731 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 2/25/2013 0:46 | 3/6/2013 14:30 | 3/6/2013 15:47 | WG125731-1,-2,-3,-4,-6,-7,-8,-9,-10,-11,-12,-13,-5 | |
| L57385-5 | 421879-210 | | CVORTHOP | BLANK WTR | 2/25/2013 13:35 | 3/6/2013 14:30 | 3/6/2013 15:49 | | |
| L57386-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/2/2013 16:24 | 3/6/2013 14:30 | 3/6/2013 15:32 | | |
| L57386-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/4/2013 10:00 | 3/6/2013 14:30 | 3/6/2013 15:40 | | |
| L57435-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/2/2013 17:42 | 3/6/2013 14:30 | 3/6/2013 15:42 | | |
| L57435-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/3/2013 10:55 | 3/6/2013 14:30 | 3/6/2013 15:44 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVORTHOP | EFFLUENT | 3/4/2013 7:07 | 3/6/2013 14:30 | 3/6/2013 16:09 | | |
| L57440-3 | 421430-300 | | CVORTHOP | EFFLUENT | 3/4/2013 7:56 | 3/6/2013 14:30 | 3/6/2013 16:18 | | |
| L57440-5 | 421430-300 | | CVORTHOP | BLANK WTR | 3/5/2013 7:38 | 3/6/2013 14:30 | 3/6/2013 16:30 | | |
| L57442-1 | 421195-150 | Beaver Lake | CVORTHOP | FRESH WTR | 2/26/2013 10:10 | 3/6/2013 14:30 | 3/6/2013 15:59 | | |
| L57442-2 | 421195-150 | | CVORTHOP | FRESH WTR | 2/26/2013 9:50 | 3/6/2013 14:30 | 3/6/2013 16:07 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/6/2013 6:51 | 3/6/2013 14:30 | 3/6/2013 17:10 | | |
| L57490-3 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 3/6/2013 7:46 | 3/6/2013 14:30 | 3/6/2013 17:12 | | |
| L57490-4 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 3/6/2013 8:34 | 3/6/2013 14:30 | 3/6/2013 17:14 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVORTHOP | LEACHATE | 3/5/2013 7:25 | 3/6/2013 14:30 | 3/6/2013 16:39 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 7:42 | 3/6/2013 14:30 | 3/6/2013 16:47 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 8:40 | 3/6/2013 14:30 | 3/6/2013 16:57 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:50 | 3/6/2013 14:30 | 3/6/2013 16:59 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:35 | 3/6/2013 14:30 | 3/6/2013 17:02 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 7:37 | 3/6/2013 14:30 | 3/6/2013 17:04 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 10:15 | 3/6/2013 14:30 | 3/6/2013 17:06 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:15 | 3/6/2013 14:30 | 3/6/2013 17:08 | | |
| WG125731-1 | MB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 15:15 | | CONNUTS3 |
| WG125731-2 | SB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 15:17 | | WG125731-1 |
| WG125731-3 | LCS | | CVORTHOP | BLANK WTR | | 3/6/2013 15:19 | 3/6/2013 15:19 | | LEVEL1 |
| WG125731-4 | LD | | CVORTHOP | STORM WTR | | 3/6/2013 14:30 | 3/6/2013 15:34 | | L57386-1 |
| WG125731-5 | MS | | CVORTHOP | STORM WTR | | 3/6/2013 14:30 | 3/6/2013 15:36 | | L57386-1 |
| WG125731-6 | LD | | CVORTHOP | FRESH WTR | | 3/6/2013 14:30 | 3/6/2013 16:01 | | L57442-1 |
| WG125731-7 | MS | | CVORTHOP | FRESH WTR | | 3/6/2013 14:30 | 3/6/2013 16:03 | | L57442-1 |
| WG125731-8 | LD | | CVORTHOP | EFFLUENT | | 3/6/2013 14:30 | 3/6/2013 16:12 | | L57440-1 |
| WG125731-9 | MS | | CVORTHOP | EFFLUENT | | 3/6/2013 14:30 | 3/6/2013 16:14 | | L57440-1 |
| WG125731-10 | MB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 16:32 | | CONNUTS3 |
| WG125731-11 | LCS | | CVORTHOP | BLANK WTR | | 3/6/2013 16:34 | 3/6/2013 16:34 | | LEVEL1 |
| WG125731-12 | LD | | CVORTHOP | LEACHATE | | 3/6/2013 14:30 | 3/6/2013 16:41 | | L57493-1 |
| WG125731-13 | MS | | CVORTHOP | LEACHATE | | 3/6/2013 14:30 | 3/6/2013 16:43 | | L57493-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125623 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57341-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTKN | FRESH WTR | 2/11/2013 9:13 | 2/28/2013 7:50 | 3/5/2013 15:08 | WG125623-1,-2,-3,-4,-5,-6,-7,-8 | |
| L57341-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/11/2013 9:54 | 2/28/2013 7:50 | 3/5/2013 15:10 | | |
| L57341-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/11/2013 10:21 | 2/28/2013 7:50 | 3/5/2013 15:12 | | |
| L57341-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/11/2013 10:47 | 2/28/2013 7:50 | 3/5/2013 15:14 | | |
| L57350-1 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 4:40 | 2/28/2013 7:50 | 3/5/2013 15:26 | | |
| L57350-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 5:20 | 2/28/2013 7:50 | 3/5/2013 15:28 | | |
| L57350-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 5:40 | 2/28/2013 7:50 | 3/5/2013 15:31 | | |
| L57350-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 6:00 | 2/28/2013 7:50 | 3/5/2013 15:33 | | |
| L57350-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 6:40 | 2/28/2013 7:50 | 3/5/2013 15:35 | | |
| L57350-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 7:15 | 2/28/2013 7:50 | 3/5/2013 15:37 | | |
| L57350-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 9:16 | 2/28/2013 7:50 | 3/5/2013 15:45 | | |
| L57350-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 9:15 | 2/28/2013 7:50 | 3/5/2013 15:58 | | |
| L57350-9 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 10:10 | 2/28/2013 7:50 | 3/5/2013 16:00 | | |
| L57350-10 | 421422-CHSW-M | | CVTKN | FRESH WTR | 2/12/2013 10:37 | 2/28/2013 7:50 | 3/5/2013 16:02 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 2/25/2013 0:46 | 2/28/2013 7:50 | 3/5/2013 16:04 | | |
| WG125623-1 | MB | | CVTKN | BLANK WTR | | 2/28/2013 7:50 | 3/5/2013 14:57 | | MB130228 |
| WG125623-2 | LCS | | CVTKN | BLANK WTR | | 2/28/2013 7:50 | 3/5/2013 14:59 | | LEVEL1 |
| WG125623-3 | LCS | | CVTKN | BLANK WTR | | 2/28/2013 7:50 | 3/5/2013 15:01 | | LEVEL2 |
| WG125623-4 | SB | | CVTKN | BLANK WTR | | 2/28/2013 7:50 | 3/5/2013 15:03 | | WG125623-1 |
| WG125623-5 | LD | | CVTKN | FRESH WTR | | 2/28/2013 7:50 | 3/5/2013 15:39 | | L57350-6 |
| WG125623-6 | MS | | CVTKN | FRESH WTR | | 2/28/2013 7:50 | 3/5/2013 15:41 | | L57350-6 |
| WG125623-7 | LD | | CVTKN | STORM WTR | | 2/28/2013 7:50 | 3/5/2013 16:06 | | L57385-1 |
| WG125623-8 | MS | | CVTKN | STORM WTR | | 2/28/2013 7:50 | 3/5/2013 16:08 | | L57385-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125674 Total Nitrogen, Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57017-29 | 421195-250 | CDC Grant | CVTOTN | FRESH WTR | 2/19/2013 8:45 | 2/27/2013 10:30 | 3/1/2013 13:37 | WG125674-1,-2,-3,-6,-7 | |
| L57017-29 | 421195-250 | | CVTOTP | FRESH WTR | 2/19/2013 8:45 | 2/27/2013 10:30 | 3/1/2013 13:37 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57017-33 | 421195-250 | | CVTOTN | FRESH WTR | 2/19/2013 11:30 | 2/27/2013 10:30 | 3/1/2013 13:39 | WG125674-1,-2,-3,-6,-7 | |
| L57017-33 | 421195-250 | | CVTOTP | FRESH WTR | 2/19/2013 11:30 | 2/27/2013 10:30 | 3/1/2013 13:39 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57017-38 | 421195-250 | | CVTOTN | FRESH WTR | 2/19/2013 13:45 | 2/27/2013 10:30 | 3/1/2013 13:41 | WG125674-1,-2,-3,-6,-7 | |
| L57017-38 | 421195-250 | | CVTOTP | FRESH WTR | 2/19/2013 13:45 | 2/27/2013 10:30 | 3/1/2013 13:41 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57017-43 | 421195-250 | | CVTOTN | FRESH WTR | 2/19/2013 9:30 | 2/27/2013 10:30 | 3/1/2013 13:43 | WG125674-1,-2,-3,-6,-7 | |
| L57017-43 | 421195-250 | | CVTOTP | FRESH WTR | 2/19/2013 9:30 | 2/27/2013 10:30 | 3/1/2013 13:43 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-1 | 421874-100 | City of Shoreline Monthly Water Quality Monitoring | CVTOTN | FRESH WTR | 2/26/2013 10:15 | 2/27/2013 10:30 | 3/1/2013 13:59 | WG125674-1,-2,-3,-6,-7 | |
| L57244-1 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 10:15 | 2/27/2013 10:30 | 3/1/2013 13:59 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-2 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 10:30 | 2/27/2013 10:30 | 3/1/2013 14:01 | WG125674-1,-2,-3,-6,-7 | |
| L57244-2 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 10:30 | 2/27/2013 10:30 | 3/1/2013 14:01 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-3 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 9:55 | 2/27/2013 10:30 | 3/1/2013 14:03 | WG125674-1,-2,-3,-6,-7 | |
| L57244-3 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 9:55 | 2/27/2013 10:30 | 3/1/2013 14:03 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-4 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 9:35 | 2/27/2013 10:30 | 3/1/2013 14:08 | WG125674-1,-2,-3,-6,-7 | |
| L57244-4 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 9:35 | 2/27/2013 10:30 | 3/1/2013 14:08 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-5 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 8:30 | 2/27/2013 10:30 | 3/1/2013 14:10 | WG125674-1,-2,-3,-6,-7 | |
| L57244-5 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 8:30 | 2/27/2013 10:30 | 3/1/2013 14:10 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-6 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 9:20 | 2/27/2013 10:30 | 3/1/2013 14:12 | WG125674-1,-2,-3,-6,-7 | |
| L57244-6 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 9:20 | 2/27/2013 10:30 | 3/1/2013 14:12 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57244-7 | 421874-100 | | CVTOTN | FRESH WTR | 2/26/2013 9:10 | 2/27/2013 10:30 | 3/1/2013 14:14 | WG125674-1,-2,-3,-6,-7 | |
| L57244-7 | 421874-100 | | CVTOTP | FRESH WTR | 2/26/2013 9:10 | 2/27/2013 10:30 | 3/1/2013 14:14 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 2/25/2013 0:46 | 2/27/2013 10:30 | 3/1/2013 14:23 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | |

# King County Environmental Laboratory Batch Report

## NPDES SW Permit, SWM, L57385

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L57442-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 2/26/2013 10:10 | 2/27/2013 10:30 | 3/1/2013 13:45 | | |
| L57442-2 | 421195-150 | | CVTOTP | FRESH WTR | 2/26/2013 9:50 | 2/27/2013 10:30 | 3/1/2013 13:46 | | |
| WG125674-1 | MB | | CVTOTN | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:32 | WG125674-1,-2,-3,-6,-7 | MB1 |
| WG125674-1 | MB | | CVTOTP | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:32 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | MB1 |
| WG125674-2 | SB | | CVTOTN | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:34 | WG125674-1,-2,-3,-6,-7 | WG125674-1 |
| WG125674-2 | SB | | CVTOTP | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:34 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | WG125674-1 |
| WG125674-3 | LCS | | CVTOTN | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:35 | WG125674-1,-2,-3,-6,-7 | LEVEL1 |
| WG125674-3 | LCS | | CVTOTP | BLANK WTR | | 2/27/2013 10:30 | 3/1/2013 13:35 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | LEVEL1 |
| WG125674-4 | LD | | CVTOTP | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 13:48 | | L57442-2 |
| WG125674-5 | MS | | CVTOTP | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 13:57 | | L57442-2 |
| WG125674-6 | LD | | CVTOTN | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 14:05 | WG125674-1,-2,-3,-6,-7 | L57244-3 |
| WG125674-6 | LD | | CVTOTP | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 14:05 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57244-3 |
| WG125674-7 | MS | | CVTOTN | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 14:07 | WG125674-1,-2,-3,-6,-7 | L57244-3 |
| WG125674-7 | MS | | CVTOTP | FRESH WTR | | 2/27/2013 10:30 | 3/1/2013 14:07 | WG125674-1,-2,-3,-4,-5,-6,-7,-8,-9 | L57244-3 |
| WG125674-8 | LD | | CVTOTP | STORM WTR | | 2/27/2013 10:30 | 3/1/2013 14:25 | | L57385-1 |
| WG125674-9 | MS | | CVTOTP | STORM WTR | | 2/27/2013 10:30 | 3/1/2013 14:48 | | L57385-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125632 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57244-1 | 421874-100 | City of Shoreline Monthly Water Quality Monitoring | CVTSS | FRESH WTR | 2/26/2013 10:15 | 3/1/2013 13:50 | 3/5/2013 11:49 | WG125632-1,-2,-3,-4,-5 | |
| L57244-2 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 10:30 | 3/1/2013 13:50 | 3/5/2013 11:50 | | |
| L57244-3 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 9:55 | 3/1/2013 13:50 | 3/5/2013 11:51 | | |
| L57244-4 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 9:35 | 3/1/2013 13:50 | 3/5/2013 11:51 | | |
| L57244-5 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 8:30 | 3/1/2013 13:50 | 3/5/2013 11:52 | | |
| L57244-6 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 9:20 | 3/1/2013 13:50 | 3/5/2013 11:53 | | |
| L57244-7 | 421874-100 | | CVTSS | FRESH WTR | 2/26/2013 9:10 | 3/1/2013 13:50 | 3/5/2013 11:54 | | |
| L57371-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 2/27/2013 8:35 | 3/1/2013 13:50 | 3/5/2013 11:55 | | |
| L57371-3 | 421422-CFGW | | CVTSS | GRND WTR | 2/27/2013 7:35 | 3/1/2013 13:50 | 3/5/2013 11:55 | | |
| L57376-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVTSS | GRND WTR | 2/27/2013 8:54 | 3/1/2013 13:50 | 3/5/2013 11:56 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 2/25/2013 0:46 | 3/1/2013 13:50 | 3/5/2013 12:04 | | |
| L57398-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVTSS | GRND WTR | 2/28/2013 10:45 | 3/1/2013 13:50 | 3/5/2013 11:57 | | |
| L57398-4 | 421422-HOGW | | CVTSS | GRND WTR | 2/28/2013 10:03 | 3/1/2013 13:50 | 3/5/2013 11:57 | | |
| L57398-5 | 421422-HOGW | | CVTSS | GRND WTR | 2/28/2013 9:03 | 3/1/2013 13:50 | 3/5/2013 12:02 | | |
| L57398-6 | 421422-HOGW | | CVTSS | GRND WTR | 2/27/2013 7:58 | 3/1/2013 13:50 | 3/5/2013 12:03 | | |
| L57398-9 | 421422-HOGW | | CVTSS | GRND WTR | 2/28/2013 9:03 | 3/1/2013 13:50 | 3/5/2013 12:03 | | |
| WG125632-1 | MB | | CVTSS | BLANK WTR | | 3/1/2013 13:50 | 3/5/2013 11:47 | | MB1 130301 |
| WG125632-2 | LCS | | CVTSS | BLANK WTR | | 3/1/2013 13:50 | 3/5/2013 11:48 | | LEVEL1 |
| WG125632-3 | LD | | CVTSS | FRESH WTR | | 3/1/2013 13:50 | 3/5/2013 11:53 | | L57244-5 |
| WG125632-4 | LD | | CVTSS | GRND WTR | | 3/1/2013 13:50 | 3/5/2013 12:00 | | L57398-5 |
| WG125632-5 | LD | | CVTSS | STORM WTR | | 3/1/2013 13:50 | 3/5/2013 12:05 | | L57385-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125602 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 2/25/2013 0:46 | 2/27/2013 14:29 | 2/27/2013 14:29 | WG125602-1,-2,-3,-4,-5,-6,-7 | |
| L57395-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTURB | FRESH WTR | 2/25/2013 9:55 | 2/27/2013 14:24 | 2/27/2013 14:24 | | |
| L57395-2 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 2/25/2013 10:13 | 2/27/2013 14:25 | 2/27/2013 14:25 | | |
| L57395-4 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 2/25/2013 9:35 | 2/27/2013 14:27 | 2/27/2013 14:27 | | |
| L57442-1 | 421195-150 | Beaver Lake | CVTURB | FRESH WTR | 2/26/2013 10:10 | 2/27/2013 14:12 | 2/27/2013 14:12 | | |
| L57442-2 | 421195-150 | | CVTURB | FRESH WTR | 2/26/2013 9:50 | 2/27/2013 14:15 | 2/27/2013 14:15 | | |
| WG125602-1 | LCS | | CVTURB | BLANK WTR | | 2/27/2013 14:08 | 2/27/2013 14:08 | | LEVEL1 |
| WG125602-2 | LCS | | CVTURB | BLANK WTR | | 2/27/2013 14:09 | 2/27/2013 14:09 | | LEVEL2 |
| WG125602-3 | LD | | CVTURB | FRESH WTR | | 2/27/2013 14:13 | 2/27/2013 14:13 | | L57442-1 |
| WG125602-4 | LD | | CVTURB | FRESH WTR | | 2/27/2013 14:28 | 2/27/2013 14:28 | | L57395-4 |
| WG125602-5 | LD | | CVTURB | STORM WTR | | 2/27/2013 14:30 | 2/27/2013 14:30 | | L57385-1 |
| WG125602-6 | LCS | | CVTURB | BLANK WTR | | 2/27/2013 14:31 | 2/27/2013 14:31 | | LEVEL1 |
| WG125602-7 | LCS | | CVTURB | BLANK WTR | | 2/27/2013 14:31 | 2/27/2013 14:31 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125682 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57327-1 | 421186B | RTP INPLNT 3 DAY INT (inf,eff,sl) | MTICPMS | INFLUENT | 2/5/2013 8:02 | 3/6/2013 8:00 | 3/7/2013 12:07 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57327-4 | 421186B | | MTICPMS | EFFLUENT | 2/5/2013 8:11 | 3/6/2013 8:00 | 3/7/2013 12:13 | | |
| L57328-1 | 421186B | | MTICPMS | INFLUENT | 2/6/2013 8:07 | 3/6/2013 8:00 | 3/7/2013 12:19 | | |
| L57328-4 | 421186B | | MTICPMS | EFFLUENT | 2/6/2013 8:16 | 3/6/2013 8:00 | 3/7/2013 12:25 | | |
| L57328-7 | 421186B | | MTICPMS | EFFLUENT | 2/6/2013 8:25 | 3/6/2013 8:00 | 3/7/2013 12:49 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 2/25/2013 0:46 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57385-1 | 421879-210 | | MTICPMS | STORM WTR | 2/25/2013 0:46 | 3/6/2013 8:00 | 3/7/2013 12:31 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57386-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 3/2/2013 16:24 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57386-1 | 421879-210 | | MTICPMS | STORM WTR | 3/2/2013 16:24 | 3/6/2013 8:00 | 3/7/2013 13:08 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57395-4 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | MTICPMS | FRESH WTR | 2/25/2013 9:35 | 3/6/2013 8:00 | 3/7/2013 13:14 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/2/2013 17:42 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57435-1 | 421879-210 | | MTICPMS | STORM WTR | 3/2/2013 17:42 | 3/6/2013 8:00 | 3/7/2013 13:20 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57486-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | MTICPMS | FRESH WTR | 3/4/2013 8:42 | 3/6/2013 8:00 | 3/7/2013 13:38 | | |
| L57486-2 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 7:52 | 3/6/2013 8:00 | 3/7/2013 13:44 | | |
| L57486-3 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 8:42 | 3/6/2013 8:00 | 3/7/2013 14:03 | | |
| L57486-4 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 7:31 | 3/6/2013 8:00 | 3/7/2013 14:09 | | |
| WG125682-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | METHOD BLANK |
| WG125682-1 | MB | | MTICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/7/2013 11:54 | WG125682-1,-2,-3,-4,-5,-6 | METHOD BLANK |
| WG125682-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | WG125682-1 MS-20 SPIKE BLANK |
| WG125682-2 | SB | | MTICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/7/2013 12:01 | WG125682-1,-2,-3,-4,-5,-6 | WG125682-1 MS-20 SPIKE BLANK |
| WG125682-3 | LD | | MTICPMS | EFFLUENT | | 3/6/2013 8:00 | 3/7/2013 12:55 | | L57328-7 RPD-LIQ LAB DUPLCIATE |
| WG125682-4 | MS | | MTICPMS | EFFLUENT | | 3/6/2013 8:00 | 3/7/2013 13:02 | | L57328-7 MS-20 MATRIX SPIKE |
| WG125682-5 | LD | | MTHARD-ICPMS | STORM WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | L57435-1 RPD-LIQ LAB DUPLUICATE |
| WG125682-5 | LD | | MTICPMS | STORM WTR | | 3/6/2013 8:00 | 3/7/2013 13:26 | WG125682-1,-2,-3,-4,-5,-6 | L57435-1 RPD-LIQ LAB DUPLUICATE |
| WG125682-6 | MS | | MTHARD-ICPMS | STORM WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | L57435-1 MS-20 MATRIX SPIKE |
| WG125682-6 | MS | | MTICPMS | STORM WTR | | 3/6/2013 8:00 | 3/7/2013 13:32 | WG125682-1,-2,-3,-4,-5,-6 | L57435-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125690 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 10:23 | 3/5/2013 14:00 | 3/6/2013 14:25 | WG125690-1,-3,-4 | |
| L57350-6 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHG-MID | FRESH WTR | 2/12/2013 7:15 | 3/5/2013 14:00 | 3/6/2013 14:09 | WG125690-1,-2 | |
| L57350-7 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 9:16 | 3/5/2013 14:00 | 3/6/2013 14:10 | | |
| L57350-8 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 9:15 | 3/5/2013 14:00 | 3/6/2013 14:12 | | |
| L57350-9 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 10:10 | 3/5/2013 14:00 | 3/6/2013 14:14 | | |
| L57350-10 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 10:37 | 3/5/2013 14:00 | 3/6/2013 14:16 | | |
| L57352-4 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 9:09 | 3/5/2013 14:00 | 3/6/2013 14:27 | WG125690-1,-3,-4 | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:46 | 3/5/2013 14:00 | 3/6/2013 14:28 | | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:15 | 3/5/2013 14:00 | 3/6/2013 14:30 | | |
| L57369-3 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:15 | 3/5/2013 14:00 | 3/6/2013 14:32 | | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/21/2013 10:09 | 3/5/2013 14:00 | 3/6/2013 14:34 | | |
| L57372-3 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 2/21/2013 10:52 | 3/5/2013 14:00 | 3/6/2013 14:36 | | |
| L57373-1 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 2/22/2013 10:24 | 3/5/2013 14:00 | 3/6/2013 14:37 | | |
| L57376-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/27/2013 8:54 | 3/5/2013 14:00 | 3/6/2013 14:43 | | |
| L57376-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/25/2013 8:27 | 3/5/2013 14:00 | 3/6/2013 14:45 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 2/25/2013 0:46 | 3/5/2013 14:00 | 3/6/2013 14:21 | WG125690-1,-2 | |
| L57393-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/25/2013 6:05 | 3/5/2013 14:00 | 3/6/2013 14:46 | WG125690-1,-3,-4 | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/2/2013 17:42 | 3/5/2013 14:00 | 3/6/2013 14:23 | WG125690-1,-2 | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 8:40 | 3/5/2013 14:00 | 3/6/2013 14:03 | WG125690-1,-3,-4 | |
| WG125690-1 | MB | | MTHG-MID | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:00 | WG125690-1,-2 | METHOD BLANK |
| WG125690-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:00 | WG125690-1,-3,-4 | METHOD BLANK |
| WG125690-2 | SB | | MTHG-MID | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:01 | WG125690-1,-2 | WG125690-1 HG-LMID |
| WG125690-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/5/2013 14:00 | 3/6/2013 14:05 | WG125690-1,-3,-4 | L57445-1 HG-LMID |
| WG125690-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/5/2013 14:00 | 3/6/2013 14:07 | | WG125690-3 L57445-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125722 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57350-5 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHG-MID | FRESH WTR | 2/12/2013 6:40 | 3/6/2013 14:00 | 3/7/2013 12:35 | WG125722-1,-2 | |
| L57371-1 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 2/27/2013 8:35 | 3/6/2013 14:00 | 3/7/2013 12:39 | WG125722-1,-3,-4 | |
| L57371-3 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 2/27/2013 7:35 | 3/6/2013 14:00 | 3/7/2013 12:40 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 2/25/2013 0:46 | 3/6/2013 14:00 | 3/7/2013 12:48 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/26/2013 8:20 | 3/6/2013 14:00 | 3/7/2013 12:30 | | |
| L57394-3 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 7:50 | 3/6/2013 14:00 | 3/7/2013 12:42 | | |
| L57499-2 | 421183 | IW KEYMANHOLE | MTHG-MID | SEWER WTR | 3/4/2013 5:10 | 3/6/2013 14:00 | 3/7/2013 12:37 | WG125722-1,-2 | |
| WG125722-1 | MB | | MTHG-MID | BLANK WTR | | 3/6/2013 14:00 | 3/7/2013 12:26 | | METHOD BLANK |
| WG125722-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/6/2013 14:00 | 3/7/2013 12:26 | WG125722-1,-3,-4 | METHOD BLANK |
| WG125722-2 | SB | | MTHG-MID | BLANK WTR | | 3/6/2013 14:00 | 3/7/2013 12:28 | WG125722-1,-2 | WG125722-1 HG-LMID |
| WG125722-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/6/2013 14:00 | 3/7/2013 12:31 | WG125722-1,-3,-4 | L57394-1 HG-LMID |
| WG125722-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/6/2013 14:00 | 3/7/2013 12:33 | | WG125722-3 L57394-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125642 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57311-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 2/5/2013 5:43 | 3/4/2013 8:00 | 3/5/2013 11:05 | WG125642-1,-2,-3,-4 | |
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 10:23 | 3/4/2013 8:00 | 3/5/2013 11:12 | | |
| L57350-9 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | MTICPMS-DISS | FRESH WTR | 2/12/2013 10:10 | 3/4/2013 8:00 | 3/5/2013 13:25 | | |
| L57350-10 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 2/12/2013 10:37 | 3/4/2013 8:00 | 3/5/2013 11:37 | | |
| L57352-4 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 9:09 | 3/4/2013 8:00 | 3/5/2013 11:43 | | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/22/2013 8:46 | 3/4/2013 8:00 | 3/5/2013 11:50 | | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/22/2013 8:15 | 3/4/2013 8:00 | 3/5/2013 12:09 | | |
| L57369-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/22/2013 8:15 | 3/4/2013 8:00 | 3/5/2013 12:15 | | |
| L57371-1 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/27/2013 8:35 | 3/4/2013 8:00 | 3/5/2013 12:22 | | |
| L57371-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 2/27/2013 7:35 | 3/4/2013 8:00 | 3/5/2013 12:28 | | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/21/2013 10:09 | 3/4/2013 8:00 | 3/5/2013 12:34 | | |
| L57372-3 | 421422-ENGW | | MTICPMS-DISS | GRND WTR | 2/21/2013 10:52 | 3/4/2013 8:00 | 3/5/2013 12:41 | | |
| L57373-1 | 421422-ENGW | | MTICPMS-DISS | GRND WTR | 2/22/2013 10:24 | 3/4/2013 8:00 | 3/5/2013 12:47 | | |
| L57376-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/27/2013 8:54 | 3/4/2013 8:00 | 3/5/2013 12:53 | | |
| L57376-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/25/2013 8:27 | 3/4/2013 8:00 | 3/5/2013 13:00 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 2/25/2013 0:46 | 3/4/2013 8:00 | 3/5/2013 13:06 | | |
| L57393-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/25/2013 6:05 | 3/4/2013 8:00 | 3/5/2013 13:38 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/26/2013 8:20 | 3/4/2013 8:00 | 3/5/2013 13:44 | | |
| L57394-3 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 3/1/2013 7:50 | 3/4/2013 8:00 | 3/5/2013 13:51 | | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/20/2013 8:40 | 3/4/2013 8:00 | 3/5/2013 13:57 | | |
| WG125642-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/4/2013 8:00 | 3/5/2013 10:53 | | METHOD BLANK |
| WG125642-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/4/2013 8:00 | 3/5/2013 10:59 | | WG125642-1 MS-20 SPIKE BLANK |
| WG125642-3 | LD | | MTICPMS-DISS | FRESH WTR | | 3/4/2013 8:00 | 3/5/2013 13:32 | | L57350-9 RPD-LIQ LAB DUPLICATE |
| WG125642-4 | MS | | MTICPMS-DISS | FRESH WTR | | 3/4/2013 8:00 | 3/5/2013 11:31 | | L57350-9 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125610 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 2/25/2013 0:46 | 2/28/2013 9:00 | 3/5/2013 15:42 | WG125610-3,-2,-1 | |
| WG125610-1 | MB | | ORHERB-NPDES | BLANK WTR | | 2/28/2013 9:00 | 3/5/2013 14:26 | | MB130228 |
| WG125610-2 | SB | | ORHERB-NPDES | BLANK WTR | | 2/28/2013 9:00 | 3/5/2013 14:51 | | WG125610-1 |
| WG125610-3 | SBD | | ORHERB-NPDES | BLANK WTR | | 2/28/2013 9:00 | 3/5/2013 15:17 | | WG125610-2 |
| | | | | | | | | | WG125610-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125644 Organo Phosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/7/2013 0:15 | WG125644-6,-5,-4,-3,-2,-1 | |
| L57386-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/6/2013 22:52 | | |
| L57435-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/6/2013 23:47 | | |
| WG125644-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 20:33 | | MB130304 |
| WG125644-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 21:00 | | WG125644-1 |
| WG125644-3 | SBD | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 21:28 | | WG125644-2 WG125644-1 |
| WG125644-4 | MS | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 23:20 | | L57435-1 |
| WG125644-5 | MS | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 21:57 | | L57386-1 |
| WG125644-6 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 22:24 | | WG125644-5 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57385

**WG125646 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/11/2013 16:55 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57385-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/11/2013 16:55 | WG125646-5,-1,-2,-3,-4 | |
| L57386-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/11/2013 16:16 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57386-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/11/2013 16:16 | WG125646-5,-1,-2,-3,-4 | |
| L57435-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/11/2013 17:33 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57435-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/11/2013 17:33 | WG125646-5,-1,-2,-3,-4 | |
| WG125646-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:03 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | MB130304 |
| WG125646-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:03 | WG125646-5,-1,-2,-3,-4 | MB130304 |
| WG125646-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:42 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-1 |
| WG125646-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:42 | WG125646-5,-1,-2,-3,-4 | WG125646-1 |
| WG125646-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 14:20 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-2 WG125646-1 |
| WG125646-3 | SBD | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 14:20 | WG125646-5,-1,-2,-3,-4 | WG125646-2 WG125646-1 |
| WG125646-4 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 14:59 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | L57386-1 |
| WG125646-4 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 14:59 | WG125646-5,-1,-2,-3,-4 | L57386-1 |
| WG125646-5 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 15:38 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-4 L57386-1 |
| WG125646-5 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 15:38 | WG125646-5,-1,-2,-3,-4 | WG125646-4 L57386-1 |

**Workgroup: WG125596 BOD**

**MB:WG125596-1 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:WG125596-2 MB:WG125596-1 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 | 185 | 94 | | 80--120 |

**Workgroup: WG125615 Anions**

**CS:WG125615-1 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 | 0.099 | 99 | | 70--130 |

**CS:WG125615-1 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 | 92 | | 70--130 |

**MB:WG125615-2 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:WG125615-2 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:WG125615-3 MB:WG125615-2 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 | 2.06 | 103 | | 80--120 |

**SB:WG125615-3 MB:WG125615-2 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 | 5.19 | 104 | | 80--120 |

**LCS:WG125615-4 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 | 2.99 | 100 | | 85--115 |

**LCS:WG125615-4 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 | 15.5 | 103 | | 85--115 |

**LD:WG125615-5 L57163-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 2.54 | 2.43 | 4 | | 0--20 |

**MS:WG125615-6 L57163-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 2.54 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125615-7 L57311-1 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 | 0.5 | 1 | mg/L | 14 | 14.2 | 1 | | 0--20 |

**MS:WG125615-8 L57311-1 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 | 0.5 | 1 | mg/L | 14 | 20 | 34.8 | 104 | | 75--125 |

**LD:WG125615-9 L57338-1 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 | 0.5 | 1 | mg/L | 3.65 | 3.68 | 1 | | 0--20 |

**LD:WG125615-9 L57338-1 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 | 0.5 | 1 | mg/L | 16.8 | 16.8 | 0 | | 0--20 |

**MS:WG125615-10 L57338-1 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 | 0.5 | 1 | mg/L | 3.65 | 20 | 24.5 | 104 | | 75--125 |

**MS:WG125615-10 L57338-1 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 | 0.5 | 1 | mg/L | 16.8 | 25 | 42.8 | 104 | | 75--125 |

**Workgroup: WG125712 Conductivity**

**LCS:WG125712-1 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 | 75.8 | 103 | | 90--110 |

**LCS:WG125712-2 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 | 725 | 101 | | 90--110 |

**LD:WG125712-3 L57435-1 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 | 35.2 | 35.2 | 0 | | 0--10 |

**LD:WG125712-4 L57398-9 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-HOGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 92.4 | 92.2 | 0 | | 0--10 |

**LCS:WG125712-5 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 | 76.2 | 103 | | 90--110 |

**LCS:WG125712-6 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 | 714 | 99 | | 90--110 |

**Workgroup: WG125660 Dissolved Nutrients - Nitrates**

**MB:WG125660-1 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:WG125660-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125660-2 MB:WG125660-1 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 | 0.803 | 100 | | 80--120 |

**SB:WG125660-2 MB:WG125660-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.391 | 98 | | 80--120 |

**LCS:WG125660-3 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 | 0.802 | 100 | | 85--115 |

**LCS:WG125660-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.384 | 96 | | 85--115 |

**LD:WG125660-4 L57371-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 1.61 | 1.6 | 0 | | 0--20 |

**MS:WG125660-5 L57371-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CFGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 1.61 | 0.4 | 1.96 | 88 | | 75--125 |

**MB:WG125660-6 Matrix: BLANK WTR Listtype:CVNO23 Method:SM4500-NO3-F Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG125660-6 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**LD:WG125660-7 L57385-1 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 | 0.168 | 0.167 | 0 | | 0--20 |

**MS:WG125660-8 L57385-1 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 | 0.168 | 0.8 | 0.975 | 101 | | 75--125 |

**Workgroup: WG125731 Dissolved Nutrients - Orthophosphate Phosphorus**

**MB:WG125731-1 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:WG125731-2 MB:WG125731-1 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 | 0.037 | 93 | | 80--120 |

**LCS:WG125731-3 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 | 0.0383 | 96 | | 85--115 |

**LD:WG125731-4 L57386-1 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 | 0.0131 | 0.0133 | 2 | | 0--20 |

**MS:WG125731-5 L57386-1 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 | 0.0131 | 0.04 | 0.0501 | 92 | | 75--125 |

**LD:WG125731-6 L57442-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00685 | 0.00743 | 8 | | 0--20 |

**MS:WG125731-7 L57442-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00685 | 0.04 | 0.0436 | 92 | | 75--125 |

**LD:WG125731-8 L57440-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 3.2 | 3.2 | 0 | | 0--20 |

**MS:WG125731-9 L57440-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 3.2 | 0.04 | 5.07 | 94 | | 75--125 |

**MB:WG125731-10 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:WG125731-11 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 | 0.0372 | 93 | | 85--115 |

**LD:WG125731-12 L57493-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-MSPECIAL Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | <MDL | | | 0--20 |

**MS:WG125731-13 L57493-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-MSPECIAL Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | 0.04 | 0.19 | 95 | | 75--125 |

**Workgroup: WG125623 TKN**

**MB:WG125623-1 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 | |

**LCS:WG125623-2 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 | 0.487 | 97 | | 80--120 |

**LCS:WG125623-3 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 | 5 | 4.79 | 96 | | 80--120 |

**SB:WG125623-4 MB:WG125623-1 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 | 5.02 | 100 | | 80--120 |

**LD:WG125623-5 L57350-6 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 | 0.263 | 0.218 | 18 | | 0--20 |

**MS:WG125623-6 L57350-6 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 | 0.263 | 5 | 5.03 | 95 | | 70--130 |

**LD:WG125623-7 L57385-1 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 | 0.77 | 0.715 | 7 | | 0--20 |

**MS:WG125623-8 L57385-1 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 | 0.77 | 5 | 5.49 | 94 | | 70--130 |

**Workgroup: WG125674 Total Nitrogen, Total Phosphorus**

**MB:WG125674-1 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:WG125674-1 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:WG125674-2 MB:WG125674-1 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 | 1.01 | 101 | | 80--120 |

**SB:WG125674-2 MB:WG125674-1 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 | 0.0975 | 97 | | 80--120 |

**LCS:WG125674-3 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 | 0.955 | 96 | | 85--115 |

**LCS:WG125674-3 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 | 0.0968 | 97 | | 85--115 |

**LD:WG125674-4 L57442-2 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 | 0.029 | 0.031 | 7 | | 0--20 |

**MS:WG125674-5 L57442-2 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 | 0.029 | 0.1 | 0.124 | 95 | | 75--125 |

**LD:WG125674-6 L57244-3 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 | 1.54 | 1.52 | 1 | | 0--20 |

**LD:WG125674-6 L57244-3 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 | 0.0263 | 0.0216 | 19 | | 0--20 |

**MS:WG125674-7 L57244-3 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 | 1.54 | 1 | 2.68 | 114 | | 75--125 |

**MS:WG125674-7 L57244-3 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 | 0.0263 | 0.1 | 0.129 | 103 | | 75--125 |

**LD:WG125674-8 L57385-1 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 | 0.05 | 0.1 | mg/L | 0.073 | 0.077 | | | 0--20 |

**MS:WG125674-9 L57385-1 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 | 0.05 | 0.1 | mg/L | 0.073 | 0.1 | 1.11 | 104 | | 75--125 |

**Workgroup: WG125632 TSS**

**MB:WG125632-1 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:WG125632-2 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 | 104 | 104 | | 80--120 |

**LD:WG125632-3 L57244-5 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421874-100 Pkey:STD**
**(Lab Duplicate)**

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

**LD:WG125632-4 L57398-5 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-HOGW 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 | 1.6 | | | 0--25 |

**LD:WG125632-5 L57385-1 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 | 60 | 61 | 2 | | 0--25 |

**Workgroup: WG125602 Turbidity**

**LCS:WG125602-1 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 | 9.83 | 98 | | 90--110 |

**LCS:WG125602-2 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 | 97.8 | 98 | | 90--110 |

**LD:WG125602-3 L57442-1 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 2.54 | 2.76 | 8 | | 0--25 |

**LD:WG125602-4 L57395-4 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 | 37.2 | 38.6 | 4 | | 0--25 |

**LD:WG125602-5 L57385-1 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 | 58.7 | 59 | 1 | | 0--25 |

**LCS:WG125602-6 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 | 9.81 | 98 | | 90--110 |

**LCS:WG125602-7 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 | 98 | 98 | | 90--110 |

**Workgroup: WG125682 Total Metals & Hardness**

**MB:WG125682-1 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:WG125682-1 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 | |
| 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:WG125682-2 MB:WG125682-1 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 | 31.6 | 95 | | 85--115 |

**SB:WG125682-2 MB:WG125682-1 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 | 20.2 | 101 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4780 | 96 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4760 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 104 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |

**LD:WG125682-3 L57328-7 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421186B 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 | 0.55 | 0.58 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.11 | 2.11 | 0 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.4 | 10.5 | 1 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 31.1 | 31.5 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.4 | 1.43 | 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 | 0.065 | 0.063 | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 3.5 | 3.51 | 0 | | 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 | 0.32 | 0.32 | | | 0--20 |

**MS:WG125682-4 L57328-7 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421186B Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 99 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.55 | 20 | 20.4 | 99 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.11 | 20 | 22 | 100 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.4 | 20 | 30.7 | 102 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 31.1 | 20 | 49.7 | 93 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.4 | 20 | 21 | 98 | | 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 | 0.065 | 20 | 19.9 | 99 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 3.5 | 20 | 23.6 | 101 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.32 | 20 | 20.5 | 101 | | 75--125 |

**LD:WG125682-5 L57435-1 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 | 18.8 | 19 | 1 | | 0--20 |

**LD:WG125682-5 L57435-1 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 | 1980 | 2000 | 1 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4250 | 4320 | 1 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 18.7 | 18.8 | 0 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 73.5 | 77.3 | 5 | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.13 | 0.13 | | | 0--20 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 11.2 | 11.1 | 1 | | 0--20 |

**MS:WG125682-6 L57435-1 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 | 18.8 | 33.1 | 50.2 | 95 | | 75--125 |

**MS:WG125682-6 L57435-1 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 | 1980 | 5000 | 6810 | 97 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4250 | 5000 | 8880 | 92 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 18.7 | 20 | 37.5 | 94 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 73.5 | 20 | 88.8 | 77 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.13 | 20 | 19.2 | 95 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 11.2 | 20 | 31.7 | 103 | | 75--125 |

**Workgroup: WG125690 Total & Dissovled Mercury**

**MB:WG125690-1 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:WG125690-1 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:WG125690-2 MB:WG125690-1 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 | 0.926 | 93 | | 85--115 |

**MSD:WG125690-4 MS:WG125690-3 L57445-1 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-VAGW 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 | 0.949 | 95 | | 75--125 | 1 | 0.929 | 93 | | 2 | | 0--20 |

**Workgroup: WG125722 Total & Dissolved Mercury**

**MB:WG125722-1 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:WG125722-1 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:WG125722-2 MB:WG125722-1 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 | 0.938 | 94 | | 85--115 |

**MSD:WG125722-4 MS:WG125722-3 L57394-1 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 | 0.91 | 91 | | 75--125 | 1 | 0.881 | 88 | | 3 | | 0--20 |

**Workgroup: WG125642 Dissolved Metals**

**MB:WG125642-1 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:WG125642-2 MB:WG125642-1 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 | 21.1 | 106 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5170 | 103 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5190 | 104 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 22.7 | 113 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5260 | 105 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5290 | 106 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 21.9 | 110 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.5 | 112 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 23 | 115 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 22.3 | 111 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.1 | 110 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 22.5 | 113 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 21.6 | 108 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 21.3 | 107 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21.8 | 109 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 22.7 | 114 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 22.8 | 114 | | 85--115 |

**LD:WG125642-3 L57350-9 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5150 | 5260 | 2 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2490 | 2500 | 0 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 73.8 | 74 | 0 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 995 | 984 | 1 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9090 | 9110 | 0 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 0.876 | 3 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.22 | 0.22 | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 162 | 161 | 1 | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 27.4 | 27.3 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.14 | 0.14 | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.4 | 0.4 | | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 5.27 | 5.22 | 1 | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 3.04 | 3.01 | 1 | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.45 | 0.46 | | | 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 | 4.7 | 4.73 | 1 | | 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:WG125642-4 L57350-9 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 5150 | 5000 | 10700 | 112 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 2490 | 5000 | 7730 | 105 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 73.8 | 20 | 95.3 | 108 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 995 | 5000 | 6240 | 105 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9090 | 5000 | 13800 | 93 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.852 | 20 | 21.9 | 105 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.22 | 20 | 21.3 | 105 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 162 | 5000 | 5240 | 102 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 27.4 | 20 | 49.8 | 112 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.14 | 20 | 20.7 | 103 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.4 | 20 | 22 | 108 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 5.27 | 20 | 25.5 | 101 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 3.04 | 20 | 24.3 | 106 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.45 | 20 | 21.4 | 105 | | 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 | 20.5 | 103 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.9 | 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 | 20.6 | 103 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 4.7 | 20 | 25.5 | 104 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.5 | 107 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 21.7 | 108 | | 75--125 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57385

**Workgroup: WG125610 Herbicides**

**MB:WG125610-1 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:WG125610-3 SB:WG125610-2 MB:WG125610-1 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 | 4.38 | 88 | | 21--147 | 5 | 4.44 | 89 | | 1 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.84 | 97 | | 10--175 | 5 | 4.79 | 96 | | 1 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.92 | 118 | | 59--151 | 5 | 5.78 | 116 | | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57385-1 | 92 | 128 |
| WG125610-1 | 79 | 109 |
| WG125610-2 | 80 | 117 |
| WG125610-3 | 85 | 124 |

**Workgroup: WG125644 Organo Phosphorus Pesticides**

**MB:WG125644-1 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:WG125644-3 SB:WG125644-2 MB:WG125644-1 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 | BD Value | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.043 | 0.05 | ug/L | <MDL | 0.25 | 0.218 | 87 | | 52--129 | 0.25 | 0.197 | 79 | | 10 | | 0--40 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.229 | 91 | | 25--161 | 0.25 | 0.215 | 86 | | 6 | | 0--40 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.236 | 94 | | 57--127 | 0.25 | 0.214 | 86 | | 10 | | 0--40 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.22 | 88 | | 70--98 | 0.25 | 0.209 | 84 | | 5 | | 0--40 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.242 | 97 | | 40--160 | 0.25 | 0.242 | 97 | | 0 | | 0--40 |

**MS:WG125644-4 L57435-1 Matrix: STORM WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project:421879-210 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.041 | 0.0472 | ug/L | <MDL | 0.236 | 0.22 | 93 | | 67--148 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.248 | 105 | | 52--190 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.222 | 94 | | 57--141 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.188 | 80 | | 40--160 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.501 | 212 | * | 40--160 |

**MSD:WG125644-6 MS:WG125644-5 L57386-1 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 | 0.236 | 0.198 | 84 | | 67--148 | 0.236 | 0.204 | 87 | | 3 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.221 | 94 | | 52--190 | 0.236 | 0.238 | 101 | | 7 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.243 | 103 | | 57--141 | 0.236 | 0.223 | 94 | | 9 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.167 | 71 | | 40--160 | 0.236 | 0.161 | 68 | | 4 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.333 | 141 | | 40--160 | 0.236 | 0.349 | 148 | | 5 | | 0--40 |

| Surrogate: | Chlorpyrifos-D10 |
|---|---|
| (Lab Limits) | 41--166 |
| L57385-1 | 90 |
| L57386-1 | 89 |
| L57435-1 | 76 |
| WG125644-1 | 78 |
| WG125644-2 | 99 |
| WG125644-3 | 91 |
| WG125644-4 | 78 |
| WG125644-5 | 91 |
| WG125644-6 | 96 |

**Workgroup: WG125646 Semi Volatile Organics**

**MB:WG125646-1 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 | <MDL | |
| 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 | 0.428 | 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 | |

**SBD:WG125646-3 SB:WG125646-2 MB:WG125646-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.96 | 78 | | 32--93 | 2.5 | 1.69 | 68 | | 15 | | 0--40 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.5 | 60 | | 25--104 | 2.5 | 1.25 | 50 | | 19 | | 0--40 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 31--119 | 2.5 | 2.4 | 96 | | 4 | | 0--40 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.99 | 80 | | 49--107 | 2.5 | 1.84 | 73 | | 8 | | 0--40 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.82 | 73 | | 43--103 | 2.5 | 1.59 | 64 | | 14 | | 0--40 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.36 | 94 | | 26--141 | 2.5 | 2.47 | 99 | | 4 | | 0--40 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.95 | 78 | | 43--127 | 2.5 | 1.97 | 79 | | 1 | | 0--40 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.5 | 60 | | 10--137 | 2.5 | 1.47 | 59 | | 2 | | 0--40 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.06 | 82 | | 57--114 | 2.5 | 1.98 | 79 | | 4 | | 0--40 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 59--122 | 2.5 | 2.07 | 83 | | 1 | | 0--40 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.6 | 104 | | 52--145 | 2.5 | 2.45 | 98 | | 6 | | 0--40 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.21 | 88 | | 57--123 | 2.5 | 2.1 | 84 | | 5 | | 0--40 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.72 | 109 | | 51--139 | 2.5 | 2.63 | 105 | | 3 | | 0--40 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.16 | 126 | | 49--145 | 2.5 | 2.97 | 119 | | 6 | | 0--40 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.28 | 91 | | 67--130 | 2.5 | 2.17 | 87 | | 5 | | 0--40 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.46 | 98 | | 58--114 | 2.5 | 2.41 | 96 | | 2 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.428 | 2.5 | 2.98 | 102 | | 48--128 | 2.5 | 2.69 | 91 | | 10 | | 0--40 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 3.09 | 124 | | 51--126 | 2.5 | 2.55 | 102 | | 19 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.35 | 98 | | 49--139 | 7.5 | 7 | 93 | | 5 | | 0--40 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.26 | 90 | | 55--132 | 2.5 | 2.16 | 86 | | 5 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.23 | 89 | | 53--122 | 2.5 | 2.12 | 85 | | 5 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.21 | 88 | | 47--134 | 2.5 | 2.12 | 85 | | 4 | | 0--40 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 1.93 | 77 | | 32--130 | 2.5 | 1.8 | 72 | | 7 | | 0--40 |

**MSD:WG125646-5 MS:WG125646-4 L57386-1 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 | 0.0202 | 2.36 | 1.56 | 65 | | 37--95 | 2.36 | 1.58 | 66 | | 2 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.13 | 48 | | 40--121 | 2.36 | 1.28 | 54 | | 12 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 1.91 | 81 | | 34--134 | 2.36 | 2.04 | 87 | | 6 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.44 | 61 | | 46--122 | 2.36 | 1.58 | 67 | | 9 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.42 | 60 | | 47--105 | 2.36 | 1.49 | 63 | | 5 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.127 | 2.36 | 2.35 | 94 | | 33--140 | 2.36 | 2.45 | 98 | | 4 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.62 | 68 | | 44--137 | 2.36 | 1.71 | 72 | | 6 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.31 | 98 | | 44--145 | 2.36 | 2.3 | 98 | | 0 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0767 | 2.36 | 2.07 | 84 | | 62--116 | 2.36 | 2.09 | 85 | | 1 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | 0.0097 | 2.36 | 1.98 | 83 | | 32--140 | 2.36 | 1.97 | 83 | | 1 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.59 | 110 | | 44--134 | 2.36 | 2.61 | 111 | | 1 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.344 | 2.36 | 2.7 | 100 | | 49--123 | 2.36 | 2.45 | 89 | | 10 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.367 | 2.36 | 3.12 | 117 | | 37--147 | 2.36 | 2.96 | 110 | | 5 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 3.36 | 142 | | 39--151 | 2.36 | 3.51 | 149 | | 5 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | 0.124 | 2.36 | 2.44 | 98 | | 50--120 | 2.36 | 2.44 | 98 | | 0 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.231 | 2.36 | 2.68 | 104 | | 42--115 | 2.36 | 2.53 | 98 | | 6 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 0.433 | 2.36 | 3.26 | 120 | | 11--188 | 2.36 | 3.62 | 135 | | 11 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 3.09 | 131 | | 48--150 | 2.36 | 3.26 | 138 | | 5 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | 0.352 | 7.08 | 7.96 | 108 | | 42--123 | 7.08 | 7.64 | 103 | | 4 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.13 | 2.36 | 2.47 | 99 | | 45--121 | 2.36 | 2.42 | 97 | | 2 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | 0.086 | 2.36 | 2.27 | 92 | | 39--122 | 2.36 | 2.26 | 92 | | 0 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.11 | 89 | | 31--121 | 2.36 | 2.13 | 90 | | 1 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | 0.114 | 2.36 | 2.08 | 83 | | 22--125 | 2.36 | 2.04 | 82 | | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57385-1 | 86 | 50 | 50 | 90 | 48 | 63 | 57 |
| L57386-1 | 75 | 47 | 46 | 87 | 44 | 54 | 53 |
| L57435-1 | 84 | 55 | 49 | 89 | 46 | 60 | 58 |
| WG125646-1 | 44 | 66 | 67 | 94 | 64 | 78 | 75 |
| WG125646-2 | 71 | 66 | 69 | 89 | 67 | 81 | 79 |
| WG125646-3 | 71 | 62 | 65 | 88 | 61 | 77 | 75 |
| WG125646-4 | 80 | 52 | 48 | 92 | 45 | 56 | 54 |
| WG125646-5 | 85 | 57 | 51 | 92 | 48 | 60 | 57 |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2/28/2013*

**WG #(s):** *WG125623*

☐ **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<br>☐ Mettler Toledo AT201 |
| Autoanalyzer: | ☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)<br>☐ 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<br>☐ 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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **Reviewer:** *Dave Hunn* | | |
| **Supervisor:** *Brian Prosch* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *2/5/13*

**WG #(s):** *WG125642*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57311-1, L57385-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *06-Mar-13*

**WG #(s):** *WG125644*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57435-1*

**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: *7890G* |

## 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. Prometon exceeded the upper QC recovery limit in the MS.*

## 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. An "*" was applied to the QC report.*

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

*3. Given the recovery in the MS was high with a "ND" for the associated sample, no bias is suggested and therefore no qualifier was warranted.*

| | 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-MAR-13*

**WG #(s):** *WG125646*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125646-1 MB had a reportable level Bis(2EthylHexyl)Phthalate.*

## 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 10X the blank level contamination were flagged "B" for Bis-2(EH)phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | _____ | _____ |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **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

May 7, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring
Samples L57386-1, 3, L57435-1, -3, -5, collected March 2 – 3, 2013

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on March 3 and 4, 2013. The samples were 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 #15213 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
The composite samples was not collected for locations RSW1UP (LDR) due to failed collection conditions. The grab sample at location RSW01UP was not collected.

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

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.



1202M

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.

Prometon recovery in the matrix spike (L57435-1) for Organophosphorus Pesticide analysis was outside the upper control range at 212% (range: 40 – 160%). All other QC results for Prometon were within control. The result was flagged with an "*" in the QC report. No other corrective action was taken.

Bis (2-ethylhexyl) phthalate and diethyl phthalate were detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "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: | RSW1UP | FFBLANK | FCSW01 |
| Descrip: | 148TH AVE SE UPSTR | FIELD FILTER BLANK | FALL CITY HD COMME |
| Sample: | L57386-1 | L57386-3 | L57435-1 |
| Matrix: | LG STORM WTR | LN BLANK WTR | LG STORM WTR |
| ColDate: | 3/2/13 16:24 | 3/4/13 10:00 | 3/2/13 17:42 |
| TimeSpan: | 23.25 | | 6.87 |
| 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 | 0.37 | SH | 0.1 | 0.2 | mg/L | | | | | | 0.923 | SH | 0.1 | 0.2 | mg/L |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.025 | RDL | 0.025 | 0.025 | mg/L | | | | | | 0.036 | | 0.025 | 0.025 | mg/L |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 13.5 | | 0.2 | 0.5 | NTU | | | | | | 107 | | 0.2 | 0.5 | NTU |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 61.8 | | 1 | 5 | umhos/cm | | | | | | 35.2 | | 1 | 5 | umhos/cm |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 16 | | 2 | 4 | mg/L | | | | | | 59 | | 5 | 10 | mg/L |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 2.34 | | 0.25 | 0.5 | mg/L | | | | | | 3.66 | | 0.5 | 1 | mg/L |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.741 | | 0.01 | 0.04 | mg/L | | <MDL | 0.01 | 0.04 | mg/L | 0.144 | | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.0523 | | 0.025 | 0.05 | mg/L | | | | | | 0.211 | | 0.025 | 0.05 | mg/L |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.0131 | H | 0.002 | 0.005 | mg/L | | <MDL | 0.002 | 0.005 | mg/L | 0.0107 | H | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | <MDL | 2 | 2 | mg/L | | | | | | 8.87 | | 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 | | | | | | | <MDL,H | 0.05 | 0.25 | ug/L |
| Cadmium, Total, ICP-MS | 0.061 | <RDL | 0.05 | 0.25 | ug/L | | | | | | 0.13 | <RDL | 0.05 | 0.25 | ug/L |
| Calcium, Total, ICP-MS | 5440 | | 50 | 50 | ug/L | | | | | | 4250 | | 50 | 50 | ug/L |
| Copper, Dissolved, ICP-MS | 1.1 | <RDL,H | 0.4 | 2 | ug/L | | | | | | 2.99 | H | 0.4 | 2 | ug/L |
| Copper, Total, ICP-MS | 2.93 | | 0.4 | 2 | ug/L | | | | | | 18.7 | | 0.4 | 2 | ug/L |
| Lead, Dissolved, ICP-MS | | <MDL,H | 0.1 | 0.5 | ug/L | | | | | | 0.15 | <RDL,H | 0.1 | 0.5 | ug/L |
| Lead, Total, ICP-MS | 2.05 | | 0.1 | 0.5 | ug/L | | | | | | 11.2 | | 0.1 | 0.5 | ug/L |
| Magnesium, Total, ICP-MS | 1600 | | 50 | 50 | ug/L | | | | | | 1980 | | 50 | 50 | ug/L |
| Zinc, Dissolved, ICP-MS | 14.2 | H | 0.5 | 2.5 | ug/L | | | | | | 8.81 | H | 0.5 | 2.5 | ug/L |
| Zinc, Total, ICP-MS | 25.3 | | 0.5 | 2.5 | ug/L | | | | | | 73.5 | | 0.5 | 2.5 | ug/L |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 20.2 | | 0.331 | 0.331 | mg CaCO3/L | | | | | | 18.8 | | 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 | | | | | | 0.0205 | | 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: | RSW1UP | FFBLANK | FCSW01 |
| Descrip: | 148TH AVE SE UPSTR | FIELD FILTER BLANK | FALL CITY HD COMME |
| Sample: | L57386-1 | L57386-3 | L57435-1 |
| Matrix: | LG STORM WTR | LN BLANK WTR | LG STORM WTR |
| ColDate: | 3/2/13 16:24 | 3/4/13 10:00 | 3/2/13 17:42 |
| TimeSpan: | 23.25 | | 6.87 |
| 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 | 0.0097 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L |
| Benzo(a)anthracene | 0.124 | | 0.0094 | 0.0189 | ug/L | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L |
| Benzo(a)pyrene | 0.13 | | 0.0094 | 0.0189 | ug/L | | | | | | | <MDL | 0.0094 | 0.0189 | ug/L |
| Benzo(b,j,k)fluoranthene | 0.352 | | 0.094 | 0.189 | ug/L | | | | | | | <MDL | 0.094 | 0.189 | ug/L |
| Benzo(g,h,i)perylene | 0.114 | | 0.047 | 0.0943 | ug/L | | | | | | 0.057 | <RDL | 0.047 | 0.0943 | ug/L |
| Benzyl Butyl Phthalate | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | 0.335 | | 0.047 | 0.0943 | ug/L |
| Bis(2-Ethylhexyl)Phthalate | 0.433 | B | 0.024 | 0.0472 | ug/L | | | | | | 2.35 | B2 | 0.024 | 0.0472 | ug/L |
| Chrysene | 0.231 | | 0.0094 | 0.0189 | ug/L | | | | | | 0.0917 | | 0.0094 | 0.0189 | ug/L |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | <MDL | 0.047 | 0.0943 | ug/L |
| Diethyl Phthalate | 0.127 | | 0.024 | 0.0472 | ug/L | | | | | | 0.158 | | 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 | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | 0.124 | | 0.024 | 0.0472 | ug/L |
| Di-N-Octyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | 0.398 | | 0.024 | 0.0472 | ug/L |
| Fluoranthene | 0.344 | | 0.0094 | 0.0189 | ug/L | | | | | | 0.0626 | | 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 | 0.086 | <RDL | 0.047 | 0.0943 | ug/L | | | | | | | <MDL | 0.047 | 0.0943 | ug/L |
| Naphthalene | 0.0202 | | 0.0094 | 0.0189 | ug/L | | | | | | 0.0278 | | 0.0094 | 0.0189 | ug/L |
| Pentachlorophenol | | <MDL | 0.12 | 0.236 | ug/L | | | | | | | <MDL | 0.12 | 0.236 | ug/L |
| Phenanthrene | 0.0767 | | 0.0094 | 0.0189 | ug/L | | | | | | 0.0566 | | 0.0094 | 0.0189 | ug/L |
| Pyrene | 0.367 | | 0.0094 | 0.0189 | ug/L | | | | | | 0.139 | | 0.0094 | 0.0189 | ug/L |
| **OR SW846 3520C*SW846 8270D SIM** | | | | | | | | | | | | | | | |
| Chlorpyrifos | | <MDL | 0.033 | 0.0478 | ug/L | | | | | | | <MDL | 0.032 | 0.0472 | ug/L |
| Diazinon | | <MDL | 0.041 | 0.0478 | ug/L | | | | | | | <MDL | 0.041 | 0.0472 | ug/L |
| Dichlobenil | | <MDL | 0.048 | 0.0957 | ug/L | | | | | | | <MDL | 0.047 | 0.0943 | ug/L |
| Malathion | | <MDL | 0.046 | 0.0478 | ug/L | | | | | | | <MDL | 0.045 | 0.0472 | ug/L |
| Prometon | | <MDL | 0.048 | 0.0957 | ug/L | | | | | | | <MDL | 0.047 | 0.0943 | ug/L |
| **OR SW846 3535A/8151A*8270D SIM** | | | | | | | | | | | | | | | |
| 2,4-D | | <MDL | 0.5 | 0.99 | ug/L | | | | | | | <MDL | 0.5 | 0.99 | ug/L |
| MCPP | | <MDL | 0.5 | 0.99 | ug/L | | | | | | | <MDL | 0.5 | 0.99 | ug/L |
| Triclopyr | | <MDL | 0.5 | 0.99 | ug/L | | | | | | | <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 Report

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Project: | 421879-210 | | | | | Project: | 421879-210 | | | |
| Locator: | FCSW01 | | | | | Locator: | FFBLANK | | | |
| Descrip: | FALL CITY HD COMME | | | | | Descrip: | FIELD FILTER BLANK | | | |
| Sample: | L57435-3 | | | | | Sample: | L57435-5 | | | |
| Matrix: | LG STORM WTR | | | | | Matrix: | LN BLANK WTR | | | |
| ColDate: | 3/3/13 9:30 | | | | | ColDate: | 3/3/13 10:55 | | | |
| 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 | 65 | | | | 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: | FCSW01 | Locator: | FFBLANK |
| Descrip: | FALL CITY HD COMME | Descrip: | FIELD FILTER BLANK |
| Sample: | L57435-3 | Sample: | L57435-5 |
| Matrix: | LG STORM WTR | Matrix: | LN BLANK WTR |
| ColDate: | 3/3/13 9:30 | ColDate: | 3/3/13 10:55 |
| 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 | 0.19 | 0.19 | mg/L | | | | | |
| Lube Oil Range (>C24) | 0.194 | | 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 | 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 |
| RSW1UP | 421879-210 | L57386-1 | 0.37 | 0.025 | 13.5 | 61.8 | 16 | 2.34 | 0.741 | 0.0523 | 0.0131 | | 0.061 | 5440 | 1.1 | 2.93 | | 2.05 | 1600 | 14.2 | 25.3 | 20.2 |
| FCSW01 | 421879-210 | L57435-1 | 0.923 | 0.036 | 107 | 35.2 | 59 | 3.66 | 0.144 | 0.211 | 0.0107 | 8.87 | 0.13 | 4250 | 2.99 | 18.7 | 0.15 | 11.2 | 1980 | 8.81 | 73.5 | 18.8 |
| FCSW01 | 421879-210 | L57435-3 | | | | | | | | | | | | | | | | | | | | |
| * 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 | 2-Methylnaphthalene | 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 | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Indeno(1,2,3-Cd)Pyrene | Naphthalene | 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 |
| RSW1UP | 421879-210 | L57386-1 | | 0.0097 | 0.124 | 0.13 | 0.352 | 0.114 | | 0.433 | 0.231 | | | 0.127 | 0.344 | 0.086 | 0.0202 | 0.0767 | 0.367 | | |
| FCSW01 | 421879-210 | L57435-1 | 0.0205 | | | | | 0.057 | 0.335 | 2.35 | 0.0917 | 0.124 | 0.398 | 0.158 | 0.0626 | | 0.0278 | 0.0566 | 0.139 | | |
| FCSW01 | 421879-210 | L57435-3 | | | | | | | | | | | | | | | | | | 65 | 0.194 |
| * Not converted to dry weight basis | | | | | | | | | | | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | | | | | | | | | | | |

Login: P57386

Renton

NPDES Stormwater Permit Monitoring

Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 3-4-13 @ 10:25 | *Time* 10:25 |
| *Received by* | *Date* 3-4-13 | *Time* 1025 |
| *Sample Numbers* 57386-1 | | *[All]* |

| Sample Number | P57386-1 | P57386-2 | P57386-3 |
|---|---|---|---|
| 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 | 3-2-13 @ 16:24 | | 3-1-13 @ 10:00 |
| End Date/Time | 3-3-13 15:39 | | |
| Time Span | | | |
| Sample Depth | | | |
| **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 | | |

*CHAIN OF CUSTODY*

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

Login: P57435 NPDES Stormwater Fall City Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

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

| Sample Number | P57435-1 | P57435-2 | P57435-3 |
|---|---|---|---|
| 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 | 3/2/13 1742 | | 3/3/13 930 |
| End Date/Time | 3/3/13 0034 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>SAMP TEMP IN LAB 3.9°C<br>STOPPED ~ 925 3/3<br>SPLIT 1055 3/3<br>STORM STOP | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

*CHAIN OF CUSTODY*

| *Relinquished by* | *Date* 3/3/13 | *Time* 1120 |
|---|---|---|
| *Received by* | *Date* 3-4-13 | *Time* 0900 |
| *Sample Numbers* 57435 1, 3, 5 | | *[All]* |

Login: P57435 NPDES Stormwater Fall City Personnel: _____

Project: 421879-210

| Sample Number | P57435-4 | P57435-5 | |
|---|---|---|---|
| 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 | | 3/3/13 1055 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Mar 6 2013
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 |
|---|---|---|---|
| P57386-1 | Water | 13-A002396 | CONV |
| P57435-1 | Water | 13-A002397 | CONV |

Your samples were received on Monday, March 4, 2013. 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

**Am Test Inc.**
13600 NE 126TH PL
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(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 #: 421879-210
All results reported on an as received basis.

Date Received: 03/04/13
Date Reported: 3/ 6/13

---

**AMTEST Identification Number** **13-A002396**
**Client Identification** **P57386-1**
**Sampling Date** **03/03/13, 15:39**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.025 | mg/l | | 0.025 | SM 5540C | EB | 03/04/13 |

---

**AMTEST Identification Number** **13-A002397**
**Client Identification** **P57435-1**
**Sampling Date** **03/03/13, 00:34**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.036 | mg/l | | 0.025 | SM 5540C | EB | 03/04/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample numbers: 13-A002396 to 13-A002397**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A002397 | Surfactants | mg/l | 0.036 | 0.180 | 0.125 | 115.20 % |
| 13-A002397 | Surfactants | mg/l | 0.036 | 0.187 | 0.125 | 120.80 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.180 | 0.187 | 3.8 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.126 | 101. % |

## 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 1380722

Project Name: _____  Date Received: 3/ 4/13  Received By: Jeff Hurst

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 8.6 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 1380722

Project Name:  Date Received: 3/ 4/13  Received By: Jeff Hurst

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-11
Shipment Method: ENA
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***

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| 2316 P57386-1 | 3/3/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 15:39PM |
| 97 P57435-1 | 3/3/2013 | Storm Water | Level 2 | X | | | | | | | | | | | | 1 | sample time: 00:34AM |
| | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 2

Requested TAT: 14 Days
Data Package Due: 3/25/2013

*Please return signed **original** CoC with data package.*

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 3-4-13 | Signature | | 3/4/13 |
| Printed Name | Jason Kinnard | Time 1100 | Printed Name | Jeffy Lusr | Time 1:50 |
| Organization | King County DNR, Environmental Laboratory | | Organization | Am Test | |

T=8.6°C

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125658 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 3/2/2013 16:24 | 3/4/2013 14:47 | 3/4/2013 14:47 | WG125658-1,-2 | |
| L57435-1 | 421879-210 | | CVBOD | STORM WTR | 3/2/2013 17:42 | 3/4/2013 14:45 | 3/4/2013 14:45 | | |
| WG125658-1 | MB | | CVBOD | BLANK WTR | | 3/4/2013 14:31 | 3/4/2013 14:31 | | MB1 3/4/13 |
| WG125658-2 | SB | | CVBOD | BLANK WTR | | 3/4/2013 14:45 | 3/4/2013 14:45 | | WG125658-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125991 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:38 | 3/22/2013 8:38 | WG125991-2,-1,-3,- | |
| L57435-1 | 421879-210 | | CVCL | STORM WTR | 3/2/2013 17:42 | 3/22/2013 10:09 | 3/22/2013 10:09 | 4,-5,-6,-7,-8,-9,-10 | |
| L57472-1 | 421879-210 | | CVCL | STORM WTR | 3/6/2013 14:52 | 3/22/2013 6:06 | 3/22/2013 6:06 | | |
| L57473-1 | 421879-210 | | CVCL | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 3:03 | 3/22/2013 3:03 | | |
| L57538-1 | 421879-210 | | CVCL | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 1:32 | 3/22/2013 1:32 | | |
| L57557-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:08 | 3/22/2013 9:08 | | |
| L57558-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:33 | 3/22/2013 2:02 | 3/22/2013 2:02 | | |
| L57595-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 3/19/2013 0:00 | 3/22/2013 0:01 | 3/22/2013 0:01 | | |
| L57595-2 | 421937 | | CVCL | BLANK WTR | 3/19/2013 0:00 | 3/21/2013 23:30 | 3/21/2013 23:30 | | |
| WG125991-1 | CS | | CVCL | BLANK WTR | | 3/21/2013 21:28 | 3/21/2013 21:28 | | RDL_LEVEL |
| WG125991-2 | MB | | CVCL | BLANK WTR | | 3/21/2013 21:59 | 3/21/2013 21:59 | | MB2 3/21/13 |
| WG125991-3 | SB | | CVCL | BLANK WTR | | 3/21/2013 22:29 | 3/21/2013 22:29 | | WG125991-2 |
| WG125991-4 | LCS | | CVCL | BLANK WTR | | 3/21/2013 23:00 | 3/21/2013 23:00 | | LEVEL1 |
| WG125991-5 | LD | | CVCL | GRND WTR | | 3/22/2013 0:31 | 3/22/2013 0:31 | | L57595-1 |
| WG125991-6 | MS | | CVCL | GRND WTR | | 3/22/2013 1:01 | 3/22/2013 1:01 | | L57595-1 |
| WG125991-7 | LD | | CVCL | FRESH WTR | | 3/22/2013 3:34 | 3/22/2013 3:34 | | L57473-1 |
| WG125991-8 | MS | | CVCL | FRESH WTR | | 3/22/2013 4:04 | 3/22/2013 4:04 | | L57473-1 |
| WG125991-9 | LD | | CVCL | STORM WTR | | 3/22/2013 6:36 | 3/22/2013 6:36 | | L57472-1 |
| WG125991-10 | MS | | CVCL | STORM WTR | | 3/22/2013 7:07 | 3/22/2013 7:07 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125712 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/4/2013 8:00 | 3/5/2013 14:00 | 3/5/2013 14:00 | WG125712-4,-5,-6,-1,-2,-3 | |
| L57371-1 | 421422-CFGW | | CVCOND | GRND WTR | 2/27/2013 8:35 | 3/5/2013 14:08 | 3/5/2013 14:08 | | |
| L57371-3 | 421422-CFGW | | CVCOND | GRND WTR | 2/27/2013 7:35 | 3/5/2013 14:28 | 3/5/2013 14:28 | | |
| L57374-1 | 421422-CFGW | | CVCOND | GRND WTR | 3/1/2013 7:10 | 3/5/2013 14:37 | 3/5/2013 14:37 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCOND | GRND WTR | 3/1/2013 11:57 | 3/5/2013 14:45 | 3/5/2013 14:45 | | |
| L57376-1 | 421422-HOGW | | CVCOND | GRND WTR | 2/27/2013 8:54 | 3/5/2013 14:55 | 3/5/2013 14:55 | | |
| L57377-1 | 421422-HOGW | | CVCOND | GRND WTR | 3/1/2013 10:30 | 3/5/2013 15:04 | 3/5/2013 15:04 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/4/2013 9:00 | 3/5/2013 15:12 | 3/5/2013 15:12 | | |
| L57377-4 | 421422-CFGW | | CVCOND | GRND WTR | 3/4/2013 7:20 | 3/5/2013 15:20 | 3/5/2013 15:20 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 2/25/2013 0:46 | 3/5/2013 13:55 | 3/5/2013 13:55 | | |
| L57386-1 | 421879-210 | | CVCOND | STORM WTR | 3/2/2013 16:24 | 3/5/2013 13:56 | 3/5/2013 13:56 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 2/26/2013 8:20 | 3/5/2013 15:28 | 3/5/2013 15:28 | | |
| L57394-3 | 421422-CFGW | | CVCOND | GRND WTR | 3/1/2013 7:50 | 3/5/2013 15:37 | 3/5/2013 15:37 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVCOND | GRND WTR | 2/26/2013 9:35 | 3/5/2013 15:45 | 3/5/2013 15:45 | | |
| L57398-3 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 10:45 | 3/5/2013 15:54 | 3/5/2013 15:54 | | |
| L57398-4 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 10:03 | 3/5/2013 16:03 | 3/5/2013 16:03 | | |
| L57398-5 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 9:03 | 3/5/2013 16:11 | 3/5/2013 16:11 | | |
| L57398-6 | 421422-HOGW | | CVCOND | GRND WTR | 2/27/2013 7:58 | 3/5/2013 16:19 | 3/5/2013 16:19 | | |
| L57398-9 | 421422-HOGW | | CVCOND | GRND WTR | 2/28/2013 9:03 | 3/5/2013 16:27 | 3/5/2013 16:27 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/2/2013 17:42 | 3/5/2013 13:58 | 3/5/2013 13:58 | | |
| WG125712-1 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 13:44 | 3/5/2013 13:44 | | LEVEL1 |
| WG125712-2 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 13:45 | 3/5/2013 13:45 | | LEVEL2 |
| WG125712-3 | LD | | CVCOND | STORM WTR | | 3/5/2013 13:59 | 3/5/2013 13:59 | | L57435-1 |
| WG125712-4 | LD | | CVCOND | GRND WTR | | 3/5/2013 16:35 | 3/5/2013 16:35 | | L57398-9 |
| WG125712-5 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 16:45 | 3/5/2013 16:45 | | LEVEL1 |
| WG125712-6 | LCS | | CVCOND | BLANK WTR | | 3/5/2013 16:46 | 3/5/2013 16:46 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125725 Dissolved Nutrient - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/4/2013 8:00 | 3/5/2013 16:50 | 3/6/2013 12:11 | WG125725-1,-2,-3,-4,-5 | |
| L57377-3 | 421422-CFGW | | CVNO3 | GRND WTR | 3/4/2013 9:00 | 3/5/2013 16:50 | 3/6/2013 12:13 | | |
| L57377-4 | 421422-CFGW | | CVNO3 | GRND WTR | 3/4/2013 7:20 | 3/5/2013 16:50 | 3/6/2013 12:32 | | |
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/2/2013 16:24 | 3/6/2013 11:25 | 3/6/2013 13:19 | WG125725-1,-2,-3,-6,-7,-8,-9,-10,-11,-12 | |
| L57386-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/4/2013 10:00 | 3/6/2013 11:25 | 3/6/2013 13:38 | | |
| L57435-1 | 421879-210 | | CVNO23 | STORM WTR | 3/2/2013 17:42 | 3/6/2013 11:25 | 3/6/2013 13:40 | | |
| L57435-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/3/2013 10:55 | 3/6/2013 11:25 | 3/6/2013 13:44 | | |
| L57440-2 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVNO23 | EFFLUENT | 3/5/2013 7:28 | 3/6/2013 11:25 | 3/6/2013 12:38 | | |
| L57440-4 | 421430-300 | | CVNO23 | EFFLUENT | 3/5/2013 7:17 | 3/6/2013 11:25 | 3/6/2013 12:46 | | |
| L57440-5 | 421430-300 | | CVNO23 | BLANK WTR | 3/5/2013 7:38 | 3/6/2013 11:25 | 3/6/2013 12:48 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVNO23 | LEACHATE | 3/6/2013 6:51 | 3/6/2013 11:25 | 3/6/2013 13:49 | | |
| L57490-3 | 421422-CHLS-M | | CVNO23 | LEACHATE | 3/6/2013 7:46 | 3/6/2013 11:25 | 3/6/2013 13:51 | | |
| L57490-4 | 421422-CHLS-M | | CVNO23 | LEACHATE | 3/6/2013 8:34 | 3/6/2013 11:25 | 3/6/2013 13:53 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVNO23 | LEACHATE | 3/5/2013 7:25 | 3/6/2013 11:25 | 3/6/2013 14:05 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 7:42 | 3/6/2013 11:25 | 3/6/2013 14:07 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 8:40 | 3/6/2013 11:25 | 3/6/2013 14:09 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 9:50 | 3/6/2013 11:25 | 3/6/2013 14:12 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 9:35 | 3/6/2013 11:25 | 3/6/2013 14:14 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 7:37 | 3/6/2013 11:25 | 3/6/2013 13:11 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 10:15 | 3/6/2013 11:25 | 3/6/2013 14:16 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVNO23 | LEACHATE | 3/5/2013 9:15 | 3/6/2013 11:25 | 3/6/2013 14:18 | | |
| WG125725-1 | MB | | CVNO23 | BLANK WTR | | 3/5/2013 16:50 | 3/6/2013 12:02 | | CONNUTS1 |
| WG125725-1 | MB | | CVNO3 | BLANK WTR | | 3/5/2013 16:50 | 3/6/2013 12:02 | WG125725-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125725-2 | SB | | CVNO23 | BLANK WTR | | 3/5/2013 16:50 | 3/6/2013 12:04 | WG125725-1,-2,-3,-6,-7,-8,-9,-10,-11,-12 | WG125725-1 |
| WG125725-2 | SB | | CVNO3 | BLANK WTR | | 3/5/2013 16:50 | 3/6/2013 12:04 | WG125725-1,-2,-3,-4,-5 | WG125725-1 |
| WG125725-3 | LCS | | CVNO23 | BLANK WTR | | 3/6/2013 12:07 | 3/6/2013 12:07 | WG125725-1,-2,-3,-6,-7,-8,-9,-10,-11,-12 | LEVEL1 |
| WG125725-3 | LCS | | CVNO3 | BLANK WTR | | 3/6/2013 12:07 | 3/6/2013 12:07 | WG125725-1,-2,-3,-4,-5 | LEVEL1 |
| WG125725-4 | LD | | CVNO3 | GRND WTR | | 3/5/2013 16:50 | 3/6/2013 12:15 | | L57377-3 |
| WG125725-5 | MS | | CVNO3 | GRND WTR | | 3/5/2013 16:50 | 3/6/2013 12:17 | | L57377-3 |
| WG125725-6 | MB | | CVNO23 | BLANK WTR | | 3/6/2013 11:25 | 3/6/2013 12:36 | WG125725-1,-2,-3,-6,-7,-8,-9,-10,-11,-12 | CONNUTS1 |
| WG125725-7 | LD | | CVNO23 | EFFLUENT | | 3/6/2013 11:25 | 3/6/2013 12:40 | | L57440-2 |
| WG125725-8 | MS | | CVNO23 | EFFLUENT | | 3/6/2013 11:25 | 3/6/2013 12:42 | | L57440-2 |
| WG125725-9 | LD | | CVNO23 | STORM WTR | | 3/6/2013 11:25 | 3/6/2013 13:22 | | L57386-1 |
| WG125725-10 | MS | | CVNO23 | STORM WTR | | 3/6/2013 11:25 | 3/6/2013 13:34 | | L57386-1 |
| WG125725-11 | LD | | CVNO23 | LEACHATE | | 3/6/2013 11:25 | 3/6/2013 14:20 | | L57493-12 |
| WG125725-12 | MS | | CVNO23 | LEACHATE | | 3/6/2013 11:25 | 3/6/2013 14:22 | | L57493-12 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125731 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 2/25/2013 0:46 | 3/6/2013 14:30 | 3/6/2013 15:47 | WG125731-1,-2,-3,-4,-6,-7,-8,-9,-10,-11,-12,-13,-5 | |
| L57385-5 | 421879-210 | | CVORTHOP | BLANK WTR | 2/25/2013 13:35 | 3/6/2013 14:30 | 3/6/2013 15:49 | | |
| L57386-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/2/2013 16:24 | 3/6/2013 14:30 | 3/6/2013 15:32 | | |
| L57386-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/4/2013 10:00 | 3/6/2013 14:30 | 3/6/2013 15:40 | | |
| L57435-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/2/2013 17:42 | 3/6/2013 14:30 | 3/6/2013 15:42 | | |
| L57435-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/3/2013 10:55 | 3/6/2013 14:30 | 3/6/2013 15:44 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVORTHOP | EFFLUENT | 3/4/2013 7:07 | 3/6/2013 14:30 | 3/6/2013 16:09 | | |
| L57440-3 | 421430-300 | | CVORTHOP | EFFLUENT | 3/4/2013 7:56 | 3/6/2013 14:30 | 3/6/2013 16:18 | | |
| L57440-5 | 421430-300 | | CVORTHOP | BLANK WTR | 3/5/2013 7:38 | 3/6/2013 14:30 | 3/6/2013 16:30 | | |
| L57442-1 | 421195-150 | Beaver Lake | CVORTHOP | FRESH WTR | 2/26/2013 10:10 | 3/6/2013 14:30 | 3/6/2013 15:59 | | |
| L57442-2 | 421195-150 | | CVORTHOP | FRESH WTR | 2/26/2013 9:50 | 3/6/2013 14:30 | 3/6/2013 16:07 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/6/2013 6:51 | 3/6/2013 14:30 | 3/6/2013 17:10 | | |
| L57490-3 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 3/6/2013 7:46 | 3/6/2013 14:30 | 3/6/2013 17:12 | | |
| L57490-4 | 421422-CHLS-M | | CVORTHOP | LEACHATE | 3/6/2013 8:34 | 3/6/2013 14:30 | 3/6/2013 17:14 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVORTHOP | LEACHATE | 3/5/2013 7:25 | 3/6/2013 14:30 | 3/6/2013 16:39 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 7:42 | 3/6/2013 14:30 | 3/6/2013 16:47 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 8:40 | 3/6/2013 14:30 | 3/6/2013 16:57 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:50 | 3/6/2013 14:30 | 3/6/2013 16:59 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:35 | 3/6/2013 14:30 | 3/6/2013 17:02 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 7:37 | 3/6/2013 14:30 | 3/6/2013 17:04 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 10:15 | 3/6/2013 14:30 | 3/6/2013 17:06 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVORTHOP | LEACHATE | 3/5/2013 9:15 | 3/6/2013 14:30 | 3/6/2013 17:08 | | |
| WG125731-1 | MB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 15:15 | | CONNUTS3 |
| WG125731-2 | SB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 15:17 | | WG125731-1 |
| WG125731-3 | LCS | | CVORTHOP | BLANK WTR | | 3/6/2013 15:19 | 3/6/2013 15:19 | | LEVEL1 |
| WG125731-4 | LD | | CVORTHOP | STORM WTR | | 3/6/2013 14:30 | 3/6/2013 15:34 | | L57386-1 |
| WG125731-5 | MS | | CVORTHOP | STORM WTR | | 3/6/2013 14:30 | 3/6/2013 15:36 | | L57386-1 |
| WG125731-6 | LD | | CVORTHOP | FRESH WTR | | 3/6/2013 14:30 | 3/6/2013 16:01 | | L57442-1 |
| WG125731-7 | MS | | CVORTHOP | FRESH WTR | | 3/6/2013 14:30 | 3/6/2013 16:03 | | L57442-1 |
| WG125731-8 | LD | | CVORTHOP | EFFLUENT | | 3/6/2013 14:30 | 3/6/2013 16:12 | | L57440-1 |
| WG125731-9 | MS | | CVORTHOP | EFFLUENT | | 3/6/2013 14:30 | 3/6/2013 16:14 | | L57440-1 |
| WG125731-10 | MB | | CVORTHOP | BLANK WTR | | 3/6/2013 14:30 | 3/6/2013 16:32 | | CONNUTS3 |
| WG125731-11 | LCS | | CVORTHOP | BLANK WTR | | 3/6/2013 16:34 | 3/6/2013 16:34 | | LEVEL1 |
| WG125731-12 | LD | | CVORTHOP | LEACHATE | | 3/6/2013 14:30 | 3/6/2013 16:41 | | L57493-1 |
| WG125731-13 | MS | | CVORTHOP | LEACHATE | | 3/6/2013 14:30 | 3/6/2013 16:43 | | L57493-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG126000 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:00 | 3/25/2013 13:00 | WG126000-2,-1,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12 | |
| L57435-1 | 421879-210 | | CVTKN | STORM WTR | 3/2/2013 17:42 | 3/22/2013 8:00 | 3/25/2013 13:05 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 3/4/2013 7:07 | 3/22/2013 8:00 | 3/25/2013 14:28 | | |
| L57440-3 | 421430-300 | | CVTKN | EFFLUENT | 3/4/2013 7:56 | 3/22/2013 8:00 | 3/25/2013 14:57 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/6/2013 14:52 | 3/22/2013 8:00 | 3/25/2013 13:02 | | |
| L57473-1 | 421879-210 | | CVTKN | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 8:00 | 3/25/2013 13:23 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 3/6/2013 6:51 | 3/22/2013 8:00 | 3/25/2013 13:34 | | |
| L57490-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 7:46 | 3/22/2013 8:00 | 3/25/2013 13:36 | | |
| L57490-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 8:34 | 3/22/2013 8:00 | 3/25/2013 14:55 | | |
| L57490-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/7/2013 4:45 | 3/22/2013 8:00 | 3/25/2013 13:50 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVTKN | LEACHATE | 3/5/2013 7:25 | 3/22/2013 8:00 | 3/25/2013 13:55 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:42 | 3/22/2013 8:00 | 3/25/2013 13:57 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 8:40 | 3/22/2013 8:00 | 3/25/2013 13:59 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:50 | 3/22/2013 8:00 | 3/25/2013 14:01 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:35 | 3/22/2013 8:00 | 3/25/2013 14:03 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:37 | 3/22/2013 8:00 | 3/25/2013 14:05 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 10:15 | 3/22/2013 8:00 | 3/25/2013 14:07 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:15 | 3/22/2013 8:00 | 3/25/2013 14:09 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTKN | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 8:00 | 3/25/2013 13:32 | | |
| WG126000-1 | MB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:50 | | MB1 3/22/13 |
| WG126000-2 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:52 | | LEVEL1 |
| WG126000-3 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:54 | | LEVEL2 |
| WG126000-4 | SB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:56 | | WG126000-1 |
| WG126000-5 | LD | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:07 | | L57435-1 |
| WG126000-6 | MS | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:19 | | L57435-1 |
| WG126000-7 | LD | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:25 | | L57473-1 |
| WG126000-8 | MS | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:27 | | L57473-1 |
| WG126000-9 | LD | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:22 | | L57493-12 |
| WG126000-10 | MS | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:24 | | L57493-12 |
| WG126000-11 | LD | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 14:59 | | L57440-3 |
| WG126000-12 | MS | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 15:01 | | L57440-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125795 Total Nitrogen, Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 3/2/2013 16:24 | 3/6/2013 10:30 | 3/8/2013 12:12 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57435-1 | 421879-210 | | CVTOTP | STORM WTR | 3/2/2013 17:42 | 3/6/2013 10:30 | 3/8/2013 12:14 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTOTP | EFFLUENT | 3/4/2013 7:07 | 3/6/2013 10:30 | 3/8/2013 14:15 | | |
| L57440-3 | 421430-300 | | CVTOTP | EFFLUENT | 3/4/2013 7:56 | 3/6/2013 10:30 | 3/8/2013 14:57 | | |
| L57466-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTOTN | FRESH WTR | 3/4/2013 9:18 | 3/6/2013 10:30 | 3/8/2013 12:20 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57466-1 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:18 | 3/6/2013 10:30 | 3/8/2013 12:20 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57466-2 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 9:35 | 3/6/2013 10:30 | 3/8/2013 12:21 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57466-2 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:35 | 3/6/2013 10:30 | 3/8/2013 12:21 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57466-3 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 9:50 | 3/6/2013 10:30 | 3/8/2013 12:23 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57466-3 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:50 | 3/6/2013 10:30 | 3/8/2013 12:23 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57466-4 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 10:25 | 3/6/2013 10:30 | 3/8/2013 12:32 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57466-4 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 10:25 | 3/6/2013 10:30 | 3/8/2013 12:32 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57466-5 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 10:45 | 3/6/2013 10:30 | 3/8/2013 12:34 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57466-5 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 10:45 | 3/6/2013 10:30 | 3/8/2013 12:34 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |

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|---|---|---|---|---|---|---|---|---|
| L57466-6 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 11:16 | 3/6/2013 10:30 | 3/8/2013 12:36 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57466-6 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 11:16 | 3/6/2013 10:30 | 3/8/2013 12:36 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57466-7 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 11:44 | 3/6/2013 10:30 | 3/8/2013 12:38 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57466-7 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 11:44 | 3/6/2013 10:30 | 3/8/2013 12:38 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57466-8 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 12:07 | 3/6/2013 10:30 | 3/8/2013 12:40 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57466-8 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 12:07 | 3/6/2013 10:30 | 3/8/2013 12:40 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57466-9 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 12:30 | 3/6/2013 10:30 | 3/8/2013 12:42 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57466-9 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 12:30 | 3/6/2013 10:30 | 3/8/2013 12:42 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57466-10 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 13:10 | 3/6/2013 10:30 | 3/8/2013 12:43 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57466-10 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 13:10 | 3/6/2013 10:30 | 3/8/2013 12:43 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57466-11 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 13:41 | 3/6/2013 10:30 | 3/8/2013 12:45 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |

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|---|---|---|---|---|---|---|---|---|
| L57466-11 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 13:41 | 3/6/2013 10:30 | 3/8/2013 12:45 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-1 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 9:22 | 3/6/2013 10:30 | 3/8/2013 12:47 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-1 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:22 | 3/6/2013 10:30 | 3/8/2013 12:47 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-2 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 9:43 | 3/6/2013 10:30 | 3/8/2013 12:49 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-2 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:43 | 3/6/2013 10:30 | 3/8/2013 12:49 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-3 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 9:56 | 3/6/2013 10:30 | 3/8/2013 12:58 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-3 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 9:56 | 3/6/2013 10:30 | 3/8/2013 12:58 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-4 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 10:10 | 3/6/2013 10:30 | 3/8/2013 13:04 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-4 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 10:10 | 3/6/2013 10:30 | 3/8/2013 13:04 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-5 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 10:23 | 3/6/2013 10:30 | 3/8/2013 13:05 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-5 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 10:23 | 3/6/2013 10:30 | 3/8/2013 13:05 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |

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|---|---|---|---|---|---|---|---|---|
| L57467-6 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 11:05 | 3/6/2013 10:30 | 3/8/2013 13:07 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-6 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 11:05 | 3/6/2013 10:30 | 3/8/2013 13:07 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-7 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 11:18 | 3/6/2013 10:30 | 3/8/2013 13:09 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-7 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 11:18 | 3/6/2013 10:30 | 3/8/2013 13:09 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-8 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 11:44 | 3/6/2013 10:30 | 3/8/2013 13:24 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-8 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 11:44 | 3/6/2013 10:30 | 3/8/2013 13:24 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-9 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 12:10 | 3/6/2013 10:30 | 3/8/2013 13:26 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-9 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 12:10 | 3/6/2013 10:30 | 3/8/2013 13:26 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-10 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 12:33 | 3/6/2013 10:30 | 3/8/2013 13:27 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-10 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 12:33 | 3/6/2013 10:30 | 3/8/2013 13:27 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-11 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 12:48 | 3/6/2013 10:30 | 3/8/2013 13:29 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |

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|---|---|---|---|---|---|---|---|---|
| L57467-11 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 12:48 | 3/6/2013 10:30 | 3/8/2013 13:29 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57467-12 | 421240A | | CVTOTN | FRESH WTR | 3/4/2013 13:08 | 3/6/2013 10:30 | 3/8/2013 13:31 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57467-12 | 421240A | | CVTOTP | FRESH WTR | 3/4/2013 13:08 | 3/6/2013 10:30 | 3/8/2013 13:31 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-1 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 9:06 | 3/6/2013 10:30 | 3/8/2013 13:33 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-1 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 9:06 | 3/6/2013 10:30 | 3/8/2013 13:33 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-2 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 9:29 | 3/6/2013 10:30 | 3/8/2013 13:35 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-2 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 9:29 | 3/6/2013 10:30 | 3/8/2013 13:35 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-3 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 9:50 | 3/6/2013 10:30 | 3/8/2013 13:37 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-3 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 9:50 | 3/6/2013 10:30 | 3/8/2013 13:37 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-4 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 10:18 | 3/6/2013 10:30 | 3/8/2013 13:38 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-4 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 10:18 | 3/6/2013 10:30 | 3/8/2013 13:38 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |

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|---|---|---|---|---|---|---|---|---|
| L57468-5 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 10:57 | 3/6/2013 10:30 | 3/8/2013 13:40 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-5 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 10:57 | 3/6/2013 10:30 | 3/8/2013 13:40 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-6 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 11:07 | 3/6/2013 10:30 | 3/8/2013 13:49 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-6 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 11:07 | 3/6/2013 10:30 | 3/8/2013 13:49 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-7 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 11:33 | 3/6/2013 10:30 | 3/8/2013 13:51 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-7 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 11:33 | 3/6/2013 10:30 | 3/8/2013 13:51 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-8 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 11:20 | 3/6/2013 10:30 | 3/8/2013 13:53 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-8 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 11:20 | 3/6/2013 10:30 | 3/8/2013 13:53 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-9 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 12:09 | 3/6/2013 10:30 | 3/8/2013 13:55 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-9 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 12:09 | 3/6/2013 10:30 | 3/8/2013 13:55 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-10 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 12:22 | 3/6/2013 10:30 | 3/8/2013 13:57 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |

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|---|---|---|---|---|---|---|---|---|
| L57468-10 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 12:22 | 3/6/2013 10:30 | 3/8/2013 13:57 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-11 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 12:37 | 3/6/2013 10:30 | 3/8/2013 13:59 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-11 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 12:37 | 3/6/2013 10:30 | 3/8/2013 13:59 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-12 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 13:13 | 3/6/2013 10:30 | 3/8/2013 14:04 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-12 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 13:13 | 3/6/2013 10:30 | 3/8/2013 14:04 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57468-13 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 13:41 | 3/6/2013 10:30 | 3/8/2013 14:06 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57468-13 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 13:41 | 3/6/2013 10:30 | 3/8/2013 14:06 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57469-1 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 11:03 | 3/6/2013 10:30 | 3/8/2013 14:30 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57469-1 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 11:03 | 3/6/2013 10:30 | 3/8/2013 14:30 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |
| L57469-2 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 11:26 | 3/6/2013 10:30 | 3/8/2013 14:32 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 |
| L57469-2 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 11:26 | 3/6/2013 10:30 | 3/8/2013 14:32 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 |

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|---|---|---|---|---|---|---|---|---|
| L57469-3 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 12:01 | 3/6/2013 10:30 | 3/8/2013 14:41 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57469-3 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 12:01 | 3/6/2013 10:30 | 3/8/2013 14:41 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57469-4 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 13:08 | 3/6/2013 10:30 | 3/8/2013 14:46 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57469-4 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 13:08 | 3/6/2013 10:30 | 3/8/2013 14:46 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| L57469-5 | 421240A | | CVTOTN | FRESH WTR | 3/5/2013 13:33 | 3/6/2013 10:30 | 3/8/2013 14:48 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | |
| L57469-5 | 421240A | | CVTOTP | FRESH WTR | 3/5/2013 13:33 | 3/6/2013 10:30 | 3/8/2013 14:48 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | |
| WG125795-1 | MB | | CVTOTN | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:07 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | MB1 |
| WG125795-1 | MB | | CVTOTP | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:07 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | MB1 |
| WG125795-2 | SB | | CVTOTN | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:09 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | WG125795-1 |
| WG125795-2 | SB | | CVTOTP | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:09 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | WG125795-1 |
| WG125795-3 | LCS | | CVTOTN | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:10 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | LEVEL1 |
| WG125795-3 | LCS | | CVTOTP | BLANK WTR | | 3/6/2013 10:30 | 3/8/2013 12:10 | WG125795-1,-2,-3,- | LEVEL1 |
| WG125795-4 | LD | | CVTOTP | STORM WTR | | 3/6/2013 10:30 | 3/8/2013 12:16 | 4,-5,-6,-7,-8,-9,-10,- | L57435-1 |
| WG125795-5 | MS | | CVTOTP | STORM WTR | | 3/6/2013 10:30 | 3/8/2013 12:18 | 11,-12,-16,-17,-18,- | L57435-1 |

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|---|---|---|---|---|---|---|---|
| WG125795-6 | LD | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 13:00 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57467-3 |
| WG125795-6 | LD | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 13:00 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | L57467-3 |
| WG125795-7 | MS | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 13:02 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57467-3 |
| WG125795-7 | MS | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 13:02 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | L57467-3 |
| WG125795-8 | MB | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:11 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | MB2 |
| WG125795-8 | MB | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:11 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | MB2 |
| WG125795-9 | SB | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:13 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | WG125795-8 |
| WG125795-9 | SB | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:13 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | WG125795-8 |
| WG125795-10 | LCS | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:15 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | LEVEL1 |
| WG125795-10 | LCS | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 13:15 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | LEVEL1 |
| WG125795-11 | LD | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:00 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57468-11 |

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|---|---|---|---|---|---|---|---|
| WG125795-11 | LD | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:00 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | L57468-11 |
| WG125795-12 | MS | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:02 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57468-11 |
| WG125795-12 | MS | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:02 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,- | L57468-11 |
| WG125795-13 | LD | CVTOTP | EFFLUENT | 3/6/2013 10:30 | 3/8/2013 15:06 | | L57440-3 |
| WG125795-14 | MS | CVTOTP | EFFLUENT | 3/6/2013 10:30 | 3/8/2013 15:08 | | L57440-3 |
| WG125795-15 | MB | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:24 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | MB3 |
| WG125795-15 | MB | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:55 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | MB3 |
| WG125795-16 | SB | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:26 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | WG125795-15 |
| WG125795-16 | SB | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:26 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | WG125795-15 |
| WG125795-17 | LCS | CVTOTN | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:28 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | LEVEL1 |
| WG125795-17 | LCS | CVTOTP | BLANK WTR | 3/6/2013 10:30 | 3/8/2013 14:28 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | LEVEL1 |
| WG125795-18 | LD | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:43 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57469-3 |
| WG125795-18 | LD | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:43 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | L57469-3 |
| WG125795-19 | MS | CVTOTN | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:44 | WG125795-11,-12,-15,-16,-17,-18,-19,-1,-2,-3,-6,-7,-8,-9,-10 | L57469-3 |

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|---|---|---|---|---|---|---|---|
| WG125795-19 | MS | CVTOTP | FRESH WTR | 3/6/2013 10:30 | 3/8/2013 14:44 | WG125795-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12,-16,-17,-18,-19,-15,-13,-14 | L57469-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125694 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/4/2013 8:00 | 3/4/2013 15:35 | 3/6/2013 16:41 | WG125694-1,-2,-3,-4,-5 | |
| L57374-1 | 421422-CFGW | | CVTSS | GRND WTR | 3/1/2013 7:10 | 3/4/2013 15:35 | 3/6/2013 16:42 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | CVTSS | GRND WTR | 3/1/2013 11:57 | 3/4/2013 15:35 | 3/6/2013 16:44 | | |
| L57377-1 | 421422-HOGW | | CVTSS | GRND WTR | 3/1/2013 10:30 | 3/4/2013 15:35 | 3/6/2013 16:45 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/4/2013 9:00 | 3/4/2013 15:35 | 3/6/2013 16:46 | | |
| L57377-4 | 421422-CFGW | | CVTSS | GRND WTR | 3/4/2013 7:20 | 3/4/2013 15:35 | 3/6/2013 16:46 | | |
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/2/2013 16:24 | 3/4/2013 15:35 | 3/6/2013 16:47 | | |
| L57394-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 2/26/2013 8:20 | 3/4/2013 15:35 | 3/6/2013 17:04 | | |
| L57394-3 | 421422-CFGW | | CVTSS | GRND WTR | 3/1/2013 7:50 | 3/4/2013 15:35 | 3/6/2013 16:55 | | |
| L57395-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTSS | FRESH WTR | 2/25/2013 9:55 | 3/4/2013 15:35 | 3/6/2013 17:04 | | |
| L57395-2 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 2/25/2013 10:13 | 3/4/2013 15:35 | 3/6/2013 17:06 | | |
| L57395-4 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 2/25/2013 9:35 | 3/4/2013 15:35 | 3/6/2013 17:07 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/2/2013 17:42 | 3/4/2013 15:35 | 3/6/2013 16:52 | | |
| L57486-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTSS | FRESH WTR | 3/4/2013 8:42 | 3/4/2013 15:35 | 3/6/2013 16:56 | | |
| L57486-2 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 3/4/2013 7:52 | 3/4/2013 15:35 | 3/6/2013 16:57 | | |
| L57486-3 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 3/4/2013 8:42 | 3/4/2013 15:35 | 3/6/2013 17:00 | | |
| L57486-4 | 421422-CHSW-P2 | | CVTSS | FRESH WTR | 3/4/2013 7:31 | 3/4/2013 15:35 | 3/6/2013 17:01 | | |
| WG125694-1 | MB | | CVTSS | BLANK WTR | | 3/4/2013 15:35 | 3/6/2013 16:40 | | MB1 130304 |
| WG125694-2 | LCS | | CVTSS | BLANK WTR | | 3/4/2013 15:35 | 3/6/2013 16:40 | | LEVEL1 |
| WG125694-3 | LD | | CVTSS | GRND WTR | | 3/4/2013 15:35 | 3/6/2013 16:43 | | L57374-1 |
| WG125694-4 | LD | | CVTSS | STORM WTR | | 3/4/2013 15:35 | 3/6/2013 16:50 | | L57386-1 |
| WG125694-5 | LD | | CVTSS | FRESH WTR | | 3/4/2013 15:35 | 3/6/2013 16:58 | | L57486-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125666 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:31 | 3/4/2013 17:31 | WG125666-1,-2,-3,-4,-5,-6,-7,-8 | |
| L57435-1 | 421879-210 | | CVTURB | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:33 | 3/4/2013 17:33 | | |
| L57466-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTURB | FRESH WTR | 3/4/2013 9:18 | 3/4/2013 17:42 | 3/4/2013 17:42 | | |
| L57466-2 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 9:35 | 3/4/2013 17:43 | 3/4/2013 17:43 | | |
| L57466-3 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 9:50 | 3/4/2013 17:44 | 3/4/2013 17:44 | | |
| L57466-4 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 10:25 | 3/4/2013 17:47 | 3/4/2013 17:47 | | |
| L57466-5 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 10:45 | 3/4/2013 17:49 | 3/4/2013 17:49 | | |
| L57466-6 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 11:16 | 3/4/2013 17:51 | 3/4/2013 17:51 | | |
| L57466-7 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 11:44 | 3/4/2013 17:53 | 3/4/2013 17:53 | | |
| L57466-8 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 12:07 | 3/4/2013 17:55 | 3/4/2013 17:55 | | |
| L57466-9 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 12:30 | 3/4/2013 17:57 | 3/4/2013 17:57 | | |
| L57466-10 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 13:10 | 3/4/2013 17:59 | 3/4/2013 17:59 | | |
| L57466-11 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 13:41 | 3/4/2013 18:01 | 3/4/2013 18:01 | | |
| L57467-1 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 9:22 | 3/4/2013 18:04 | 3/4/2013 18:04 | | |
| L57467-2 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 9:43 | 3/4/2013 18:06 | 3/4/2013 18:06 | | |
| L57467-3 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 9:56 | 3/4/2013 18:08 | 3/4/2013 18:08 | | |
| L57467-4 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 10:10 | 3/4/2013 18:09 | 3/4/2013 18:09 | | |
| L57467-5 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 10:23 | 3/4/2013 18:13 | 3/4/2013 18:13 | | |
| L57467-6 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 11:05 | 3/4/2013 18:16 | 3/4/2013 18:16 | | |
| L57467-7 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 11:18 | 3/4/2013 18:17 | 3/4/2013 18:17 | | |
| L57467-8 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 11:44 | 3/4/2013 18:19 | 3/4/2013 18:19 | | |
| L57467-9 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 12:10 | 3/4/2013 18:22 | 3/4/2013 18:22 | | |
| L57467-10 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 12:33 | 3/4/2013 18:23 | 3/4/2013 18:23 | | |
| L57467-11 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 12:48 | 3/4/2013 18:24 | 3/4/2013 18:24 | | |
| L57467-12 | 421240A | | CVTURB | FRESH WTR | 3/4/2013 13:08 | 3/4/2013 18:27 | 3/4/2013 18:27 | | |
| L57486-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | CVTURB | FRESH WTR | 3/4/2013 8:42 | 3/4/2013 17:35 | 3/4/2013 17:35 | | |
| L57486-2 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 3/4/2013 7:52 | 3/4/2013 17:36 | 3/4/2013 17:36 | | |
| L57486-3 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 3/4/2013 8:42 | 3/4/2013 17:39 | 3/4/2013 17:39 | | |
| L57486-4 | 421422-CHSW-P2 | | CVTURB | FRESH WTR | 3/4/2013 7:31 | 3/4/2013 17:40 | 3/4/2013 17:40 | | |
| WG125666-1 | LCS | | CVTURB | BLANK WTR | | 3/4/2013 17:29 | 3/4/2013 17:29 | | LEVEL1 |
| WG125666-2 | LCS | | CVTURB | BLANK WTR | | 3/4/2013 17:30 | 3/4/2013 17:30 | | LEVEL2 |
| WG125666-3 | LD | | CVTURB | STORM WTR | | 3/4/2013 17:32 | 3/4/2013 17:32 | | L57386-1 |
| WG125666-4 | LD | | CVTURB | FRESH WTR | | 3/4/2013 17:37 | 3/4/2013 17:37 | | L57486-2 |
| WG125666-5 | LD | | CVTURB | FRESH WTR | | 3/4/2013 17:45 | 3/4/2013 17:45 | | L57466-3 |
| WG125666-6 | LCS | | CVTURB | BLANK WTR | | 3/4/2013 18:03 | 3/4/2013 18:03 | | LEVEL1 |
| WG125666-7 | LD | | CVTURB | FRESH WTR | | 3/4/2013 18:11 | 3/4/2013 18:11 | | L57467-4 |
| WG125666-8 | LCS | | CVTURB | BLANK WTR | | 3/4/2013 18:28 | 3/4/2013 18:28 | | LEVEL1 |

**WG125643 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 3/3/2013 9:30 | 3/3/2013 14:00 | 3/4/2013 12:00 | WG125639-2,-3,-4,-5 | |
| WG125639-2 | PC | | MCFC-MF | BLANK WTR | | 3/3/2013 14:00 | 3/4/2013 12:00 | | QC-PERFORMED:03-FEB-13 |
| WG125639-3 | NC | | MCFC-MF | BLANK WTR | | 3/3/2013 14:00 | 3/4/2013 12:00 | | QC-PERFORMED:03-FEB-13 |
| WG125639-4 | BF | | MCFC-MF | BLANK WTR | | 3/3/2013 14:00 | 3/4/2013 12:00 | | QC-PERFORMED:03-FEB-13 |
| WG125639-5 | AF | | MCFC-MF | BLANK WTR | | 3/3/2013 14:00 | 3/4/2013 12:00 | | QC-PERFORMED:03-FEB-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125682 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57327-1 | 421186B | RTP INPLNT 3 DAY INT (inf,eff,sl) | MTICPMS | INFLUENT | 2/5/2013 8:02 | 3/6/2013 8:00 | 3/7/2013 12:07 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57327-4 | 421186B | | MTICPMS | EFFLUENT | 2/5/2013 8:11 | 3/6/2013 8:00 | 3/7/2013 12:13 | | |
| L57328-1 | 421186B | | MTICPMS | INFLUENT | 2/6/2013 8:07 | 3/6/2013 8:00 | 3/7/2013 12:19 | | |
| L57328-4 | 421186B | | MTICPMS | EFFLUENT | 2/6/2013 8:16 | 3/6/2013 8:00 | 3/7/2013 12:25 | | |
| L57328-7 | 421186B | | MTICPMS | EFFLUENT | 2/6/2013 8:25 | 3/6/2013 8:00 | 3/7/2013 12:49 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 2/25/2013 0:46 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57385-1 | 421879-210 | | MTICPMS | STORM WTR | 2/25/2013 0:46 | 3/6/2013 8:00 | 3/7/2013 12:31 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57386-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 3/2/2013 16:24 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57386-1 | 421879-210 | | MTICPMS | STORM WTR | 3/2/2013 16:24 | 3/6/2013 8:00 | 3/7/2013 13:08 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57395-4 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | MTICPMS | FRESH WTR | 2/25/2013 9:35 | 3/6/2013 8:00 | 3/7/2013 13:14 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/2/2013 17:42 | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | |
| L57435-1 | 421879-210 | | MTICPMS | STORM WTR | 3/2/2013 17:42 | 3/6/2013 8:00 | 3/7/2013 13:20 | WG125682-1,-2,-3,-4,-5,-6 | |
| L57486-1 | 421422-CHSW-P2 | SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2 | MTICPMS | FRESH WTR | 3/4/2013 8:42 | 3/6/2013 8:00 | 3/7/2013 13:38 | | |
| L57486-2 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 7:52 | 3/6/2013 8:00 | 3/7/2013 13:44 | | |
| L57486-3 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 8:42 | 3/6/2013 8:00 | 3/7/2013 14:03 | | |
| L57486-4 | 421422-CHSW-P2 | | MTICPMS | FRESH WTR | 3/4/2013 7:31 | 3/6/2013 8:00 | 3/7/2013 14:09 | | |
| WG125682-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | METHOD BLANK |
| WG125682-1 | MB | | MTICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/7/2013 11:54 | WG125682-1,-2,-3,-4,-5,-6 | METHOD BLANK |
| WG125682-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | WG125682-1 MS-20 SPIKE BLANK |
| WG125682-2 | SB | | MTICPMS | BLANK WTR | | 3/6/2013 8:00 | 3/7/2013 12:01 | WG125682-1,-2,-3,-4,-5,-6 | WG125682-1 MS-20 SPIKE BLANK |
| WG125682-3 | LD | | MTICPMS | EFFLUENT | | 3/6/2013 8:00 | 3/7/2013 12:55 | | L57328-7 RPD-LIQ LAB DUPLCIATE |
| WG125682-4 | MS | | MTICPMS | EFFLUENT | | 3/6/2013 8:00 | 3/7/2013 13:02 | | L57328-7 MS-20 MATRIX SPIKE |
| WG125682-5 | LD | | MTHARD-ICPMS | STORM WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | L57435-1 RPD-LIQ LAB DUPLUICATE |
| WG125682-5 | LD | | MTICPMS | STORM WTR | | 3/6/2013 8:00 | 3/7/2013 13:26 | WG125682-1,-2,-3,-4,-5,-6 | L57435-1 RPD-LIQ LAB DUPLUICATE |
| WG125682-6 | MS | | MTHARD-ICPMS | STORM WTR | | 3/6/2013 8:00 | 3/8/2013 9:43 | WG125682-1,-2,-5,-6 | L57435-1 MS-20 MATRIX SPIKE |
| WG125682-6 | MS | | MTICPMS | STORM WTR | | 3/6/2013 8:00 | 3/7/2013 13:32 | WG125682-1,-2,-3,-4,-5,-6 | L57435-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125690 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57338-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 10:23 | 3/5/2013 14:00 | 3/6/2013 14:25 | WG125690-1,-3,-4 | |
| L57350-6 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHG-MID | FRESH WTR | 2/12/2013 7:15 | 3/5/2013 14:00 | 3/6/2013 14:09 | WG125690-1,-2 | |
| L57350-7 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 9:16 | 3/5/2013 14:00 | 3/6/2013 14:10 | | |
| L57350-8 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 9:15 | 3/5/2013 14:00 | 3/6/2013 14:12 | | |
| L57350-9 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 10:10 | 3/5/2013 14:00 | 3/6/2013 14:14 | | |
| L57350-10 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 2/12/2013 10:37 | 3/5/2013 14:00 | 3/6/2013 14:16 | | |
| L57352-4 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 9:09 | 3/5/2013 14:00 | 3/6/2013 14:27 | WG125690-1,-3,-4 | |
| L57366-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:46 | 3/5/2013 14:00 | 3/6/2013 14:28 | | |
| L57369-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:15 | 3/5/2013 14:00 | 3/6/2013 14:30 | | |
| L57369-3 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 2/22/2013 8:15 | 3/5/2013 14:00 | 3/6/2013 14:32 | | |
| L57372-1 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/21/2013 10:09 | 3/5/2013 14:00 | 3/6/2013 14:34 | | |
| L57372-3 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 2/21/2013 10:52 | 3/5/2013 14:00 | 3/6/2013 14:36 | | |
| L57373-1 | 421422-ENGW | | MTHG-MID-DISS | GRND WTR | 2/22/2013 10:24 | 3/5/2013 14:00 | 3/6/2013 14:37 | | |
| L57376-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/27/2013 8:54 | 3/5/2013 14:00 | 3/6/2013 14:43 | | |
| L57376-3 | 421422-ENGW | SWD-ENGW Enumclaw Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/25/2013 8:27 | 3/5/2013 14:00 | 3/6/2013 14:45 | | |
| L57385-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 2/25/2013 0:46 | 3/5/2013 14:00 | 3/6/2013 14:21 | WG125690-1,-2 | |
| L57393-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/25/2013 6:05 | 3/5/2013 14:00 | 3/6/2013 14:46 | WG125690-1,-3,-4 | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/2/2013 17:42 | 3/5/2013 14:00 | 3/6/2013 14:23 | WG125690-1,-2 | |
| L57445-1 | 421422-VAGW | SWD-VAGW Vashon Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/20/2013 8:40 | 3/5/2013 14:00 | 3/6/2013 14:03 | WG125690-1,-3,-4 | |
| WG125690-1 | MB | | MTHG-MID | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:00 | WG125690-1,-2 | METHOD BLANK |
| WG125690-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:00 | WG125690-1,-3,-4 | METHOD BLANK |
| WG125690-2 | SB | | MTHG-MID | BLANK WTR | | 3/5/2013 14:00 | 3/6/2013 14:01 | WG125690-1,-2 | WG125690-1 HG-LMID |
| WG125690-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/5/2013 14:00 | 3/6/2013 14:05 | WG125690-1,-3,-4 | L57445-1 HG-LMID |
| WG125690-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/5/2013 14:00 | 3/6/2013 14:07 | | WG125690-3 L57445-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125796 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 8:00 | 3/11/2013 10:00 | 3/12/2013 12:50 | WG125796-1,-3,-4 | |
| L57374-1 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 7:10 | 3/11/2013 10:00 | 3/12/2013 12:52 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/1/2013 11:57 | 3/11/2013 10:00 | 3/12/2013 12:54 | | |
| L57377-1 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 10:30 | 3/11/2013 10:00 | 3/12/2013 12:43 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 9:00 | 3/11/2013 10:00 | 3/12/2013 12:45 | | |
| L57377-4 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/4/2013 7:20 | 3/11/2013 10:00 | 3/12/2013 12:47 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/26/2013 9:35 | 3/11/2013 10:00 | 3/12/2013 12:29 | | |
| L57398-3 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:45 | 3/11/2013 10:00 | 3/12/2013 12:31 | | |
| L57398-4 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:03 | 3/11/2013 10:00 | 3/12/2013 12:20 | | |
| L57398-5 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:33 | | |
| L57398-6 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/27/2013 7:58 | 3/11/2013 10:00 | 3/12/2013 12:38 | | |
| L57398-9 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:40 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 3/2/2013 17:42 | 3/11/2013 10:00 | 3/12/2013 12:49 | | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTHG-MID | EFFLUENT | 3/3/2013 7:30 | 3/11/2013 10:00 | 3/12/2013 13:00 | WG125796-1,-2 | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 13:01 | | |
| L57472-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 12:27 | WG125796-1,-3,-4 | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/8/2013 10:59 | 3/11/2013 10:00 | 3/12/2013 12:25 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/7/2013 8:10 | 3/11/2013 10:00 | 3/12/2013 12:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | BLANK WTR | 3/7/2013 10:05 | 3/11/2013 10:00 | 3/12/2013 13:03 | WG125796-1,-2 | |
| WG125796-1 | MB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | | METHOD BLANK |
| WG125796-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | WG125796-1,-3,-4 | METHOD BLANK |
| WG125796-2 | SB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:18 | WG125796-1,-2 | WG125796-1 HG-LMID |
| WG125796-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:22 | WG125796-1,-3,-4 | L57398-4 HG-LMID |
| WG125796-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:23 | | WG125796-3 L57398-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125782 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/4/2013 8:00 | 3/8/2013 11:00 | 3/8/2013 12:44 | WG125782-1,-2,-3,-4 | |
| L57374-1 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 3/1/2013 7:10 | 3/8/2013 11:00 | 3/8/2013 12:50 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/1/2013 11:57 | 3/8/2013 11:00 | 3/8/2013 12:57 | | |
| L57377-1 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 3/1/2013 10:30 | 3/8/2013 11:00 | 3/8/2013 13:03 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/4/2013 9:00 | 3/8/2013 11:00 | 3/8/2013 13:09 | | |
| L57377-4 | 421422-CFGW | | MTICPMS-DISS | GRND WTR | 3/4/2013 7:20 | 3/8/2013 11:00 | 3/8/2013 13:16 | | |
| L57386-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 3/2/2013 16:24 | 3/8/2013 11:00 | 3/8/2013 13:22 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 2/26/2013 9:35 | 3/8/2013 11:00 | 3/8/2013 13:28 | | |
| L57398-3 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 2/28/2013 10:45 | 3/8/2013 11:00 | 3/8/2013 13:48 | | |
| L57398-4 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 2/28/2013 10:03 | 3/8/2013 11:00 | 3/8/2013 14:07 | | |
| L57398-5 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 2/28/2013 9:03 | 3/8/2013 11:00 | 3/8/2013 14:13 | | |
| L57398-6 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 2/27/2013 7:58 | 3/8/2013 11:00 | 3/8/2013 14:19 | | |
| L57398-9 | 421422-HOGW | | MTICPMS-DISS | GRND WTR | 2/28/2013 9:03 | 3/8/2013 11:00 | 3/8/2013 14:26 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 3/2/2013 17:42 | 3/8/2013 11:00 | 3/8/2013 14:32 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/7/2013 8:10 | 3/8/2013 11:00 | 3/8/2013 14:38 | | |
| WG125782-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/8/2013 11:00 | 3/8/2013 12:31 | | METHOD BLANK |
| WG125782-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/8/2013 11:00 | 3/8/2013 12:38 | | WG125782-1 MS-20 SPIKE BLANK |
| WG125782-3 | LD | | MTICPMS-DISS | GRND WTR | | 3/8/2013 11:00 | 3/8/2013 13:54 | | L57398-3 RPD-LIQ LAB DUPLICATE |
| WG125782-4 | MS | | MTICPMS-DISS | GRND WTR | | 3/8/2013 11:00 | 3/8/2013 14:00 | | L57398-3 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125780 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 3/2/2013 16:24 | 3/8/2013 12:00 | 3/14/2013 7:25 | WG125780-4,-3,-2,-1 | |
| L57435-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/2/2013 17:42 | 3/8/2013 12:00 | 3/14/2013 8:41 | | |
| L57472-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/6/2013 14:52 | 3/8/2013 12:00 | 3/14/2013 8:16 | | |
| L57538-1 | 421879-210 | | ORHERB-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/8/2013 12:00 | 3/14/2013 7:50 | | |
| WG125780-1 | MB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 5:44 | | MB130308 |
| WG125780-2 | SB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 6:10 | | WG125780-1 |
| WG125780-3 | MS | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 6:35 | | L57386-1 |
| WG125780-4 | MSD | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 7:00 | | WG125780-3 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125644 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/7/2013 0:15 | WG125644-6,-5,-4,-3,-2,-1 | |
| L57386-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/6/2013 22:52 | | |
| L57435-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/6/2013 23:47 | | |
| WG125644-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 20:33 | | MB130304 |
| WG125644-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 21:00 | | WG125644-1 |
| WG125644-3 | SBD | | OROPPEST-NPDES | BLANK WTR | | 3/4/2013 17:00 | 3/6/2013 21:28 | | WG125644-2 WG125644-1 |
| WG125644-4 | MS | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 23:20 | | L57435-1 |
| WG125644-5 | MS | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 21:57 | | L57386-1 |
| WG125644-6 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/4/2013 17:00 | 3/6/2013 22:24 | | WG125644-5 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125646 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57385-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/11/2013 16:55 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57385-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 2/25/2013 0:46 | 3/4/2013 17:00 | 3/11/2013 16:55 | WG125646-5,-1,-2,-3,-4 | |
| L57386-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/11/2013 16:16 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57386-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/2/2013 16:24 | 3/4/2013 17:00 | 3/11/2013 16:16 | WG125646-5,-1,-2,-3,-4 | |
| L57435-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/11/2013 17:33 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | |
| L57435-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/2/2013 17:42 | 3/4/2013 17:00 | 3/11/2013 17:33 | WG125646-5,-1,-2,-3,-4 | |
| WG125646-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:03 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | MB130304 |
| WG125646-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:03 | WG125646-5,-1,-2,-3,-4 | MB130304 |
| WG125646-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:42 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-1 |
| WG125646-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 13:42 | WG125646-5,-1,-2,-3,-4 | WG125646-1 |
| WG125646-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 14:20 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-2 WG125646-1 |
| WG125646-3 | SBD | | TICORPAHPHTH-SUR | BLANK WTR | | 3/4/2013 17:00 | 3/11/2013 14:20 | WG125646-5,-1,-2,-3,-4 | WG125646-2 WG125646-1 |
| WG125646-4 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 14:59 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | L57386-1 |
| WG125646-4 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 14:59 | WG125646-5,-1,-2,-3,-4 | L57386-1 |
| WG125646-5 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 15:38 | WG125646-5,-5,-1,-1,-2,-2,-3,-3,-4,-4 | WG125646-4 L57386-1 |
| WG125646-5 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 3/4/2013 17:00 | 3/11/2013 15:38 | WG125646-5,-1,-2,-3,-4 | WG125646-4 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125757 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 3/3/2013 9:30 | 3/7/2013 11:45 | 3/14/2013 18:20 | WG125757-1,-2,-3,-4 | |
| L57436-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/6/2013 12:20 | 3/7/2013 11:45 | 3/14/2013 18:43 | | |
| L57473-2 | 421879-210 | | ORWTPH-DX | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 11:45 | 3/14/2013 19:07 | | |
| WG125757-1 | MB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 16:45 | | MB130307 |
| WG125757-2 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:09 | | WG125757-1 SB-MO |
| WG125757-3 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:32 | | WG125757-1 SB-DSL |
| WG125757-4 | LD | | ORWTPH-DX | STORM WTR | | 3/7/2013 11:45 | 3/14/2013 17:57 | | L57436-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57386, L57435

**WG125724 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 3/3/2013 9:30 | 3/7/2013 14:18 | 3/7/2013 14:18 | WG125724-1,-2,-3 | |
| L57436-2 | 421879-210 | | ORWTPH-G | STORM WTR | 3/6/2013 12:20 | 3/7/2013 14:47 | 3/7/2013 14:47 | | |
| L57472-3 | 421879-210 | | ORWTPH-G | STORM WTR | 3/7/2013 12:15 | 3/7/2013 16:46 | 3/7/2013 16:46 | | |
| L57473-2 | 421879-210 | | ORWTPH-G | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 15:17 | 3/7/2013 15:17 | | |
| WG125724-1 | MB | | ORWTPH-G | BLANK WTR | | 3/7/2013 13:19 | 3/7/2013 13:19 | | MB130306 |
| WG125724-2 | SB | | ORWTPH-G | BLANK WTR | | 3/7/2013 15:47 | 3/7/2013 15:47 | | WG125724-1 |
| WG125724-3 | LD | | ORWTPH-G | STORM WTR | | 3/7/2013 13:48 | 3/7/2013 13:48 | | L57435-3 |

**Workgroup: WG125658 BOD**

**MB:WG125658-1 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:WG125658-2 MB:WG125658-1 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 | 178 | 90 | | 80--120 |

**Workgroup: WG125991 Anions**

**CS:WG125991-1 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 | 0.098 | 98 | | 70--130 |

**MB:WG125991-2 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 | |

**SB:WG125991-3 MB:WG125991-2 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 | 1.92 | 96 | | 80--120 |

**LCS:WG125991-4 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 |

**LD:WG125991-5 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 4.14 | 3.99 | 4 | | 0--20 |

**MS:WG125991-6 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 4.14 | 10 | 13.8 | 96 | | 75--125 |

**LD:WG125991-7 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 2.56 | 1 | | 0--20 |

**MS:WG125991-8 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125991-9 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 10 | 12 | | 0--20 |

**MS:WG125991-10 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 20 | 28.6 | 98 | | 75--125 |

**Workgroup: WG125712 Conductivity**

**LCS:WG125712-1 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 | 75.8 | 103 | | 90--110 |

**LCS:WG125712-2 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 | 725 | 101 | | 90--110 |

**LD:WG125712-3 L57435-1 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 | 35.2 | 35.2 | 0 | | 0--10 |

**LD:WG125712-4 L57398-9 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-HOGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 92.4 | 92.2 | 0 | | 0--10 |

**LCS:WG125712-5 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 | 76.2 | 103 | | 90--110 |

**LCS:WG125712-6 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 | 714 | 99 | | 90--110 |

**Workgroup: WG125725 Dissolved Nutrient - Nitrates**

**MB:WG125725-1 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:WG125725-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125725-2 MB:WG125725-1 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 | 0.813 | 102 | | 80--120 |

**SB:WG125725-2 MB:WG125725-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.391 | 98 | | 80--120 |

**LCS:WG125725-3 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 | 0.814 | 102 | | 85--115 |

**LCS:WG125725-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.393 | 98 | | 85--115 |

**LD:WG125725-4 L57377-3 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 1.03 | 1.04 | 1 | | 0--20 |

**MS:WG125725-5 L57377-3 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-CFGW Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 1.03 | 0.4 | 1.4 | 93 | | 75--125 |

**MB:WG125725-6 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:WG125725-7 L57440-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.1 | 0.4 | mg/L | 10.9 | 10.8 | 1 | | 0--20 |

**MS:WG125725-8 L57440-2 Matrix: EFFLUENT Listtype:CVNO23 Method:SM4500-NO3-F Project:421430-300 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.1 | 0.4 | mg/L | 10.9 | 0.8 | 18.9 | 100 | | 75--125 |

**LD:WG125725-9 L57386-1 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 | 0.741 | 0.743 | 0 | | 0--20 |

**MS:WG125725-10 L57386-1 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 | 0.741 | 0.8 | 1.55 | 101 | | 75--125 |

**LD:WG125725-11 L57493-12 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-MSPECIAL 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 | 1.61 | 1.6 | 0 | | 0--20 |

**MS:WG125725-12 L57493-12 Matrix: LEACHATE Listtype:CVNO23 Method:SM4500-NO3-F Project:421422-VALS-MSPECIAL 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 | 1.61 | 0.8 | 2.37 | 95 | | 75--125 |

**Workgroup: WG125731 Dissolved Nutrients - Orthophosphate Phosphorus**

**MB:WG125731-1 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:WG125731-2 MB:WG125731-1 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 | 0.037 | 93 | | 80--120 |

**LCS:WG125731-3 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 | 0.0383 | 96 | | 85--115 |

**LD:WG125731-4 L57386-1 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 | 0.0131 | 0.0133 | 2 | | 0--20 |

**MS:WG125731-5 L57386-1 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 | 0.0131 | 0.04 | 0.0501 | 92 | | 75--125 |

**LD:WG125731-6 L57442-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00685 | 0.00743 | 8 | | 0--20 |

**MS:WG125731-7 L57442-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00685 | 0.04 | 0.0436 | 92 | | 75--125 |

**LD:WG125731-8 L57440-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 3.2 | 3.2 | 0 | | 0--20 |

**MS:WG125731-9 L57440-1 Matrix: EFFLUENT Listtype:CVORTHOP Method:SM4500-P-F Project:421430-300 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.1 | 0.25 | mg/L | 3.2 | 0.04 | 5.07 | 94 | | 75--125 |

**MB:WG125731-10 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:WG125731-11 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 | 0.0372 | 93 | | 85--115 |

**LD:WG125731-12 L57493-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-MSPECIAL Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | <MDL | | | 0--20 |

**MS:WG125731-13 L57493-1 Matrix: LEACHATE Listtype:CVORTHOP Method:SM4500-P-F Project:421422-VALS-MSPECIAL Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | <MDL | 0.04 | 0.19 | 95 | | 75--125 |

**Workgroup: WG126000 TKN**

**MB:WG126000-1 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 | |

**LCS:WG126000-2 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 | 0.427 | 85 | | 80--120 |

**LCS:WG126000-3 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 | 5 | 4.81 | 96 | | 80--120 |

**SB:WG126000-4 MB:WG126000-1 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 |

**LD:WG126000-5 L57435-1 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 | 0.923 | 0.925 | 0 | | 0--20 |

**MS:WG126000-6 L57435-1 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 | 0.923 | 5 | 5.76 | 97 | | 70--130 |

**LD:WG126000-7 L57473-1 Matrix: FRESH 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 | 0.304 | 0.299 | 2 | | 0--20 |

**MS:WG126000-8 L57473-1 Matrix: FRESH 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 | 0.304 | 5 | 5.38 | 101 | | 70--130 |

**LD:WG126000-9 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 1.93 | 1 | | 0--20 |

**MS:WG126000-10 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 5 | 7.15 | 105 | | 70--130 |

**LD:WG126000-11 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 19 | 4 | | 0--20 |

**MS:WG126000-12 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 10 | 28.9 | 91 | | 70--130 |

**Workgroup: WG125795 Total Nitrogen, Total Phosphorus**

**MB:WG125795-1 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:WG125795-1 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:WG125795-2 MB:WG125795-1 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 | 0.988 | 99 | | 80--120 |

**SB:WG125795-2 MB:WG125795-1 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 | 0.0967 | 97 | | 80--120 |

**LCS:WG125795-3 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 | 0.948 | 95 | | 85--115 |

**LCS:WG125795-3 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 | 0.0944 | 94 | | 85--115 |

**LD:WG125795-4 L57435-1 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 | 0.025 | 0.05 | mg/L | 0.211 | 0.216 | 2 | | 0--20 |

**MS:WG125795-5 L57435-1 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 | 0.025 | 0.05 | mg/L | 0.211 | 0.1 | 0.71 | 100 | | 75--125 |

**LD:WG125795-6 L57467-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.541 | 0.557 | 3 | | 0--20 |

**LD:WG125795-6 L57467-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0352 | 0.0389 | 10 | | 0--20 |

**MS:WG125795-7 L57467-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.541 | 1 | 1.53 | 99 | | 75--125 |

**MS:WG125795-7 L57467-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0352 | 0.1 | 0.136 | 101 | | 75--125 |

**MB:WG125795-8 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD (Method Blank)**

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

**MB:WG125795-8 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:WG125795-9 MB:WG125795-8 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 | 0.985 | 98 | | 80--120 |

**SB:WG125795-9 MB:WG125795-8 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 | 0.0976 | 98 | | 80--120 |

**LCS:WG125795-10 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 | 0.916 | 92 | | 85--115 |

**LCS:WG125795-10 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 | 0.0928 | 93 | | 85--115 |

**LD:WG125795-11 L57468-11 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.54 | 0.535 | 1 | | 0--20 |

**LD:WG125795-11 L57468-11 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0197 | 0.02 | 1 | | 0--20 |

**MS:WG125795-12 L57468-11 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.54 | 1 | 1.51 | 97 | | 75--125 |

**MS:WG125795-12 L57468-11 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0197 | 0.1 | 0.121 | 101 | | 75--125 |

**LD:WG125795-13 L57440-3 Matrix: EFFLUENT Listtype:CVTOTP Method:SM4500-P-B,F Project:421430-300 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.58 | 3.6 | 1 | | 0--20 |

**MS:WG125795-14 L57440-3 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 | 0.1 | 0.2 | mg/L | 3.58 | 1 | 4.71 | 113 | | 75--125 |

**MB:WG125795-15 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:WG125795-15 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:WG125795-16 MB:WG125795-15 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 | 0.904 | 90 | | 80--120 |

**SB:WG125795-16 MB:WG125795-15 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 | 0.0895 | 90 | | 80--120 |

**LCS:WG125795-17 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 | 0.953 | 95 | | 85--115 |

**LCS:WG125795-17 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 | 0.0947 | 95 | | 85--115 |

**LD:WG125795-18 L57469-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.15 | 1.15 | 0 | | 0--20 |

**LD:WG125795-18 L57469-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0491 | 0.0504 | 3 | | 0--20 |

**MS:WG125795-19 L57469-3 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421240A Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.15 | 1 | 2.13 | 98 | | 75--125 |

**MS:WG125795-19 L57469-3 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421240A Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0491 | 0.1 | 0.148 | 99 | | 75--125 |

**Workgroup: WG125694 TSS**

**MB:WG125694-1 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:WG125694-2 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 | 97 | 97 | | 80--120 |

**LD:WG125694-3 L57374-1 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 | 0.5 | 1 | mg/L | <MDL | 0.6 | | | 0--25 |

**LD:WG125694-4 L57386-1 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 | 2 | 4 | mg/L | 16 | 15.2 | 5 | | 0--25 |

**LD:WG125694-5 L57486-2 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 | 1 | <MDL | | | 0--25 |

**Workgroup: WG125666 Turbidity**

**LCS:WG125666-1 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 | 9.86 | 99 | | 90--110 |

**LCS:WG125666-2 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 | 97.7 | 98 | | 90--110 |

**LD:WG125666-3 L57386-1 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 | 13.5 | 13 | 4 | | 0--25 |

**LD:WG125666-4 L57486-2 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 | 5.39 | 5.06 | 6 | | 0--25 |

**LD:WG125666-5 L57466-3 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 4.59 | 5.09 | 10 | | 0--25 |

**LCS:WG125666-6 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 | 9.83 | 98 | | 90--110 |

**LD:WG125666-7 L57467-4 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 4.9 | 4.56 | 7 | | 0--25 |

**LCS:WG125666-8 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 | 9.83 | 98 | | 90--110 |

**Workgroup: WG125643 Fecal coliform**

**PC:WG125639-2 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:WG125639-3 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:WG125639-4 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:WG125639-5 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: WG125682 Total Metals & Hardness**

**MB:WG125682-1 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:WG125682-1 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 | |
| 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:WG125682-2 MB:WG125682-1 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 | 31.6 | 95 | | 85--115 |

**SB:WG125682-2 MB:WG125682-1 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 | 20.2 | 101 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4780 | 96 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4760 | 95 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.9 | 104 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |

**LD:WG125682-3 L57328-7 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421186B 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 | 0.55 | 0.58 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.11 | 2.11 | 0 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.4 | 10.5 | 1 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 31.1 | 31.5 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.4 | 1.43 | 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 | 0.065 | 0.063 | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 3.5 | 3.51 | 0 | | 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 | 0.32 | 0.32 | | | 0--20 |

**MS:WG125682-4 L57328-7 Matrix: EFFLUENT Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421186B Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 99 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.55 | 20 | 20.4 | 99 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.11 | 20 | 22 | 100 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 10.4 | 20 | 30.7 | 102 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 31.1 | 20 | 49.7 | 93 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 1.4 | 20 | 21 | 98 | | 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 | 0.065 | 20 | 19.9 | 99 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 3.5 | 20 | 23.6 | 101 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.32 | 20 | 20.5 | 101 | | 75--125 |

**LD:WG125682-5 L57435-1 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 | 18.8 | 19 | 1 | | 0--20 |

**LD:WG125682-5 L57435-1 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 | 1980 | 2000 | 1 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4250 | 4320 | 1 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 18.7 | 18.8 | 0 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 73.5 | 77.3 | 5 | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.13 | 0.13 | | | 0--20 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 11.2 | 11.1 | 1 | | 0--20 |

**MS:WG125682-6 L57435-1 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 | 18.8 | 33.1 | 50.2 | 95 | | 75--125 |

**MS:WG125682-6 L57435-1 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 | 1980 | 5000 | 6810 | 97 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 4250 | 5000 | 8880 | 92 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 18.7 | 20 | 37.5 | 94 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 73.5 | 20 | 88.8 | 77 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.13 | 20 | 19.2 | 95 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | 11.2 | 20 | 31.7 | 103 | | 75--125 |

**Workgroup: WG125690 Total & Dissolved Mercury**

**MB:WG125690-1 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:WG125690-1 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:WG125690-2 MB:WG125690-1 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 | 0.926 | 93 | | 85--115 |

**MSD:WG125690-4 MS:WG125690-3 L57445-1 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-VAGW 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 | 0.949 | 95 | | 75--125 | 1 | 0.929 | 93 | | 2 | | 0--20 |

**Workgroup: WG125796 Total & Dissolved Mercury**

**MB:WG125796-1 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:WG125796-1 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:WG125796-2 MB:WG125796-1 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 | 0.953 | 95 | | 85--115 |

**MSD:WG125796-4 MS:WG125796-3 L57398-4 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-HOGW 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 | 0.972 | 97 | | 75--125 | 1 | 0.991 | 99 | | 2 | | 0--20 |

**Workgroup: WG125782 Dissolved Metals**

**MB:WG125782-1 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:WG125782-2 MB:WG125782-1 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 | 19 | 95 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 5110 | 102 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5230 | 105 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5030 | 101 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4740 | 95 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 19.3 | 96 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.5 | 98 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5070 | 101 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.7 | 103 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.1 | 95 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 19.9 | 99 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 101 | | 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 | 19.1 | 95 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |

**LD:WG125782-3 L57398-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HOGW 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 | 1540 | 1540 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1800 | 1790 | 0 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1300 | 1300 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8150 | 8030 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.13 | 0.13 | | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 3200 | 3200 | 0 | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 520 | 507 | 3 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 1.58 | 1.55 | 2 | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.32 | 0.3 | | | 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 | 1.1 | 0.76 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 6.01 | 5.9 | 2 | | 0--20 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.2 | 0.095 | | | 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 | 5.18 | 5.18 | 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:WG125782-4 L57398-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HOGW 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 | 18.1 | 91 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 1540 | 5000 | 6540 | 100 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 1800 | 5000 | 6480 | 94 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1300 | 5000 | 6170 | 97 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 8150 | 5000 | 12600 | 90 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.13 | 20 | 19.4 | 96 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 3200 | 5000 | 8200 | 100 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 520 | 20 | 530 | | 4xRule | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 1.58 | 20 | 20.2 | 93 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.32 | 20 | 19.5 | 96 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 1.1 | 20 | 21.1 | 100 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 6.01 | 20 | 25.6 | 98 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.5 | 102 | | 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 | 0.2 | 20 | 21.4 | 106 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.18 | 20 | 24.9 | 99 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |

**Workgroup: WG125780 Herbicides**

**MB:WG125780-1 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 | |

**SB:WG125780-2 MB:WG125780-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.55 | 91 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.69 | 94 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.81 | 96 | | 59--151 |

**MSD:WG125780-4 MS:WG125780-3 L57386-1 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 | 4.7 | 94 | | 20--162 | 5 | 4.77 | 95 | | 1 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.04 | 101 | | 10--196 | 5 | 5.12 | 102 | | 2 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.17 | 103 | | 30--150 | 5 | 5.2 | 104 | | 1 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57386-1 | 90 | 113 |
| L57435-1 | 100 | 136 |
| L57472-1 | 91 | 123 |
| L57538-1 | 87 | 115 |
| WG125780-1 | 91 | 112 |
| WG125780-2 | 88 | 110 |
| WG125780-3 | 90 | 114 |
| WG125780-4 | 92 | 118 |

**Workgroup: WG125644 Organophosphorus Pesticides**

**MB:WG125644-1 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:WG125644-3 SB:WG125644-2 MB:WG125644-1 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 | BD Value | % Rec. | Qual | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.043 | 0.05 | ug/L | <MDL | 0.25 | 0.218 | 87 | | 52--129 | 0.25 | 0.197 | 79 | | 10 | | 0--40 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.229 | 91 | | 25--161 | 0.25 | 0.215 | 86 | | 6 | | 0--40 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.236 | 94 | | 57--127 | 0.25 | 0.214 | 86 | | 10 | | 0--40 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.22 | 88 | | 70--98 | 0.25 | 0.209 | 84 | | 5 | | 0--40 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.242 | 97 | | 40--160 | 0.25 | 0.242 | 97 | | 0 | | 0--40 |

**MS:WG125644-4 L57435-1 Matrix: STORM WTR Listtype:OROPPEST-NPDES Method:SW846 3520C*SW846 8270D SIM Project:421879-210 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Diazinon | 0.041 | 0.0472 | ug/L | <MDL | 0.236 | 0.22 | 93 | | 67--148 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.248 | 105 | | 52--190 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.222 | 94 | | 57--141 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.188 | 80 | | 40--160 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.501 | 212 | * | 40--160 |

**MSD:WG125644-6 MS:WG125644-5 L57386-1 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 | 0.236 | 0.198 | 84 | | 67--148 | 0.236 | 0.204 | 87 | | 3 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.221 | 94 | | 52--190 | 0.236 | 0.238 | 101 | | 7 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.243 | 103 | | 57--141 | 0.236 | 0.223 | 94 | | 9 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.167 | 71 | | 40--160 | 0.236 | 0.161 | 68 | | 4 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.333 | 141 | | 40--160 | 0.236 | 0.349 | 148 | | 5 | | 0--40 |

| Surrogate: | Chlorpyrifos-D10 |
|---|---|
| (Lab Limits) | 41--166 |
| L57385-1 | 90 |
| L57386-1 | 89 |
| L57435-1 | 76 |
| WG125644-1 | 78 |
| WG125644-2 | 99 |
| WG125644-3 | 91 |
| WG125644-4 | 78 |
| WG125644-5 | 91 |
| WG125644-6 | 96 |

**Workgroup: WG125646 Semi Volatile Organics**

**MB:WG125646-1 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 | <MDL | |
| 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 | 0.428 | 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 | |

**SBD:WG125646-3 SB:WG125646-2 MB:WG125646-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.96 | 78 | | 32--93 | 2.5 | 1.69 | 68 | | 15 | | 0--40 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.5 | 60 | | 25--104 | 2.5 | 1.25 | 50 | | 19 | | 0--40 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 31--119 | 2.5 | 2.4 | 96 | | 4 | | 0--40 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.99 | 80 | | 49--107 | 2.5 | 1.84 | 73 | | 8 | | 0--40 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.82 | 73 | | 43--103 | 2.5 | 1.59 | 64 | | 14 | | 0--40 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.36 | 94 | | 26--141 | 2.5 | 2.47 | 99 | | 4 | | 0--40 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.95 | 78 | | 43--127 | 2.5 | 1.97 | 79 | | 1 | | 0--40 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.5 | 60 | | 10--137 | 2.5 | 1.47 | 59 | | 2 | | 0--40 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.06 | 82 | | 57--114 | 2.5 | 1.98 | 79 | | 4 | | 0--40 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 59--122 | 2.5 | 2.07 | 83 | | 1 | | 0--40 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.6 | 104 | | 52--145 | 2.5 | 2.45 | 98 | | 6 | | 0--40 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.21 | 88 | | 57--123 | 2.5 | 2.1 | 84 | | 5 | | 0--40 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.72 | 109 | | 51--139 | 2.5 | 2.63 | 105 | | 3 | | 0--40 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.16 | 126 | | 49--145 | 2.5 | 2.97 | 119 | | 6 | | 0--40 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.28 | 91 | | 67--130 | 2.5 | 2.17 | 87 | | 5 | | 0--40 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.46 | 98 | | 58--114 | 2.5 | 2.41 | 96 | | 2 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.428 | 2.5 | 2.98 | 102 | | 48--128 | 2.5 | 2.69 | 91 | | 10 | | 0--40 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 3.09 | 124 | | 51--126 | 2.5 | 2.55 | 102 | | 19 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.35 | 98 | | 49--139 | 7.5 | 7 | 93 | | 5 | | 0--40 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.26 | 90 | | 55--132 | 2.5 | 2.16 | 86 | | 5 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.23 | 89 | | 53--122 | 2.5 | 2.12 | 85 | | 5 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.21 | 88 | | 47--134 | 2.5 | 2.12 | 85 | | 4 | | 0--40 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 1.93 | 77 | | 32--130 | 2.5 | 1.8 | 72 | | 7 | | 0--40 |

**MSD:WG125646-5 MS:WG125646-4 L57386-1 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 | 0.0202 | 2.36 | 1.56 | 65 | | 37--95 | 2.36 | 1.58 | 66 | | 2 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.13 | 48 | | 40--121 | 2.36 | 1.28 | 54 | | 12 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 1.91 | 81 | | 34--134 | 2.36 | 2.04 | 87 | | 6 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.44 | 61 | | 46--122 | 2.36 | 1.58 | 67 | | 9 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.42 | 60 | | 47--105 | 2.36 | 1.49 | 63 | | 5 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.127 | 2.36 | 2.35 | 94 | | 33--140 | 2.36 | 2.45 | 98 | | 4 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.62 | 68 | | 44--137 | 2.36 | 1.71 | 72 | | 6 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.31 | 98 | | 44--145 | 2.36 | 2.3 | 98 | | 0 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0767 | 2.36 | 2.07 | 84 | | 62--116 | 2.36 | 2.09 | 85 | | 1 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | 0.0097 | 2.36 | 1.98 | 83 | | 32--140 | 2.36 | 1.97 | 83 | | 1 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.59 | 110 | | 44--134 | 2.36 | 2.61 | 111 | | 1 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.344 | 2.36 | 2.7 | 100 | | 49--123 | 2.36 | 2.45 | 89 | | 10 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.367 | 2.36 | 3.12 | 117 | | 37--147 | 2.36 | 2.96 | 110 | | 5 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 3.36 | 142 | | 39--151 | 2.36 | 3.51 | 149 | | 5 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | 0.124 | 2.36 | 2.44 | 98 | | 50--120 | 2.36 | 2.44 | 98 | | 0 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.231 | 2.36 | 2.68 | 104 | | 42--115 | 2.36 | 2.53 | 98 | | 6 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 0.433 | 2.36 | 3.26 | 120 | | 11--188 | 2.36 | 3.62 | 135 | | 11 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 3.09 | 131 | | 48--150 | 2.36 | 3.26 | 138 | | 5 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | 0.352 | 7.08 | 7.96 | 108 | | 42--123 | 7.08 | 7.64 | 103 | | 4 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.13 | 2.36 | 2.47 | 99 | | 45--121 | 2.36 | 2.42 | 97 | | 2 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | 0.086 | 2.36 | 2.27 | 92 | | 39--122 | 2.36 | 2.26 | 92 | | 0 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 2.11 | 89 | | 31--121 | 2.36 | 2.13 | 90 | | 1 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | 0.114 | 2.36 | 2.08 | 83 | | 22--125 | 2.36 | 2.04 | 82 | | 2 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57385-1 | 86 | 50 | 50 | 90 | 48 | 63 | 57 |
| L57386-1 | 75 | 47 | 46 | 87 | 44 | 54 | 53 |
| L57435-1 | 84 | 55 | 49 | 89 | 46 | 60 | 58 |
| WG125646-1 | 44 | 66 | 67 | 94 | 64 | 78 | 75 |
| WG125646-2 | 71 | 66 | 69 | 89 | 67 | 81 | 79 |
| WG125646-3 | 71 | 62 | 65 | 88 | 61 | 77 | 75 |
| WG125646-4 | 80 | 52 | 48 | 92 | 45 | 56 | 54 |
| WG125646-5 | 85 | 57 | 51 | 92 | 48 | 60 | 57 |

**Workgroup: WG125757 WTPH-Dx**

**MB:WG125757-1 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:WG125757-2 MB:WG125757-1 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 | 0.908 | 91 | | 50--150 |

**SB:WG125757-3 MB:WG125757-1 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 | 0.848 | 85 | | 50--150 |

**LD:WG125757-4 L57436-2 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) | 0.19 | 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-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57435-3 | 72 | 94 |
| L57436-2 | 78 | 94 |
| L57473-2 | 83 | 93 |
| WG125757-1 | 75 | 88 |
| WG125757-2 | 82 | 91 |
| WG125757-3 | 95 | 95 |
| WG125757-4 | 82 | 93 |

**Workgroup: WG125724 WTPH-G**

**MB:WG125724-1 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:WG125724-2 MB:WG125724-1 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 | 430 | 86 | | 50--150 |

**LD:WG125724-3 L57435-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L57435-3 | 90 | 93 |
| L57436-2 | 90 | 93 |
| L57472-3 | 89 | 93 |
| L57473-2 | 89 | 93 |
| WG125724-1 | 91 | 94 |
| WG125724-2 | 87 | 94 |
| WG125724-3 | 90 | 94 |

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

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *06-Mar-13*

**WG #(s):** *WG125644*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57435-1*

**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: *7890G* |

## 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. Prometon exceeded the upper QC recovery limit in the MS.*

## 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. An "*" was applied to the QC report.*

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

*3. Given the recovery in the MS was high with a "ND" for the associated sample, no bias is suggested and therefore no qualifier was warranted.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Felix Zboralski | | |
| **Reviewer:** Michael Muramoto | | |
| **Supervisor:** Diane McElhany | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *3/2/13*

**WG #(s):** *WG125782*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57386-1, L57435-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *11-MAR-13*

**WG #(s):** *WG125646*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125646-1 MB had a reportable level Bis(2EthylHexyl)Phthalate.*

## 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 10X the blank level contamination were flagged "B" for Bis-2(EH)phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | _____ | _____ |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 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:
☐ 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".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2/28/2013*

**WG #(s):** *WG125623*

☐ **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<br>☐ Mettler Toledo AT201 |
| Autoanalyzer: | ☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)<br>☐ 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<br>☐ 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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **Reviewer:** *Dave Hunn* | _____ | _____ |
| **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

May 7, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring Samples L57436-2, L57472-1, -3, -5, collected March 6 – 7, 2013

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on March 6 & 7, 2013. The samples were 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 #15215 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
The composite samples were not collected for locations RSW1UP (LDR) and FCSW02 (HDR) due to failed collection conditions. The grab sample for location RSW1UP (LDR) was not collected.

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

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 difference between the initial dissolved oxygen reading and the final DO reading must be at least 2.0 mg/L of DO in order for a sample dilution to be valid for calculating the sample's BOD. This minimum depletion requirement was not met for all dilutions of sample L57472-1.



1202M

Due to insufficient DO depletion for the prepared dilutions of L57472-1, the BOD result is estimated as being less than 7.58 mg/L. The sample's BOD result was reported as a null value with the above qualifier and added text.

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

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.

The recovery of Prometon in the matrix spike and matrix spike duplicate for Organophosphorus pesticide analysis was outside the upper control range at 206 and 176%. These results were flagged with an "*" in the QC report. The spike blank recovery was within control limits. Prometon was not detected in the sample therefore qualifiers were not applied to the data.

Bis (2-ethylhexyl) phthalate and diethyl phthalate were detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "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 | | | | Project: | 421879-210 | | | | Project: | 421879-210 | | | |
| | Locator: | RSW1UP | | | | Locator: | FCSW01 | | | | Locator: | FCSW01 | | | |
| | Descrip: | 148TH AVE SE UPSTR | | | | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD COMME | | | |
| | Sample: | L57436-2 | | | | Sample: | L57472-1 | | | | Sample: | L57472-3 | | | |
| | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | |
| | ColDate: | 3/6/13 12:20 | | | | ColDate: | 3/6/13 14:52 | | | | ColDate: | 3/7/13 12:15 | | | |
| | TimeSpan: | | | | | TimeSpan: | 17.35 | | | | 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 | | | | | | 3.05 | | 0.1 | 0.2 | mg/L | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | | | | | | 0.088 | | 0.025 | 0.025 | mg/L | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | | | | | | 99.4 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | | | | | | 60.5 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | | | | | | 72 | | 5 | 10 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | | | | | | 8.94 | | 0.5 | 1 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | | | | | | 0.16 | | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | | | | | | 0.124 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | | | | | | 0.00979 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | | | | | | <7.58 | 2 | 2 | mg/L | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | 4 | | | | CFU/100ml | | | | | | 150 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | | | | | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | |
| Cadmium, Total, ICP-MS | | | | | | 0.1 | <RDL | 0.05 | 0.25 | ug/L | | | | | |
| Calcium, Total, ICP-MS | | | | | | 5780 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | | | | | | 4.1 | H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | | | | | | 15.6 | | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | | | | | | | <MDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | | | | | | 6.33 | | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | | | | | | 1930 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | | | | | | 11.9 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | | | | | | 59.2 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | | | | | | 22.4 | | 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: | RSW1UP | FCSW01 | FCSW01 |
| Descrip: | 148TH AVE SE UPSTR | FALL CITY HD COMME | FALL CITY HD COMME |
| Sample: | L57436-2 | L57472-1 | L57472-3 |
| Matrix: | LG STORM WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 3/6/13 12:20 | 3/6/13 14:52 | 3/7/13 12:15 |
| TimeSpan: | | 17.35 | |
| 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 | | | | | | 0.0264 | | 0.0094 | 0.0189 | ug/L | | | | | |
| 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 | | | | | | 0.166 | | 0.047 | 0.0943 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | | | | | | 1.69 | | 0.024 | 0.0472 | ug/L | | | | | |
| Chrysene | | | | | | 0.0561 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | <MDL | 0.047 | 0.0943 | ug/L | | | | | |
| Diethyl Phthalate | | | | | | 0.204 | B3 | 0.024 | 0.0472 | ug/L | | | | | |
| Dimethyl Phthalate | | | | | | | <MDL | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Butyl Phthalate | | | | | | 0.106 | | 0.024 | 0.0472 | ug/L | | | | | |
| Di-N-Octyl Phthalate | | | | | | 0.316 | | 0.024 | 0.0472 | ug/L | | | | | |
| Fluoranthene | | | | | | 0.0379 | | 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 | | | | | | 0.0403 | | 0.0094 | 0.0189 | ug/L | | | | | |
| Pyrene | | | | | | 0.11 | | 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) | | <MDL | 0.19 | 0.19 | mg/L | | | | | | | <MDL | 0.19 | 0.19 | mg/L |
| Lube Oil Range (>C24) | | <MDL | 0.19 | 0.19 | mg/L | | | | | | 0.486 | | 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
Locator: FFBLANK
Descrip: FIELD FILTER BLANK
Sample: L57472-5
Matrix: LN BLANK WTR
ColDate: 3/7/13 14:02
TimeSpan:
TotalSolid:
ClientLoc:
SampDepth:
**WET Weight Basis**

| Parameters | 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 | | | | | |
| **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 |
| Locator: | FFBLANK |
| Descrip: | FIELD FILTER BLANK |
| Sample: | L57472-5 |
| Matrix: | LN BLANK WTR |
| ColDate: | 3/7/13 14:02 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | 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) | | | | | |
| 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 | Fecal Coliform | Lube Oil Range (>C24) | Total Kjeldahl Nitrogen | Methylene Blue Act. Substance | Turbidity | Conductivity | Total Suspended Solids | Chloride | Nitrite + Nitrate Nitrogen | Total Phosphorus | Orthophosphate Phosphorus | Cadmium, Total, ICP-MS | Calcium, Total, ICP-MS | Copper, Dissolved, ICP-MS | Copper, Total, ICP-MS | Lead, Total, ICP-MS | Magnesium, Total, ICP-MS | Zinc, Dissolved, ICP-MS | Zinc, Total, ICP-MS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CFU/100ml | mg/L | mg/L | mg/L | NTU | umhos/cm | 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 |
| RSW1UP | 421879-210 | L57436-2 | 4 | | | | | | | | | | | | | | | | | | |
| FCSW01 | 421879-210 | L57472-1 | | | 3.05 | 0.088 | 99.4 | 60.5 | 72 | 8.94 | 0.16 | 0.124 | 0.00979 | 0.1 | 5780 | 4.1 | 15.6 | 6.33 | 1930 | 11.9 | 59.2 |
| FCSW01 | 421879-210 | L57472-3 | 150 | 0.486 | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | Benzo(a)pyrene | Benzyl Butyl Phthalate | Bis(2-Ethylhexyl)Phthalate | Chrysene | Di-N-Butyl Phthalate | Di-N-Octyl Phthalate | Diethyl Phthalate | Fluoranthene | Phenanthrene | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| RSW1UP | 421879-210 | L57436-2 | | | | | | | | | | | |
| FCSW01 | 421879-210 | L57472-1 | 22.4 | 0.0264 | 0.166 | 1.69 | 0.0561 | 0.106 | 0.316 | 0.204 | 0.0379 | 0.0403 | 0.11 |
| FCSW01 | 421879-210 | L57472-3 | | | | | | | | | | | |
| * 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 | L57472-1 | Biochemical Oxygen Demand | Minimum depletion requirement of 2.0 mg/L was not met. Estimated result is less than 7.58 mg/L. |

Login: P57436 NPDES Stormwater Renton Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 3-6-13 | *Time* 14:05 |
| *Received by* | *Date* 3-6-13 | *Time* 1405 |
| *Sample Numbers* 57436-2 | | *[All]* |

| Sample Number | P57436-1 | P57436-2 | P57436-3 |
|---|---|---|---|
| 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 | | 3-6-13 @ 13:20 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

*CHAIN OF CUSTODY*

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

Login: P57472 | NPDES Stormwater Permit Monitoring | Personnel: JD

Project: 421879-210

*CHAIN OF CUSTODY*

| | | | |
|---|---|---|---|
| *Relinquished by* JD | *Date* 3/7/13 | *Time* 1430 | |
| *Received by* Kyle | *Date* 3/7/13 | *Time* 1430 | |
| *Sample Numbers* 57472 1, 3, 5 | | | *[All]* |

| Sample Number | P57472-1 | P57472-2 | P57472-3 |
|---|---|---|---|
| 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 | 3/6/13 1452 ~~1018~~ | | 3/7/13 1215 |
| End Date/Time | 3/7/13 0813 ~~1057~~ | | |
| Time Span | | | |
| Sample Depth | | | |
| **Dept, Matrix, Prod** | 3 LG BOD START 3/6<br>3 LG CL<br>3 LG COND STOP<br>3 LG MBAS 3/7 1230<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN SPLIT @<br>3 LG TOTP 1400<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>SAMP TEMP @ LAB = 3.6°C | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G |

*CHAIN OF CUSTODY*

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

Login: P57472 NPDES Stormwater Permit Monitoring Personnel: _____

Project: 421879-210

| Sample Number | P57472-4 | P57472-5 | |
|---|---|---|---|
| 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 | | 3/7 1405 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP | |

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

***Professional Analytical Services***

Mar 13 2013
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 |
|---|---|---|---|
| P57458-1 | Water | 13-A002679 | CONV |

Your sample was received on Friday, March 8, 2013. 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

**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 #: 421879-210
All results reported on an as received basis.

Date Received: 03/08/13
Date Reported: 3/13/13

---

**AMTEST Identification Number** 13-A002679
**Client Identification** P57458-1
**Sampling Date** 03/07/13, 08:13

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.088 | mg/l | | 0.025 | SM 5540C | EB | 03/08/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A002679**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A002643 | Surfactants | mg/l | < 0.025 | 0.124 | 0.125 | 99.20 % |
| 13-A002643 | Surfactants | mg/l | < 0.025 | 0.124 | 0.125 | 99.20 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.124 | 0.124 | 0.00 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.128 | 102. % |

## 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 1380808

Project Name: _____  Date Received: 3/ 8/13  Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 6.1 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):

_____

_____

_____

_____

_____

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.

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-14
Shipment Method: ENA
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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 079 P57458-1 12 | 3/7/2013 | LG - Storm | Level 2 | X | | | | | | | | | | | | 1 | sample time: 08:13AM |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

Requested TAT: 14 Days
Data Package Due: 3/29/2013

*Please return signed original CoC with data package.*

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 3-8-13 | Signature | | 3-8-13 |
| Printed Name | Jason Kinnard | Time | Printed Name | J Olsen | Time |
| Organization | King County DNR, Environmental Laboratory | 0930 | Organization | Anteon | 10:25 |

T = 6.1 °C

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125783 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 3/6/2013 14:52 | 3/8/2013 13:47 | 3/8/2013 13:47 | WG125783-1,-2 | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar | CVBOD | LEACHATE | 3/6/2013 6:51 | 3/8/2013 13:50 | 3/8/2013 13:50 | | |
| L57490-3 | 421422-CHLS-M | Hills Leachate Monthly | CVBOD | LEACHATE | 3/6/2013 7:46 | 3/8/2013 13:53 | 3/8/2013 13:53 | | |
| L57490-4 | 421422-CHLS-M | | CVBOD | LEACHATE | 3/6/2013 8:34 | 3/8/2013 13:55 | 3/8/2013 13:55 | | |
| L57490-5 | 421422-CHLS-M | | CVBOD | LEACHATE | 3/7/2013 4:45 | 3/8/2013 13:57 | 3/8/2013 13:57 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVBOD | BLANK WTR | 3/7/2013 10:05 | 3/8/2013 13:58 | 3/8/2013 13:58 | | |
| WG125783-1 | MB | | CVBOD | BLANK WTR | | 3/8/2013 13:40 | 3/8/2013 13:40 | | MB1 3/8/13 |
| WG125783-2 | SB | | CVBOD | BLANK WTR | | 3/8/2013 13:46 | 3/8/2013 13:46 | | WG125783-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125991 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:38 | 3/22/2013 8:38 | WG125991-2,-1,-3,- | |
| L57435-1 | 421879-210 | | CVCL | STORM WTR | 3/2/2013 17:42 | 3/22/2013 10:09 | 3/22/2013 10:09 | 4,-5,-6,-7,-8,-9,-10 | |
| L57472-1 | 421879-210 | | CVCL | STORM WTR | 3/6/2013 14:52 | 3/22/2013 6:06 | 3/22/2013 6:06 | | |
| L57473-1 | 421879-210 | | CVCL | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 3:03 | 3/22/2013 3:03 | | |
| L57538-1 | 421879-210 | | CVCL | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 1:32 | 3/22/2013 1:32 | | |
| L57557-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:08 | 3/22/2013 9:08 | | |
| L57558-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:33 | 3/22/2013 2:02 | 3/22/2013 2:02 | | |
| L57595-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 3/19/2013 0:00 | 3/22/2013 0:01 | 3/22/2013 0:01 | | |
| L57595-2 | 421937 | | CVCL | BLANK WTR | 3/19/2013 0:00 | 3/21/2013 23:30 | 3/21/2013 23:30 | | |
| WG125991-1 | CS | | CVCL | BLANK WTR | | 3/21/2013 21:28 | 3/21/2013 21:28 | | RDL_LEVEL |
| WG125991-2 | MB | | CVCL | BLANK WTR | | 3/21/2013 21:59 | 3/21/2013 21:59 | | MB2 3/21/13 |
| WG125991-3 | SB | | CVCL | BLANK WTR | | 3/21/2013 22:29 | 3/21/2013 22:29 | | WG125991-2 |
| WG125991-4 | LCS | | CVCL | BLANK WTR | | 3/21/2013 23:00 | 3/21/2013 23:00 | | LEVEL1 |
| WG125991-5 | LD | | CVCL | GRND WTR | | 3/22/2013 0:31 | 3/22/2013 0:31 | | L57595-1 |
| WG125991-6 | MS | | CVCL | GRND WTR | | 3/22/2013 1:01 | 3/22/2013 1:01 | | L57595-1 |
| WG125991-7 | LD | | CVCL | FRESH WTR | | 3/22/2013 3:34 | 3/22/2013 3:34 | | L57473-1 |
| WG125991-8 | MS | | CVCL | FRESH WTR | | 3/22/2013 4:04 | 3/22/2013 4:04 | | L57473-1 |
| WG125991-9 | LD | | CVCL | STORM WTR | | 3/22/2013 6:36 | 3/22/2013 6:36 | | L57472-1 |
| WG125991-10 | MS | | CVCL | STORM WTR | | 3/22/2013 7:07 | 3/22/2013 7:07 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125890 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/6/2013 14:52 | 3/12/2013 16:44 | 3/12/2013 16:44 | WG125890-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57473-1 | 421879-210 | | CVCOND | FRESH WTR | 3/8/2013 10:43 | 3/12/2013 16:46 | 3/12/2013 16:46 | | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/8/2013 10:59 | 3/12/2013 16:12 | 3/12/2013 16:12 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVCOND | LEACHATE | 3/6/2013 6:51 | 3/12/2013 18:27 | 3/12/2013 18:27 | | |
| L57490-3 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 7:46 | 3/12/2013 18:06 | 3/12/2013 18:06 | | |
| L57490-4 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 8:34 | 3/12/2013 18:13 | 3/12/2013 18:13 | | |
| L57490-5 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/7/2013 4:45 | 3/12/2013 18:20 | 3/12/2013 18:20 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVCOND | LEACHATE | 3/5/2013 7:25 | 3/12/2013 16:49 | 3/12/2013 16:49 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:42 | 3/12/2013 17:05 | 3/12/2013 17:05 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 8:40 | 3/12/2013 17:14 | 3/12/2013 17:14 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:50 | 3/12/2013 17:23 | 3/12/2013 17:23 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:35 | 3/12/2013 17:31 | 3/12/2013 17:31 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:37 | 3/12/2013 17:40 | 3/12/2013 17:40 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 10:15 | 3/12/2013 17:49 | 3/12/2013 17:49 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:15 | 3/12/2013 17:57 | 3/12/2013 17:57 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/7/2013 8:10 | 3/12/2013 16:22 | 3/12/2013 16:22 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVCOND | BLANK WTR | 3/7/2013 10:05 | 3/12/2013 16:42 | 3/12/2013 16:42 | | |
| WG125890-1 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:00 | 3/12/2013 16:00 | | LEVEL1 |
| WG125890-2 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:01 | 3/12/2013 16:01 | | LEVEL2 |
| WG125890-3 | LD | | CVCOND | GRND WTR | | 3/12/2013 16:32 | 3/12/2013 16:32 | | L57509-1 |
| WG125890-4 | LD | | CVCOND | STORM WTR | | 3/12/2013 16:45 | 3/12/2013 16:45 | | L57472-1 |
| WG125890-5 | LD | | CVCOND | FRESH WTR | | 3/12/2013 16:47 | 3/12/2013 16:47 | | L57473-1 |
| WG125890-6 | LD | | CVCOND | LEACHATE | | 3/12/2013 16:57 | 3/12/2013 16:57 | | L57493-1 |
| WG125890-7 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:36 | 3/12/2013 18:36 | | LEVEL1 |
| WG125890-8 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:38 | 3/12/2013 18:38 | | LEVEL2 |
| WG125890-9 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:39 | 3/12/2013 18:39 | | LEVEL3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125885 Dissolved Nutrients - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/6/2013 14:52 | 3/15/2013 12:25 | 3/15/2013 14:51 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57472-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/7/2013 14:02 | 3/15/2013 12:25 | 3/15/2013 15:32 | | |
| L57473-1 | 421879-210 | | CVNO23 | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 12:25 | 3/15/2013 14:33 | | |
| L57473-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/9/2013 11:40 | 3/15/2013 12:25 | 3/15/2013 15:30 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 9:50 | 3/15/2013 12:25 | 3/15/2013 13:53 | WG125885-1,-2,-3,-4,-5 | |
| L57509-3 | 421422-CFGW | | CVNO3 | GRND WTR | 3/15/2013 7:40 | 3/15/2013 12:25 | 3/15/2013 13:55 | | |
| L57526-1 | 421422-CFGW | | CVNO3 | GRND WTR | 3/14/2013 8:25 | 3/15/2013 12:25 | 3/15/2013 13:57 | | |
| L57529-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 8:29 | 3/15/2013 12:25 | 3/15/2013 13:59 | | |
| L57529-3 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 10:49 | 3/15/2013 12:25 | 3/15/2013 14:18 | | |
| L57529-4 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 9:57 | 3/15/2013 12:25 | 3/15/2013 14:20 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | BLANK WTR | 3/7/2013 10:05 | 3/15/2013 12:25 | 3/15/2013 15:45 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVNO23 | OTHR WTR | 3/13/2013 9:36 | 3/15/2013 12:25 | 3/15/2013 15:18 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/13/2013 11:22 | 3/15/2013 12:25 | 3/15/2013 14:31 | | |
| L57557-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 10:20 | 3/15/2013 12:25 | 3/15/2013 15:28 | | |
| L57558-1 | 421879-210 | | CVNO23 | STORM WTR | 3/13/2013 11:33 | 3/15/2013 12:25 | 3/15/2013 14:22 | | |
| L57558-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 11:30 | 3/15/2013 12:25 | 3/15/2013 15:26 | | |
| WG125885-1 | MB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | | CONNUTS1 |
| WG125885-1 | MB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | WG125885-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125885-2 | SB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | WG125885-1 |
| WG125885-2 | SB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-4,-5 | WG125885-1 |
| WG125885-3 | LCS | | CVNO23 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG125885-3 | LCS | | CVNO3 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-4,-5 | LEVEL1 |
| WG125885-4 | LD | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:01 | | L57529-1 |
| WG125885-5 | MS | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:14 | | L57529-1 |
| WG125885-6 | LD | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:24 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | L57558-1 |
| WG125885-7 | MS | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:26 | | L57558-1 |
| WG125885-8 | LD | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:45 | | L57473-1 |
| WG125885-9 | MS | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:47 | | L57473-1 |
| WG125885-10 | LD | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:20 | | L57541-1 |
| WG125885-11 | MS | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:22 | | L57541-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVORTHOP | FRESH WTR | 3/11/2013 9:50 | 3/11/2013 11:45 | 3/20/2013 16:29 | WG125950-12,-13,-14,-15,-16,-3,-4,-5,-6,-7,-1,-2,-10,-11,-17,-18,-19,-20,-21,-22,-23 | |
| L57172-2 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 9:45 | 3/11/2013 11:45 | 3/20/2013 16:38 | | |
| L57172-3 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 10:10 | 3/11/2013 11:45 | 3/20/2013 16:40 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 16:54 | | |
| L57382-2 | 421195-150 | | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 17:03 | | |
| L57433-1 | 421195-450 | China Creek Stormwater Monitoring | CVORTHOP | STORM WTR | 3/20/2013 11:28 | 3/20/2013 16:25 | 3/20/2013 17:13 | | |
| L57433-2 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:15 | 3/20/2013 16:25 | 3/20/2013 17:30 | | |
| L57433-3 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:10 | 3/20/2013 16:25 | 3/20/2013 17:32 | | |
| L57433-4 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:02 | 3/20/2013 16:25 | 3/20/2013 17:34 | | |
| L57433-5 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:50 | 3/20/2013 16:25 | 3/20/2013 17:36 | | |
| L57433-6 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:42 | 3/20/2013 16:25 | 3/20/2013 17:38 | | |
| L57433-7 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:32 | 3/20/2013 16:25 | 3/20/2013 17:40 | | |
| L57433-8 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:20 | 3/20/2013 16:25 | 3/20/2013 17:42 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/6/2013 14:52 | 3/20/2013 11:50 | 3/20/2013 14:08 | | |
| L57472-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/7/2013 14:02 | 3/20/2013 11:50 | 3/20/2013 14:16 | | |
| L57473-1 | 421879-210 | | CVORTHOP | FRESH WTR | 3/8/2013 10:43 | 3/20/2013 11:50 | 3/20/2013 14:35 | | |
| L57473-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/9/2013 11:40 | 3/20/2013 11:50 | 3/20/2013 14:18 | | |
| L57490-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/7/2013 4:45 | 3/20/2013 11:50 | 3/20/2013 15:31 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/11/2013 9:25 | 3/20/2013 11:50 | 3/20/2013 14:41 | | |
| L57519-3 | 423258-500-1 | | CVORTHOP | BLANK WTR | 3/11/2013 9:10 | 3/20/2013 11:50 | 3/20/2013 14:58 | | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVORTHOP | FRESH WTR | 3/18/2013 9:13 | 3/20/2013 11:50 | 3/20/2013 15:33 | | |
| L57532-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 8:44 | 3/20/2013 11:50 | 3/20/2013 15:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | BLANK WTR | 3/7/2013 10:05 | 3/20/2013 11:50 | 3/20/2013 14:29 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/12/2013 9:49 | 3/20/2013 11:50 | 3/20/2013 15:00 | | |
| L57541-1 | 423258-500-1 | | CVORTHOP | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:50 | 3/20/2013 15:02 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/13/2013 11:22 | 3/20/2013 11:50 | 3/20/2013 14:37 | | |
| L57557-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 10:20 | 3/20/2013 11:50 | 3/20/2013 14:31 | | |
| L57558-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/13/2013 11:33 | 3/20/2013 11:50 | 3/20/2013 14:39 | | |
| L57558-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 11:30 | 3/20/2013 11:50 | 3/20/2013 14:33 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVORTHOP | FRESH WTR | 3/19/2013 5:50 | 3/20/2013 11:50 | 3/20/2013 15:44 | | |
| L57565-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 6:45 | 3/20/2013 11:50 | 3/20/2013 15:56 | | |
| L57565-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:30 | 3/20/2013 11:50 | 3/20/2013 15:58 | | |
| L57565-5 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:02 | 3/20/2013 11:50 | 3/20/2013 16:00 | | |
| L57565-6 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:29 | 3/20/2013 11:50 | 3/20/2013 16:02 | | |
| L57565-7 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:50 | 3/20/2013 11:50 | 3/20/2013 16:04 | | |
| L57565-8 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:25 | 3/20/2013 11:50 | 3/20/2013 16:07 | | |
| L57565-9 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 6:25 | 3/20/2013 11:50 | 3/20/2013 16:09 | | |
| WG125950-1 | MB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:06 | | CONNUTS3 |
| WG125950-2 | SB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:08 | | WG125950-1 |
| WG125950-3 | LCS | | CVORTHOP | BLANK WTR | | 3/20/2013 14:04 | 3/20/2013 14:04 | | LEVEL1 |
| WG125950-4 | LD | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:10 | | L57472-1 |
| WG125950-5 | MS | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:12 | | L57472-1 |
| WG125950-6 | LD | | CVORTHOP | OTHR WTR | | 3/20/2013 11:50 | 3/20/2013 14:43 | | L57519-1 |

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|---|---|---|---|---|---|---|---|
| WG125950-7 | MS | CVORTHOP | OTHR WTR | 3/20/2013 11:50 | 3/20/2013 14:45 | | L57519-1 |
| WG125950-10 | LD | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:35 | | L57532-1 |
| WG125950-11 | MS | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:37 | | L57532-1 |
| WG125950-12 | MB | CVORTHOP | BLANK WTR | 3/20/2013 11:50 | 3/20/2013 16:13 | | CONNUTS3 |
| WG125950-13 | MB | CVORTHOP | BLANK WTR | 3/11/2013 11:45 | 3/20/2013 16:15 | | CONNUTS3 |
| WG125950-14 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 16:25 | | LEVEL1 |
| WG125950-15 | LD | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:32 | | L57172-1 |
| WG125950-16 | MS | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:34 | | L57172-1 |
| WG125950-17 | MB | CVORTHOP | BLANK WTR | 3/8/2013 16:00 | 3/20/2013 16:44 | | CONNUTS3 |
| WG125950-18 | LD | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:57 | | L57382-1 |
| WG125950-19 | MS | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:59 | | L57382-1 |
| WG125950-20 | MB | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 17:07 | | CONNUTS3 |
| WG125950-21 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 17:09 | 3/20/2013 17:09 | | LEVEL1 |
| WG125950-22 | LD | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:24 | | L57433-1 |
| WG125950-23 | MS | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:26 | | L57433-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG126000 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:00 | 3/25/2013 13:00 | WG126000-2,-1,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12 | |
| L57435-1 | 421879-210 | | CVTKN | STORM WTR | 3/2/2013 17:42 | 3/22/2013 8:00 | 3/25/2013 13:05 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 3/4/2013 7:07 | 3/22/2013 8:00 | 3/25/2013 14:28 | | |
| L57440-3 | 421430-300 | | CVTKN | EFFLUENT | 3/4/2013 7:56 | 3/22/2013 8:00 | 3/25/2013 14:57 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/6/2013 14:52 | 3/22/2013 8:00 | 3/25/2013 13:02 | | |
| L57473-1 | 421879-210 | | CVTKN | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 8:00 | 3/25/2013 13:23 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 3/6/2013 6:51 | 3/22/2013 8:00 | 3/25/2013 13:34 | | |
| L57490-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 7:46 | 3/22/2013 8:00 | 3/25/2013 13:36 | | |
| L57490-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 8:34 | 3/22/2013 8:00 | 3/25/2013 14:55 | | |
| L57490-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/7/2013 4:45 | 3/22/2013 8:00 | 3/25/2013 13:50 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVTKN | LEACHATE | 3/5/2013 7:25 | 3/22/2013 8:00 | 3/25/2013 13:55 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:42 | 3/22/2013 8:00 | 3/25/2013 13:57 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 8:40 | 3/22/2013 8:00 | 3/25/2013 13:59 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:50 | 3/22/2013 8:00 | 3/25/2013 14:01 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:35 | 3/22/2013 8:00 | 3/25/2013 14:03 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:37 | 3/22/2013 8:00 | 3/25/2013 14:05 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 10:15 | 3/22/2013 8:00 | 3/25/2013 14:07 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:15 | 3/22/2013 8:00 | 3/25/2013 14:09 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTKN | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 8:00 | 3/25/2013 13:32 | | |
| WG126000-1 | MB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:50 | | MB1 3/22/13 |
| WG126000-2 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:52 | | LEVEL1 |
| WG126000-3 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:54 | | LEVEL2 |
| WG126000-4 | SB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:56 | | WG126000-1 |
| WG126000-5 | LD | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:07 | | L57435-1 |
| WG126000-6 | MS | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:19 | | L57435-1 |
| WG126000-7 | LD | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:25 | | L57473-1 |
| WG126000-8 | MS | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:27 | | L57473-1 |
| WG126000-9 | LD | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:22 | | L57493-12 |
| WG126000-10 | MS | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:24 | | L57493-12 |
| WG126000-11 | LD | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 14:59 | | L57440-3 |
| WG126000-12 | MS | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 15:01 | | L57440-3 |

**WG125933 Total Nitrogen, Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTOTP | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 12:30 | 3/14/2013 13:49 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57172-2 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 12:30 | 3/14/2013 13:51 | | |
| L57172-3 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 12:30 | 3/14/2013 13:57 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:15 | | |
| L57382-2 | 421195-150 | | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:17 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 3/6/2013 14:52 | 3/13/2013 12:30 | 3/14/2013 14:33 | | |
| L57473-1 | 421879-210 | | CVTOTP | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 12:30 | 3/14/2013 14:39 | | |
| L57506-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-1 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-2 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-2 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-3 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-3 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-4 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-4 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-5 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |

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|---|---|---|---|---|---|---|---|---|
| L57506-5 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-6 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-6 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-8 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-8 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-9 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-9 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-10 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-10 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-11 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-11 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-12 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-12 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-13 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-13 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-14 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-14 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-15 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-15 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-16 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-16 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-17 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-17 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-19 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-19 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-20 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-20 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-21 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-21 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-22 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-22 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-23 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-23 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-25 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-25 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-26 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-26 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-27 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-27 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-29 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-29 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-30 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-30 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-31 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-31 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-32 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-32 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-33 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-33 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-37 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-37 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-38 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-38 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-39 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-39 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-40 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-40 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-41 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-41 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-42 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-42 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-44 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/14/2013 13:20 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-44 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/28/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-45 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-45 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-46 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-46 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-47 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-47 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-48 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-48 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-49 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-49 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57519-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,- | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 14:24 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57540-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | |
| L57545-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 3/12/2013 10:20 | 3/13/2013 12:30 | 3/14/2013 14:11 | | |
| L57545-2 | 421195-150 | | CVTOTP | FRESH WTR | 3/12/2013 10:28 | 3/13/2013 12:30 | 3/14/2013 14:13 | | |
| WG125933-1 | MB | | CVTOTN | BLANK WTR | | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB1 |

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|---|---|---|---|---|---|---|---|
| WG125933-1 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB1 |
| WG125933-2 | SB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | WG125933-1 |
| WG125933-2 | SB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | WG125933-1 |
| WG125933-3 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-3 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-4 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-4 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-5 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-5 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-6 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB2 |
| WG125933-6 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB2 |

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|---|---|---|---|---|---|---|---|
| WG125933-7 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-7 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-8 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-8 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-9 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:24 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-9 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-10 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB3 |
| WG125933-10 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB3 |
| WG125933-11 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-11 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-12 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |

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|---|---|---|---|---|---|---|---|
| WG125933-12 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-49 |
| WG125933-13 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |
| WG125933-13 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | L57506-49 |
| WG125933-14 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:53 | | L57172-2 |
| WG125933-15 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:55 | | L57172-2 |
| WG125933-16 | LD | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-16 | LD | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-17 | MS | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-17 | MS | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-18 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:19 | | L57382-2 |
| WG125933-19 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:21 | | L57382-2 |
| WG125933-20 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:35 | | L57472-1 |
| WG125933-21 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:37 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125834 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTSS | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 13:25 | 3/14/2013 9:58 | WG125834-1,-2,-3,-4,-5,-6,-7 | |
| L57172-2 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 13:25 | 3/14/2013 10:02 | | |
| L57172-3 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 13:25 | 3/14/2013 10:05 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/6/2013 14:52 | 3/13/2013 13:25 | 3/14/2013 10:06 | | |
| L57473-1 | 421879-210 | | CVTSS | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 13:25 | 3/14/2013 10:08 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 10:35 | 3/13/2013 13:25 | 3/14/2013 10:10 | | |
| L57482-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/8/2013 10:59 | 3/13/2013 13:25 | 3/14/2013 10:13 | | |
| L57508-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/11/2013 13:15 | 3/13/2013 13:25 | 3/14/2013 10:14 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/7/2013 8:10 | 3/13/2013 13:25 | 3/14/2013 10:15 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 9:21 | 3/13/2013 13:25 | 3/14/2013 10:16 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 13:25 | 3/14/2013 10:17 | | |
| L57524-1 | 421422-ENLS | SWD-ENLS Enumclaw Wastewater Permit | CVTSS | IW WTR | 3/12/2013 6:00 | 3/13/2013 13:25 | 3/14/2013 10:19 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/13/2013 9:37 | 3/13/2013 13:25 | 3/14/2013 10:23 | | |
| L57526-4 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 8:44 | 3/13/2013 13:25 | 3/14/2013 10:24 | | |
| L57527-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 7:53 | 3/13/2013 13:25 | 3/14/2013 10:25 | | |
| L57527-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 10:42 | 3/13/2013 13:25 | 3/14/2013 10:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTSS | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 13:25 | 3/14/2013 10:22 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 13:25 | 3/14/2013 10:27 | | |
| WG125834-1 | MB | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:54 | | MB1 130313 |
| WG125834-2 | LCS | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:57 | | LEVEL1 |
| WG125834-3 | LD | | CVTSS | FRESH WTR | | 3/13/2013 13:25 | 3/14/2013 10:04 | | L57172-2 |
| WG125834-4 | LD | | CVTSS | STORM WTR | | 3/13/2013 13:25 | 3/14/2013 10:07 | | L57472-1 |
| WG125834-5 | LD | | CVTSS | GRND WTR | | 3/13/2013 13:25 | 3/14/2013 10:12 | | L57482-1 |
| WG125834-6 | LD | | CVTSS | OTHR WTR | | 3/13/2013 13:25 | 3/14/2013 10:18 | | L57519-1 |
| WG125834-7 | LD | | CVTSS | IW WTR | | 3/13/2013 13:25 | 3/14/2013 10:21 | | L57524-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125776 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57468-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTURB | FRESH WTR | 3/5/2013 9:06 | 3/7/2013 16:10 | 3/7/2013 16:10 | WG125776-1,-2,-3,-4,-5,-6 | |
| L57468-2 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 9:29 | 3/7/2013 16:11 | 3/7/2013 16:11 | | |
| L57468-3 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 9:50 | 3/7/2013 16:12 | 3/7/2013 16:12 | | |
| L57468-4 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 10:18 | 3/7/2013 16:19 | 3/7/2013 16:19 | | |
| L57468-5 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 10:57 | 3/7/2013 16:22 | 3/7/2013 16:22 | | |
| L57468-6 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:07 | 3/7/2013 16:25 | 3/7/2013 16:25 | | |
| L57468-7 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:33 | 3/7/2013 16:42 | 3/7/2013 16:42 | | |
| L57468-8 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:20 | 3/7/2013 16:44 | 3/7/2013 16:44 | | |
| L57468-9 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:09 | 3/7/2013 16:45 | 3/7/2013 16:45 | | |
| L57468-10 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:22 | 3/7/2013 16:47 | 3/7/2013 16:47 | | |
| L57468-11 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:37 | 3/7/2013 17:00 | 3/7/2013 17:00 | | |
| L57468-12 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:13 | 3/7/2013 17:01 | 3/7/2013 17:01 | | |
| L57468-13 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:41 | 3/7/2013 17:03 | 3/7/2013 17:03 | | |
| L57469-1 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:03 | 3/7/2013 17:04 | 3/7/2013 17:04 | | |
| L57469-2 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:26 | 3/7/2013 17:05 | 3/7/2013 17:05 | | |
| L57469-3 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:01 | 3/7/2013 17:07 | 3/7/2013 17:07 | | |
| L57469-4 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:08 | 3/7/2013 17:19 | 3/7/2013 17:19 | | |
| L57469-5 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:33 | 3/7/2013 17:20 | 3/7/2013 17:20 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 3/6/2013 14:52 | 3/7/2013 17:27 | 3/7/2013 17:27 | | |
| L57538-1 | 421879-210 | | CVTURB | BLANK WTR | 3/7/2013 10:05 | 3/7/2013 17:26 | 3/7/2013 17:26 | | |
| WG125776-1 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 16:09 | 3/7/2013 16:09 | | LEVEL1 |
| WG125776-2 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 16:10 | 3/7/2013 16:10 | | LEVEL2 |
| WG125776-3 | LD | | CVTURB | FRESH WTR | | 3/7/2013 16:23 | 3/7/2013 16:23 | | L57468-5 |
| WG125776-4 | LD | | CVTURB | STORM WTR | | 3/7/2013 17:28 | 3/7/2013 17:28 | | L57472-1 |
| WG125776-5 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 17:29 | 3/7/2013 17:29 | | LEVEL1 |
| WG125776-6 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 17:29 | 3/7/2013 17:29 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125721 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57436-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 3/6/2013 12:20 | 3/6/2013 15:00 | 3/7/2013 13:15 | WG125671-1,-2,-3,-4 | |
| WG125671-1 | PC | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-2 | NC | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-3 | BF | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-4 | AF | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |

**WG125765 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 3/7/2013 12:15 | 3/7/2013 15:00 | 3/8/2013 13:20 | WG125747-2,-3,WG125748-4,-5 | |
| WG125747-2 | PC | | MCSWFC-MF | BLANK WTR | | 3/7/2013 15:00 | 3/8/2013 13:20 | | QC-PERFORMED:07-MAR-13 |
| WG125747-3 | NC | | MCSWFC-MF | BLANK WTR | | 3/7/2013 15:00 | 3/8/2013 13:20 | | QC-PERFORMED:07-MAR-13 |
| WG125748-4 | BF | | MCSWTC-MF | BLANK WTR | | 3/7/2013 15:00 | 3/8/2013 13:30 | | QC-PERFORMED:07-MAR-13 |
| WG125748-5 | AF | | MCSWTC-MF | BLANK WTR | | 3/7/2013 15:00 | 3/8/2013 13:30 | | QC-PERFORMED:07-MAR-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125916 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57347-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 3/13/2013 10:30 | 3/19/2013 10:00 | 3/20/2013 14:16 | WG125916-1,-2,-3,-4 | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 3/3/2013 7:30 | 3/19/2013 10:00 | 3/20/2013 14:22 | | |
| L57444-3 | 421184-110 | | MTICPMS | INFLUENT | 3/3/2013 7:40 | 3/19/2013 10:00 | 3/20/2013 14:28 | | |
| L57447-31 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 2/20/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 14:34 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57472-1 | 421879-210 | | MTICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/20/2013 14:40 | | |
| L57473-1 | 421879-210 | | MTHARD-ICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57473-1 | 421879-210 | | MTICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/20/2013 14:45 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTHARD-ICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57519-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/20/2013 14:51 | | |
| L57519-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:18 | 3/19/2013 10:00 | 3/20/2013 15:09 | | |
| L57519-5 | 423258-500-1 | | MTICPMS | BLANK WTR | 3/11/2013 9:15 | 3/19/2013 10:00 | 3/20/2013 15:15 | | |
| L57534-1 | 421937 | | MTICPMS | INFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:20 | | |
| L57534-4 | 421937 | | MTICPMS | EFFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57538-1 | 421879-210 | | MTICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/20/2013 15:32 | | |
| L57539-1 | 421937 | Brightwater Operations | MTICPMS | BLANK WTR | 3/12/2013 9:21 | 3/19/2013 10:00 | 3/20/2013 15:38 | | |
| L57540-1 | 423258-500-1 | | MTHARD-ICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57540-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/20/2013 15:44 | | |
| L57540-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:50 | 3/19/2013 10:00 | 3/20/2013 16:01 | | |
| L57541-1 | 423258-500-1 | | MTHARD-ICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57541-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/20/2013 16:25 | | |
| L57544-1 | 421301A | Georgetown Yard Industiral SW Monitoring | MTICPMS | STORM WTR | 3/6/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 16:31 | | |
| L57549-25 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:37 | | |
| L57549-29 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:42 | | |
| L57549-31 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:48 | | |
| WG125916-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | METHOD BLANK |
| WG125916-1 | MB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:04 | | METHOD BLANK |
| WG125916-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | WG125916-1 MS-20 |
| WG125916-2 | SB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:10 | | WG125916-1 MS-20 |
| WG125916-3 | LD | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 RPD-LIQ |
| WG125916-3 | LD | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:50 | | L57540-1 RPD-LIQ |
| WG125916-4 | MS | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 MS-20 |
| WG125916-4 | MS | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:55 | | L57540-1 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125796 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 8:00 | 3/11/2013 10:00 | 3/12/2013 12:50 | WG125796-1,-3,-4 | |
| L57374-1 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 7:10 | 3/11/2013 10:00 | 3/12/2013 12:52 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/1/2013 11:57 | 3/11/2013 10:00 | 3/12/2013 12:54 | | |
| L57377-1 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 10:30 | 3/11/2013 10:00 | 3/12/2013 12:43 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 9:00 | 3/11/2013 10:00 | 3/12/2013 12:45 | | |
| L57377-4 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/4/2013 7:20 | 3/11/2013 10:00 | 3/12/2013 12:47 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/26/2013 9:35 | 3/11/2013 10:00 | 3/12/2013 12:29 | | |
| L57398-3 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:45 | 3/11/2013 10:00 | 3/12/2013 12:31 | | |
| L57398-4 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:03 | 3/11/2013 10:00 | 3/12/2013 12:20 | | |
| L57398-5 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:33 | | |
| L57398-6 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/27/2013 7:58 | 3/11/2013 10:00 | 3/12/2013 12:38 | | |
| L57398-9 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:40 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 3/2/2013 17:42 | 3/11/2013 10:00 | 3/12/2013 12:49 | | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTHG-MID | EFFLUENT | 3/3/2013 7:30 | 3/11/2013 10:00 | 3/12/2013 13:00 | WG125796-1,-2 | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 13:01 | | |
| L57472-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 12:27 | WG125796-1,-3,-4 | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/8/2013 10:59 | 3/11/2013 10:00 | 3/12/2013 12:25 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/7/2013 8:10 | 3/11/2013 10:00 | 3/12/2013 12:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | BLANK WTR | 3/7/2013 10:05 | 3/11/2013 10:00 | 3/12/2013 13:03 | WG125796-1,-2 | |
| WG125796-1 | MB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | | METHOD BLANK |
| WG125796-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | WG125796-1,-3,-4 | METHOD BLANK |
| WG125796-2 | SB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:18 | WG125796-1,-2 | WG125796-1 HG-LMID |
| WG125796-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:22 | WG125796-1,-3,-4 | L57398-4 HG-LMID |
| WG125796-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:23 | | WG125796-3 L57398-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125908 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 8:40 | 3/19/2013 13:29 | WG125908-1,-2,-3,-4 | |
| L57473-1 | 421879-210 | | MTICPMS-DISS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 8:40 | 3/19/2013 13:36 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/12/2013 10:35 | 3/19/2013 8:40 | 3/19/2013 13:42 | | |
| L57482-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/8/2013 10:59 | 3/19/2013 8:40 | 3/19/2013 13:49 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/14/2013 9:50 | 3/19/2013 8:40 | 3/19/2013 13:55 | | |
| L57508-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/11/2013 13:15 | 3/19/2013 8:40 | 3/19/2013 14:01 | | |
| L57509-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/15/2013 7:40 | 3/19/2013 8:40 | 3/19/2013 14:08 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/12/2013 9:21 | 3/19/2013 8:40 | 3/19/2013 14:33 | | |
| L57519-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTICPMS-DISS | OTHR WTR | 3/11/2013 9:18 | 3/19/2013 8:40 | 3/19/2013 14:52 | | |
| L57519-3 | 423258-500-1 | | MTICPMS-DISS | BLANK WTR | 3/11/2013 9:10 | 3/19/2013 8:40 | 3/19/2013 14:58 | | |
| L57526-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/14/2013 8:25 | 3/19/2013 8:40 | 3/19/2013 15:05 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/13/2013 9:37 | 3/19/2013 8:40 | 3/19/2013 15:11 | | |
| L57526-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 8:44 | 3/19/2013 8:40 | 3/19/2013 15:17 | | |
| L57527-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 7:53 | 3/19/2013 8:40 | 3/19/2013 15:24 | | |
| L57527-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 10:42 | 3/19/2013 8:40 | 3/19/2013 15:30 | | |
| L57529-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 8:29 | 3/19/2013 8:40 | 3/19/2013 15:49 | | |
| L57529-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 10:49 | 3/19/2013 8:40 | 3/19/2013 15:56 | | |
| L57529-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 9:57 | 3/19/2013 8:40 | 3/19/2013 16:02 | | |
| L57540-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTICPMS-DISS | OTHR WTR | 3/12/2013 9:50 | 3/19/2013 8:40 | 3/19/2013 16:08 | | |
| L57541-2 | 423258-500-1 | | MTICPMS-DISS | OTHR WTR | 3/13/2013 9:37 | 3/19/2013 8:40 | 3/19/2013 16:15 | | |
| WG125908-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/19/2013 8:40 | 3/19/2013 14:14 | | METHOD BLANK |
| WG125908-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/19/2013 8:40 | 3/19/2013 13:22 | | WG125908-1 MS-20 SPIKE BLANK |
| WG125908-3 | LD | | MTICPMS-DISS | GRND WTR | | 3/19/2013 8:40 | 3/19/2013 14:39 | | L57511-1 RPD-LIQ LAB DUPLICATE |
| WG125908-4 | MS | | MTICPMS-DISS | GRND WTR | | 3/19/2013 8:40 | 3/19/2013 14:46 | | L57511-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125780 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 3/2/2013 16:24 | 3/8/2013 12:00 | 3/14/2013 7:25 | WG125780-4,-3,-2,-1 | |
| L57435-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/2/2013 17:42 | 3/8/2013 12:00 | 3/14/2013 8:41 | | |
| L57472-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/6/2013 14:52 | 3/8/2013 12:00 | 3/14/2013 8:16 | | |
| L57538-1 | 421879-210 | | ORHERB-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/8/2013 12:00 | 3/14/2013 7:50 | | |
| WG125780-1 | MB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 5:44 | | MB130308 |
| WG125780-2 | SB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 6:10 | | WG125780-1 |
| WG125780-3 | MS | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 6:35 | | L57386-1 |
| WG125780-4 | MSD | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 7:00 | | WG125780-3 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125841 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 11:54 | WG125841-4,-3,-2,-1 | |
| L57473-1 | 421879-210 | | OROPPEST-NPDES | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:33 | | |
| L57538-1 | 421879-210 | | OROPPEST-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:06 | | |
| WG125841-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:12 | | MB130313 |
| WG125841-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:39 | | WG125841-1 |
| WG125841-3 | MS | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:00 | | L57472-1 |
| WG125841-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:27 | | WG125841-3 L57472-1 |

**WG125842 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57472-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-1,-2,-3 | |
| L57473-1 | 421879-210 | | ORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57473-1 | 421879-210 | | TICORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-1,-2,-3 | |
| L57538-1 | 421879-210 | | ORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57538-1 | 421879-210 | | TICORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-1,-2,-3 | |
| WG125842-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | MB130313 |
| WG125842-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-1,-2,-3 | MB130313 |
| WG125842-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-1 |
| WG125842-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-1,-2,-3 | WG125842-1 |
| WG125842-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | L57472-1 |
| WG125842-3 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-1,-2,-3 | L57472-1 |
| WG125842-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-3 L57472-1 |
| WG125842-4 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-1,-2,-3 | WG125842-3 L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125757 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 3/3/2013 9:30 | 3/7/2013 11:45 | 3/14/2013 18:20 | WG125757-1,-2,-3,-4 | |
| L57436-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/6/2013 12:20 | 3/7/2013 11:45 | 3/14/2013 18:43 | | |
| L57473-2 | 421879-210 | | ORWTPH-DX | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 11:45 | 3/14/2013 19:07 | | |
| WG125757-1 | MB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 16:45 | | MB130307 |
| WG125757-2 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:09 | | WG125757-1 SB-MO |
| WG125757-3 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:32 | | WG125757-1 SB-DSL |
| WG125757-4 | LD | | ORWTPH-DX | STORM WTR | | 3/7/2013 11:45 | 3/14/2013 17:57 | | L57436-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125855 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 3/7/2013 12:15 | 3/14/2013 17:00 | 4/2/2013 17:20 | WG125855-1,-2,-3,-4 | |
| L57557-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 14:20 | 3/14/2013 17:00 | 4/2/2013 17:43 | | |
| L57557-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 14:44 | 3/14/2013 17:00 | 4/2/2013 18:06 | | |
| L57558-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 12:52 | 3/14/2013 17:00 | 4/2/2013 18:30 | | |
| WG125855-1 | MB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 15:46 | | MB130314 |
| WG125855-2 | SB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 16:10 | | WG125855-1 SB-MO |
| WG125855-3 | SB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 16:33 | | WG125855-1 SB-DSL |
| WG125855-4 | LD | | ORWTPH-DX | STORM WTR | | 3/14/2013 17:00 | 4/2/2013 16:56 | | L57472-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57436, L57472

**WG125724 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 3/3/2013 9:30 | 3/7/2013 14:18 | 3/7/2013 14:18 | WG125724-1,-2,-3 | |
| L57436-2 | 421879-210 | | ORWTPH-G | STORM WTR | 3/6/2013 12:20 | 3/7/2013 14:47 | 3/7/2013 14:47 | | |
| L57472-3 | 421879-210 | | ORWTPH-G | STORM WTR | 3/7/2013 12:15 | 3/7/2013 16:46 | 3/7/2013 16:46 | | |
| L57473-2 | 421879-210 | | ORWTPH-G | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 15:17 | 3/7/2013 15:17 | | |
| WG125724-1 | MB | | ORWTPH-G | BLANK WTR | | 3/7/2013 13:19 | 3/7/2013 13:19 | | MB130306 |
| WG125724-2 | SB | | ORWTPH-G | BLANK WTR | | 3/7/2013 15:47 | 3/7/2013 15:47 | | WG125724-1 |
| WG125724-3 | LD | | ORWTPH-G | STORM WTR | | 3/7/2013 13:48 | 3/7/2013 13:48 | | L57435-3 |

**Workgroup: WG125783 BOD**

**MB:WG125783-1 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:WG125783-2 MB:WG125783-1 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 | 186 | 94 | | 80--120 |

**Workgroup: WG125991 Anions**

**CS:WG125991-1 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 | 0.098 | 98 | | 70--130 |

**MB:WG125991-2 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 | |

**SB:WG125991-3 MB:WG125991-2 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 | 1.92 | 96 | | 80--120 |

**LCS:WG125991-4 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 |

**LD:WG125991-5 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 4.14 | 3.99 | 4 | | 0--20 |

**MS:WG125991-6 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 4.14 | 10 | 13.8 | 96 | | 75--125 |

**LD:WG125991-7 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 2.56 | 1 | | 0--20 |

**MS:WG125991-8 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125991-9 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 10 | 12 | | 0--20 |

**MS:WG125991-10 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 20 | 28.6 | 98 | | 75--125 |

**Workgroup: WG125890 Conductivity**

**LCS:WG125890-1 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 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-2 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 | 714 | 100 | | 90--110 |

**LD:WG125890-3 L57509-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 34.9 | 34.3 | 2 | | 0--10 |

**LD:WG125890-4 L57472-1 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 | 60.5 | 60.6 | 0 | | 0--10 |

**LD:WG125890-5 L57473-1 Matrix: FRESH 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 | 66.3 | 66.2 | 0 | | 0--10 |

**LD:WG125890-6 L57493-1 Matrix: LEACHATE Listtype:CVCOND Method:SM2510-B Project:421422-VALS-MSPECIAL Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 116 | 116 | 0 | | 0--10 |

**LCS:WG125890-7 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 | 73.9 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-8 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 | 717.5 | 712 | 99 | | 90--110 |

**LCS:WG125890-9 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 | 6667 | 6590 | 99 | | 90--110 |

**Workgroup: WG125885 Dissolved Nutrients - Nitrates**

**MB:WG125885-1 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:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125885-2 MB:WG125885-1 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 | 0.805 | 101 | | 80--120 |

**SB:WG125885-2 MB:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.398 | 100 | | 80--120 |

**LCS:WG125885-3 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 | 0.82 | 102 | | 85--115 |

**LCS:WG125885-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.407 | 102 | | 85--115 |

**LD:WG125885-4 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG125885-5 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.285 | 71 | * | 75--125 |

**LD:WG125885-6 L57558-1 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 | 0.582 | 0.581 | 0 | | 0--20 |

**MS:WG125885-7 L57558-1 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 | 0.582 | 0.8 | 1.37 | 99 | | 75--125 |

**LD:WG125885-8 L57473-1 Matrix: FRESH 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 | 1.02 | 1.02 | 0 | | 0--20 |

**MS:WG125885-9 L57473-1 Matrix: FRESH 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 | 1.02 | 0.8 | 1.79 | 97 | | 75--125 |

**LD:WG125885-10 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 19.2 | 0 | | 0--20 |

**MS:WG125885-11 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 0.8 | 35.2 | 100 | | 75--125 |

**Workgroup: WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

**MB:WG125950-1 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:WG125950-2 MB:WG125950-1 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:WG125950-3 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:WG125950-4 L57472-1 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 | 0.00979 | 0.00947 | 3 | | 0--20 |

**MS:WG125950-5 L57472-1 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 | 0.00979 | 0.04 | 0.0472 | 94 | | 75--125 |

**LD:WG125950-6 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 3.8 | 1 | | 0--20 |

**MS:WG125950-7 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 0.04 | 7.64 | 97 | | 75--125 |

**LD:WG125950-10 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.012 | | | 0--20 |

**MS:WG125950-11 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.04 | 0.201 | 94 | | 75--125 |

**MB:WG125950-12 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 | |

**MB:WG125950-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125950-14 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 | 0.0386 | 97 | | 85--115 |

**LD:WG125950-15 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00916 | 0.0075 | 20 | | 0--20 |

**MS:WG125950-16 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 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 | 0.00916 | 0.04 | 0.0438 | 87 | | 75--125 |

**MB:WG125950-17 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 | |

**LD:WG125950-18 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00505 | 0.00573 | 13 | | 0--20 |

**MS:WG125950-19 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00505 | 0.04 | 0.0424 | 93 | | 75--125 |

**MB:WG125950-20 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:WG125950-21 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 | 0.0387 | 97 | | 85--115 |

**LD:WG125950-22 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00838 | 0.00863 | 3 | | 0--20 |

**MS:WG125950-23 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 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 | 0.00838 | 0.04 | 0.0463 | 95 | | 75--125 |

**Workgroup: WG126000 TKN**

**MB:WG126000-1 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 | |

**LCS:WG126000-2 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 | 0.427 | 85 | | 80--120 |

**LCS:WG126000-3 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 | 5 | 4.81 | 96 | | 80--120 |

**SB:WG126000-4 MB:WG126000-1 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 |

**LD:WG126000-5 L57435-1 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 | 0.923 | 0.925 | 0 | | 0--20 |

**MS:WG126000-6 L57435-1 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 | 0.923 | 5 | 5.76 | 97 | | 70--130 |

**LD:WG126000-7 L57473-1 Matrix: FRESH 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 | 0.304 | 0.299 | 2 | | 0--20 |

**MS:WG126000-8 L57473-1 Matrix: FRESH 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 | 0.304 | 5 | 5.38 | 101 | | 70--130 |

**LD:WG126000-9 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 1.93 | 1 | | 0--20 |

**MS:WG126000-10 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 5 | 7.15 | 105 | | 70--130 |

**LD:WG126000-11 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 19 | 4 | | 0--20 |

**MS:WG126000-12 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 10 | 28.9 | 91 | | 70--130 |

**Workgroup: WG125933 Total Nitrogen, Total Phosphorus**

**MB:WG125933-1 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:WG125933-1 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:WG125933-2 MB:WG125933-1 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 | 1.04 | 104 | | 80--120 |

**SB:WG125933-2 MB:WG125933-1 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 | 0.0985 | 98 | | 80--120 |

**LCS:WG125933-3 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 | 0.944 | 94 | | 85--115 |

**LCS:WG125933-3 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 | 0.0963 | 96 | | 85--115 |

**LD:WG125933-4 L57506-13 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 | 0.357 | 0.358 | 0 | | 0--20 |

**LD:WG125933-4 L57506-13 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 | 0.0134 | 0.013 | 3 | | 0--20 |

**MS:WG125933-5 L57506-13 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 | 0.357 | 1 | 1.4 | 104 | | 75--125 |

**MS:WG125933-5 L57506-13 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 | 0.0134 | 0.1 | 0.113 | 100 | | 75--125 |

**MB:WG125933-6 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:WG125933-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125933-7 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 | 1.02 | 102 | | 85--115 |

**LCS:WG125933-7 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:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.422 | 0.444 | 5 | | 0--20 |

**LD:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0162 | 0.0158 | 2 | | 0--20 |

**MS:WG125933-9 L57506-44 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 | 0.422 | 1 | 1.49 | 107 | | 75--125 |

**MS:WG125933-9 L57506-44 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 | 0.0162 | 0.1 | 0.116 | 100 | | 75--125 |

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD (Method Blank)**

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

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD (Method Blank)**

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

**LCS:WG125933-11 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 | 100 | | 85--115 |

**LCS:WG125933-11 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 | 0.0921 | 92 | | 85--115 |

**LD:WG125933-12 L57506-49 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 | 0.483 | 0.464 | 4 | | 0--20 |

**LD:WG125933-12 L57506-49 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 | 0.0312 | 0.0305 | 2 | | 0--20 |

**MS:WG125933-13 L57506-49 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 | 0.483 | 1 | 1.52 | 104 | | 75--125 |

**MS:WG125933-13 L57506-49 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 | 0.0312 | 0.1 | 0.13 | 99 | | 75--125 |

**LD:WG125933-14 L57172-2 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 | 0.0093 | 0.0089 | | | 0--20 |

**MS:WG125933-15 L57172-2 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 | 0.0093 | 0.1 | 0.108 | 99 | | 75--125 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 25.1 | 1 | | 0--20 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 3.83 | 1 | | 0--20 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 1 | 46.8 | 107 | | 75--125 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 0.1 | 5.91 | 102 | | 75--125 |

**LD:WG125933-18 L57382-2 Matrix: STORM 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 | 0.0199 | 0.0184 | 8 | | 0--20 |

**MS:WG125933-19 L57382-2 Matrix: STORM 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 | 0.0199 | 0.1 | 0.116 | 96 | | 75--125 |

**LD:WG125933-20 L57472-1 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 | 0.124 | 0.118 | 4 | | 0--20 |

**MS:WG125933-21 L57472-1 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 | 0.124 | 0.1 | 0.232 | 108 | | 75--125 |

**Workgroup: WG125834 TSS**

**MB:WG125834-1 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:WG125834-2 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 | 87 | 87 | | 80--120 |

**LD:WG125834-3 L57172-2 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 | 2.8 | 2.2 | 24 | | 0--25 |

**LD:WG125834-4 L57472-1 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 | 72 | 75 | 4 | | 0--25 |

**LD:WG125834-5 L57482-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 1.4 | 2 | | | 0--25 |

**LD:WG125834-6 L57519-1 Matrix: OTHR WTR Listtype:CVTSS Method:SM2540-D Project:423258-500-1 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 |

**LD:WG125834-7 L57524-1 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 | 5 | 10 | mg/L | 37 | 41 | 10 | | 0--25 |

**Workgroup: WG125776 Turbidity**

**LCS:WG125776-1 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 | 9.8 | 98 | | 90--110 |

**LCS:WG125776-2 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 | 98.4 | 98 | | 90--110 |

**LD:WG125776-3 L57468-5 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 3.4 | 3.11 | 9 | | 0--25 |

**LD:WG125776-4 L57472-1 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 | 99.4 | 104 | 5 | | 0--25 |

**LCS:WG125776-5 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 | 9.97 | 100 | | 90--110 |

**LCS:WG125776-6 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 | 98.1 | 98 | | 90--110 |

**Workgroup: WG125721 Fecal coliform**

**PC:WG125671-1 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:WG125671-2 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:WG125671-3 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:WG125671-4 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: WG125765 Fecal coliform**

**PC:WG125747-2 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:WG125747-3 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:WG125748-4 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:WG125748-5 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: WG125916 Total Metals & Hardness**

**MB:WG125916-1 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:WG125916-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD (Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Boron, Total, ICP-MS | 2 | 10 | 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 | |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | 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:WG125916-2 MB:WG125916-1 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 | 32.2 | 97 | | 85--115 |

**SB:WG125916-2 MB:WG125916-1 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 |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5140 | 103 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4680 | 94 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4420 | 88 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.3 | 92 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4840 | 97 | | 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 | 95 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 17.8 | 89 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 17.9 | 89 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.1 | 90 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.7 | 93 | | 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 | 95 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 55.9 | 2 | | 0--20 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 1.9 | | | 0--20 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 157 | 2 | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 65900 | 3 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 4730 | 3 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 10.5 | 0 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 13500 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 14600 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 0.488 | 7 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 0.42 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 65.5 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 38.4 | 2 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 0.15 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 2.35 | 3 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 7.51 | 0 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 34.7 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 0.851 | 4 | | 0--20 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 0.936 | 2 | | 0--20 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 0.095 | | | 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 | 4.85 | 4.83 | 0 | | 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 | 0.16 | 0.14 | | | 0--20 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 33.1 | 82.1 | 82 | | 75--125 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 20 | 18.7 | 83 | | 75--125 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 16.6 | 83 | | 75--125 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 20 | 165 | | 4xRule | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 5000 | 67300 | | 4xRule | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 5000 | 8690 | 82 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 20 | 27.7 | 86 | | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 5000 | 18000 | 89 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 5000 | 18500 | 81 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 20 | 18.8 | 92 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 20 | 18.4 | 90 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 5000 | 4810 | 95 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 20 | 55.3 | 88 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 20 | 17.6 | 87 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 20 | 20.2 | 89 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 20 | 25.1 | 88 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 20 | 51.1 | 83 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 20 | 18.3 | 87 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 17.3 | 87 | | 75--125 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 20 | 18.9 | 90 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.5 | 92 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 20 | 17.4 | 87 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.3 | 92 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 4.85 | 20 | 23.1 | 91 | | 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 | 0.16 | 20 | 18.5 | 92 | | 75--125 |

**Workgroup: WG125796 Total & Dissolved Mercury**

**MB:WG125796-1 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:WG125796-1 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:WG125796-2 MB:WG125796-1 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 | 0.953 | 95 | | 85--115 |

**MSD:WG125796-4 MS:WG125796-3 L57398-4 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-HOGW 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 | 0.972 | 97 | | 75--125 | 1 | 0.991 | 99 | | 2 | | 0--20 |

**Workgroup: WG125908 Dissolved Metals**

**MB:WG125908-1 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:WG125908-2 MB:WG125908-1 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 | 4810 | 96 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4800 | 96 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5000 | 100 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4970 | 99 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5050 | 101 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.3 | 106 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 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 | 20.1 | 100 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |

**LD:WG125908-3 L57511-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 9700 | 9660 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 14300 | 14100 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1030 | 1020 | 1 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 19600 | 19800 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.931 | 0.916 | 2 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | <MDL | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.02 | 1.02 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.46 | 0.45 | | | 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 | 0.51 | 0.62 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 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 | 0.07 | 0.09 | | | 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 | 5.31 | 5.22 | 2 | | 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:WG125908-4 L57511-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 9700 | 5000 | 14500 | 96 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 14300 | 5000 | 19300 | 100 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1030 | 5000 | 6000 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 19600 | 5000 | 24400 | 97 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.931 | 20 | 21.4 | 103 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5100 | 102 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.02 | 20 | 21.3 | 101 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.3 | 101 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.46 | 20 | 20.4 | 100 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.3 | 107 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 0.51 | 20 | 20.2 | 99 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 20 | 20.5 | 102 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.1 | 106 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.07 | 20 | 19.5 | 97 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.31 | 20 | 25.7 | 102 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |

**Workgroup: WG125780 Herbicides**

**MB:WG125780-1 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 | |

**SB:WG125780-2 MB:WG125780-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.55 | 91 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.69 | 94 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.81 | 96 | | 59--151 |

**MSD:WG125780-4 MS:WG125780-3 L57386-1 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 | 4.7 | 94 | | 20--162 | 5 | 4.77 | 95 | | 1 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.04 | 101 | | 10--196 | 5 | 5.12 | 102 | | 2 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.17 | 103 | | 30--150 | 5 | 5.2 | 104 | | 1 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57386-1 | 90 | 113 |
| L57435-1 | 100 | 136 |
| L57472-1 | 91 | 123 |
| L57538-1 | 87 | 115 |
| WG125780-1 | 91 | 112 |
| WG125780-2 | 88 | 110 |
| WG125780-3 | 90 | 114 |
| WG125780-4 | 92 | 118 |

**Workgroup: WG125841 Organophosphorus Pesticides**

**MB:WG125841-1 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:WG125841-2 MB:WG125841-1 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 | 0.25 | 0.247 | 99 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.273 | 109 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.246 | 98 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.217 | 87 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.284 | 114 | | 40--160 |

**MSD:WG125841-4 MS:WG125841-3 L57472-1 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 | 0.236 | 0.234 | 99 | | 67--148 | 0.236 | 0.233 | 99 | | 1 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.309 | 131 | | 52--190 | 0.236 | 0.328 | 139 | | 6 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.22 | 93 | | 57--141 | 0.236 | 0.211 | 90 | | 4 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.205 | 87 | | 40--160 | 0.236 | 0.206 | 87 | | 0 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.485 | 206 | * | 40--160 | 0.236 | 0.415 | 176 | * | 16 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57472-1 | 90 |
| L57473-1 | 92 |
| L57538-1 | 91 |
| WG125841-1 | 78 |
| WG125841-2 | 99 |
| WG125841-3 | 82 |
| WG125841-4 | 73 |

**Workgroup: WG125842 Semi Volatile Organics**

**MB:WG125842-1 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 | 0.027 | B |
| 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 | <MDL | |
| 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 | 0.168 | 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:WG125842-2 MB:WG125842-1 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 | 1.18 | 47 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.738 | 30 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.44 | 98 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.27 | 51 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.18 | 47 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | 0.027 | 2.5 | 2.7 | 107 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.67 | 67 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.61 | 64 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.08 | 83 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.68 | 107 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.72 | 109 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.2 | 128 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.48 | 99 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.168 | 2.5 | 2.92 | 110 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.81 | 112 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.7 | 103 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.51 | 101 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.24 | 90 | | 32--130 |

**MSD:WG125842-4 MS:WG125842-3 L57472-1 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 | <MDL | 2.36 | 1.12 | 47 | | 37--95 | 2.36 | 1.2 | 51 | | 8 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.05 | 45 | | 40--121 | 2.36 | 1.2 | 51 | | 13 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.14 | 91 | | 34--134 | 2.36 | 2.05 | 87 | | 4 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.64 | 69 | | 46--122 | 2.36 | 1.55 | 66 | | 5 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.71 | 73 | | 47--105 | 2.36 | 1.62 | 69 | | 6 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.204 | 2.36 | 2.4 | 93 | | 33--140 | 2.36 | 2.37 | 92 | | 1 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.93 | 82 | | 44--137 | 2.36 | 1.91 | 81 | | 1 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.8 | 119 | | 44--145 | 2.36 | 2.81 | 119 | | 0 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0403 | 2.36 | 2.22 | 92 | | 62--116 | 2.36 | 2.22 | 92 | | 0 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2 | 85 | | 32--140 | 2.36 | 2.04 | 86 | | 2 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.106 | 2.36 | 2.35 | 95 | | 44--134 | 2.36 | 2.38 | 97 | | 2 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0379 | 2.36 | 2.04 | 85 | | 49--123 | 2.36 | 2.08 | 86 | | 2 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.11 | 2.36 | 2.79 | 114 | | 37--147 | 2.36 | 2.76 | 113 | | 1 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.166 | 2.36 | 3.34 | 135 | | 39--151 | 2.36 | 3.31 | 133 | | 1 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.25 | 95 | | 50--120 | 2.36 | 2.24 | 95 | | 0 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.0561 | 2.36 | 2.23 | 92 | | 42--115 | 2.36 | 2.29 | 95 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 1.69 | 2.36 | 4.34 | 112 | | 11--188 | 2.36 | 4.4 | 115 | | 1 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.316 | 2.36 | 3.43 | 132 | | 48--150 | 2.36 | 3.45 | 133 | | 1 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 7.75 | 110 | | 42--123 | 7.08 | 7.9 | 112 | | 2 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.0264 | 2.36 | 2.39 | 100 | | 45--121 | 2.36 | 2.41 | 101 | | 1 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.82 | 77 | | 39--122 | 2.36 | 1.89 | 80 | | 4 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.79 | 76 | | 31--121 | 2.36 | 1.87 | 79 | | 4 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.6 | 68 | | 22--125 | 2.36 | 1.65 | 70 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57472-1 | 98 | 47 | 61 | 104 | 54 | 73 | 65 |
| L57473-1 | 69 | 40 | 53 | 89 | 45 | 63 | 61 |
| L57538-1 | 36 | 41 | 50 | 89 | 43 | 60 | 58 |
| WG125842-1 | 53 | 47 | 75 | 85 | 64 | 88 | 82 |
| WG125842-2 | 73 | 31 | 78 | 86 | 69 | 102 | 89 |
| WG125842-3 | 87 | 49 | 62 | 98 | 54 | 72 | 65 |
| WG125842-4 | 91 | 45 | 60 | 100 | 51 | 93 | 62 |

**Workgroup: WG125757 WTPH-Dx**

**MB:WG125757-1 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:WG125757-2 MB:WG125757-1 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 | 0.908 | 91 | | 50--150 |

**SB:WG125757-3 MB:WG125757-1 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 | 0.848 | 85 | | 50--150 |

**LD:WG125757-4 L57436-2 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) | 0.19 | 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-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57435-3 | 72 | 94 |
| L57436-2 | 78 | 94 |
| L57473-2 | 83 | 93 |
| WG125757-1 | 75 | 88 |
| WG125757-2 | 82 | 91 |
| WG125757-3 | 95 | 95 |
| WG125757-4 | 82 | 93 |

**Workgroup: WG125855 WTPH-Dx**

**MB:WG125855-1 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:WG125855-2 MB:WG125855-1 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 | 0.973 | 97 | | 50--150 |

**SB:WG125855-3 MB:WG125855-1 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 | 0.944 | 94 | | 50--150 |

**LD:WG125855-4 L57472-3 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 | 0.486 | 0.58 | 18 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57472-3 | 82 | 104 |
| L57557-3 | 77 | 104 |
| L57557-4 | 83 | 104 |
| L57558-2 | 93 | 105 |
| WG125855-1 | 72 | 105 |
| WG125855-2 | 84 | 104 |
| WG125855-3 | 101 | 107 |
| WG125855-4 | 85 | 109 |

**Workgroup: WG125724 WTPH-G**

**MB:WG125724-1 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:WG125724-2 MB:WG125724-1 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 | 430 | 86 | | 50--150 |

**LD:WG125724-3 L57435-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57435-3 | 90 | 93 |
| L57436-2 | 90 | 93 |
| L57472-3 | 89 | 93 |
| L57473-2 | 89 | 93 |
| WG125724-1 | 91 | 94 |
| WG125724-2 | 87 | 94 |
| WG125724-3 | 90 | 94 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *3/7/13 & 3/11/13*

**WG #(s):** *WG125908*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57472-1, L57473-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *19-Mar-13*

**WG #(s):** *WG125644*

☒ **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: *7890G* |

## 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. Prometon exceeded the upper QC recovery 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. An "*" was applied to the QC report.*

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

*3. Given the recovery was high for both the MS & MSD and all associated samples are "ND, no bias is suggested and no qualifier is warranted.*

| | 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:** *19-MAR-13*

**WG #(s):** *WG125842*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125842-1 MB had a reportable levels of Diethyl Phthalate and Bis(2EthylHexyl)Phthalate.*

## 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 10X the blank level contamination were flagged "B" for Diethyl Phthalate and Bis-2(EH)phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 were filtered past the 15 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:
☐ Other

**Corrective Action Description:** *The samples were filtered for ORTHOP as a 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 associated matrix QC were qualified with an "H".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *March 6, 2013*

**WG #(s):** *WG125783*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57472-1*

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

**Matrix:** ☒ **Liquid** ☐ **Solid** ☐ **Air** ☐ **Tissue** ☐ **Calibration** ☐ **Other:**

## I. Analysis

☐ Anions:
☐ Chlorophylls:
☐ Cyanides:
☒ Demands: *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 difference between the initial dissolved oxygen reading and the final DO reading must be at least 2.0 mg/L of DO in order for a sample dilution to be valid for calculating the sample's BOD. This minimum depletion requirement was not met for all dilutions of sample L57472-1.*

## 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: *<7.58*
☒ Text added: *Minimum depletion requirement of 2.0 mg/L was not met. Estimated result is less than 7.58 mg/L.*
☒ Other

**Corrective Action Description:** *Due to insufficient DO depletion for the prepared dilutions of L57472-1, the BOD result is estimated as being less than 7.58 mg/L. The sample's BOD result was reported as a null value with the above qualifier and added text.*

## VI. Potential Effects on Data Quality

**Potential Effects on Data Quality** (explanation mandatory): *The reported value of 7.58 mg/L BOD is a maximum estimated value based on a minimum depletion of 2 mg/L. The actual BOD value is unknown but less than the stated value. The method blank associated with this sample was acceptable (<MDL) and the associated spike blank had an acceptable percent recovery.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Keith Solberg* | | |
| **Reviewer:** *Benjamin Mendoza* | | |
| **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

July 18, 2011

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring
Rural site, Equipment Blank, Sample L57538-1, collected March 7, 2013

Attached is the comprehensive report for the equipment blank water sample delivered to the laboratory on March 7, 2013. The sample was analyzed in the Trace Metals, Conventionals, and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15214 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
The sample was taken by drawing laboratory DI water from a clean carboy through the sampling system and into the composite container in the autosampler. The sample was then split in the normal fashion at the laboratory. A grab sample was not collected.

**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.



1202M

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 recovery of Prometon in the matrix spike and matrix spike duplicate for Organophosphorus pesticide analysis was outside the upper control range at 206 and 176%. These results were flagged with an "*" in the QC report. The spike blank recovery was within control limits. Prometon was not detected in the sample therefore qualifiers were not applied to the data.

Bis (2-ethylhexyl) phthalate and diethyl phthalate were detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "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 |
| Locator: | EQUIPBLANK |
| Descrip: | EQUIPMENT BLANK |
| Sample: | L57538-1 |
| Matrix: | LN BLANK WTR |
| ColDate: | 3/7/13 10:05 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | Value | Qual | MDL | RDL | Units |
|---|---|---|---|---|---|
| **CV EPA 351.2** | | | | | |
| Total Kjeldahl Nitrogen | | <MDL,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 | | <MDL | 0.2 | 0.5 | NTU |
| **CV SM2510-B** | | | | | |
| Conductivity | 1.8 | <RDL | 1 | 5 | umhos/cm |
| **CV SM2540-D** | | | | | |
| Total Suspended Solids | | <MDL | 0.5 | 1 | mg/L |
| **CV SM4110B CL** | | | | | |
| Chloride | | <MDL | 0.05 | 0.1 | mg/L |
| **CV SM4500-NO3-F** | | | | | |
| Nitrite + Nitrate Nitrogen | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | |
| Total Phosphorus | | <MDL | 0.005 | 0.01 | mg/L |
| **CV SM4500-P-F** | | | | | |
| Orthophosphate Phosphorus | | <MDL,H | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | |
| Biochemical Oxygen Demand | | <MDL | 2 | 2 | mg/L |
| **ES NONE** | | | | | |
| Sample Information | Field Equipment Rinsate Blank @ RSW1UP | | | | none |
| **MT EPA 200.8*SW846 6020A** | | | | | |
| Cadmium, Total, ICP-MS | | <MDL | 0.05 | 0.25 | ug/L |
| Calcium, Total, ICP-MS | 59.7 | | 50 | 50 | ug/L |
| Copper, Total, ICP-MS | | <MDL | 0.4 | 2 | ug/L |
| Lead, Total, ICP-MS | | <MDL | 0.1 | 0.5 | ug/L |
| Magnesium, Total, ICP-MS | | <MDL | 50 | 50 | ug/L |
| Zinc, Total, ICP-MS | 0.61 | <RDL | 0.5 | 2.5 | ug/L |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | |
| Hardness, Calc | | <MDL | 0.331 | 0.331 | mg CaCO3/L |
| **MT EPA 245.1*SW846 7470A** | | | | | |
| 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 |
| 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 | 0.094 | 0.189 | ug/L |
| Benzo(g,h,i)perylene | | <MDL | 0.047 | 0.0943 | ug/L |
| Benzyl Butyl Phthalate | | <MDL | 0.047 | 0.0943 | ug/L |
| Bis(2-Ethylhexyl)Phthalate | 0.252 | B | 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 | 0.157 | B3 | 0.024 | 0.0472 | ug/L |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L |
| Di-N-Butyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L |
| Di-N-Octyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L |
| Fluoranthene | | <MDL | 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 | 0.0415 | | 0.0094 | 0.0189 | ug/L |
| Pentachlorophenol | | <MDL | 0.12 | 0.236 | ug/L |
| Phenanthrene | | <MDL | 0.0094 | 0.0189 | ug/L |
| Pyrene | | <MDL | 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 |

# King County Environmental Lab Analytical Report

| | |
|---|---|
| Project: | 421879-210 |
| Locator: | EQUIPBLANK |
| Descrip: | EQUIPMENT BLANK |
| Sample: | L57538-1 |
| Matrix: | LN BLANK WTR |
| ColDate: | 3/7/13 10:05 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | Value | Qual | MDL | RDL | Units |
|---|---|---|---|---|---|
| **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 |

# King County Environmental Lab Analytical MATRIX Report

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

| LOCATOR | PROJECT | SAMPLE | Conductivity | Calcium, Total, ICP-MS | Zinc, Total, ICP-MS | Bis(2-Ethylhexyl)Phthalate | Diethyl Phthalate | Naphthalene |
|---|---|---|---|---|---|---|---|---|
| | | | umhos/cm | ug/L | ug/L | ug/L | ug/L | ug/L |
| EQUIPBLANK | 421879-210 | L57538-1 | 1.8 | 59.7 | 0.61 | 0.252 | 0.157 | 0.0415 |
| * 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: P57538 | NPDES SWM Field Equipment Blank | Personnel: Crawford

Project: 421879-210

CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by | Date 3-7-13 | Time 1200 |
| Received by | Date 3-7-13 | Time 1200 |
| Sample Numbers | | [All] |

| | | | |
|---|---|---|---|
| **Sample Number** | P57538-1 | | |
| **QC Link** | | | |
| **Locator** | TEMP EQUIPBLANK | | |
| Short Loc Desc | TEMPLOC | | |
| Locator Desc | TEMPORARY LOCATOR | | |
| Site | TEMP | | |
| Comments | | | |
| Start Date/Time | 3-7-13 @ 10:05 | | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| **Dept, Matrix, Prod** | 3 LN BOD<br>3 LN CL<br>3 LN COND<br>3 LN MBAS<br>3 LN NO23<br>3 LN ORTHOP<br>3 LN TKN<br>3 LN TOTP<br>3 LN TSS<br>3 LN TURB<br>6 LN CA-ICPMS<br>6 LN CD-ICPMS<br>6 LN CU-ICPMS<br>6 LN HG-CVAA-M<br>6 LN ICPMS-HARDNESS<br>6 LN MG-ICPMS<br>6 LN PB-ICPMS<br>6 LN ZN-ICPMS<br>7 LN HERB-NPDES<br>7 LN OPPEST-NPDES<br>7 LN PAHPHTH-SUR | | |

SAMP INFO { Collected @ location RSW1UP
Field Equipment Rinsate Blank.

WG125779 3/8/13
R186774 3/8/13

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

***Professional Analytical Services***

Mar 13 2013
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 |
|---|---|---|---|
| P57538-1 | Water | 13-A002643 | CONV |

Your sample was received on Thursday, March 7, 2013. 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

**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 #: 421879-210
All results reported on an as received basis.

Date Received: 03/07/13
Date Reported: 3/13/13

---

**AMTEST Identification Number** **13-A002643**
**Client Identification** **P57538-1**
**Sampling Date** **03/07/13, 10:05**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | < 0.025 | mg/l | | 0.025 | SM 5540C | EB | 03/08/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A002643**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A002643 | Surfactants | mg/l | < 0.025 | 0.124 | 0.125 | 99.20 % |
| 13-A002643 | Surfactants | mg/l | < 0.025 | 0.124 | 0.125 | 99.20 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.124 | 0.124 | 0.00 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.128 | 102. % |

## 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 1380781

Project Name: _____  Date Received: 3/ 7/13  Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 7.6 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.

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-13
Shipment Method: ENA
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*

| | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| 264B P57538-1 | 3/7/2013 | LN - Blank | Level 2 | X | | | | | | | | | | | | 1 | sample time: 10:05AM |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

Requested TAT: 14 Days
Data Package Due: 3/28/2013

*Please return signed original CoC with data package.*

| | | | |
|---|---|---|---|
| RELINQUISHED BY | | Date | 3-7-13 |
| Signature | | Time | 1230 |
| Printed Name | Jason Kinnard | | |
| Organization | King County DNR, Environmental Laboratory | | |

| | | | |
|---|---|---|---|
| RECEIVED BY | | Date | 3/7/13 |
| Signature | | Time | 1:48 |
| Printed Name | J Olsen | | |
| Organization | Am Test | | |

T=7.6°C

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125783 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 3/6/2013 14:52 | 3/8/2013 13:47 | 3/8/2013 13:47 | WG125783-1,-2 | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar | CVBOD | LEACHATE | 3/6/2013 6:51 | 3/8/2013 13:50 | 3/8/2013 13:50 | | |
| L57490-3 | 421422-CHLS-M | Hills Leachate Monthly | CVBOD | LEACHATE | 3/6/2013 7:46 | 3/8/2013 13:53 | 3/8/2013 13:53 | | |
| L57490-4 | 421422-CHLS-M | | CVBOD | LEACHATE | 3/6/2013 8:34 | 3/8/2013 13:55 | 3/8/2013 13:55 | | |
| L57490-5 | 421422-CHLS-M | | CVBOD | LEACHATE | 3/7/2013 4:45 | 3/8/2013 13:57 | 3/8/2013 13:57 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVBOD | BLANK WTR | 3/7/2013 10:05 | 3/8/2013 13:58 | 3/8/2013 13:58 | | |
| WG125783-1 | MB | | CVBOD | BLANK WTR | | 3/8/2013 13:40 | 3/8/2013 13:40 | | MB1 3/8/13 |
| WG125783-2 | SB | | CVBOD | BLANK WTR | | 3/8/2013 13:46 | 3/8/2013 13:46 | | WG125783-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125991 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:38 | 3/22/2013 8:38 | WG125991-2,-1,-3,- | |
| L57435-1 | 421879-210 | | CVCL | STORM WTR | 3/2/2013 17:42 | 3/22/2013 10:09 | 3/22/2013 10:09 | 4,-5,-6,-7,-8,-9,-10 | |
| L57472-1 | 421879-210 | | CVCL | STORM WTR | 3/6/2013 14:52 | 3/22/2013 6:06 | 3/22/2013 6:06 | | |
| L57473-1 | 421879-210 | | CVCL | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 3:03 | 3/22/2013 3:03 | | |
| L57538-1 | 421879-210 | | CVCL | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 1:32 | 3/22/2013 1:32 | | |
| L57557-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:08 | 3/22/2013 9:08 | | |
| L57558-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:33 | 3/22/2013 2:02 | 3/22/2013 2:02 | | |
| L57595-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 3/19/2013 0:00 | 3/22/2013 0:01 | 3/22/2013 0:01 | | |
| L57595-2 | 421937 | | CVCL | BLANK WTR | 3/19/2013 0:00 | 3/21/2013 23:30 | 3/21/2013 23:30 | | |
| WG125991-1 | CS | | CVCL | BLANK WTR | | 3/21/2013 21:28 | 3/21/2013 21:28 | | RDL_LEVEL |
| WG125991-2 | MB | | CVCL | BLANK WTR | | 3/21/2013 21:59 | 3/21/2013 21:59 | | MB2 3/21/13 |
| WG125991-3 | SB | | CVCL | BLANK WTR | | 3/21/2013 22:29 | 3/21/2013 22:29 | | WG125991-2 |
| WG125991-4 | LCS | | CVCL | BLANK WTR | | 3/21/2013 23:00 | 3/21/2013 23:00 | | LEVEL1 |
| WG125991-5 | LD | | CVCL | GRND WTR | | 3/22/2013 0:31 | 3/22/2013 0:31 | | L57595-1 |
| WG125991-6 | MS | | CVCL | GRND WTR | | 3/22/2013 1:01 | 3/22/2013 1:01 | | L57595-1 |
| WG125991-7 | LD | | CVCL | FRESH WTR | | 3/22/2013 3:34 | 3/22/2013 3:34 | | L57473-1 |
| WG125991-8 | MS | | CVCL | FRESH WTR | | 3/22/2013 4:04 | 3/22/2013 4:04 | | L57473-1 |
| WG125991-9 | LD | | CVCL | STORM WTR | | 3/22/2013 6:36 | 3/22/2013 6:36 | | L57472-1 |
| WG125991-10 | MS | | CVCL | STORM WTR | | 3/22/2013 7:07 | 3/22/2013 7:07 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125890 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/6/2013 14:52 | 3/12/2013 16:44 | 3/12/2013 16:44 | WG125890-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57473-1 | 421879-210 | | CVCOND | FRESH WTR | 3/8/2013 10:43 | 3/12/2013 16:46 | 3/12/2013 16:46 | | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/8/2013 10:59 | 3/12/2013 16:12 | 3/12/2013 16:12 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVCOND | LEACHATE | 3/6/2013 6:51 | 3/12/2013 18:27 | 3/12/2013 18:27 | | |
| L57490-3 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 7:46 | 3/12/2013 18:06 | 3/12/2013 18:06 | | |
| L57490-4 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 8:34 | 3/12/2013 18:13 | 3/12/2013 18:13 | | |
| L57490-5 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/7/2013 4:45 | 3/12/2013 18:20 | 3/12/2013 18:20 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVCOND | LEACHATE | 3/5/2013 7:25 | 3/12/2013 16:49 | 3/12/2013 16:49 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:42 | 3/12/2013 17:05 | 3/12/2013 17:05 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 8:40 | 3/12/2013 17:14 | 3/12/2013 17:14 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:50 | 3/12/2013 17:23 | 3/12/2013 17:23 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:35 | 3/12/2013 17:31 | 3/12/2013 17:31 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:37 | 3/12/2013 17:40 | 3/12/2013 17:40 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 10:15 | 3/12/2013 17:49 | 3/12/2013 17:49 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:15 | 3/12/2013 17:57 | 3/12/2013 17:57 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/7/2013 8:10 | 3/12/2013 16:22 | 3/12/2013 16:22 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVCOND | BLANK WTR | 3/7/2013 10:05 | 3/12/2013 16:42 | 3/12/2013 16:42 | | |
| WG125890-1 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:00 | 3/12/2013 16:00 | | LEVEL1 |
| WG125890-2 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:01 | 3/12/2013 16:01 | | LEVEL2 |
| WG125890-3 | LD | | CVCOND | GRND WTR | | 3/12/2013 16:32 | 3/12/2013 16:32 | | L57509-1 |
| WG125890-4 | LD | | CVCOND | STORM WTR | | 3/12/2013 16:45 | 3/12/2013 16:45 | | L57472-1 |
| WG125890-5 | LD | | CVCOND | FRESH WTR | | 3/12/2013 16:47 | 3/12/2013 16:47 | | L57473-1 |
| WG125890-6 | LD | | CVCOND | LEACHATE | | 3/12/2013 16:57 | 3/12/2013 16:57 | | L57493-1 |
| WG125890-7 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:36 | 3/12/2013 18:36 | | LEVEL1 |
| WG125890-8 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:38 | 3/12/2013 18:38 | | LEVEL2 |
| WG125890-9 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:39 | 3/12/2013 18:39 | | LEVEL3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125885 Dissolved Nutrients - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/6/2013 14:52 | 3/15/2013 12:25 | 3/15/2013 14:51 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57472-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/7/2013 14:02 | 3/15/2013 12:25 | 3/15/2013 15:32 | | |
| L57473-1 | 421879-210 | | CVNO23 | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 12:25 | 3/15/2013 14:33 | | |
| L57473-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/9/2013 11:40 | 3/15/2013 12:25 | 3/15/2013 15:30 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 9:50 | 3/15/2013 12:25 | 3/15/2013 13:53 | WG125885-1,-2,-3,-4,-5 | |
| L57509-3 | 421422-CFGW | | CVNO3 | GRND WTR | 3/15/2013 7:40 | 3/15/2013 12:25 | 3/15/2013 13:55 | | |
| L57526-1 | 421422-CFGW | | CVNO3 | GRND WTR | 3/14/2013 8:25 | 3/15/2013 12:25 | 3/15/2013 13:57 | | |
| L57529-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 8:29 | 3/15/2013 12:25 | 3/15/2013 13:59 | | |
| L57529-3 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 10:49 | 3/15/2013 12:25 | 3/15/2013 14:18 | | |
| L57529-4 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 9:57 | 3/15/2013 12:25 | 3/15/2013 14:20 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | BLANK WTR | 3/7/2013 10:05 | 3/15/2013 12:25 | 3/15/2013 15:45 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVNO23 | OTHR WTR | 3/13/2013 9:36 | 3/15/2013 12:25 | 3/15/2013 15:18 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/13/2013 11:22 | 3/15/2013 12:25 | 3/15/2013 14:31 | | |
| L57557-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 10:20 | 3/15/2013 12:25 | 3/15/2013 15:28 | | |
| L57558-1 | 421879-210 | | CVNO23 | STORM WTR | 3/13/2013 11:33 | 3/15/2013 12:25 | 3/15/2013 14:22 | | |
| L57558-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 11:30 | 3/15/2013 12:25 | 3/15/2013 15:26 | | |
| WG125885-1 | MB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | | CONNUTS1 |
| WG125885-1 | MB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | WG125885-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125885-2 | SB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | WG125885-1 |
| WG125885-2 | SB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-4,-5 | WG125885-1 |
| WG125885-3 | LCS | | CVNO23 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG125885-3 | LCS | | CVNO3 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-4,-5 | LEVEL1 |
| WG125885-4 | LD | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:01 | | L57529-1 |
| WG125885-5 | MS | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:14 | | L57529-1 |
| WG125885-6 | LD | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:24 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | L57558-1 |
| WG125885-7 | MS | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:26 | | L57558-1 |
| WG125885-8 | LD | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:45 | | L57473-1 |
| WG125885-9 | MS | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:47 | | L57473-1 |
| WG125885-10 | LD | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:20 | | L57541-1 |
| WG125885-11 | MS | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:22 | | L57541-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVORTHOP | FRESH WTR | 3/11/2013 9:50 | 3/11/2013 11:45 | 3/20/2013 16:29 | WG125950-12,-13,-14,-15,-16,-3,-4,-5,-6,-7,-1,-2,-10,-11,-17,-18,-19,-20,-21,-22,-23 | |
| L57172-2 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 9:45 | 3/11/2013 11:45 | 3/20/2013 16:38 | | |
| L57172-3 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 10:10 | 3/11/2013 11:45 | 3/20/2013 16:40 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 16:54 | | |
| L57382-2 | 421195-150 | | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 17:03 | | |
| L57433-1 | 421195-450 | China Creek Stormwater Monitoring | CVORTHOP | STORM WTR | 3/20/2013 11:28 | 3/20/2013 16:25 | 3/20/2013 17:13 | | |
| L57433-2 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:15 | 3/20/2013 16:25 | 3/20/2013 17:30 | | |
| L57433-3 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:10 | 3/20/2013 16:25 | 3/20/2013 17:32 | | |
| L57433-4 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:02 | 3/20/2013 16:25 | 3/20/2013 17:34 | | |
| L57433-5 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:50 | 3/20/2013 16:25 | 3/20/2013 17:36 | | |
| L57433-6 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:42 | 3/20/2013 16:25 | 3/20/2013 17:38 | | |
| L57433-7 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:32 | 3/20/2013 16:25 | 3/20/2013 17:40 | | |
| L57433-8 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:20 | 3/20/2013 16:25 | 3/20/2013 17:42 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/6/2013 14:52 | 3/20/2013 11:50 | 3/20/2013 14:08 | | |
| L57472-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/7/2013 14:02 | 3/20/2013 11:50 | 3/20/2013 14:16 | | |
| L57473-1 | 421879-210 | | CVORTHOP | FRESH WTR | 3/8/2013 10:43 | 3/20/2013 11:50 | 3/20/2013 14:35 | | |
| L57473-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/9/2013 11:40 | 3/20/2013 11:50 | 3/20/2013 14:18 | | |
| L57490-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/7/2013 4:45 | 3/20/2013 11:50 | 3/20/2013 15:31 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/11/2013 9:25 | 3/20/2013 11:50 | 3/20/2013 14:41 | | |
| L57519-3 | 423258-500-1 | | CVORTHOP | BLANK WTR | 3/11/2013 9:10 | 3/20/2013 11:50 | 3/20/2013 14:58 | | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVORTHOP | FRESH WTR | 3/18/2013 9:13 | 3/20/2013 11:50 | 3/20/2013 15:33 | | |
| L57532-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 8:44 | 3/20/2013 11:50 | 3/20/2013 15:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | BLANK WTR | 3/7/2013 10:05 | 3/20/2013 11:50 | 3/20/2013 14:29 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/12/2013 9:49 | 3/20/2013 11:50 | 3/20/2013 15:00 | | |
| L57541-1 | 423258-500-1 | | CVORTHOP | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:50 | 3/20/2013 15:02 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/13/2013 11:22 | 3/20/2013 11:50 | 3/20/2013 14:37 | | |
| L57557-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 10:20 | 3/20/2013 11:50 | 3/20/2013 14:31 | | |
| L57558-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/13/2013 11:33 | 3/20/2013 11:50 | 3/20/2013 14:39 | | |
| L57558-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 11:30 | 3/20/2013 11:50 | 3/20/2013 14:33 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVORTHOP | FRESH WTR | 3/19/2013 5:50 | 3/20/2013 11:50 | 3/20/2013 15:44 | | |
| L57565-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 6:45 | 3/20/2013 11:50 | 3/20/2013 15:56 | | |
| L57565-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:30 | 3/20/2013 11:50 | 3/20/2013 15:58 | | |
| L57565-5 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:02 | 3/20/2013 11:50 | 3/20/2013 16:00 | | |
| L57565-6 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:29 | 3/20/2013 11:50 | 3/20/2013 16:02 | | |
| L57565-7 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:50 | 3/20/2013 11:50 | 3/20/2013 16:04 | | |
| L57565-8 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:25 | 3/20/2013 11:50 | 3/20/2013 16:07 | | |
| L57565-9 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 6:25 | 3/20/2013 11:50 | 3/20/2013 16:09 | | |
| WG125950-1 | MB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:06 | | CONNUTS3 |
| WG125950-2 | SB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:08 | | WG125950-1 |
| WG125950-3 | LCS | | CVORTHOP | BLANK WTR | | 3/20/2013 14:04 | 3/20/2013 14:04 | | LEVEL1 |
| WG125950-4 | LD | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:10 | | L57472-1 |
| WG125950-5 | MS | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:12 | | L57472-1 |
| WG125950-6 | LD | | CVORTHOP | OTHR WTR | | 3/20/2013 11:50 | 3/20/2013 14:43 | | L57519-1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125950-7 | MS | CVORTHOP | OTHR WTR | 3/20/2013 11:50 | 3/20/2013 14:45 | | L57519-1 |
| WG125950-10 | LD | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:35 | | L57532-1 |
| WG125950-11 | MS | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:37 | | L57532-1 |
| WG125950-12 | MB | CVORTHOP | BLANK WTR | 3/20/2013 11:50 | 3/20/2013 16:13 | | CONNUTS3 |
| WG125950-13 | MB | CVORTHOP | BLANK WTR | 3/11/2013 11:45 | 3/20/2013 16:15 | | CONNUTS3 |
| WG125950-14 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 16:25 | | LEVEL1 |
| WG125950-15 | LD | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:32 | | L57172-1 |
| WG125950-16 | MS | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:34 | | L57172-1 |
| WG125950-17 | MB | CVORTHOP | BLANK WTR | 3/8/2013 16:00 | 3/20/2013 16:44 | | CONNUTS3 |
| WG125950-18 | LD | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:57 | | L57382-1 |
| WG125950-19 | MS | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:59 | | L57382-1 |
| WG125950-20 | MB | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 17:07 | | CONNUTS3 |
| WG125950-21 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 17:09 | 3/20/2013 17:09 | | LEVEL1 |
| WG125950-22 | LD | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:24 | | L57433-1 |
| WG125950-23 | MS | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:26 | | L57433-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG126000 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:00 | 3/25/2013 13:00 | WG126000-2,-1,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12 | |
| L57435-1 | 421879-210 | | CVTKN | STORM WTR | 3/2/2013 17:42 | 3/22/2013 8:00 | 3/25/2013 13:05 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 3/4/2013 7:07 | 3/22/2013 8:00 | 3/25/2013 14:28 | | |
| L57440-3 | 421430-300 | | CVTKN | EFFLUENT | 3/4/2013 7:56 | 3/22/2013 8:00 | 3/25/2013 14:57 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/6/2013 14:52 | 3/22/2013 8:00 | 3/25/2013 13:02 | | |
| L57473-1 | 421879-210 | | CVTKN | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 8:00 | 3/25/2013 13:23 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 3/6/2013 6:51 | 3/22/2013 8:00 | 3/25/2013 13:34 | | |
| L57490-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 7:46 | 3/22/2013 8:00 | 3/25/2013 13:36 | | |
| L57490-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 8:34 | 3/22/2013 8:00 | 3/25/2013 14:55 | | |
| L57490-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/7/2013 4:45 | 3/22/2013 8:00 | 3/25/2013 13:50 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVTKN | LEACHATE | 3/5/2013 7:25 | 3/22/2013 8:00 | 3/25/2013 13:55 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:42 | 3/22/2013 8:00 | 3/25/2013 13:57 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 8:40 | 3/22/2013 8:00 | 3/25/2013 13:59 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:50 | 3/22/2013 8:00 | 3/25/2013 14:01 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:35 | 3/22/2013 8:00 | 3/25/2013 14:03 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:37 | 3/22/2013 8:00 | 3/25/2013 14:05 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 10:15 | 3/22/2013 8:00 | 3/25/2013 14:07 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:15 | 3/22/2013 8:00 | 3/25/2013 14:09 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTKN | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 8:00 | 3/25/2013 13:32 | | |
| WG126000-1 | MB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:50 | | MB1 3/22/13 |
| WG126000-2 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:52 | | LEVEL1 |
| WG126000-3 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:54 | | LEVEL2 |
| WG126000-4 | SB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:56 | | WG126000-1 |
| WG126000-5 | LD | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:07 | | L57435-1 |
| WG126000-6 | MS | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:19 | | L57435-1 |
| WG126000-7 | LD | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:25 | | L57473-1 |
| WG126000-8 | MS | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:27 | | L57473-1 |
| WG126000-9 | LD | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:22 | | L57493-12 |
| WG126000-10 | MS | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:24 | | L57493-12 |
| WG126000-11 | LD | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 14:59 | | L57440-3 |
| WG126000-12 | MS | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 15:01 | | L57440-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125933 Total Nitrogen, Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTOTP | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 12:30 | 3/14/2013 13:49 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57172-2 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 12:30 | 3/14/2013 13:51 | | |
| L57172-3 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 12:30 | 3/14/2013 13:57 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:15 | | |
| L57382-2 | 421195-150 | | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:17 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 3/6/2013 14:52 | 3/13/2013 12:30 | 3/14/2013 14:33 | | |
| L57473-1 | 421879-210 | | CVTOTP | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 12:30 | 3/14/2013 14:39 | | |
| L57506-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-1 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-2 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-2 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-3 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-3 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-4 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-4 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-5 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |

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|---|---|---|---|---|---|---|---|---|
| L57506-5 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-6 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-6 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-8 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-8 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-9 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-9 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-10 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-10 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-11 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-11 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-12 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-12 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-13 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-13 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-14 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-14 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-15 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-15 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-16 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-16 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-17 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-17 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-19 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-19 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-20 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-20 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-21 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-21 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-22 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-22 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-23 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-23 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-25 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-25 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-26 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-26 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-27 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-27 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-29 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-29 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-30 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-30 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-31 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-31 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-32 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-32 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-33 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-33 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-37 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-37 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-38 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-38 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-39 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-39 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-40 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-40 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-41 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-41 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-42 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-42 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-44 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/14/2013 13:20 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-44 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/28/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-45 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-45 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-46 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|---|
| L57506-46 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-47 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-47 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-48 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-48 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-49 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-49 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57519-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,- | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 14:24 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57540-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | |
| L57545-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 3/12/2013 10:20 | 3/13/2013 12:30 | 3/14/2013 14:11 | | |
| L57545-2 | 421195-150 | | CVTOTP | FRESH WTR | 3/12/2013 10:28 | 3/13/2013 12:30 | 3/14/2013 14:13 | | |
| WG125933-1 | MB | | CVTOTN | BLANK WTR | | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125933-1 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB1 |
| WG125933-2 | SB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | WG125933-1 |
| WG125933-2 | SB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | WG125933-1 |
| WG125933-3 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-3 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-4 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-4 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-5 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-5 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-6 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB2 |
| WG125933-6 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125933-7 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-7 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-8 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-8 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-9 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:24 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-9 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-10 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB3 |
| WG125933-10 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB3 |
| WG125933-11 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-11 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-12 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |

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|---|---|---|---|---|---|---|---|
| WG125933-12 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-49 |
| WG125933-13 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |
| WG125933-13 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | L57506-49 |
| WG125933-14 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:53 | | L57172-2 |
| WG125933-15 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:55 | | L57172-2 |
| WG125933-16 | LD | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-16 | LD | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-17 | MS | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-17 | MS | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-18 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:19 | | L57382-2 |
| WG125933-19 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:21 | | L57382-2 |
| WG125933-20 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:35 | | L57472-1 |
| WG125933-21 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:37 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125834 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTSS | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 13:25 | 3/14/2013 9:58 | WG125834-1,-2,-3,-4,-5,-6,-7 | |
| L57172-2 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 13:25 | 3/14/2013 10:02 | | |
| L57172-3 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 13:25 | 3/14/2013 10:05 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/6/2013 14:52 | 3/13/2013 13:25 | 3/14/2013 10:06 | | |
| L57473-1 | 421879-210 | | CVTSS | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 13:25 | 3/14/2013 10:08 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 10:35 | 3/13/2013 13:25 | 3/14/2013 10:10 | | |
| L57482-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/8/2013 10:59 | 3/13/2013 13:25 | 3/14/2013 10:13 | | |
| L57508-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/11/2013 13:15 | 3/13/2013 13:25 | 3/14/2013 10:14 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/7/2013 8:10 | 3/13/2013 13:25 | 3/14/2013 10:15 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 9:21 | 3/13/2013 13:25 | 3/14/2013 10:16 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 13:25 | 3/14/2013 10:17 | | |
| L57524-1 | 421422-ENLS | SWD-ENLS Enumclaw Wastewater Permit | CVTSS | IW WTR | 3/12/2013 6:00 | 3/13/2013 13:25 | 3/14/2013 10:19 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/13/2013 9:37 | 3/13/2013 13:25 | 3/14/2013 10:23 | | |
| L57526-4 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 8:44 | 3/13/2013 13:25 | 3/14/2013 10:24 | | |
| L57527-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 7:53 | 3/13/2013 13:25 | 3/14/2013 10:25 | | |
| L57527-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 10:42 | 3/13/2013 13:25 | 3/14/2013 10:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTSS | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 13:25 | 3/14/2013 10:22 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 13:25 | 3/14/2013 10:27 | | |
| WG125834-1 | MB | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:54 | | MB1 130313 |
| WG125834-2 | LCS | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:57 | | LEVEL1 |
| WG125834-3 | LD | | CVTSS | FRESH WTR | | 3/13/2013 13:25 | 3/14/2013 10:04 | | L57172-2 |
| WG125834-4 | LD | | CVTSS | STORM WTR | | 3/13/2013 13:25 | 3/14/2013 10:07 | | L57472-1 |
| WG125834-5 | LD | | CVTSS | GRND WTR | | 3/13/2013 13:25 | 3/14/2013 10:12 | | L57482-1 |
| WG125834-6 | LD | | CVTSS | OTHR WTR | | 3/13/2013 13:25 | 3/14/2013 10:18 | | L57519-1 |
| WG125834-7 | LD | | CVTSS | IW WTR | | 3/13/2013 13:25 | 3/14/2013 10:21 | | L57524-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125776 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57468-1 | 421240A | STREAMS MONITOR (surf wtr) | CVTURB | FRESH WTR | 3/5/2013 9:06 | 3/7/2013 16:10 | 3/7/2013 16:10 | WG125776-1,-2,-3,-4,-5,-6 | |
| L57468-2 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 9:29 | 3/7/2013 16:11 | 3/7/2013 16:11 | | |
| L57468-3 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 9:50 | 3/7/2013 16:12 | 3/7/2013 16:12 | | |
| L57468-4 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 10:18 | 3/7/2013 16:19 | 3/7/2013 16:19 | | |
| L57468-5 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 10:57 | 3/7/2013 16:22 | 3/7/2013 16:22 | | |
| L57468-6 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:07 | 3/7/2013 16:25 | 3/7/2013 16:25 | | |
| L57468-7 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:33 | 3/7/2013 16:42 | 3/7/2013 16:42 | | |
| L57468-8 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:20 | 3/7/2013 16:44 | 3/7/2013 16:44 | | |
| L57468-9 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:09 | 3/7/2013 16:45 | 3/7/2013 16:45 | | |
| L57468-10 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:22 | 3/7/2013 16:47 | 3/7/2013 16:47 | | |
| L57468-11 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:37 | 3/7/2013 17:00 | 3/7/2013 17:00 | | |
| L57468-12 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:13 | 3/7/2013 17:01 | 3/7/2013 17:01 | | |
| L57468-13 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:41 | 3/7/2013 17:03 | 3/7/2013 17:03 | | |
| L57469-1 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:03 | 3/7/2013 17:04 | 3/7/2013 17:04 | | |
| L57469-2 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 11:26 | 3/7/2013 17:05 | 3/7/2013 17:05 | | |
| L57469-3 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 12:01 | 3/7/2013 17:07 | 3/7/2013 17:07 | | |
| L57469-4 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:08 | 3/7/2013 17:19 | 3/7/2013 17:19 | | |
| L57469-5 | 421240A | | CVTURB | FRESH WTR | 3/5/2013 13:33 | 3/7/2013 17:20 | 3/7/2013 17:20 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 3/6/2013 14:52 | 3/7/2013 17:27 | 3/7/2013 17:27 | | |
| L57538-1 | 421879-210 | | CVTURB | BLANK WTR | 3/7/2013 10:05 | 3/7/2013 17:26 | 3/7/2013 17:26 | | |
| WG125776-1 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 16:09 | 3/7/2013 16:09 | | LEVEL1 |
| WG125776-2 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 16:10 | 3/7/2013 16:10 | | LEVEL2 |
| WG125776-3 | LD | | CVTURB | FRESH WTR | | 3/7/2013 16:23 | 3/7/2013 16:23 | | L57468-5 |
| WG125776-4 | LD | | CVTURB | STORM WTR | | 3/7/2013 17:28 | 3/7/2013 17:28 | | L57472-1 |
| WG125776-5 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 17:29 | 3/7/2013 17:29 | | LEVEL1 |
| WG125776-6 | LCS | | CVTURB | BLANK WTR | | 3/7/2013 17:29 | 3/7/2013 17:29 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125916 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57347-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 3/13/2013 10:30 | 3/19/2013 10:00 | 3/20/2013 14:16 | WG125916-1,-2,-3,-4 | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 3/3/2013 7:30 | 3/19/2013 10:00 | 3/20/2013 14:22 | | |
| L57444-3 | 421184-110 | | MTICPMS | INFLUENT | 3/3/2013 7:40 | 3/19/2013 10:00 | 3/20/2013 14:28 | | |
| L57447-31 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 2/20/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 14:34 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57472-1 | 421879-210 | | MTICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/20/2013 14:40 | | |
| L57473-1 | 421879-210 | | MTHARD-ICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57473-1 | 421879-210 | | MTICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/20/2013 14:45 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTHARD-ICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57519-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/20/2013 14:51 | | |
| L57519-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:18 | 3/19/2013 10:00 | 3/20/2013 15:09 | | |
| L57519-5 | 423258-500-1 | | MTICPMS | BLANK WTR | 3/11/2013 9:15 | 3/19/2013 10:00 | 3/20/2013 15:15 | | |
| L57534-1 | 421937 | | MTICPMS | INFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:20 | | |
| L57534-4 | 421937 | | MTICPMS | EFFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57538-1 | 421879-210 | | MTICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/20/2013 15:32 | | |
| L57539-1 | 421937 | Brightwater Operations | MTICPMS | BLANK WTR | 3/12/2013 9:21 | 3/19/2013 10:00 | 3/20/2013 15:38 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTHARD-ICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57540-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/20/2013 15:44 | | |
| L57540-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:50 | 3/19/2013 10:00 | 3/20/2013 16:01 | | |
| L57541-1 | 423258-500-1 | | MTHARD-ICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57541-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/20/2013 16:25 | | |
| L57544-1 | 421301A | Georgetown Yard Industiral SW Monitoring | MTICPMS | STORM WTR | 3/6/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 16:31 | | |
| L57549-25 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:37 | | |
| L57549-29 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:42 | | |
| L57549-31 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:48 | | |
| WG125916-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | METHOD BLANK |
| WG125916-1 | MB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:04 | | METHOD BLANK |
| WG125916-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | WG125916-1 MS-20 |
| WG125916-2 | SB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:10 | | WG125916-1 MS-20 |
| WG125916-3 | LD | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 RPD-LIQ |
| WG125916-3 | LD | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:50 | | L57540-1 RPD-LIQ |
| WG125916-4 | MS | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 MS-20 |
| WG125916-4 | MS | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:55 | | L57540-1 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125796 Total & Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57355-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 8:00 | 3/11/2013 10:00 | 3/12/2013 12:50 | WG125796-1,-3,-4 | |
| L57374-1 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 7:10 | 3/11/2013 10:00 | 3/12/2013 12:52 | | |
| L57374-3 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/1/2013 11:57 | 3/11/2013 10:00 | 3/12/2013 12:54 | | |
| L57377-1 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 3/1/2013 10:30 | 3/11/2013 10:00 | 3/12/2013 12:43 | | |
| L57377-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/4/2013 9:00 | 3/11/2013 10:00 | 3/12/2013 12:45 | | |
| L57377-4 | 421422-CFGW | | MTHG-MID-DISS | GRND WTR | 3/4/2013 7:20 | 3/11/2013 10:00 | 3/12/2013 12:47 | | |
| L57398-1 | 421422-HOGW | SWD-HOGW Hobart Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 2/26/2013 9:35 | 3/11/2013 10:00 | 3/12/2013 12:29 | | |
| L57398-3 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:45 | 3/11/2013 10:00 | 3/12/2013 12:31 | | |
| L57398-4 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 10:03 | 3/11/2013 10:00 | 3/12/2013 12:20 | | |
| L57398-5 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:33 | | |
| L57398-6 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/27/2013 7:58 | 3/11/2013 10:00 | 3/12/2013 12:38 | | |
| L57398-9 | 421422-HOGW | | MTHG-MID-DISS | GRND WTR | 2/28/2013 9:03 | 3/11/2013 10:00 | 3/12/2013 12:40 | | |
| L57435-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 3/2/2013 17:42 | 3/11/2013 10:00 | 3/12/2013 12:49 | | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTHG-MID | EFFLUENT | 3/3/2013 7:30 | 3/11/2013 10:00 | 3/12/2013 13:00 | WG125796-1,-2 | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 13:01 | | |
| L57472-1 | 421879-210 | | MTHG-MID-DISS | STORM WTR | 3/6/2013 14:52 | 3/11/2013 10:00 | 3/12/2013 12:27 | WG125796-1,-3,-4 | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/8/2013 10:59 | 3/11/2013 10:00 | 3/12/2013 12:25 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/7/2013 8:10 | 3/11/2013 10:00 | 3/12/2013 12:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | BLANK WTR | 3/7/2013 10:05 | 3/11/2013 10:00 | 3/12/2013 13:03 | WG125796-1,-2 | |
| WG125796-1 | MB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | | METHOD BLANK |
| WG125796-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:16 | WG125796-1,-3,-4 | METHOD BLANK |
| WG125796-2 | SB | | MTHG-MID | BLANK WTR | | 3/11/2013 10:00 | 3/12/2013 12:18 | WG125796-1,-2 | WG125796-1 HG-LMID |
| WG125796-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:22 | WG125796-1,-3,-4 | L57398-4 HG-LMID |
| WG125796-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/11/2013 10:00 | 3/12/2013 12:23 | | WG125796-3 L57398-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125780 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | STORM WTR | 3/2/2013 16:24 | 3/8/2013 12:00 | 3/14/2013 7:25 | WG125780-4,-3,-2,-1 | |
| L57435-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/2/2013 17:42 | 3/8/2013 12:00 | 3/14/2013 8:41 | | |
| L57472-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/6/2013 14:52 | 3/8/2013 12:00 | 3/14/2013 8:16 | | |
| L57538-1 | 421879-210 | | ORHERB-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/8/2013 12:00 | 3/14/2013 7:50 | | |
| WG125780-1 | MB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 5:44 | | MB130308 |
| WG125780-2 | SB | | ORHERB-NPDES | BLANK WTR | | 3/8/2013 12:00 | 3/14/2013 6:10 | | WG125780-1 |
| WG125780-3 | MS | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 6:35 | | L57386-1 |
| WG125780-4 | MSD | | ORHERB-NPDES | STORM WTR | | 3/8/2013 12:00 | 3/14/2013 7:00 | | WG125780-3 L57386-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125841 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 11:54 | WG125841-4,-3,-2,-1 | |
| L57473-1 | 421879-210 | | OROPPEST-NPDES | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:33 | | |
| L57538-1 | 421879-210 | | OROPPEST-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:06 | | |
| WG125841-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:12 | | MB130313 |
| WG125841-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:39 | | WG125841-1 |
| WG125841-3 | MS | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:00 | | L57472-1 |
| WG125841-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:27 | | WG125841-3 L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, FERB, L57538

**WG125842 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57472-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-1,-2,-3 | |
| L57473-1 | 421879-210 | | ORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57473-1 | 421879-210 | | TICORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-1,-2,-3 | |
| L57538-1 | 421879-210 | | ORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57538-1 | 421879-210 | | TICORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-1,-2,-3 | |
| WG125842-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | MB130313 |
| WG125842-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-1,-2,-3 | MB130313 |
| WG125842-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-1 |
| WG125842-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-1,-2,-3 | WG125842-1 |
| WG125842-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | L57472-1 |
| WG125842-3 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-1,-2,-3 | L57472-1 |
| WG125842-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-3 L57472-1 |
| WG125842-4 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-1,-2,-3 | WG125842-3 L57472-1 |

**Workgroup: WG125783 BOD**

**MB:WG125783-1 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:WG125783-2 MB:WG125783-1 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 | 186 | 94 | | 80--120 |

**Workgroup: WG125991 Anions**

**CS:WG125991-1 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 | 0.098 | 98 | | 70--130 |

**MB:WG125991-2 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 | |

**SB:WG125991-3 MB:WG125991-2 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 | 1.92 | 96 | | 80--120 |

**LCS:WG125991-4 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 |

**LD:WG125991-5 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 4.14 | 3.99 | 4 | | 0--20 |

**MS:WG125991-6 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 4.14 | 10 | 13.8 | 96 | | 75--125 |

**LD:WG125991-7 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 2.56 | 1 | | 0--20 |

**MS:WG125991-8 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125991-9 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 10 | 12 | | 0--20 |

**MS:WG125991-10 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 20 | 28.6 | 98 | | 75--125 |

**Workgroup: WG125890 Conductivity**

**LCS:WG125890-1 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 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-2 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 | 714 | 100 | | 90--110 |

**LD:WG125890-3 L57509-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 34.9 | 34.3 | 2 | | 0--10 |

**LD:WG125890-4 L57472-1 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 | 60.5 | 60.6 | 0 | | 0--10 |

**LD:WG125890-5 L57473-1 Matrix: FRESH 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 | 66.3 | 66.2 | 0 | | 0--10 |

**LD:WG125890-6 L57493-1 Matrix: LEACHATE Listtype:CVCOND Method:SM2510-B Project:421422-VALS-MSPECIAL Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 116 | 116 | 0 | | 0--10 |

**LCS:WG125890-7 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 | 73.9 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-8 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 | 717.5 | 712 | 99 | | 90--110 |

**LCS:WG125890-9 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 | 6667 | 6590 | 99 | | 90--110 |

**Workgroup: WG125885 Dissolved Nutrients - Nitrates**

**MB:WG125885-1 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:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125885-2 MB:WG125885-1 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 | 0.805 | 101 | | 80--120 |

**SB:WG125885-2 MB:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.398 | 100 | | 80--120 |

**LCS:WG125885-3 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 | 0.82 | 102 | | 85--115 |

**LCS:WG125885-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.407 | 102 | | 85--115 |

**LD:WG125885-4 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG125885-5 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.285 | 71 | * | 75--125 |

**LD:WG125885-6 L57558-1 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 | 0.582 | 0.581 | 0 | | 0--20 |

**MS:WG125885-7 L57558-1 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 | 0.582 | 0.8 | 1.37 | 99 | | 75--125 |

**LD:WG125885-8 L57473-1 Matrix: FRESH 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 | 1.02 | 1.02 | 0 | | 0--20 |

**MS:WG125885-9 L57473-1 Matrix: FRESH 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 | 1.02 | 0.8 | 1.79 | 97 | | 75--125 |

**LD:WG125885-10 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 19.2 | 0 | | 0--20 |

**MS:WG125885-11 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 0.8 | 35.2 | 100 | | 75--125 |

**Workgroup: WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

**MB:WG125950-1 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:WG125950-2 MB:WG125950-1 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:WG125950-3 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:WG125950-4 L57472-1 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 | 0.00979 | 0.00947 | 3 | | 0--20 |

**MS:WG125950-5 L57472-1 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 | 0.00979 | 0.04 | 0.0472 | 94 | | 75--125 |

**LD:WG125950-6 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 3.8 | 1 | | 0--20 |

**MS:WG125950-7 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 0.04 | 7.64 | 97 | | 75--125 |

**LD:WG125950-10 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.012 | | | 0--20 |

**MS:WG125950-11 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.04 | 0.201 | 94 | | 75--125 |

**MB:WG125950-12 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 | |

**MB:WG125950-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125950-14 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 | 0.0386 | 97 | | 85--115 |

**LD:WG125950-15 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00916 | 0.0075 | 20 | | 0--20 |

**MS:WG125950-16 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 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 | 0.00916 | 0.04 | 0.0438 | 87 | | 75--125 |

**MB:WG125950-17 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 | |

**LD:WG125950-18 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00505 | 0.00573 | 13 | | 0--20 |

**MS:WG125950-19 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00505 | 0.04 | 0.0424 | 93 | | 75--125 |

**MB:WG125950-20 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:WG125950-21 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 | 0.0387 | 97 | | 85--115 |

**LD:WG125950-22 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00838 | 0.00863 | 3 | | 0--20 |

**MS:WG125950-23 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 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 | 0.00838 | 0.04 | 0.0463 | 95 | | 75--125 |

**Workgroup: WG126000 TKN**

**MB:WG126000-1 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 | |

**LCS:WG126000-2 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 | 0.427 | 85 | | 80--120 |

**LCS:WG126000-3 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 | 5 | 4.81 | 96 | | 80--120 |

**SB:WG126000-4 MB:WG126000-1 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 |

**LD:WG126000-5 L57435-1 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 | 0.923 | 0.925 | 0 | | 0--20 |

**MS:WG126000-6 L57435-1 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 | 0.923 | 5 | 5.76 | 97 | | 70--130 |

**LD:WG126000-7 L57473-1 Matrix: FRESH 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 | 0.304 | 0.299 | 2 | | 0--20 |

**MS:WG126000-8 L57473-1 Matrix: FRESH 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 | 0.304 | 5 | 5.38 | 101 | | 70--130 |

**LD:WG126000-9 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 1.93 | 1 | | 0--20 |

**MS:WG126000-10 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 5 | 7.15 | 105 | | 70--130 |

**LD:WG126000-11 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 19 | 4 | | 0--20 |

**MS:WG126000-12 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 10 | 28.9 | 91 | | 70--130 |

**Workgroup: WG125933 Total Nitrogen, Total Phosphorus**

**MB:WG125933-1 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:WG125933-1 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:WG125933-2 MB:WG125933-1 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 | 1.04 | 104 | | 80--120 |

**SB:WG125933-2 MB:WG125933-1 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 | 0.0985 | 98 | | 80--120 |

**LCS:WG125933-3 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 | 0.944 | 94 | | 85--115 |

**LCS:WG125933-3 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 | 0.0963 | 96 | | 85--115 |

**LD:WG125933-4 L57506-13 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 | 0.357 | 0.358 | 0 | | 0--20 |

**LD:WG125933-4 L57506-13 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 | 0.0134 | 0.013 | 3 | | 0--20 |

**MS:WG125933-5 L57506-13 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 | 0.357 | 1 | 1.4 | 104 | | 75--125 |

**MS:WG125933-5 L57506-13 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 | 0.0134 | 0.1 | 0.113 | 100 | | 75--125 |

**MB:WG125933-6 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:WG125933-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125933-7 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 | 1.02 | 102 | | 85--115 |

**LCS:WG125933-7 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:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.422 | 0.444 | 5 | | 0--20 |

**LD:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0162 | 0.0158 | 2 | | 0--20 |

**MS:WG125933-9 L57506-44 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 | 0.422 | 1 | 1.49 | 107 | | 75--125 |

**MS:WG125933-9 L57506-44 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 | 0.0162 | 0.1 | 0.116 | 100 | | 75--125 |

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125933-11 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 | 100 | | 85--115 |

**LCS:WG125933-11 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 | 0.0921 | 92 | | 85--115 |

**LD:WG125933-12 L57506-49 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 | 0.483 | 0.464 | 4 | | 0--20 |

**LD:WG125933-12 L57506-49 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 | 0.0312 | 0.0305 | 2 | | 0--20 |

**MS:WG125933-13 L57506-49 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 | 0.483 | 1 | 1.52 | 104 | | 75--125 |

**MS:WG125933-13 L57506-49 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 | 0.0312 | 0.1 | 0.13 | 99 | | 75--125 |

**LD:WG125933-14 L57172-2 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 | 0.0093 | 0.0089 | | | 0--20 |

**MS:WG125933-15 L57172-2 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 | 0.0093 | 0.1 | 0.108 | 99 | | 75--125 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 25.1 | 1 | | 0--20 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 3.83 | 1 | | 0--20 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 1 | 46.8 | 107 | | 75--125 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 0.1 | 5.91 | 102 | | 75--125 |

**LD:WG125933-18 L57382-2 Matrix: STORM 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 | 0.0199 | 0.0184 | 8 | | 0--20 |

**MS:WG125933-19 L57382-2 Matrix: STORM 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 | 0.0199 | 0.1 | 0.116 | 96 | | 75--125 |

**LD:WG125933-20 L57472-1 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 | 0.124 | 0.118 | 4 | | 0--20 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, FERB, L57538

**MS:WG125933-21 L57472-1 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 | 0.124 | 0.1 | 0.232 | 108 | | 75--125 |

**Workgroup: WG125834 TSS**

**MB:WG125834-1 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:WG125834-2 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 | 87 | 87 | | 80--120 |

**LD:WG125834-3 L57172-2 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 | 2.8 | 2.2 | 24 | | 0--25 |

**LD:WG125834-4 L57472-1 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 | 72 | 75 | 4 | | 0--25 |

**LD:WG125834-5 L57482-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 1.4 | 2 | | | 0--25 |

**LD:WG125834-6 L57519-1 Matrix: OTHR WTR Listtype:CVTSS Method:SM2540-D Project:423258-500-1 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 |

**LD:WG125834-7 L57524-1 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 | 5 | 10 | mg/L | 37 | 41 | 10 | | 0--25 |

**Workgroup: WG125776 Turbidity**

**LCS:WG125776-1 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 | 9.8 | 98 | | 90--110 |

**LCS:WG125776-2 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 | 98.4 | 98 | | 90--110 |

**LD:WG125776-3 L57468-5 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421240A Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 3.4 | 3.11 | 9 | | 0--25 |

**LD:WG125776-4 L57472-1 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 | 99.4 | 104 | 5 | | 0--25 |

**LCS:WG125776-5 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 | 9.97 | 100 | | 90--110 |

**LCS:WG125776-6 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 | 98.1 | 98 | | 90--110 |

**Workgroup: WG125916 Total Metals & Hardness**

**MB:WG125916-1 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:WG125916-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD (Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Boron, Total, ICP-MS | 2 | 10 | 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 | |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | 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:WG125916-2 MB:WG125916-1 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 | 32.2 | 97 | | 85--115 |

**SB:WG125916-2 MB:WG125916-1 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 |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5140 | 103 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4680 | 94 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4420 | 88 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.3 | 92 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4840 | 97 | | 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 | 95 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 17.8 | 89 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 17.9 | 89 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.1 | 90 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.7 | 93 | | 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 | 95 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 55.9 | 2 | | 0--20 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 1.9 | | | 0--20 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 157 | 2 | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 65900 | 3 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 4730 | 3 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 10.5 | 0 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 13500 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 14600 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 0.488 | 7 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 0.42 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 65.5 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 38.4 | 2 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 0.15 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 2.35 | 3 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 7.51 | 0 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 34.7 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 0.851 | 4 | | 0--20 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 0.936 | 2 | | 0--20 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 0.095 | | | 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 | 4.85 | 4.83 | 0 | | 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 | 0.16 | 0.14 | | | 0--20 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 33.1 | 82.1 | 82 | | 75--125 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 20 | 18.7 | 83 | | 75--125 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 16.6 | 83 | | 75--125 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 20 | 165 | | 4xRule | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 5000 | 67300 | | 4xRule | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 5000 | 8690 | 82 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 20 | 27.7 | 86 | | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 5000 | 18000 | 89 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 5000 | 18500 | 81 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 20 | 18.8 | 92 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 20 | 18.4 | 90 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 5000 | 4810 | 95 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 20 | 55.3 | 88 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 20 | 17.6 | 87 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 20 | 20.2 | 89 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 20 | 25.1 | 88 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 20 | 51.1 | 83 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 20 | 18.3 | 87 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 17.3 | 87 | | 75--125 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 20 | 18.9 | 90 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.5 | 92 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 20 | 17.4 | 87 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.3 | 92 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 4.85 | 20 | 23.1 | 91 | | 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 | 0.16 | 20 | 18.5 | 92 | | 75--125 |

**Workgroup: WG125796 Total & Dissolved Mercury**

**MB:WG125796-1 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:WG125796-1 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:WG125796-2 MB:WG125796-1 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 | 0.953 | 95 | | 85--115 |

**MSD:WG125796-4 MS:WG125796-3 L57398-4 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-HOGW 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 | 0.972 | 97 | | 75--125 | 1 | 0.991 | 99 | | 2 | | 0--20 |

**Workgroup: WG125780 Herbicides**

**MB:WG125780-1 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 | |

**SB:WG125780-2 MB:WG125780-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.55 | 91 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.69 | 94 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.81 | 96 | | 59--151 |

**MSD:WG125780-4 MS:WG125780-3 L57386-1 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 | 4.7 | 94 | | 20--162 | 5 | 4.77 | 95 | | 1 | | 0--40 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 5.04 | 101 | | 10--196 | 5 | 5.12 | 102 | | 2 | | 0--40 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 5.17 | 103 | | 30--150 | 5 | 5.2 | 104 | | 1 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57386-1 | 90 | 113 |
| L57435-1 | 100 | 136 |
| L57472-1 | 91 | 123 |
| L57538-1 | 87 | 115 |
| WG125780-1 | 91 | 112 |
| WG125780-2 | 88 | 110 |
| WG125780-3 | 90 | 114 |
| WG125780-4 | 92 | 118 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, FERB, L57538

**Workgroup: WG125841 Organophosphorus Pesticides**

**MB:WG125841-1 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:WG125841-2 MB:WG125841-1 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 | 0.25 | 0.247 | 99 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.273 | 109 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.246 | 98 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.217 | 87 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.284 | 114 | | 40--160 |

**MSD:WG125841-4 MS:WG125841-3 L57472-1 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 | 0.236 | 0.234 | 99 | | 67--148 | 0.236 | 0.233 | 99 | | 1 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.309 | 131 | | 52--190 | 0.236 | 0.328 | 139 | | 6 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.22 | 93 | | 57--141 | 0.236 | 0.211 | 90 | | 4 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.205 | 87 | | 40--160 | 0.236 | 0.206 | 87 | | 0 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.485 | 206 | * | 40--160 | 0.236 | 0.415 | 176 | * | 16 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57472-1 | 90 |
| L57473-1 | 92 |
| L57538-1 | 91 |
| WG125841-1 | 78 |
| WG125841-2 | 99 |
| WG125841-3 | 82 |
| WG125841-4 | 73 |

**Workgroup: WG125842 Semi Volatile Organics**

**MB:WG125842-1 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 | 0.027 | B |
| 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 | <MDL | |
| 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 | 0.168 | 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:WG125842-2 MB:WG125842-1 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 | 1.18 | 47 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.738 | 30 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.44 | 98 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.27 | 51 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.18 | 47 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | 0.027 | 2.5 | 2.7 | 107 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.67 | 67 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.61 | 64 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.08 | 83 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.68 | 107 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.72 | 109 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.2 | 128 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.48 | 99 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.168 | 2.5 | 2.92 | 110 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.81 | 112 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.7 | 103 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.51 | 101 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.24 | 90 | | 32--130 |

**MSD:WG125842-4 MS:WG125842-3 L57472-1 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 | <MDL | 2.36 | 1.12 | 47 | | 37--95 | 2.36 | 1.2 | 51 | | 8 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.05 | 45 | | 40--121 | 2.36 | 1.2 | 51 | | 13 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.14 | 91 | | 34--134 | 2.36 | 2.05 | 87 | | 4 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.64 | 69 | | 46--122 | 2.36 | 1.55 | 66 | | 5 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.71 | 73 | | 47--105 | 2.36 | 1.62 | 69 | | 6 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.204 | 2.36 | 2.4 | 93 | | 33--140 | 2.36 | 2.37 | 92 | | 1 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.93 | 82 | | 44--137 | 2.36 | 1.91 | 81 | | 1 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.8 | 119 | | 44--145 | 2.36 | 2.81 | 119 | | 0 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0403 | 2.36 | 2.22 | 92 | | 62--116 | 2.36 | 2.22 | 92 | | 0 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2 | 85 | | 32--140 | 2.36 | 2.04 | 86 | | 2 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.106 | 2.36 | 2.35 | 95 | | 44--134 | 2.36 | 2.38 | 97 | | 2 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0379 | 2.36 | 2.04 | 85 | | 49--123 | 2.36 | 2.08 | 86 | | 2 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.11 | 2.36 | 2.79 | 114 | | 37--147 | 2.36 | 2.76 | 113 | | 1 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.166 | 2.36 | 3.34 | 135 | | 39--151 | 2.36 | 3.31 | 133 | | 1 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.25 | 95 | | 50--120 | 2.36 | 2.24 | 95 | | 0 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.0561 | 2.36 | 2.23 | 92 | | 42--115 | 2.36 | 2.29 | 95 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 1.69 | 2.36 | 4.34 | 112 | | 11--188 | 2.36 | 4.4 | 115 | | 1 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.316 | 2.36 | 3.43 | 132 | | 48--150 | 2.36 | 3.45 | 133 | | 1 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 7.75 | 110 | | 42--123 | 7.08 | 7.9 | 112 | | 2 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.0264 | 2.36 | 2.39 | 100 | | 45--121 | 2.36 | 2.41 | 101 | | 1 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.82 | 77 | | 39--122 | 2.36 | 1.89 | 80 | | 4 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.79 | 76 | | 31--121 | 2.36 | 1.87 | 79 | | 4 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.6 | 68 | | 22--125 | 2.36 | 1.65 | 70 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57472-1 | 98 | 47 | 61 | 104 | 54 | 73 | 65 |
| L57473-1 | 69 | 40 | 53 | 89 | 45 | 63 | 61 |
| L57538-1 | 36 | 41 | 50 | 89 | 43 | 60 | 58 |
| WG125842-1 | 53 | 47 | 75 | 85 | 64 | 88 | 82 |
| WG125842-2 | 73 | 31 | 78 | 86 | 69 | 102 | 89 |
| WG125842-3 | 87 | 49 | 62 | 98 | 54 | 72 | 65 |
| WG125842-4 | 91 | 45 | 60 | 100 | 51 | 93 | 62 |

==========

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

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *19-Mar-13*

**WG #(s):** *WG125644*

☒ **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: *7890G* |

## 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. Prometon exceeded the upper QC recovery 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. An "*" was applied to the QC report.*

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

*3. Given the recovery was high for both the MS & MSD and all associated samples are "ND, no bias is suggested and no qualifier is warranted.*

| | 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:** *2/28/2013*

**WG #(s):** *WG125623*

☐ **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<br>☐ Mettler Toledo AT201 |
| Autoanalyzer: | ☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)<br>☐ 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<br>☐ 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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **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:** *19-MAR-13*

**WG #(s):** *WG125842*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125842-1 MB had a reportable levels of Diethyl Phthalate and Bis(2EthylHexyl)Phthalate.*

## 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 10X the blank level contamination were flagged "B" for Diethyl Phthalate and Bis-2(EH)phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 were filtered past the 15 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:
☐ Other

**Corrective Action Description:** *The samples were filtered for ORTHOP as a 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 associated matrix QC were qualified with an "H".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **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

January 23, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring
Samples L57557-1, 3 - 5, L57558-1 - 3, collected March 13-14, 2013

Attached is the comprehensive report for the stormwater water samples delivered to the laboratory on March 13 & 14, 2013. The samples were 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 #15225 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
The composite sample was not collected for location FCSW02 (HDR) due to failed collection conditions. BOD was not analyzed on location RSW01UP (LDR) due to limited sample volume.

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

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.



1202M

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 recovery of Prometon in the matrix spike and matrix spike duplicate for Organophosphorus pesticide analysis was outside the upper control range at 176 and 199%. These results were flagged with an "*" in the QC report. The spike blank recovery was within control limits. Prometon was not detected in the sample therefore qualifiers were not applied to the data.

Bis (2-ethylhexyl) phthalate was detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "B" qualifier.

The surrogate d5-nitro benzene was outside its upper control limit in spike blank and spike blank duplicate associated with semivolatile analysis. The results have been flagged with an "*" in the QC report. All other surrogates were within control.

**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: | FCSW02 | | | |
| | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD RESID | | | |
| | Sample: | L57557-1 | | | | Sample: | L57557-3 | | | | Sample: | L57557-4 | | | |
| | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | |
| | ColDate: | 3/13/13 11:22 | | | | ColDate: | 3/13/13 14:20 | | | | ColDate: | 3/13/13 14:44 | | | |
| | TimeSpan: | 7.23 | | | | 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 | 1.65 | SH | 0.1 | 0.2 | mg/L | | | | | | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.052 | | 0.025 | 0.025 | mg/L | | | | | | | | | | |
| **CV SM2130-B** | | | | | | | | | | | | | | | |
| Turbidity | 278 | | 0.4 | 1 | NTU | | | | | | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 50.4 | | 1 | 5 | umhos/cm | | | | | | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 208 | | 10 | 20 | mg/L | | | | | | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 4.14 | | 0.5 | 1 | mg/L | | | | | | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 0.187 | | 0.01 | 0.04 | mg/L | | | | | | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.363 | | 0.025 | 0.05 | mg/L | | | | | | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.00641 | H | 0.002 | 0.005 | mg/L | | | | | | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | 6.56 | | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | 1400 | | | | CFU/100ml | 220 | | | | CFU/100ml |
| **MT EPA 200.8*SW846 6020A** | | | | | | | | | | | | | | | |
| Cadmium, Dissolved, ICP-MS | | <MDL,H | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Cadmium, Total, ICP-MS | 0.22 | <RDL | 0.05 | 0.25 | ug/L | | | | | | | | | | |
| Calcium, Total, ICP-MS | 6730 | | 50 | 50 | ug/L | | | | | | | | | | |
| Copper, Dissolved, ICP-MS | 4.85 | H | 0.4 | 2 | ug/L | | | | | | | | | | |
| Copper, Total, ICP-MS | 39.1 | | 0.4 | 2 | ug/L | | | | | | | | | | |
| Lead, Dissolved, ICP-MS | 0.14 | <RDL,H | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Lead, Total, ICP-MS | 20.3 | | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Magnesium, Total, ICP-MS | 4330 | | 50 | 50 | ug/L | | | | | | | | | | |
| Zinc, Dissolved, ICP-MS | 11 | H | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| Zinc, Total, ICP-MS | 165 | | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 34.6 | | 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: | FCSW02 | | | |
| | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD COMME | | | | Descrip: | FALL CITY HD RESID | | | |
| | Sample: | L57557-1 | | | | Sample: | L57557-3 | | | | Sample: | L57557-4 | | | |
| | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | | Matrix: | LG STORM WTR | | | |
| | ColDate: | 3/13/13 11:22 | | | | ColDate: | 3/13/13 14:20 | | | | ColDate: | 3/13/13 14:44 | | | |
| | TimeSpan: | 7.23 | | | | 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 | 0.0417 | | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| Benzo(b,j,k)fluoranthene | 0.11 | <RDL | 0.094 | 0.189 | ug/L | | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.056 | <RDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | |
| Benzyl Butyl Phthalate | 0.082 | <RDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 2.02 | B2 | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Chrysene | 0.112 | | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | |
| Diethyl Phthalate | 0.339 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Di-N-Butyl Phthalate | 0.0617 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Di-N-Octyl Phthalate | 0.529 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | |
| Fluoranthene | 0.104 | | 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 | 0.0504 | | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| Pyrene | 0.215 | | 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 | | <MDL | 0.19 | 0.19 | mg/L |
| Lube Oil Range (>C24) | | | | | | 1.07 | | 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 | 421879-210 | 421879-210 |
| Locator: | FFBLANK | RSW1UP | RSW1UP |
| Descrip: | FIELD FILTER BLANK | 148TH AVE SE UPSTR | 148TH AVE SE UPSTR |
| Sample: | L57557-5 | L57558-1 | L57558-2 |
| Matrix: | LN BLANK WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 3/14/13 10:20 | 3/13/13 11:33 | 3/13/13 12:52 |
| TimeSpan: | | 20.2 | |
| 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 | | | | | | 0.291 | 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 | | | | | | 4 | | 0.2 | 0.5 | NTU | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | | | | | | 62.2 | | 1 | 5 | umhos/cm | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | | | | | | | <MDL | 5 | 10 | mg/L | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | | | | | | 2.31 | | 0.25 | 0.5 | mg/L | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | | <MDL | 0.01 | 0.04 | mg/L | 0.582 | | 0.01 | 0.04 | mg/L | | | | | |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | | | | | | 0.0293 | | 0.005 | 0.01 | mg/L | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | | <MDL | 0.002 | 0.005 | mg/L | 0.00858 | H | 0.002 | 0.005 | mg/L | | | | | |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | | | | | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | | | | | | 4 | | | | 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 | | | | | | 4910 | | 50 | 50 | ug/L | | | | | |
| Copper, Dissolved, ICP-MS | | | | | | 1.3 | <RDL,H | 0.4 | 2 | ug/L | | | | | |
| Copper, Total, ICP-MS | | | | | | 1.6 | <RDL | 0.4 | 2 | ug/L | | | | | |
| Lead, Dissolved, ICP-MS | | | | | | | <MDL,H | 0.1 | 0.5 | ug/L | | | | | |
| Lead, Total, ICP-MS | | | | | | 0.38 | <RDL | 0.1 | 0.5 | ug/L | | | | | |
| Magnesium, Total, ICP-MS | | | | | | 1490 | | 50 | 50 | ug/L | | | | | |
| Zinc, Dissolved, ICP-MS | | | | | | 7.86 | H | 0.5 | 2.5 | ug/L | | | | | |
| Zinc, Total, ICP-MS | | | | | | 9.1 | | 0.5 | 2.5 | ug/L | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | | | | | | 18.4 | | 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 | 0.0098 | 0.0196 | ug/L | | | | | |
| Acenaphthene | | | | | | | <MDL | 0.0098 | 0.0196 | ug/L | | | | | |
| Acenaphthylene | | | | | | | <MDL | 0.0098 | 0.0196 | ug/L | | | | | |

# King County Environmental Lab Analytical Report

| | | | |
|---|---|---|---|
| Project: | 421879-210 | 421879-210 | 421879-210 |
| Locator: | FFBLANK | RSW1UP | RSW1UP |
| Descrip: | FIELD FILTER BLANK | 148TH AVE SE UPSTR | 148TH AVE SE UPSTR |
| Sample: | L57557-5 | L57558-1 | L57558-2 |
| Matrix: | LN BLANK WTR | LG STORM WTR | LG STORM WTR |
| ColDate: | 3/14/13 10:20 | 3/13/13 11:33 | 3/13/13 12:52 |
| TimeSpan: | | 20.2 | |
| 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 | 0.0098 | 0.0196 | ug/L | | | | | |
| Benzo(a)anthracene | | | | | | 0.0374 | | 0.0098 | 0.0196 | ug/L | | | | | |
| Benzo(a)pyrene | | | | | | 0.0479 | | 0.0098 | 0.0196 | ug/L | | | | | |
| Benzo(b,j,k)fluoranthene | | | | | | 0.13 | <RDL | 0.098 | 0.196 | ug/L | | | | | |
| Benzo(g,h,i)perylene | | | | | | | <MDL | 0.049 | 0.098 | ug/L | | | | | |
| Benzyl Butyl Phthalate | | | | | | | <MDL | 0.049 | 0.098 | ug/L | | | | | |
| Bis(2-Ethylhexyl)Phthalate | | | | | | 0.334 | B | 0.025 | 0.049 | ug/L | | | | | |
| Chrysene | | | | | | 0.0658 | | 0.0098 | 0.0196 | ug/L | | | | | |
| Dibenzo(a,h)anthracene | | | | | | | <MDL | 0.049 | 0.098 | ug/L | | | | | |
| Diethyl Phthalate | | | | | | 0.603 | | 0.025 | 0.049 | ug/L | | | | | |
| Dimethyl Phthalate | | | | | | 0.034 | <RDL | 0.025 | 0.049 | ug/L | | | | | |
| Di-N-Butyl Phthalate | | | | | | 0.025 | <RDL | 0.025 | 0.049 | ug/L | | | | | |
| Di-N-Octyl Phthalate | | | | | | | <MDL | 0.025 | 0.049 | ug/L | | | | | |
| Fluoranthene | | | | | | 0.099 | | 0.0098 | 0.0196 | ug/L | | | | | |
| Fluorene | | | | | | | <MDL | 0.0098 | 0.0196 | ug/L | | | | | |
| Indeno(1,2,3-Cd)Pyrene | | | | | | | <MDL | 0.049 | 0.098 | ug/L | | | | | |
| Naphthalene | | | | | | | <MDL | 0.0098 | 0.0196 | ug/L | | | | | |
| Pentachlorophenol | | | | | | | <MDL | 0.12 | 0.245 | ug/L | | | | | |
| Phenanthrene | | | | | | 0.018 | <RDL | 0.0098 | 0.0196 | ug/L | | | | | |
| Pyrene | | | | | | 0.103 | | 0.0098 | 0.0196 | 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) | | | | | | | | | | | | <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 Report

Project: 421879-210
Locator: FFBLANK
Descrip: FIELD FILTER BLANK
Sample: L57558-3
Matrix: LN BLANK WTR
ColDate: 3/14/13 11:30
TimeSpan:
TotalSolid:
ClientLoc:
SampDepth:
**WET Weight Basis**

| Parameters | 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 | | | | | |
| **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 |
| Locator: | FFBLANK |
| Descrip: | FIELD FILTER BLANK |
| Sample: | L57558-3 |
| Matrix: | LN BLANK WTR |
| ColDate: | 3/14/13 11:30 |
| TimeSpan: | |
| TotalSolid: | |
| ClientLoc: | |
| SampDepth: | |

**WET Weight Basis**

| Parameters | 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) | | | | | |
| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 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 |
| FCSW01 | 421879-210 | L57557-1 | 1.65 | 0.052 | 278 | 50.4 | 208 | 4.14 | 0.187 | 0.363 | 0.00641 | 6.56 | 0.22 | 6730 | 4.85 | 39.1 | 0.14 | 20.3 | 4330 | 11 | 165 |
| FCSW01 | 421879-210 | L57557-3 | | | | | | | | | | | | | | | | | | | |
| FCSW02 | 421879-210 | L57557-4 | | | | | | | | | | | | | | | | | | | |
| RSW1UP | 421879-210 | L57558-1 | 0.291 | | 4 | 62.2 | | 2.31 | 0.582 | 0.0293 | 0.00858 | | | 4910 | 1.3 | 1.6 | | 0.38 | 1490 | 7.86 | 9.1 |
| RSW1UP | 421879-210 | L57558-2 | | | | | | | | | | | | | | | | | | | |
| * 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 | Hardness, Calc | 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 | Phenanthrene | Pyrene | Fecal Coliform | Lube Oil Range (>C24) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg CaCO3/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 | L57557-1 | 34.6 | | 0.0417 | 0.11 | 0.056 | 0.082 | 2.02 | 0.112 | 0.0617 | 0.529 | 0.339 | | 0.104 | 0.0504 | 0.215 | | |
| FCSW01 | 421879-210 | L57557-3 | | | | | | | | | | | | | | | | 1400 | 1.07 |
| FCSW02 | 421879-210 | L57557-4 | | | | | | | | | | | | | | | | 220 | |
| RSW1UP | 421879-210 | L57558-1 | 18.4 | 0.0374 | 0.0479 | 0.13 | | | 0.334 | 0.0658 | 0.025 | | 0.603 | 0.034 | 0.099 | 0.018 | 0.103 | | |
| RSW1UP | 421879-210 | L57558-2 | | | | | | | | | | | | | | | | 4 | |
| * Not converted to dry weight basis | | | | | | | | | | | | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | | | | | | | | | | | | |

Login: P57557 NPDES Stormwater Fall City Personnel: JD

Project: 421879-210

CHAIN OF CUSTODY

| Relinquished by | Date 3/14/13 | Time 1035 |
|---|---|---|
| Received by | Date 3-14-13 | Time 1035 |
| Sample Numbers 57557 1, 5 | | [All] |

| Sample Number | P57557-1 | P57557-2 | P57557-3 |
|---|---|---|---|
| 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 | 3/13/13 1122 | | 3/13/13 1420 |
| End Date/Time | 3/13/13 1836 | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 3 LG BOD TEMP @ LAB = 4.0°C<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23 SPLIT @ 1020<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS 24 SAMPLE<br>3 LG TURB<br>6 LG CA-ICPMS = 12L<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG HG-CVAA, DISS-M<br>6 LG HG-CVAA-M<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 3 LG BOD<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR<br>DELETE | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G<br>TAKEN BEFORE 9TH SAMPLE |

CHAIN OF CUSTODY

| Relinquished by | Date 3/13/13 | Time 1405 |
|---|---|---|
| Received by | Date 3-13-13 | Time 1405 |
| Sample Numbers 57557 3, 4 | | [All] |

Login: P57557 NPDES Stormwater Fall City Personnel: _____

Project: 421879-210

| Sample Number | P57557-4 | P57557-5 | |
|---|---|---|---|
| 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 | 3/13/13 1444 | 3/14/13 1020 | |
| End Date/Time | | | |
| Time Span | | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G<br>NO FLOW NO SAMPLE LOTS OF MUCK FROM VACTOR TRUCK HERE YESTERDAY & FRIDAY. THEY ALSO LEFT LOTS OF OIL RUNNING INTO STORM DRAIN | 3 LN NO23<br>3 LN ORTHOP | |

Login: P57558 | NPDES Stormwater Rural Site | Personnel: Crawford

Project: 421879-210

CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by: Samuel D. Crawford | Date: 3-13-13 | Time: 13:45 |
| Received by: | Date: 3-13-13 | Time: 1345 |
| Sample Numbers: 57558-2 | | [All] |

| Sample Number | P57558-1 | P57558-2 | P57558-3 |
|---|---|---|---|
| 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 | 3/13/13 11:33 | 3-13-13 @ 1252 | 3-13-13 11:30 |
| End Date/Time | 3/14/13 0714:5 | | |
| Time Span | Temp = 0.5°C | | |
| Sample Depth | | | |
| Dept, Matrix, Prod | ~~3 LG BOD~~<br>3 LG CL<br>3 LG COND<br>3 LG MBAS<br>3 LG NO23<br>3 LG ORTHOP<br>3 LG TKN<br>3 LG TOTP<br>3 LG TSS<br>3 LG TURB<br>6 LG CA-ICPMS<br>6 LG CD-ICPMS<br>6 LG CD-ICPMS, DISS<br>6 LG CU-ICPMS<br>6 LG CU-ICPMS, DISS<br>6 LG ICPMS-HARDNESS<br>6 LG MG-ICPMS<br>6 LG PB-ICPMS<br>6 LG PB-ICPMS, DISS<br>6 LG ZN-ICPMS<br>6 LG ZN-ICPMS, DISS<br>7 LG HERB-NPDES<br>7 LG OPPEST-NPDES<br>7 LG PAHPHTH-SUR | 5 LG FC-MF<br>7 LG WTPH-DX<br>7 LG WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

CHAIN OF CUSTODY

| | | |
|---|---|---|
| Relinquished by: | Date: 3/13/13 @ 11:45 | Time: |
| Received by: | Date: 3-14-13 | Time: 1145 |
| Sample Numbers: 57550-1, 3 | | [All] |

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

***Professional Analytical Services***

Mar 15 2013
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 |
|---|---|---|---|
| P57557-1 | Water | 13-A003157 | CONV |
| P57558-1 | Water | 13-A003158 | CONV |

Your samples were received on Thursday, March 14, 2013. 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

**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 #: 421879-210
All results reported on an as received basis.

Date Received: 03/14/13
Date Reported: 3/15/13

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**AMTEST Identification Number** **13-A003157**
**Client Identification** **P57557-1**
**Sampling Date** **03/13/13, 18:36**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.052 | mg/l | | 0.025 | SM 5540C | EB | 03/15/13 |

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**AMTEST Identification Number** **13-A003158**
**Client Identification** **P57558-1**
**Sampling Date** **03/14/13, 07:45**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | < 0.025 | mg/l | | 0.025 | SM 5540C | EB | 03/15/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample numbers: 13-A003157 to 13-A003158**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A003157 | Surfactants | mg/l | 0.052 | 0.185 | 0.125 | 106.40 % |
| 13-A003157 | Surfactants | mg/l | 0.052 | 0.179 | 0.125 | 101.60 % |

## MATRIX SPIKE DUPLICATES

| SAMPLE # | ANALYTE | UNITS | SAMPLE + SPK | MSD VALUE | RPD |
|---|---|---|---|---|---|
| Spike | Surfactants | mg/l | 0.185 | 0.179 | 3.3 |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.130 | 104. % |

## 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 1380892

Project Name: _____ Date Received: 3/14/13 Received By: Jean Olson

Samples received at AmTest by: Courier

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 8.9 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 1380892

Project Name: Date Received: 3/14/13 Received By: Jean Olson

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-17
Shipment Method: ENA
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*

T = 8.9

| | | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| 3157 P57557-1 | 3/13/2013 | LG - Storm | Level 2 | X | | | | | | | | | | | | 1 | sample time: 18:36 |
| 3158 P57558-1 | 3/14/2013 | LG - Storm | Level 2 | X | | | | | | | | | | | | 1 | sample time: 07:45 |
| | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 2

*Please return signed original CoC with data package.*

Requested TAT: 14 Days
Data Package Due: 4/4/2013

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | | 3-14-13 | Signature | | 3-14-13 |
| Printed Name | Jason Kinnard | Time 1200 | Printed Name | J Olsen | Time 2:25 |
| Organization | King County DNR, Environmental Laboratory | | Organization | Am Test | |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125876 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVBOD | OTHR WTR | 3/13/2013 9:36 | 3/15/2013 14:39 | 3/15/2013 14:39 | WG125876-1,-2,-3,-4 | |
| L57551-12 | 421161 | IW SURCHARGE | CVBOD | IW WTR | 3/13/2013 11:35 | 3/15/2013 14:43 | 3/15/2013 14:43 | | |
| L57552-3 | 421161 | | CVBOD | IW WTR | 3/13/2013 10:40 | 3/15/2013 14:45 | 3/15/2013 14:45 | | |
| L57553-3 | 421161 | | CVBOD | IW WTR | 3/13/2013 9:20 | 3/15/2013 14:48 | 3/15/2013 14:48 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVBOD | STORM WTR | 3/13/2013 11:22 | 3/15/2013 14:41 | 3/15/2013 14:41 | | |
| L57560-3 | 421161 | IW SURCHARGE | CVBOD | IW WTR | 3/13/2013 11:30 | 3/15/2013 14:49 | 3/15/2013 14:49 | | |
| L57561-3 | 421161 | | CVBOD | IW WTR | 3/13/2013 10:30 | 3/15/2013 14:59 | 3/15/2013 14:59 | | |
| L57562-3 | 421161 | | CVBOD | IW WTR | 3/13/2013 13:15 | 3/15/2013 15:06 | 3/15/2013 15:06 | | |
| L57563-3 | 421161 | | CVBOD | IW WTR | 3/13/2013 12:50 | 3/15/2013 15:08 | 3/15/2013 15:08 | | |
| WG125876-1 | MB | | CVBOD | BLANK WTR | | 3/15/2013 14:12 | 3/15/2013 14:12 | | MB1 3/15/13 |
| WG125876-2 | SB | | CVBOD | BLANK WTR | | 3/15/2013 14:37 | 3/15/2013 14:37 | | WG125876-1 |
| WG125876-3 | MB | | CVBOD | BLANK WTR | | 3/15/2013 15:03 | 3/15/2013 15:03 | | MB2 3/15/13 |
| WG125876-4 | SB | | CVBOD | BLANK WTR | | 3/15/2013 15:05 | 3/15/2013 15:05 | | WG125876-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125991 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:38 | 3/22/2013 8:38 | WG125991-2,-1,-3,- | |
| L57435-1 | 421879-210 | | CVCL | STORM WTR | 3/2/2013 17:42 | 3/22/2013 10:09 | 3/22/2013 10:09 | 4,-5,-6,-7,-8,-9,-10 | |
| L57472-1 | 421879-210 | | CVCL | STORM WTR | 3/6/2013 14:52 | 3/22/2013 6:06 | 3/22/2013 6:06 | | |
| L57473-1 | 421879-210 | | CVCL | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 3:03 | 3/22/2013 3:03 | | |
| L57538-1 | 421879-210 | | CVCL | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 1:32 | 3/22/2013 1:32 | | |
| L57557-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:08 | 3/22/2013 9:08 | | |
| L57558-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:33 | 3/22/2013 2:02 | 3/22/2013 2:02 | | |
| L57595-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 3/19/2013 0:00 | 3/22/2013 0:01 | 3/22/2013 0:01 | | |
| L57595-2 | 421937 | | CVCL | BLANK WTR | 3/19/2013 0:00 | 3/21/2013 23:30 | 3/21/2013 23:30 | | |
| WG125991-1 | CS | | CVCL | BLANK WTR | | 3/21/2013 21:28 | 3/21/2013 21:28 | | RDL_LEVEL |
| WG125991-2 | MB | | CVCL | BLANK WTR | | 3/21/2013 21:59 | 3/21/2013 21:59 | | MB2 3/21/13 |
| WG125991-3 | SB | | CVCL | BLANK WTR | | 3/21/2013 22:29 | 3/21/2013 22:29 | | WG125991-2 |
| WG125991-4 | LCS | | CVCL | BLANK WTR | | 3/21/2013 23:00 | 3/21/2013 23:00 | | LEVEL1 |
| WG125991-5 | LD | | CVCL | GRND WTR | | 3/22/2013 0:31 | 3/22/2013 0:31 | | L57595-1 |
| WG125991-6 | MS | | CVCL | GRND WTR | | 3/22/2013 1:01 | 3/22/2013 1:01 | | L57595-1 |
| WG125991-7 | LD | | CVCL | FRESH WTR | | 3/22/2013 3:34 | 3/22/2013 3:34 | | L57473-1 |
| WG125991-8 | MS | | CVCL | FRESH WTR | | 3/22/2013 4:04 | 3/22/2013 4:04 | | L57473-1 |
| WG125991-9 | LD | | CVCL | STORM WTR | | 3/22/2013 6:36 | 3/22/2013 6:36 | | L57472-1 |
| WG125991-10 | MS | | CVCL | STORM WTR | | 3/22/2013 7:07 | 3/22/2013 7:07 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125964 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVCOND | FRESH WTR | 3/11/2013 9:50 | 3/20/2013 16:11 | 3/20/2013 16:11 | WG125964-1,-2,-3,-4,-5,-6,-7,-8,-9,-10 | |
| L57172-2 | 421195-140 | | CVCOND | FRESH WTR | 3/11/2013 9:45 | 3/20/2013 16:21 | 3/20/2013 16:21 | | |
| L57172-3 | 421195-140 | | CVCOND | FRESH WTR | 3/11/2013 10:10 | 3/20/2013 16:30 | 3/20/2013 16:30 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/12/2013 10:35 | 3/20/2013 13:17 | 3/20/2013 13:17 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/14/2013 9:50 | 3/20/2013 13:29 | 3/20/2013 13:29 | | |
| L57508-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/11/2013 13:15 | 3/20/2013 13:36 | 3/20/2013 13:36 | | |
| L57509-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/15/2013 7:40 | 3/20/2013 13:45 | 3/20/2013 13:45 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/12/2013 9:21 | 3/20/2013 13:55 | 3/20/2013 13:55 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVCOND | OTHR WTR | 3/11/2013 9:25 | 3/20/2013 15:25 | 3/20/2013 15:25 | | |
| L57526-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/14/2013 8:25 | 3/20/2013 14:04 | 3/20/2013 14:04 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/13/2013 9:37 | 3/20/2013 14:12 | 3/20/2013 14:12 | | |
| L57526-4 | 421422-DUGW | | CVCOND | GRND WTR | 3/13/2013 8:44 | 3/20/2013 14:24 | 3/20/2013 14:24 | | |
| L57527-1 | 421422-DUGW | | CVCOND | GRND WTR | 3/13/2013 7:53 | 3/20/2013 14:32 | 3/20/2013 14:32 | | |
| L57527-3 | 421422-DUGW | | CVCOND | GRND WTR | 3/13/2013 10:42 | 3/20/2013 14:40 | 3/20/2013 14:40 | | |
| L57529-1 | 421422-DUGW | | CVCOND | GRND WTR | 3/14/2013 8:29 | 3/20/2013 14:50 | 3/20/2013 14:50 | | |
| L57529-3 | 421422-DUGW | | CVCOND | GRND WTR | 3/14/2013 10:49 | 3/20/2013 14:58 | 3/20/2013 14:58 | | |
| L57529-4 | 421422-DUGW | | CVCOND | GRND WTR | 3/14/2013 9:57 | 3/20/2013 15:07 | 3/20/2013 15:07 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVCOND | OTHR WTR | 3/12/2013 9:49 | 3/20/2013 15:33 | 3/20/2013 15:33 | | |
| L57541-1 | 423258-500-1 | | CVCOND | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 15:42 | 3/20/2013 15:42 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/13/2013 11:22 | 3/20/2013 13:13 | 3/20/2013 13:13 | | |
| L57558-1 | 421879-210 | | CVCOND | STORM WTR | 3/13/2013 11:33 | 3/20/2013 13:14 | 3/20/2013 13:14 | | |
| WG125964-1 | LCS | | CVCOND | BLANK WTR | | 3/20/2013 13:01 | 3/20/2013 13:01 | | LEVEL1 |
| WG125964-2 | LCS | | CVCOND | BLANK WTR | | 3/20/2013 13:02 | 3/20/2013 13:02 | | LEVEL2 |
| WG125964-3 | LD | | CVCOND | STORM WTR | | 3/20/2013 13:15 | 3/20/2013 13:15 | | L57558-1 |
| WG125964-4 | LD | | CVCOND | GRND WTR | | 3/20/2013 15:16 | 3/20/2013 15:16 | | L57529-4 |
| WG125964-5 | LD | | CVCOND | OTHR WTR | | 3/20/2013 15:50 | 3/20/2013 15:50 | | L57541-1 |
| WG125964-6 | LCS | | CVCOND | BLANK WTR | | 3/20/2013 15:59 | 3/20/2013 15:59 | | LEVEL1 |
| WG125964-7 | LCS | | CVCOND | BLANK WTR | | 3/20/2013 16:00 | 3/20/2013 16:00 | | LEVEL2 |
| WG125964-8 | LD | | CVCOND | FRESH WTR | | 3/20/2013 16:39 | 3/20/2013 16:39 | | L57172-3 |
| WG125964-9 | LCS | | CVCOND | BLANK WTR | | 3/20/2013 19:17 | 3/20/2013 19:17 | | LEVEL1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125964-10 | LCS | CVCOND | BLANK WTR | 3/20/2013 19:18 | 3/20/2013 19:18 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125885 Dissolved Nutrients - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/6/2013 14:52 | 3/15/2013 12:25 | 3/15/2013 14:51 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57472-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/7/2013 14:02 | 3/15/2013 12:25 | 3/15/2013 15:32 | | |
| L57473-1 | 421879-210 | | CVNO23 | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 12:25 | 3/15/2013 14:33 | | |
| L57473-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/9/2013 11:40 | 3/15/2013 12:25 | 3/15/2013 15:30 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 9:50 | 3/15/2013 12:25 | 3/15/2013 13:53 | WG125885-1,-2,-3,-4,-5 | |
| L57509-3 | 421422-CFGW | | CVNO3 | GRND WTR | 3/15/2013 7:40 | 3/15/2013 12:25 | 3/15/2013 13:55 | | |
| L57526-1 | 421422-CFGW | | CVNO3 | GRND WTR | 3/14/2013 8:25 | 3/15/2013 12:25 | 3/15/2013 13:57 | | |
| L57529-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 8:29 | 3/15/2013 12:25 | 3/15/2013 13:59 | | |
| L57529-3 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 10:49 | 3/15/2013 12:25 | 3/15/2013 14:18 | | |
| L57529-4 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 9:57 | 3/15/2013 12:25 | 3/15/2013 14:20 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | BLANK WTR | 3/7/2013 10:05 | 3/15/2013 12:25 | 3/15/2013 15:45 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVNO23 | OTHR WTR | 3/13/2013 9:36 | 3/15/2013 12:25 | 3/15/2013 15:18 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/13/2013 11:22 | 3/15/2013 12:25 | 3/15/2013 14:31 | | |
| L57557-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 10:20 | 3/15/2013 12:25 | 3/15/2013 15:28 | | |
| L57558-1 | 421879-210 | | CVNO23 | STORM WTR | 3/13/2013 11:33 | 3/15/2013 12:25 | 3/15/2013 14:22 | | |
| L57558-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 11:30 | 3/15/2013 12:25 | 3/15/2013 15:26 | | |
| WG125885-1 | MB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | | CONNUTS1 |
| WG125885-1 | MB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | WG125885-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125885-2 | SB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | WG125885-1 |
| WG125885-2 | SB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-4,-5 | WG125885-1 |
| WG125885-3 | LCS | | CVNO23 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG125885-3 | LCS | | CVNO3 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-4,-5 | LEVEL1 |
| WG125885-4 | LD | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:01 | | L57529-1 |
| WG125885-5 | MS | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:14 | | L57529-1 |
| WG125885-6 | LD | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:24 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | L57558-1 |
| WG125885-7 | MS | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:26 | | L57558-1 |
| WG125885-8 | LD | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:45 | | L57473-1 |
| WG125885-9 | MS | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:47 | | L57473-1 |
| WG125885-10 | LD | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:20 | | L57541-1 |
| WG125885-11 | MS | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:22 | | L57541-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVORTHOP | FRESH WTR | 3/11/2013 9:50 | 3/11/2013 11:45 | 3/20/2013 16:29 | WG125950-12,-13,-14,-15,-16,-3,-4,-5,-6,-7,-1,-2,-10,-11,-17,-18,-19,-20,-21,-22,-23 | |
| L57172-2 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 9:45 | 3/11/2013 11:45 | 3/20/2013 16:38 | | |
| L57172-3 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 10:10 | 3/11/2013 11:45 | 3/20/2013 16:40 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 16:54 | | |
| L57382-2 | 421195-150 | | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 17:03 | | |
| L57433-1 | 421195-450 | China Creek Stormwater Monitoring | CVORTHOP | STORM WTR | 3/20/2013 11:28 | 3/20/2013 16:25 | 3/20/2013 17:13 | | |
| L57433-2 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:15 | 3/20/2013 16:25 | 3/20/2013 17:30 | | |
| L57433-3 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:10 | 3/20/2013 16:25 | 3/20/2013 17:32 | | |
| L57433-4 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:02 | 3/20/2013 16:25 | 3/20/2013 17:34 | | |
| L57433-5 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:50 | 3/20/2013 16:25 | 3/20/2013 17:36 | | |
| L57433-6 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:42 | 3/20/2013 16:25 | 3/20/2013 17:38 | | |
| L57433-7 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:32 | 3/20/2013 16:25 | 3/20/2013 17:40 | | |
| L57433-8 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:20 | 3/20/2013 16:25 | 3/20/2013 17:42 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/6/2013 14:52 | 3/20/2013 11:50 | 3/20/2013 14:08 | | |
| L57472-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/7/2013 14:02 | 3/20/2013 11:50 | 3/20/2013 14:16 | | |
| L57473-1 | 421879-210 | | CVORTHOP | FRESH WTR | 3/8/2013 10:43 | 3/20/2013 11:50 | 3/20/2013 14:35 | | |
| L57473-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/9/2013 11:40 | 3/20/2013 11:50 | 3/20/2013 14:18 | | |
| L57490-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/7/2013 4:45 | 3/20/2013 11:50 | 3/20/2013 15:31 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/11/2013 9:25 | 3/20/2013 11:50 | 3/20/2013 14:41 | | |
| L57519-3 | 423258-500-1 | | CVORTHOP | BLANK WTR | 3/11/2013 9:10 | 3/20/2013 11:50 | 3/20/2013 14:58 | | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVORTHOP | FRESH WTR | 3/18/2013 9:13 | 3/20/2013 11:50 | 3/20/2013 15:33 | | |
| L57532-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 8:44 | 3/20/2013 11:50 | 3/20/2013 15:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | BLANK WTR | 3/7/2013 10:05 | 3/20/2013 11:50 | 3/20/2013 14:29 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/12/2013 9:49 | 3/20/2013 11:50 | 3/20/2013 15:00 | | |
| L57541-1 | 423258-500-1 | | CVORTHOP | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:50 | 3/20/2013 15:02 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/13/2013 11:22 | 3/20/2013 11:50 | 3/20/2013 14:37 | | |
| L57557-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 10:20 | 3/20/2013 11:50 | 3/20/2013 14:31 | | |
| L57558-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/13/2013 11:33 | 3/20/2013 11:50 | 3/20/2013 14:39 | | |
| L57558-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 11:30 | 3/20/2013 11:50 | 3/20/2013 14:33 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVORTHOP | FRESH WTR | 3/19/2013 5:50 | 3/20/2013 11:50 | 3/20/2013 15:44 | | |
| L57565-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 6:45 | 3/20/2013 11:50 | 3/20/2013 15:56 | | |
| L57565-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:30 | 3/20/2013 11:50 | 3/20/2013 15:58 | | |
| L57565-5 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:02 | 3/20/2013 11:50 | 3/20/2013 16:00 | | |
| L57565-6 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:29 | 3/20/2013 11:50 | 3/20/2013 16:02 | | |
| L57565-7 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:50 | 3/20/2013 11:50 | 3/20/2013 16:04 | | |
| L57565-8 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:25 | 3/20/2013 11:50 | 3/20/2013 16:07 | | |
| L57565-9 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 6:25 | 3/20/2013 11:50 | 3/20/2013 16:09 | | |
| WG125950-1 | MB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:06 | | CONNUTS3 |
| WG125950-2 | SB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:08 | | WG125950-1 |
| WG125950-3 | LCS | | CVORTHOP | BLANK WTR | | 3/20/2013 14:04 | 3/20/2013 14:04 | | LEVEL1 |
| WG125950-4 | LD | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:10 | | L57472-1 |
| WG125950-5 | MS | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:12 | | L57472-1 |

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|---|---|---|---|---|---|---|---|
| WG125950-6 | LD | CVORTHOP | OTHR WTR | 3/20/2013 11:50 | 3/20/2013 14:43 | | L57519-1 |
| WG125950-7 | MS | CVORTHOP | OTHR WTR | 3/20/2013 11:50 | 3/20/2013 14:45 | | L57519-1 |
| WG125950-10 | LD | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:35 | | L57532-1 |
| WG125950-11 | MS | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:37 | | L57532-1 |
| WG125950-12 | MB | CVORTHOP | BLANK WTR | 3/20/2013 11:50 | 3/20/2013 16:13 | | CONNUTS3 |
| WG125950-13 | MB | CVORTHOP | BLANK WTR | 3/11/2013 11:45 | 3/20/2013 16:15 | | CONNUTS3 |
| WG125950-14 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 16:25 | | LEVEL1 |
| WG125950-15 | LD | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:32 | | L57172-1 |
| WG125950-16 | MS | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:34 | | L57172-1 |
| WG125950-17 | MB | CVORTHOP | BLANK WTR | 3/8/2013 16:00 | 3/20/2013 16:44 | | CONNUTS3 |
| WG125950-18 | LD | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:57 | | L57382-1 |
| WG125950-19 | MS | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:59 | | L57382-1 |
| WG125950-20 | MB | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 17:07 | | CONNUTS3 |
| WG125950-21 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 17:09 | 3/20/2013 17:09 | | LEVEL1 |
| WG125950-22 | LD | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:24 | | L57433-1 |
| WG125950-23 | MS | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:26 | | L57433-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG126201 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57519-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTKN | OTHR WTR | 3/11/2013 9:18 | 4/4/2013 7:36 | 4/8/2013 13:20 | WG126201-4,-5,-6,-7,-8,-9,-10,-1,-2,-3 | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVTKN | FRESH WTR | 3/18/2013 9:13 | 4/4/2013 7:36 | 4/8/2013 13:51 | | |
| L57532-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/18/2013 8:44 | 4/4/2013 7:36 | 4/8/2013 14:47 | | |
| L57540-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTKN | OTHR WTR | 3/12/2013 9:50 | 4/4/2013 7:36 | 4/8/2013 13:26 | | |
| L57541-2 | 423258-500-1 | | CVTKN | OTHR WTR | 3/13/2013 9:37 | 4/4/2013 7:36 | 4/8/2013 13:38 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/13/2013 11:22 | 4/4/2013 7:36 | 4/8/2013 13:41 | | |
| L57558-1 | 421879-210 | | CVTKN | STORM WTR | 3/13/2013 11:33 | 4/4/2013 7:36 | 4/8/2013 13:49 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTKN | FRESH WTR | 3/19/2013 5:50 | 4/4/2013 7:36 | 4/8/2013 14:12 | | |
| L57565-2 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 6:25 | 4/4/2013 7:36 | 4/8/2013 14:14 | | |
| L57565-3 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 6:45 | 4/4/2013 7:36 | 4/8/2013 14:16 | | |
| L57565-4 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 7:30 | 4/4/2013 7:36 | 4/8/2013 14:18 | | |
| L57565-5 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 8:02 | 4/4/2013 7:36 | 4/8/2013 14:20 | | |
| L57565-6 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 7:29 | 4/4/2013 7:36 | 4/8/2013 14:22 | | |
| L57565-7 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 8:50 | 4/4/2013 7:36 | 4/8/2013 14:24 | | |
| L57565-8 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/19/2013 8:25 | 4/4/2013 7:36 | 4/8/2013 14:26 | | |
| L57565-9 | 421422-CHSW-M | | CVTKN | FRESH WTR | 3/18/2013 6:25 | 4/4/2013 7:36 | 4/8/2013 14:28 | | |
| L57570-1 | 421422-VASW-2 | SWD-VASW-2 Vashon Surface Water Quarterly | CVTKN | FRESH WTR | 3/26/2013 10:02 | 4/4/2013 7:36 | 4/8/2013 14:41 | | |
| L57570-3 | 421422-VASW-2 | | CVTKN | FRESH WTR | 3/26/2013 12:16 | 4/4/2013 7:36 | 4/8/2013 14:43 | | |
| L57570-4 | 421422-VASW-2 | | CVTKN | FRESH WTR | 3/26/2013 11:20 | 4/4/2013 7:36 | 4/8/2013 14:45 | | |
| WG126201-1 | MB | | CVTKN | BLANK WTR | | 4/4/2013 7:36 | 4/8/2013 13:09 | | MB130408 |
| WG126201-2 | LCS | | CVTKN | BLANK WTR | | 4/4/2013 7:36 | 4/8/2013 13:11 | | LEVEL1 |
| WG126201-3 | LCS | | CVTKN | BLANK WTR | | 4/4/2013 7:36 | 4/8/2013 13:13 | | LEVEL2 |
| WG126201-4 | SB | | CVTKN | BLANK WTR | | 4/4/2013 7:36 | 4/8/2013 13:16 | | WG126201-1 |
| WG126201-5 | LD | | CVTKN | OTHR WTR | | 4/4/2013 7:36 | 4/8/2013 13:22 | | L57519-2 |
| WG126201-6 | MS | | CVTKN | OTHR WTR | | 4/4/2013 7:36 | 4/8/2013 13:24 | | L57519-2 |
| WG126201-7 | LD | | CVTKN | STORM WTR | | 4/4/2013 7:36 | 4/8/2013 13:43 | | L57557-1 |
| WG126201-8 | MS | | CVTKN | STORM WTR | | 4/4/2013 7:36 | 4/8/2013 13:45 | | L57557-1 |
| WG126201-9 | LD | | CVTKN | FRESH WTR | | 4/4/2013 7:36 | 4/8/2013 14:49 | | L57532-2 |
| WG126201-10 | MS | | CVTKN | FRESH WTR | | 4/4/2013 7:36 | 4/8/2013 14:51 | | L57532-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG126030 Total Phosphorus, Total Nitrogen**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57470-1 | 422019 | WRIA 7 Streams Ambient Monitoring | CVTOTN | FRESH WTR | 3/18/2013 13:03 | 3/20/2013 11:30 | 3/22/2013 13:58 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-1 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 13:03 | 3/20/2013 11:30 | 3/22/2013 13:58 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-2 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 12:04 | 3/20/2013 11:30 | 3/22/2013 14:00 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-2 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 12:04 | 3/20/2013 11:30 | 3/22/2013 14:00 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-3 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 11:50 | 3/20/2013 11:30 | 3/22/2013 14:01 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-3 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 11:50 | 3/20/2013 11:30 | 3/22/2013 14:01 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-4 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 11:26 | 3/20/2013 11:30 | 3/22/2013 14:03 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-4 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 11:26 | 3/20/2013 11:30 | 3/22/2013 14:03 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-5 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 11:03 | 3/20/2013 11:30 | 3/22/2013 14:05 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-5 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 11:03 | 3/20/2013 11:30 | 3/22/2013 14:05 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-6 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 10:34 | 3/20/2013 11:30 | 3/22/2013 14:18 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-6 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 10:34 | 3/20/2013 11:30 | 3/22/2013 14:18 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-7 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 10:11 | 3/20/2013 11:30 | 3/22/2013 14:20 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-7 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 10:11 | 3/20/2013 11:30 | 3/22/2013 14:20 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-8 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 9:36 | 3/20/2013 11:30 | 3/22/2013 14:22 | WG126030-1,-2,-3,-4,-5,-6,-7 | |
| L57470-8 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 9:36 | 3/20/2013 11:30 | 3/22/2013 14:22 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | |
| L57470-9 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 9:11 | 3/20/2013 11:30 | 3/22/2013 14:23 | WG126030-1,-2,-3,-4,-5,-6,-7 | |

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|---|---|---|---|---|---|---|---|---|---|---|
| L57470-9 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 9:11 | 3/20/2013 11:30 | 3/22/2013 14:23 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | | |
| L57470-10 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 8:38 | 3/20/2013 11:30 | 3/22/2013 14:25 | WG126030-1,-2,-3,-4,-5,-6,-7 | | |
| L57470-10 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 8:38 | 3/20/2013 11:30 | 3/22/2013 14:25 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | | |
| L57470-11 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 8:15 | 3/20/2013 11:30 | 3/22/2013 14:27 | WG126030-1,-2,-3,-4,-5,-6,-7 | | |
| L57470-11 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 8:15 | 3/20/2013 11:30 | 3/22/2013 14:27 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | | |
| L57470-12 | 422019 | | CVTOTN | FRESH WTR | 3/18/2013 8:00 | 3/20/2013 11:30 | 3/22/2013 14:29 | WG126030-1,-2,-3,-4,-5,-6,-7 | | |
| L57470-12 | 422019 | | CVTOTP | FRESH WTR | 3/18/2013 8:00 | 3/20/2013 11:30 | 3/22/2013 14:29 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVTOTP | FRESH WTR | 3/18/2013 9:13 | 3/20/2013 11:30 | 3/22/2013 14:31 | | | |
| L57532-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/18/2013 8:44 | 3/20/2013 11:30 | 3/22/2013 14:33 | | | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:30 | 3/22/2013 15:13 | WG126030-1,-2,-3,-4,-5,-6,-7 | | |
| L57541-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:30 | 3/22/2013 15:13 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 3/13/2013 11:22 | 3/20/2013 11:30 | 3/22/2013 15:15 | | | |
| L57558-1 | 421879-210 | | CVTOTP | STORM WTR | 3/13/2013 11:33 | 3/20/2013 11:30 | 3/22/2013 15:20 | | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVTOTP | FRESH WTR | 3/19/2013 5:50 | 3/20/2013 11:30 | 3/22/2013 14:34 | | | |
| L57565-2 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 6:25 | 3/20/2013 11:30 | 3/22/2013 14:44 | | | |
| L57565-3 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 6:45 | 3/20/2013 11:30 | 3/22/2013 14:45 | | | |
| L57565-4 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 7:30 | 3/20/2013 11:30 | 3/22/2013 14:47 | | | |
| L57565-5 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 8:02 | 3/20/2013 11:30 | 3/22/2013 14:49 | | | |
| L57565-6 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 7:29 | 3/20/2013 11:30 | 3/22/2013 14:51 | | | |
| L57565-7 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 8:50 | 3/20/2013 11:30 | 3/22/2013 14:56 | | | |
| L57565-8 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/19/2013 8:25 | 3/20/2013 11:30 | 3/22/2013 15:52 | | | |
| L57565-9 | 421422-CHSW-M | | CVTOTP | FRESH WTR | 3/18/2013 6:25 | 3/20/2013 11:30 | 3/22/2013 15:11 | | | |
| WG126030-1 | MB | | CVTOTN | BLANK WTR | | 3/20/2013 11:30 | 3/22/2013 13:52 | WG126030-1,-2,-3,-4,-5,-6,-7 | MB1 | |
| WG126030-1 | MB | | CVTOTP | BLANK WTR | | 3/20/2013 11:30 | 3/22/2013 13:52 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | MB1 | |
| WG126030-2 | SB | | CVTOTN | BLANK WTR | | 3/20/2013 11:30 | 3/22/2013 13:54 | WG126030-1,-2,-3,-4,-5,-6,-7 | WG126030-1 | |
| WG126030-2 | SB | | CVTOTP | BLANK WTR | | 3/20/2013 11:30 | 3/22/2013 13:54 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | WG126030-1 | |
| WG126030-3 | LCS | | CVTOTN | BLANK WTR | | 3/20/2013 11:30 | 3/22/2013 13:56 | WG126030-1,-2,-3,-4,-5,-6,-7 | LEVEL1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG126030-3 | LCS | CVTOTP | BLANK WTR | 3/20/2013 11:30 | 3/22/2013 13:56 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG126030-4 | LD | CVTOTN | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 14:07 | WG126030-1,-2,-3,-4,-5,-6,-7 | L57470-5 |
| WG126030-4 | LD | CVTOTP | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 14:07 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | L57470-5 |
| WG126030-5 | MS | CVTOTN | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 14:09 | WG126030-1,-2,-3,-4,-5,-6,-7 | L57470-5 |
| WG126030-5 | MS | CVTOTP | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 14:09 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | L57470-5 |
| WG126030-6 | MB | CVTOTN | BLANK WTR | 3/20/2013 11:30 | 3/22/2013 14:53 | WG126030-1,-2,-3,-4,-5,-6,-7 | MB2 |
| WG126030-6 | MB | CVTOTP | BLANK WTR | 3/20/2013 11:30 | 3/22/2013 14:53 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | MB2 |
| WG126030-7 | LCS | CVTOTN | BLANK WTR | 3/20/2013 11:30 | 3/22/2013 14:55 | WG126030-1,-2,-3,-4,-5,-6,-7 | LEVEL1 |
| WG126030-7 | LCS | CVTOTP | BLANK WTR | 3/20/2013 11:30 | 3/22/2013 14:55 | WG126030-1,-2,-3,-4,-5,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG126030-8 | LD | CVTOTP | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 14:58 | | L57565-7 |
| WG126030-9 | MS | CVTOTP | FRESH WTR | 3/20/2013 11:30 | 3/22/2013 15:00 | | L57565-7 |
| WG126030-10 | LD | CVTOTP | STORM WTR | 3/20/2013 11:30 | 3/22/2013 15:17 | | L57557-1 |
| WG126030-11 | MS | CVTOTP | STORM WTR | 3/20/2013 11:30 | 3/22/2013 15:18 | | L57557-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125883 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/14/2013 9:50 | 3/18/2013 16:15 | 3/21/2013 11:19 | WG125883-2,-3,-4,-5,-1,-6,-7,-8,-9 | |
| L57526-1 | 421422-CFGW | | CVTSS | GRND WTR | 3/14/2013 8:25 | 3/18/2013 16:15 | 3/21/2013 11:22 | | |
| L57529-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/14/2013 8:29 | 3/18/2013 16:15 | 3/21/2013 11:23 | | |
| L57529-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/14/2013 10:49 | 3/18/2013 16:15 | 3/21/2013 11:24 | | |
| L57529-4 | 421422-DUGW | | CVTSS | GRND WTR | 3/14/2013 9:57 | 3/18/2013 16:15 | 3/21/2013 11:25 | | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/13/2013 9:36 | 3/18/2013 16:15 | 3/21/2013 11:26 | | |
| L57551-10 | 421161 | IW SURCHARGE | CVTSS | IW WTR | 3/11/2013 12:20 | 3/18/2013 16:15 | 3/21/2013 11:36 | | |
| L57551-11 | 421161 | | CVTSS | IW WTR | 3/12/2013 11:30 | 3/18/2013 16:15 | 3/21/2013 11:37 | | |
| L57551-12 | 421161 | | CVTSS | IW WTR | 3/13/2013 11:35 | 3/18/2013 16:15 | 3/21/2013 11:38 | | |
| L57552-1 | 421161 | | CVTSS | IW WTR | 3/11/2013 11:10 | 3/18/2013 16:15 | 3/21/2013 11:39 | | |
| L57552-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 10:50 | 3/18/2013 16:15 | 3/21/2013 11:45 | | |
| L57552-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 10:40 | 3/18/2013 16:15 | 3/21/2013 11:47 | | |
| L57553-1 | 421161 | | CVTSS | IW WTR | 3/11/2013 10:15 | 3/18/2013 16:15 | 3/21/2013 11:49 | | |
| L57553-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 9:50 | 3/18/2013 16:15 | 3/21/2013 11:50 | | |
| L57553-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 9:20 | 3/18/2013 16:15 | 3/21/2013 11:51 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/13/2013 11:22 | 3/18/2013 16:15 | 3/21/2013 11:53 | | |
| L57558-1 | 421879-210 | | CVTSS | STORM WTR | 3/13/2013 11:33 | 3/18/2013 16:15 | 3/21/2013 11:59 | | |
| L57560-1 | 421161 | IW SURCHARGE | CVTSS | IW WTR | 3/11/2013 10:45 | 3/18/2013 16:15 | 3/21/2013 12:00 | | |
| L57560-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 10:45 | 3/18/2013 16:15 | 3/21/2013 12:01 | | |
| L57560-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 11:30 | 3/18/2013 16:15 | 3/21/2013 12:02 | | |
| L57561-1 | 421161 | | CVTSS | IW WTR | 3/11/2013 15:30 | 3/18/2013 16:15 | 3/21/2013 12:03 | | |
| L57561-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 10:00 | 3/18/2013 16:15 | 3/21/2013 12:04 | | |
| L57561-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 10:30 | 3/18/2013 16:15 | 3/21/2013 12:06 | | |
| L57562-1 | 421161 | | CVTSS | IW WTR | 3/11/2013 14:20 | 3/18/2013 16:15 | 3/21/2013 12:07 | | |
| L57562-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 12:45 | 3/18/2013 16:15 | 3/21/2013 12:08 | | |
| L57562-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 13:15 | 3/18/2013 16:15 | 3/21/2013 12:09 | | |
| L57563-1 | 421161 | | CVTSS | IW WTR | 3/11/2013 11:40 | 3/18/2013 16:15 | 3/21/2013 12:10 | | |
| L57563-2 | 421161 | | CVTSS | IW WTR | 3/12/2013 11:45 | 3/18/2013 16:15 | 3/21/2013 12:11 | | |
| L57563-3 | 421161 | | CVTSS | IW WTR | 3/13/2013 12:50 | 3/18/2013 16:15 | 3/21/2013 12:12 | | |
| WG125883-1 | MB | | CVTSS | BLANK WTR | | 3/18/2013 16:15 | 3/21/2013 11:15 | | MB1 130318 |
| WG125883-2 | LCS | | CVTSS | BLANK WTR | | 3/18/2013 16:15 | 3/21/2013 11:16 | | LEVEL1 |
| WG125883-3 | LD | | CVTSS | GRND WTR | | 3/18/2013 16:15 | 3/21/2013 11:20 | | L57507-1 |
| WG125883-4 | LD | | CVTSS | OTHR WTR | | 3/18/2013 16:15 | 3/21/2013 11:28 | | L57541-1 |
| WG125883-5 | LD | | CVTSS | IW WTR | | 3/18/2013 16:15 | 3/21/2013 11:42 | | L57552-1 |
| WG125883-6 | LD | | CVTSS | STORM WTR | | 3/18/2013 16:15 | 3/21/2013 11:54 | | L57557-1 |
| WG125883-7 | MB | | CVTSS | BLANK WTR | | 3/18/2013 16:15 | 3/21/2013 11:56 | | MB2 130318 |
| WG125883-8 | LCS | | CVTSS | BLANK WTR | | 3/18/2013 16:15 | 3/21/2013 11:57 | | LEVEL1 |
| WG125883-9 | LD | | CVTSS | IW WTR | | 3/18/2013 16:15 | 3/21/2013 12:05 | | L57561-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125896 Turbidity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57545-1 | 421195-150 | Beaver Lake | CVTURB | FRESH WTR | 3/12/2013 10:20 | 3/14/2013 18:42 | 3/14/2013 18:42 | WG125896-1,-2,-3,-4,-5 | |
| L57545-2 | 421195-150 | | CVTURB | FRESH WTR | 3/12/2013 10:28 | 3/14/2013 18:44 | 3/14/2013 18:44 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVTURB | STORM WTR | 3/13/2013 11:22 | 3/14/2013 18:49 | 3/14/2013 18:49 | | |
| L57558-1 | 421879-210 | | CVTURB | STORM WTR | 3/13/2013 11:33 | 3/14/2013 18:51 | 3/14/2013 18:51 | | |
| WG125896-1 | LCS | | CVTURB | BLANK WTR | | 3/14/2013 18:41 | 3/14/2013 18:41 | | LEVEL1 |
| WG125896-2 | LD | | CVTURB | FRESH WTR | | 3/14/2013 18:45 | 3/14/2013 18:45 | | L57545-2 |
| WG125896-3 | LD | | CVTURB | STORM WTR | | 3/14/2013 18:50 | 3/14/2013 18:50 | | L57557-1 |
| WG125896-4 | LCS | | CVTURB | BLANK WTR | | 3/14/2013 18:51 | 3/14/2013 18:51 | | LEVEL1 |
| WG125896-5 | LCS | | CVTURB | BLANK WTR | | 3/14/2013 18:52 | 3/14/2013 18:52 | | LEVEL2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125848 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57558-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 3/13/2013 12:52 | 3/13/2013 14:05 | 3/14/2013 14:20 | WG125848-1,-2,-3,-4,-5 | |
| WG125848-1 | LD | | MCFC-MF | STORM WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | L57558-2 |
| WG125848-2 | PC | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-3 | NC | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-4 | BF | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-5 | AF | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |

**WG125851 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57557-3 | 421879-210 | NPDES SW Monitoring | MCFC-MF | STORM WTR | 3/13/2013 14:20 | 3/13/2013 16:40 | 3/14/2013 14:45 | WG125848-2,-3,-4,-5 | |
| L57557-4 | 421879-210 | | MCFC-MF | STORM WTR | 3/13/2013 14:44 | 3/13/2013 16:40 | 3/14/2013 14:45 | | |
| WG125848-2 | PC | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-3 | NC | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-4 | BF | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |
| WG125848-5 | AF | | MCFC-MF | BLANK WTR | | 3/13/2013 14:05 | 3/14/2013 14:20 | | QC-PERFORMED:13-MAR-13 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125961 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHARD-ICPMS | FRESH WTR | 3/18/2013 9:13 | 3/21/2013 11:00 | 3/22/2013 14:35 | WG125961-1,-2,-3,-4 | |
| L57532-1 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/18/2013 9:13 | 3/21/2013 11:00 | 3/22/2013 9:21 | | |
| L57532-2 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/18/2013 8:44 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57532-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/18/2013 8:44 | 3/21/2013 11:00 | 3/22/2013 9:27 | | |
| L57541-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTICPMS | OTHR WTR | 3/13/2013 9:37 | 3/21/2013 11:00 | 3/22/2013 9:33 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/13/2013 11:22 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57557-1 | 421879-210 | | MTICPMS | STORM WTR | 3/13/2013 11:22 | 3/21/2013 11:00 | 3/22/2013 9:40 | | |
| L57558-1 | 421879-210 | | MTHARD-ICPMS | STORM WTR | 3/13/2013 11:33 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57558-1 | 421879-210 | | MTICPMS | STORM WTR | 3/13/2013 11:33 | 3/21/2013 11:00 | 3/22/2013 9:46 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHARD-ICPMS | FRESH WTR | 3/19/2013 5:50 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-1 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 5:50 | 3/21/2013 11:00 | 3/22/2013 9:52 | | |
| L57565-2 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 6:25 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-2 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 6:25 | 3/21/2013 11:00 | 3/22/2013 9:59 | | |
| L57565-3 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 6:45 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-3 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 6:45 | 3/21/2013 11:00 | 3/22/2013 10:05 | | |
| L57565-4 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 7:30 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-4 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 7:30 | 3/21/2013 11:00 | 3/22/2013 10:24 | | |
| L57565-5 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 8:02 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-5 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 8:02 | 3/21/2013 11:00 | 3/22/2013 10:31 | | |
| L57565-6 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 7:29 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-6 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 7:29 | 3/21/2013 11:00 | 3/22/2013 10:50 | | |
| L57565-7 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 8:50 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-7 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 8:50 | 3/21/2013 11:00 | 3/22/2013 10:56 | | |
| L57565-8 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/19/2013 8:25 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-8 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/19/2013 8:25 | 3/21/2013 11:00 | 3/22/2013 11:02 | | |
| L57565-9 | 421422-CHSW-M | | MTHARD-ICPMS | FRESH WTR | 3/18/2013 6:25 | 3/21/2013 11:00 | 3/22/2013 14:35 | | |
| L57565-9 | 421422-CHSW-M | | MTICPMS | FRESH WTR | 3/18/2013 6:25 | 3/21/2013 11:00 | 3/22/2013 11:09 | | |
| WG125961-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/21/2013 11:00 | 3/22/2013 14:35 | | METHOD BLANK |
| WG125961-1 | MB | | MTICPMS | BLANK WTR | | 3/21/2013 11:00 | 3/22/2013 9:08 | | METHOD BLANK |
| WG125961-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/21/2013 11:00 | 3/22/2013 14:35 | | WG125961-1 MS-20 SPIKE BLANK |
| WG125961-2 | SB | | MTICPMS | BLANK WTR | | 3/21/2013 11:00 | 3/22/2013 9:14 | | WG125961-1 MS-20 SPIKE BLANK |
| WG125961-3 | LD | | MTHARD-ICPMS | FRESH WTR | | 3/21/2013 11:00 | 3/22/2013 14:35 | | L57565-5 RPD-LIQ LAB DUPLICATE |
| WG125961-3 | LD | | MTICPMS | FRESH WTR | | 3/21/2013 11:00 | 3/22/2013 10:37 | | L57565-5 RPD-LIQ LAB DUPLICATE |
| WG125961-4 | MS | | MTHARD-ICPMS | FRESH WTR | | 3/21/2013 11:00 | 3/22/2013 14:35 | | L57565-5 MS-20 MATRIX SPIKE |
| WG125961-4 | MS | | MTICPMS | FRESH WTR | | 3/21/2013 11:00 | 3/22/2013 10:43 | | L57565-5 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG126003 Total Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | MTHG-MID | FRESH WTR | 3/18/2013 9:13 | 3/22/2013 12:00 | 3/25/2013 15:22 | WG126003-1,-2,-3,-4 | |
| L57532-2 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/18/2013 8:44 | 3/22/2013 12:00 | 3/25/2013 15:23 | | |
| L57534-1 | 421937 | Brightwater Operations | MTHG-MID | INFLUENT | 3/12/2013 8:13 | 3/22/2013 12:00 | 3/25/2013 15:25 | | |
| L57551-3 | 421163 | IW COMPLIANCE MONITORING | MTHG-MID | IW WTR | 3/13/2013 11:35 | 3/22/2013 12:00 | 3/25/2013 15:47 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID | STORM WTR | 3/13/2013 11:22 | 3/22/2013 12:00 | 3/25/2013 15:27 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTHG-MID | FRESH WTR | 3/19/2013 5:50 | 3/22/2013 12:00 | 3/25/2013 15:29 | | |
| L57565-2 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 6:25 | 3/22/2013 12:00 | 3/25/2013 15:31 | | |
| L57565-3 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 6:45 | 3/22/2013 12:00 | 3/25/2013 15:32 | | |
| L57565-4 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 7:30 | 3/22/2013 12:00 | 3/25/2013 15:16 | | |
| L57565-5 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 8:02 | 3/22/2013 12:00 | 3/25/2013 15:38 | | |
| L57565-6 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 7:29 | 3/22/2013 12:00 | 3/25/2013 15:40 | | |
| L57565-7 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 8:50 | 3/22/2013 12:00 | 3/25/2013 15:41 | | |
| L57565-8 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/19/2013 8:25 | 3/22/2013 12:00 | 3/25/2013 15:43 | | |
| L57565-9 | 421422-CHSW-M | | MTHG-MID | FRESH WTR | 3/18/2013 6:25 | 3/22/2013 12:00 | 3/25/2013 15:45 | | |
| WG126003-1 | MB | | MTHG-MID | BLANK WTR | | 3/22/2013 12:00 | 3/25/2013 15:09 | | METHOD BLANK |
| WG126003-2 | SB | | MTHG-MID | BLANK WTR | | 3/22/2013 12:00 | 3/25/2013 15:11 | | WG126003-1 HG-LMID |
| WG126003-3 | MS | | MTHG-MID | FRESH WTR | | 3/22/2013 12:00 | 3/25/2013 15:18 | | L57565-4 HG-LMID |
| WG126003-4 | MSD | | MTHG-MID | FRESH WTR | | 3/22/2013 12:00 | 3/25/2013 15:20 | | WG126003-3 L57565-4 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG126004 Dissolved Mercury**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/12/2013 10:35 | 3/22/2013 13:00 | 3/25/2013 14:42 | WG126004-1,-2,-3,-4 | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/14/2013 9:50 | 3/22/2013 13:00 | 3/25/2013 14:44 | | |
| L57508-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/11/2013 13:15 | 3/22/2013 13:00 | 3/25/2013 14:36 | | |
| L57509-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/15/2013 7:40 | 3/22/2013 13:00 | 3/25/2013 14:46 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/12/2013 9:21 | 3/22/2013 13:00 | 3/25/2013 14:47 | | |
| L57526-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/14/2013 8:25 | 3/22/2013 13:00 | 3/25/2013 14:49 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTHG-MID-DISS | GRND WTR | 3/13/2013 9:37 | 3/22/2013 13:00 | 3/25/2013 14:55 | | |
| L57526-4 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/13/2013 8:44 | 3/22/2013 13:00 | 3/25/2013 14:56 | | |
| L57527-1 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/13/2013 7:53 | 3/22/2013 13:00 | 3/25/2013 14:58 | | |
| L57527-3 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/13/2013 10:42 | 3/22/2013 13:00 | 3/25/2013 15:00 | | |
| L57529-1 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/14/2013 8:29 | 3/22/2013 13:00 | 3/25/2013 15:02 | | |
| L57529-3 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/14/2013 10:49 | 3/22/2013 13:00 | 3/25/2013 15:04 | | |
| L57529-4 | 421422-DUGW | | MTHG-MID-DISS | GRND WTR | 3/14/2013 9:57 | 3/22/2013 13:00 | 3/25/2013 15:05 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | MTHG-MID-DISS | STORM WTR | 3/13/2013 11:22 | 3/22/2013 13:00 | 3/25/2013 15:07 | | |
| WG126004-1 | MB | | MTHG-MID-DISS | BLANK WTR | | 3/22/2013 13:00 | 3/25/2013 14:33 | | METHOD BLANK |
| WG126004-2 | SB | | MTHG-MID-DISS | BLANK WTR | | 3/22/2013 13:00 | 3/25/2013 14:35 | | WG126004-1 HG-LMID |
| WG126004-3 | MS | | MTHG-MID-DISS | GRND WTR | | 3/22/2013 13:00 | 3/25/2013 14:38 | | L57508-1 HG-LMID |
| WG126004-4 | MSD | | MTHG-MID-DISS | GRND WTR | | 3/22/2013 13:00 | 3/25/2013 14:40 | | WG126004-3 L57508-1 HG-LMID-MSD |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125990 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | MTICPMS-DISS | FRESH WTR | 3/18/2013 9:13 | 3/22/2013 9:30 | 3/22/2013 14:49 | WG125990-1,-2,-3,-4 | |
| L57532-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/18/2013 8:44 | 3/22/2013 9:30 | 3/22/2013 15:08 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:30 | 3/22/2013 15:14 | | |
| L57558-1 | 421879-210 | | MTICPMS-DISS | STORM WTR | 3/13/2013 11:33 | 3/22/2013 9:30 | 3/22/2013 15:21 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | MTICPMS-DISS | FRESH WTR | 3/19/2013 5:50 | 3/22/2013 9:30 | 3/22/2013 15:27 | | |
| L57565-2 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 6:25 | 3/22/2013 9:30 | 3/22/2013 15:33 | | |
| L57565-3 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 6:45 | 3/22/2013 9:30 | 3/22/2013 15:52 | | |
| L57565-4 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 7:30 | 3/22/2013 9:30 | 3/22/2013 15:59 | | |
| L57565-5 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 8:02 | 3/22/2013 9:30 | 3/22/2013 16:05 | | |
| L57565-6 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 7:29 | 3/22/2013 9:30 | 3/22/2013 16:11 | | |
| L57565-7 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 8:50 | 3/22/2013 9:30 | 3/22/2013 16:18 | | |
| L57565-8 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/19/2013 8:25 | 3/22/2013 9:30 | 3/22/2013 16:24 | | |
| L57565-9 | 421422-CHSW-M | | MTICPMS-DISS | FRESH WTR | 3/18/2013 6:25 | 3/22/2013 9:30 | 3/22/2013 16:31 | | |
| WG125990-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/22/2013 9:30 | 3/22/2013 14:36 | | METHOD BLANK |
| WG125990-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/22/2013 9:30 | 3/22/2013 14:42 | | WG125990-1 MS-20 SPIKE BLANK |
| WG125990-3 | LD | | MTICPMS-DISS | FRESH WTR | | 3/22/2013 9:30 | 3/22/2013 14:55 | | L57532-1 RPD-LIQ LAB DUPLICATE |
| WG125990-4 | MS | | MTICPMS-DISS | FRESH WTR | | 3/22/2013 9:30 | 3/22/2013 15:02 | | L57532-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125869 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57473-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 9:00 | 3/18/2013 17:31 | WG125869-4,-3,-2,-1 | |
| L57557-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/13/2013 11:22 | 3/15/2013 9:00 | 3/18/2013 18:21 | | |
| L57558-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/13/2013 11:33 | 3/15/2013 9:00 | 3/18/2013 17:56 | | |
| WG125869-1 | MB | | ORHERB-NPDES | BLANK WTR | | 3/15/2013 9:00 | 3/18/2013 15:50 | | MB130315 |
| WG125869-2 | SB | | ORHERB-NPDES | BLANK WTR | | 3/15/2013 9:00 | 3/18/2013 16:15 | | WG125869-1 |
| WG125869-3 | MS | | ORHERB-NPDES | FRESH WTR | | 3/15/2013 9:00 | 3/18/2013 16:40 | | L57473-1 |
| WG125869-4 | MSD | | ORHERB-NPDES | FRESH WTR | | 3/15/2013 9:00 | 3/18/2013 17:05 | | WG125869-3<br>L57473-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125892 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57557-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 3/13/2013 11:22 | 3/18/2013 17:00 | 3/27/2013 10:07 | WG125892-4,-3,-2,-1 | |
| L57558-1 | 421879-210 | | OROPPEST-NPDES | STORM WTR | 3/13/2013 11:33 | 3/18/2013 17:00 | 3/27/2013 8:46 | | |
| WG125892-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/18/2013 17:00 | 3/27/2013 7:52 | | MB130318 |
| WG125892-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/18/2013 17:00 | 3/27/2013 8:19 | | WG125892-1 |
| WG125892-3 | MS | | OROPPEST-NPDES | STORM WTR | | 3/18/2013 17:00 | 3/27/2013 9:13 | | L57557-1 |
| WG125892-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/18/2013 17:00 | 3/27/2013 9:40 | | WG125892-3 L57557-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125893 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57557-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 3/13/2013 11:22 | 3/18/2013 17:00 | 3/22/2013 15:54 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57557-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/13/2013 11:22 | 3/18/2013 17:00 | 3/22/2013 15:54 | WG125893-4,-1,-2,-3 | |
| L57558-1 | 421879-210 | | ORPAHPHTH-SUR | STORM WTR | 3/13/2013 11:33 | 3/18/2013 17:00 | 3/22/2013 14:37 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57558-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/13/2013 11:33 | 3/18/2013 17:00 | 3/22/2013 14:37 | WG125893-4,-1,-2,-3 | |
| WG125893-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 12:19 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | MB130318 |
| WG125893-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 12:19 | WG125893-4,-1,-2,-3 | MB130318 |
| WG125893-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 12:57 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | WG125893-1 |
| WG125893-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 12:57 | WG125893-4,-1,-2,-3 | WG125893-1 |
| WG125893-3 | SBD | | ORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 14:02 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | WG125893-2 WG125893-1 |
| WG125893-3 | SBD | | TICORPAHPHTH-SUR | BLANK WTR | | 3/18/2013 17:00 | 3/22/2013 14:02 | WG125893-4,-1,-2,-3 | WG125893-2 WG125893-1 |
| WG125893-4 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/18/2013 17:00 | 3/22/2013 15:16 | WG125893-4,-4,-1,-1,-2,-2,-3,-3 | L57557-1 |
| WG125893-4 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/18/2013 17:00 | 3/22/2013 15:16 | WG125893-4,-1,-2,-3 | L57557-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125855 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 3/7/2013 12:15 | 3/14/2013 17:00 | 4/2/2013 17:20 | WG125855-1,-2,-3,-4 | |
| L57557-3 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 14:20 | 3/14/2013 17:00 | 4/2/2013 17:43 | | |
| L57557-4 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 14:44 | 3/14/2013 17:00 | 4/2/2013 18:06 | | |
| L57558-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/13/2013 12:52 | 3/14/2013 17:00 | 4/2/2013 18:30 | | |
| WG125855-1 | MB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 15:46 | | MB130314 |
| WG125855-2 | SB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 16:10 | | WG125855-1 SB-MO |
| WG125855-3 | SB | | ORWTPH-DX | BLANK WTR | | 3/14/2013 17:00 | 4/2/2013 16:33 | | WG125855-1 SB-DSL |
| WG125855-4 | LD | | ORWTPH-DX | STORM WTR | | 3/14/2013 17:00 | 4/2/2013 16:56 | | L57472-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57557, L57558

**WG125868 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57557-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 3/13/2013 14:20 | 3/14/2013 16:00 | 3/14/2013 16:00 | WG125868-1,-2,-3 | |
| L57557-4 | 421879-210 | | ORWTPH-G | STORM WTR | 3/13/2013 14:44 | 3/14/2013 16:29 | 3/14/2013 16:29 | | |
| L57558-2 | 421879-210 | | ORWTPH-G | STORM WTR | 3/13/2013 12:52 | 3/14/2013 16:58 | 3/14/2013 16:58 | | |
| WG125868-1 | MB | | ORWTPH-G | BLANK WTR | | 3/14/2013 15:01 | 3/14/2013 15:01 | | MB130314 |
| WG125868-2 | SB | | ORWTPH-G | BLANK WTR | | 3/14/2013 17:28 | 3/14/2013 17:28 | | WG125868-1 |
| WG125868-3 | LD | | ORWTPH-G | STORM WTR | | 3/14/2013 15:30 | 3/14/2013 15:30 | | L57557-3 |

**Workgroup: WG125876 BOD**

**MB:WG125876-1 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:WG125876-2 MB:WG125876-1 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 | 175 | 88 | | 80--120 |

**MB:WG125876-3 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:WG125876-4 MB:WG125876-3 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 | 183 | 92 | | 80--120 |

**Workgroup: WG125991 Anions**

**CS:WG125991-1 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 | 0.098 | 98 | | 70--130 |

**MB:WG125991-2 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 | |

**SB:WG125991-3 MB:WG125991-2 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 | 1.92 | 96 | | 80--120 |

**LCS:WG125991-4 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 |

**LD:WG125991-5 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 4.14 | 3.99 | 4 | | 0--20 |

**MS:WG125991-6 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 4.14 | 10 | 13.8 | 96 | | 75--125 |

**LD:WG125991-7 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 2.56 | 1 | | 0--20 |

**MS:WG125991-8 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125991-9 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 10 | 12 | | 0--20 |

**MS:WG125991-10 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 20 | 28.6 | 98 | | 75--125 |

**Workgroup: WG125964 Conductivity**

**LCS:WG125964-1 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 | 75.5 | 102 | | 90--110 |

**LCS:WG125964-2 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 | 710 | 99 | | 90--110 |

**LD:WG125964-3 L57558-1 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 | 62.2 | 62.4 | 0 | | 0--10 |

**LD:WG125964-4 L57529-4 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 126 | 127 | 1 | | 0--10 |

**LD:WG125964-5 L57541-1 Matrix: OTHR WTR Listtype:CVCOND Method:SM2510-B Project:423258-500-1 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 538 | 540 | 0 | | 0--10 |

**LCS:WG125964-6 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 | 76.1 | 103 | | 90--110 |

**LCS:WG125964-7 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 | 715 | 100 | | 90--110 |

**LD:WG125964-8 L57172-3 Matrix: FRESH WTR Listtype:CVCOND Method:SM2510-B Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 144 | 144 | 0 | | 0--10 |

**LCS:WG125964-9 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 | 73.9 | 76.7 | 104 | | 90--110 |

**LCS:WG125964-10 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 | 717.5 | 715 | 100 | | 90--110 |

**Workgroup: WG125885 Dissolved Nutrients - Nitrates**

**MB:WG125885-1 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:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125885-2 MB:WG125885-1 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 | 0.805 | 101 | | 80--120 |

**SB:WG125885-2 MB:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.398 | 100 | | 80--120 |

**LCS:WG125885-3 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 | 0.82 | 102 | | 85--115 |

**LCS:WG125885-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.407 | 102 | | 85--115 |

**LD:WG125885-4 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG125885-5 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.285 | 71 | * | 75--125 |

**LD:WG125885-6 L57558-1 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 | 0.582 | 0.581 | 0 | | 0--20 |

**MS:WG125885-7 L57558-1 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 | 0.582 | 0.8 | 1.37 | 99 | | 75--125 |

**LD:WG125885-8 L57473-1 Matrix: FRESH 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 | 1.02 | 1.02 | 0 | | 0--20 |

**MS:WG125885-9 L57473-1 Matrix: FRESH 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 | 1.02 | 0.8 | 1.79 | 97 | | 75--125 |

**LD:WG125885-10 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 19.2 | 0 | | 0--20 |

**MS:WG125885-11 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 0.8 | 35.2 | 100 | | 75--125 |

**Workgroup: WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

**MB:WG125950-1 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:WG125950-2 MB:WG125950-1 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:WG125950-3 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:WG125950-4 L57472-1 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 | 0.00979 | 0.00947 | 3 | | 0--20 |

**MS:WG125950-5 L57472-1 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 | 0.00979 | 0.04 | 0.0472 | 94 | | 75--125 |

**LD:WG125950-6 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 3.8 | 1 | | 0--20 |

**MS:WG125950-7 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 0.04 | 7.64 | 97 | | 75--125 |

**LD:WG125950-10 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.012 | | | 0--20 |

**MS:WG125950-11 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.04 | 0.201 | 94 | | 75--125 |

**MB:WG125950-12 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 | |

**MB:WG125950-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125950-14 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 | 0.0386 | 97 | | 85--115 |

**LD:WG125950-15 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00916 | 0.0075 | 20 | | 0--20 |

**MS:WG125950-16 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 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 | 0.00916 | 0.04 | 0.0438 | 87 | | 75--125 |

**MB:WG125950-17 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 | |

**LD:WG125950-18 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00505 | 0.00573 | 13 | | 0--20 |

**MS:WG125950-19 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00505 | 0.04 | 0.0424 | 93 | | 75--125 |

**MB:WG125950-20 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:WG125950-21 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 | 0.0387 | 97 | | 85--115 |

**LD:WG125950-22 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00838 | 0.00863 | 3 | | 0--20 |

**MS:WG125950-23 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 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 | 0.00838 | 0.04 | 0.0463 | 95 | | 75--125 |

**Workgroup: WG126201 TKN**

**MB:WG126201-1 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 | |

**LCS:WG126201-2 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 | 0.444 | 89 | | 80--120 |

**LCS:WG126201-3 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 | 5 | 5.24 | 105 | | 80--120 |

**SB:WG126201-4 MB:WG126201-1 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 | 5.03 | 101 | | 80--120 |

**LD:WG126201-5 L57519-2 Matrix: OTHR WTR Listtype:CVTKN Method:EPA 351.2 Project:423258-500-1 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 | 0.928 | 0.976 | 5 | | 0--20 |

**MS:WG126201-6 L57519-2 Matrix: OTHR WTR Listtype:CVTKN Method:EPA 351.2 Project:423258-500-1 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 | 0.928 | 5 | 6 | 102 | | 70--130 |

**LD:WG126201-7 L57557-1 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 | 1.65 | 1.57 | 5 | | 0--20 |

**MS:WG126201-8 L57557-1 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 | 1.65 | 5 | 6.67 | 100 | | 70--130 |

**LD:WG126201-9 L57532-2 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 | 0.322 | 0.317 | 2 | | 0--20 |

**MS:WG126201-10 L57532-2 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 | 0.322 | 5 | 5.4 | 102 | | 70--130 |

**Workgroup: WG126030 Total Phosphorus, Total Nitrogen**

**MB:WG126030-1 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:WG126030-1 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:WG126030-2 MB:WG126030-1 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 | 1 | 100 | | 80--120 |

**SB:WG126030-2 MB:WG126030-1 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 | 0.102 | 102 | | 80--120 |

**LCS:WG126030-3 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 | 0.939 | 94 | | 85--115 |

**LCS:WG126030-3 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 | 0.0941 | 94 | | 85--115 |

**LD:WG126030-4 L57470-5 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 1.08 | 1.08 | 0 | | 0--20 |

**LD:WG126030-4 L57470-5 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0919 | 0.0981 | 6 | | 0--20 |

**MS:WG126030-5 L57470-5 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:422019 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 | 1.08 | 1 | 2.07 | 99 | | 75--125 |

**MS:WG126030-5 L57470-5 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:422019 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 | 0.0919 | 0.1 | 0.195 | 103 | | 75--125 |

**MB:WG126030-6 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:WG126030-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG126030-7 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 | 0.921 | 92 | | 85--115 |

**LCS:WG126030-7 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 | 0.0941 | 94 | | 85--115 |

**LD:WG126030-8 L57565-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-CHSW-M Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0228 | 0.02 | 13 | | 0--20 |

**MS:WG126030-9 L57565-7 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0228 | 0.1 | 0.12 | 97 | | 75--125 |

**LD:WG126030-10 L57557-1 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 | 0.025 | 0.05 | mg/L | 0.363 | 0.376 | 3 | | 0--20 |

**MS:WG126030-11 L57557-1 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 | 0.025 | 0.05 | mg/L | 0.363 | 0.1 | 0.859 | 99 | | 75--125 |

**Workgroup: WG125883 TSS**

**MB:WG125883-1 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:WG125883-2 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 | 87 | 87 | | 80--120 |

**LD:WG125883-3 L57507-1 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 | <MDL | <MDL | | | 0--25 |

**LD:WG125883-4 L57541-1 Matrix: OTHR WTR Listtype:CVTSS Method:SM2540-D Project:423258-500-1 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 |

**LD:WG125883-5 L57552-1 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421161 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 10 | 20 | mg/L | 238 | 266 | 11 | | 0--25 |

**LD:WG125883-6 L57557-1 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 | 208 | 188 | 10 | | 0--25 |

**MB:WG125883-7 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125883-8 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 | 82 | 82 | | 80--120 |

**LD:WG125883-9 L57561-2 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421161 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 20 | 40 | mg/L | 144 | 120 | 18 | | 0--25 |

**Workgroup: WG125896 Turbidity**

**LCS:WG125896-1 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 | 9.98 | 100 | | 90--110 |

**LD:WG125896-2 L57545-2 Matrix: FRESH WTR Listtype:CVTURB Method:SM2130-B Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Turbidity | 0.2 | 0.5 | NTU | 0.835 | 0.911 | 9 | | 0--25 |

**LD:WG125896-3 L57557-1 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 | 0.4 | 1 | NTU | 278 | 284 | 2 | | 0--25 |

**LCS:WG125896-4 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 | 10 | 9.89 | 99 | | 90--110 |

**LCS:WG125896-5 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 | 98.3 | 98 | | 90--110 |

**Workgroup: WG125848 Fecal coliform**

**LD:WG125848-1 L57558-2 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 | 4 | 9 | 0.35 | 0.57 | N7 |

**PC:WG125848-2 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:WG125848-3 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:WG125848-4 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:WG125848-5 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: WG125851 Fecal coliform**

**PC:WG125848-2 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:WG125848-3 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:WG125848-4 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:WG125848-5 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: WG125961 Total Metals & Hardness**

**MB:WG125961-1 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:WG125961-1 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:WG125961-2 MB:WG125961-1 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 | 32.6 | 99 | | 85--115 |

**SB:WG125961-2 MB:WG125961-1 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 | 19.8 | 99 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4930 | 99 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5100 | 102 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 20.3 | 102 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5060 | 101 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4630 | 93 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4760 | 95 | | 85--115 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.7 | 98 | | 85--115 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.1 | 105 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.2 | 101 | | 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 | 20.2 | 101 | | 85--115 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.4 | 97 | | 85--115 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.9 | 104 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |

**LD:WG125961-3 L57565-5 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 | 39.8 | 39.2 | 1 | | 0--20 |

**LD:WG125961-3 L57565-5 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 | 2240 | 2280 | 2 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3470 | 3390 | 2 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 93.4 | 95.3 | 2 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 1430 | 1410 | 1 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 10200 | 10100 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.716 | 0.727 | 2 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.7 | 0.7 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 138 | 140 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 26.3 | 26.3 | 0 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.12 | 0.13 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 2.46 | 1 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 9.04 | 9.21 | 2 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 17.9 | 18.2 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.42 | 0.41 | | | 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 | 3.73 | 3.76 | 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:WG125961-4 L57565-5 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 | 39.8 | 33.1 | 71.7 | 96 | | 75--125 |

**MS:WG125961-4 L57565-5 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 | 19.1 | 96 | | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 2240 | 5000 | 7300 | 101 | | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 3470 | 5000 | 8340 | 97 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 93.4 | 20 | 109 | | 4xRule | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 1430 | 5000 | 6510 | 102 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 10200 | 5000 | 15000 | 95 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.716 | 20 | 21.1 | 102 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.7 | 20 | 21.3 | 103 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 138 | 5000 | 4980 | 97 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 26.3 | 20 | 47.2 | 105 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.12 | 20 | 19.7 | 98 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.49 | 20 | 23 | 102 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 9.04 | 20 | 30.4 | 107 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 17.9 | 20 | 37.5 | 98 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.42 | 20 | 20.3 | 99 | | 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 | 20.5 | 103 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.3 | 101 | | 75--125 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 3.73 | 20 | 23.7 | 100 | | 75--125 |
| Thallium, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.4 | 107 | | 75--125 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 75--125 |

**Workgroup: WG126003 Total Mercury**

**MB:WG126003-1 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:WG126003-2 MB:WG126003-1 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 | 0.934 | 93 | | 85--115 |

**MSD:WG126003-4 MS:WG126003-3 L57565-4 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 | 0.91 | 91 | | 75--125 | 1 | 0.925 | 93 | | 2 | | 0--20 |

**Workgroup: WG126004 Dissolved Mercury**

**MB:WG126004-1 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:WG126004-2 MB:WG126004-1 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 | 0.957 | 96 | | 85--115 |

**MSD:WG126004-4 MS:WG126004-3 L57508-1 Matrix: GRND WTR Listtype:MTHG-MID-DISS Method:EPA 245.1*SW846 7470A Project:421422-DUGW 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 | 0.972 | 97 | | 75--125 | 1 | 0.92 | 92 | | 6 | | 0--20 |

**Workgroup: WG125990 Dissolved Metals**

**MB:WG125990-1 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:WG125990-2 MB:WG125990-1 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 | 20.2 | 101 | | 85--115 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4960 | 99 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4900 | 98 | | 85--115 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 22.2 | 111 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5080 | 102 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4590 | 92 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4760 | 95 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.2 | 101 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.1 | 106 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 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 | 21.1 | 105 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 22.5 | 113 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.1 | 101 | | 85--115 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 21.2 | 106 | | 85--115 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.8 | 99 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.3 | 107 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 101 | | 85--115 |

**LD:WG125990-3 L57532-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 4010 | 4040 | 1 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 3310 | 3210 | 3 | | 0--20 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 21.9 | 22.1 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 990 | 991 | 0 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9440 | 9600 | 2 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.434 | 0.457 | 5 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.24 | 0.24 | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 40 | 41 | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 3.42 | 3.44 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.828 | 0.83 | 0 | | 0--20 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 3.09 | 3.08 | 0 | | 0--20 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 5.08 | 5.04 | 1 | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.25 | 0.24 | | | 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 | 0.046 | 0.043 | | | 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 | 3.72 | 3.73 | 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:WG125990-4 L57532-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 4010 | 5000 | 9050 | 101 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 3310 | 5000 | 8050 | 95 | | 75--125 |
| Aluminum, Dissolved, ICP-MS | 2 | 10 | ug/L | 21.9 | 20 | 44.1 | 111 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 990 | 5000 | 6040 | 101 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 9440 | 5000 | 14400 | 99 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.434 | 20 | 19.9 | 97 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | 0.24 | 20 | 19.8 | 98 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | 40 | 5000 | 4850 | 96 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 3.42 | 20 | 23.2 | 99 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20 | 100 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.828 | 20 | 20.5 | 98 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | 3.09 | 20 | 23.4 | 102 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 5.08 | 20 | 24.5 | 97 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.25 | 20 | 19.8 | 98 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.2 | 101 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | 0.046 | 20 | 21.7 | 108 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 75--125 |
| Tin, Dissolved, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 20.7 | 103 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 19.4 | 97 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 3.72 | 20 | 23.2 | 97 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.1 | 105 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.8 | 99 | | 75--125 |

**Workgroup: WG125869 Herbicides**

**MB:WG125869-1 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 | |

**SB:WG125869-2 MB:WG125869-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.59 | 92 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.72 | 94 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.19 | 84 | | 59--151 |

**MSD:WG125869-4 MS:WG125869-3 L57473-1 Matrix: FRESH 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 | 4.64 | 94 | | 20--162 | 4.95 | 4.5 | 91 | | 3 | | 0--40 |
| 2,4-D | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.8 | 97 | | 10--196 | 4.95 | 4.64 | 94 | | 3 | | 0--40 |
| Triclopyr | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.46 | 90 | | 30--150 | 4.95 | 4.8 | 97 | | 8 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57473-1 | 87 | 101 |
| L57557-1 | 59 | 71 |
| L57558-1 | 91 | 108 |
| WG125869-1 | 82 | 91 |
| WG125869-2 | 89 | 98 |
| WG125869-3 | 89 | 111 |
| WG125869-4 | 88 | 122 |

**Workgroup: WG125892 Organophosphorus Pesticides**

**MB:WG125892-1 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:WG125892-2 MB:WG125892-1 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 | 0.25 | 0.208 | 83 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.244 | 97 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.226 | 91 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.218 | 87 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.322 | 129 | | 40--160 |

**MSD:WG125892-4 MS:WG125892-3 L57557-1 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 | 0.236 | 0.193 | 82 | | 67--148 | 0.236 | 0.18 | 76 | | 7 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.26 | 110 | | 52--190 | 0.236 | 0.255 | 108 | | 2 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.226 | 96 | | 57--141 | 0.236 | 0.201 | 85 | | 12 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.135 | 57 | | 40--160 | 0.236 | 0.139 | 59 | | 3 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.415 | 176 | * | 40--160 | 0.236 | 0.47 | 199 | * | 12 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57557-1 | 69 |
| L57558-1 | 84 |
| WG125892-1 | 79 |
| WG125892-2 | 97 |
| WG125892-3 | 73 |
| WG125892-4 | 66 |

**Workgroup: WG125893 Semi Volatile Organics**

**MB:WG125893-1 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 | <MDL | |
| 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 | 0.217 | 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 | |

**SBD:WG125893-3 SB:WG125893-2 MB:WG125893-1 Matrix: BLANK WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.62 | 65 | | 32--93 | 2.5 | 1.79 | 72 | | 10 | | 0--40 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.35 | 54 | | 25--104 | 2.5 | 1.32 | 53 | | 2 | | 0--40 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.02 | 81 | | 31--119 | 2.5 | 2.18 | 87 | | 8 | | 0--40 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.71 | 68 | | 49--107 | 2.5 | 1.85 | 74 | | 8 | | 0--40 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.62 | 65 | | 43--103 | 2.5 | 1.79 | 72 | | 10 | | 0--40 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.13 | 85 | | 26--141 | 2.5 | 2.24 | 90 | | 5 | | 0--40 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.8 | 72 | | 43--127 | 2.5 | 1.94 | 78 | | 7 | | 0--40 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.59 | 64 | | 10--137 | 2.5 | 1.74 | 69 | | 9 | | 0--40 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.81 | 72 | | 57--114 | 2.5 | 1.88 | 75 | | 4 | | 0--40 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.78 | 71 | | 59--122 | 2.5 | 1.84 | 74 | | 3 | | 0--40 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.28 | 91 | | 52--145 | 2.5 | 2.27 | 91 | | 1 | | 0--40 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.95 | 78 | | 57--123 | 2.5 | 1.97 | 79 | | 1 | | 0--40 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.26 | 91 | | 51--139 | 2.5 | 2.3 | 92 | | 2 | | 0--40 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.74 | 110 | | 49--145 | 2.5 | 2.72 | 109 | | 1 | | 0--40 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.11 | 84 | | 67--130 | 2.5 | 2.03 | 81 | | 4 | | 0--40 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 58--114 | 2.5 | 2.03 | 81 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.217 | 2.5 | 3 | 111 | | 48--128 | 2.5 | 2.36 | 86 | | 24 | | 0--40 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.37 | 95 | | 51--126 | 2.5 | 2.27 | 91 | | 4 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 6.83 | 91 | | 49--139 | 7.5 | 6.56 | 88 | | 4 | | 0--40 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.15 | 86 | | 55--132 | 2.5 | 2.07 | 83 | | 4 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 1.91 | 76 | | 53--122 | 2.5 | 1.86 | 74 | | 3 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 1.93 | 77 | | 47--134 | 2.5 | 1.83 | 73 | | 5 | | 0--40 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.43 | 97 | | 32--130 | 2.5 | 2.28 | 91 | | 7 | | 0--40 |

**MS:WG125893-4 L57557-1 Matrix: STORM WTR Listtype:ORPAHPHTH-SUR Method:SW846 3520C*SW846 8270D Project:421879-210 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.82 | 77 | | 37--95 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.61 | 68 | | 40--121 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 1.96 | 83 | | 34--134 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.92 | 81 | | 46--122 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.76 | 75 | | 47--105 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.339 | 2.36 | 2.18 | 78 | | 33--140 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.87 | 79 | | 44--137 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.65 | 112 | | 44--145 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0504 | 2.36 | 2.07 | 86 | | 62--116 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.93 | 82 | | 32--140 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.0617 | 2.36 | 2.14 | 88 | | 44--134 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.104 | 2.36 | 1.92 | 77 | | 49--123 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.215 | 2.36 | 2.72 | 106 | | 37--147 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.082 | 2.36 | 2.98 | 123 | | 39--151 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.12 | 90 | | 50--120 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.112 | 2.36 | 2.18 | 88 | | 42--115 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 2.02 | 2.36 | 4.49 | 105 | | 11--188 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.529 | 2.36 | 3.41 | 122 | | 48--150 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | 0.11 | 7.08 | 7.51 | 105 | | 42--123 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.0417 | 2.36 | 2.26 | 94 | | 45--121 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.34 | 57 | | 39--122 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.32 | 56 | | 31--121 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | 0.056 | 2.36 | 1.49 | 61 | | 22--125 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | l5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57557-1 | 98 | 50 | 59 | 97 | 52 | 108 | 65 |
| L57558-1 | 76 | 42 | 40 | 104 | 43 | 71 | 54 |
| WG125893-1 | 74 | 63 | 72 | 96 | 69 | 109 | 89 |
| WG125893-2 | 70 | 49 | 66 | 87 | 62 | 146 * | 80 |
| WG125893-3 | 79 | 50 | 71 | 88 | 68 | 147 * | 87 |
| WG125893-4 | 95 | 62 | 67 | 101 | 58 | 88 | 71 |

**Workgroup: WG125855 WTPH-Dx**

**MB:WG125855-1 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:WG125855-2 MB:WG125855-1 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 | 0.973 | 97 | | 50--150 |

**SB:WG125855-3 MB:WG125855-1 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 | 0.944 | 94 | | 50--150 |

**LD:WG125855-4 L57472-3 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 | 0.486 | 0.58 | 18 | | 0--40 |

| Surrogate: (Lab Limits) | 2-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57472-3 | 82 | 104 |
| L57557-3 | 77 | 104 |
| L57557-4 | 83 | 104 |
| L57558-2 | 93 | 105 |
| WG125855-1 | 72 | 105 |
| WG125855-2 | 84 | 104 |
| WG125855-3 | 101 | 107 |
| WG125855-4 | 85 | 109 |

**Workgroup: WG125868 WTPH-G**

**MB:WG125868-1 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:WG125868-2 MB:WG125868-1 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 | 490 | 98 | | 50--150 |

**LD:WG125868-3 L57557-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | I8-Toluene 50--150 |
|---|---|---|
| L57557-3 | 104 | 101 |
| L57557-4 | 104 | 101 |
| L57558-2 | 104 | 101 |
| WG125868-1 | 105 | 101 |
| WG125868-2 | 100 | 100 |
| WG125868-3 | 104 | 101 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *3/26/2013*

**WG #(s):** *WG126004*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57557-1*

**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:** Steve Talbot | _____ | _____ |
| **Supervisor:** *Diane McElhany* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** Fritz Grothkopp | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 were filtered past the 15 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:
☐ Other

**Corrective Action Description:** *The samples were filtered for ORTHOP as a 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 associated matrix QC were qualified with an "H".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *3-27-2013*

**WG #(s):** *125892*

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

**Project #(s):**

**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: *OPPest-NPDES*

☐ Subcontracted:

## II. Instrument

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GC/ICP/MS: | ☐ P | | | | | | | |
| GC/MS: | ☐ A | ☐ E | ☐ F | ☒ G | ☐ H | ☐ I | | |
| 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) Prometon exceeded the upper recovery 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) An "*" was applied to the QC report.*

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

*3) Although the recovery in the MS and MSD is high, the SB is within established limits and all associated samples are "ND". Therefore, the data may be used without bias.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Felix Zboralski | | |
| **Reviewer:** Michael Muramoto | | |
| **Supervisor:** Diane McElhany | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *3/13/13*

**WG #(s):** *WG125990*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57557-1, L57558-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *4/8/2013*

**WG #(s):** *WG126201*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57557-1, L57558-1, WG126201-7,-8*

**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 L57557-1 and L57558-1 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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **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:** *22-MAR-13*

**WG #(s):** *WG125893*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125646-1 MB had a reportable level Bis(2EthylHexyl)Phthalate.*

*8. 2 of 42 surrogates exceeded 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 10X the blank level contamination were flagged "B" for Bis-2(EH)phthalate.*

*8. Surrogates which exceeded QC Limits were 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.*

*8. The asterisked compounds were reported without qualification and data should be used without 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

May 7, 2013

TO: Eric Ferguson
WLRD, Scientific and Technical Support

FROM: Fritz Grothkopp
WLRD, Environmental Laboratory

SUBJECT: Attached Report for Project 421879-210, NPDES SW Monitoring
Rural site, Baseflow, Sample L57473-1, -2, -3, collected March 8-9, 2013

Attached is the comprehensive report for the baseflow water sample delivered to the laboratory on March 6 and March 9, 2013. The sample was analyzed in the Conventionals, Trace Metals, Microbiology and Trace Organics units of the laboratory. QA/QC data summaries are included for your information. Comprehensive report #15221 was prepared and sent via e-mail on April 10, 2013.

**Sample Collection:**
This sample collection was a baseline 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 with the following exception.



1202M

The dissolved metals results were reported with an "H" qualifier to indicate that they were filtered more than 15 minutes after the completion of the composite sampling.

Barium was detected in the method blank for total metals analysis. The result in the QC report was flagged with an "B" qualifier. No other corrective action was taken.

Beryllium was detected in the method blank for dissolved metals analysis. The result in the QC report was flagged with an "B" qualifier. No other corrective action was taken.

**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 recovery of Prometon in the matrix spike and matrix spike duplicate for Organophosphorus pesticide analysis was outside the upper control range at 206 and 176%. These results were flagged with an "*" in the QC report. The spike blank recovery was within control limits. Prometon was not detected in the sample therefore qualifiers were not applied to the data.

Bis (2-ethylhexyl) phthalate and diethyl phthalate were detected in the method blank for semivolatile analysis. All results in the data report and the QC report have been flagged with an appropriate "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 | | | | Project: | 421879-210 | | | | Project: | 421879-210 | | | |
| | Locator: | RSW1UP | | | | Locator: | RSW1UP | | | | Locator: | FFBLANK | | | |
| | Descrip: | 148TH AVE SE UPSTR | | | | Descrip: | 148TH AVE SE UPSTR | | | | Descrip: | FIELD FILTER BLANK | | | |
| | Sample: | L57473-1 | | | | Sample: | L57473-2 | | | | Sample: | L57473-3 | | | |
| | Matrix: | LK FRESH WTR | | | | Matrix: | LK FRESH WTR | | | | Matrix: | LN BLANK WTR | | | |
| | ColDate: | 3/8/13 10:43 | | | | ColDate: | 3/6/13 8:50 | | | | ColDate: | 3/9/13 11:40 | | | |
| | TimeSpan: | 23.43 | | | | 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 | 0.304 | SH | 0.1 | 0.2 | mg/L | | | | | | | | | | |
| **CV SM 5540C** | | | | | | | | | | | | | | | |
| Methylene Blue Act. Substance | 0.033 | | 0.025 | 0.025 | mg/L | | | | | | | | | | |
| **CV SM2510-B** | | | | | | | | | | | | | | | |
| Conductivity | 66.3 | | 1 | 5 | umhos/cm | | | | | | | | | | |
| **CV SM2540-D** | | | | | | | | | | | | | | | |
| Total Suspended Solids | 2.5 | | 0.5 | 1 | mg/L | | | | | | | | | | |
| **CV SM4110B CL** | | | | | | | | | | | | | | | |
| Chloride | 2.53 | | 0.25 | 0.5 | mg/L | | | | | | | | | | |
| **CV SM4500-NO3-F** | | | | | | | | | | | | | | | |
| Nitrite + Nitrate Nitrogen | 1.02 | | 0.01 | 0.04 | mg/L | | | | | | | <MDL | 0.01 | 0.04 | mg/L |
| **CV SM4500-P-B,F** | | | | | | | | | | | | | | | |
| Total Phosphorus | 0.0225 | | 0.005 | 0.01 | mg/L | | | | | | | | | | |
| **CV SM4500-P-F** | | | | | | | | | | | | | | | |
| Orthophosphate Phosphorus | 0.00766 | H | 0.002 | 0.005 | mg/L | | | | | | | <MDL | 0.002 | 0.005 | mg/L |
| **CV SM5210-B** | | | | | | | | | | | | | | | |
| Biochemical Oxygen Demand | | <MDL | 2 | 2 | mg/L | | | | | | | | | | |
| **MC SM 9222D 20TH** | | | | | | | | | | | | | | | |
| Fecal Coliform | | | | | | 2 | | | | 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 | 4720 | | 50 | 50 | ug/L | | | | | | | | | | |
| Copper, Dissolved, ICP-MS | 1.3 | <RDL,H | 0.4 | 2 | ug/L | | | | | | | | | | |
| Copper, Total, ICP-MS | 1.1 | <RDL | 0.4 | 2 | ug/L | | | | | | | | | | |
| Lead, Dissolved, ICP-MS | | <MDL,H | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Lead, Total, ICP-MS | 0.24 | <RDL | 0.1 | 0.5 | ug/L | | | | | | | | | | |
| Magnesium, Total, ICP-MS | 1500 | | 50 | 50 | ug/L | | | | | | | | | | |
| Zinc, Dissolved, ICP-MS | 7.14 | H | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| Zinc, Total, ICP-MS | 6.9 | | 0.5 | 2.5 | ug/L | | | | | | | | | | |
| **MT EPA 200.8/SW846 6020A*SM2340B** | | | | | | | | | | | | | | | |
| Hardness, Calc | 18 | | 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 | 0.017 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | | | | | | |
| Benzo(b,j,k)fluoranthene | | <MDL | 0.094 | 0.189 | ug/L | | | | | | | | | | |
| Benzo(g,h,i)perylene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | |

# King County Environmental Lab Analytical Report

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Project: | 421879-210 | | | | | Project: | 421879-210 | | | | | Project: | 421879-210 | | | | | | | |
| | Locator: | RSW1UP | | | | | Locator: | RSW1UP | | | | | Locator: | FFBLANK | | | | | | | |
| | Descrip: | 148TH AVE SE UPSTR | | | | | Descrip: | 148TH AVE SE UPSTR | | | | | Descrip: | FIELD FILTER BLANK | | | | | | | |
| | Sample: | L57473-1 | | | | | Sample: | L57473-2 | | | | | Sample: | L57473-3 | | | | | | | |
| | Matrix: | LK FRESH WTR | | | | | Matrix: | LK FRESH WTR | | | | | Matrix: | LN BLANK WTR | | | | | | | |
| | ColDate: | 3/8/13 10:43 | | | | | ColDate: | 3/6/13 8:50 | | | | | ColDate: | 3/9/13 11:40 | | | | | | | |
| | TimeSpan: | 23.43 | | | | | 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** | | | | |
| Benzyl Butyl Phthalate | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 0.294 | B | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Chrysene | 0.0226 | | 0.0094 | 0.0189 | ug/L | | | | | | | | | | | | | | | | |
| Dibenzo(a,h)anthracene | | <MDL | 0.047 | 0.0943 | ug/L | | | | | | | | | | | | | | | | |
| Diethyl Phthalate | 0.422 | | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Dimethyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Di-N-Butyl Phthalate | 0.033 | <RDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Di-N-Octyl Phthalate | | <MDL | 0.024 | 0.0472 | ug/L | | | | | | | | | | | | | | | | |
| Fluoranthene | 0.0364 | | 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 | 0.015 | <RDL | 0.0094 | 0.0189 | ug/L | | | | | | | | | | | | | | | | |
| Pentachlorophenol | | <MDL | 0.12 | 0.236 | ug/L | | | | | | | | | | | | | | | | |
| Phenanthrene | | <MDL | 0.0094 | 0.0189 | ug/L | | | | | | | | | | | | | | | | |
| Pyrene | 0.038 | | 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 | 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 | Conductivity | Total Suspended Solids | Chloride | Nitrite + Nitrate Nitrogen | Total Phosphorus | Orthophosphate Phosphorus | Calcium, Total, ICP-MS | Copper, Dissolved, ICP-MS | Copper, Total, ICP-MS | Lead, Total, ICP-MS | Magnesium, Total, ICP-MS | Zinc, Dissolved, ICP-MS | Zinc, Total, ICP-MS | Hardness, Calc | Benzo(a)pyrene | Bis(2-Ethylhexyl)Phthalate | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mg/L | mg/L | umhos/cm | mg/L | mg/L | mg/L | mg/L | mg/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | mg CaCO3/L | ug/L | ug/L | ug/L |
| RSW1UP | 421879-210 | L57473-1 | 0.304 | 0.033 | 66.3 | 2.5 | 2.53 | 1.02 | 0.0225 | 0.00766 | 4720 | 1.3 | 1.1 | 0.24 | 1500 | 7.14 | 6.9 | 18 | 0.017 | 0.294 | 0.0226 |
| RSW1UP | 421879-210 | L57473-2 | | | | | | | | | | | | | | | | | | | |
| * 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 | Di-N-Butyl Phthalate | Diethyl Phthalate | Fluoranthene | Naphthalene | Pyrene | Fecal Coliform |
|---|---|---|---|---|---|---|---|---|
| | | | ug/L | ug/L | ug/L | ug/L | ug/L | CFU/100ml |
| RSW1UP | 421879-210 | L57473-1 | 0.033 | 0.422 | 0.0364 | 0.015 | 0.038 | |
| RSW1UP | 421879-210 | L57473-2 | | | | | | 2 |
| * Not converted to dry weight basis | | | | | | | | |
| If a parameter/analyze appears twice in the column header, | | | | | | | | |

Login: P57473 NPDES SW Permit, Baseflow RSW1UP Personnel: Crawford

Project: 421879-210

*CHAIN OF CUSTODY*

| | | |
|---|---|---|
| *Relinquished by* | *Date* 3-6-13 @ 10:40 | *Time* |
| *Received by* | *Date* 3-6-13 | *Time* 1040 |
| *Sample Numbers* 57473-2 | | *[All]* |

| Sample Number | P57473-1 | P57473-2 | P57473-3 |
|---|---|---|---|
| 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 | composite | grab | field filter blank |
| Start Date/Time | 3-8-13 10:43 | 3-6-13 @ 0850 | 3-9-13 11:40 |
| End Date/Time | 3-9-13 10:09 | | |
| Time Span | | | |
| Sample Depth | @ Lab 1.2°C | | |
| **Dept, Matrix, Prod** | 3 LK BOD<br>3 LK CL<br>3 LK COND<br>3 LK MBAS<br>3 LK NO23<br>3 LK ORTHOP<br>3 LK TKN<br>3 LK TOTP<br>3 LK TSS<br>6 LK CA-ICPMS<br>6 LK CD-ICPMS<br>6 LK CD-ICPMS, DISS<br>6 LK CU-ICPMS<br>6 LK CU-ICPMS, DISS<br>6 LK ICPMS-HARDNESS<br>6 LK MG-ICPMS<br>6 LK PB-ICPMS<br>6 LK PB-ICPMS, DISS<br>6 LK ZN-ICPMS<br>6 LK ZN-ICPMS, DISS<br>7 LK HERB-NPDES<br>7 LK OPPEST-NPDES<br>7 LK PAHPHTH-SUR<br>3LK TURB | 5 LK FC-MF<br>7 LK WTPH-DX<br>7 LK WTPH-G | 3 LN NO23<br>3 LN ORTHOP |

CHAIN OF CUSTODY

RELINQUISHED BY: 3-9-13 17:55

RECEIVED BY: 3-11-13 0900

SAMPLE #: 57473-1 (All)

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

***Professional Analytical Services***

Mar 12 2013
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 |
|---|---|---|---|
| P57473-1 | Water | 13-A002833 | CONV |

Your sample was received on Saturday, March 9, 2013. 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

**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 #: 421879-210
All results reported on an as received basis.

Date Received: 03/09/13
Date Reported: 3/12/13

---

**AMTEST Identification Number** **13-A002833**
**Client Identification** **P57473-1**
**Sampling Date** **03/09/13, 10:09**

## Conventionals

| PARAMETER | RESULT | UNITS | Q | D.L. | METHOD | ANALYST | DATE |
|---|---|---|---|---|---|---|---|
| Surfactants | 0.033 | mg/l | | 0.025 | SM 5540C | SS | 03/09/13 |

Kathy Fugiel
President

AMTEST
LABORATORIES

**QC Summary for sample number: 13-A002833**

## MATRIX SPIKES

| SAMPLE # | ANALYTE | UNITS | SAMPLE VALUE | SMPL+ SPK | SPK AMT | RECOVERY |
|---|---|---|---|---|---|---|
| 13-A002833 | Surfactants | mg/l | 0.033 | 0.295 | 0.250 | 104.80 % |

## STANDARD REFERENCE MATERIALS

| ANALYTE | UNITS | TRUE VALUE | MEASURED VALUE | RECOVERY |
|---|---|---|---|---|
| Surfactants | mg/l | 0.125 | 0.130 | 104. % |

## 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 1380828

Project Name: _____  Date Received: 3/ 9/13  Received By: Jean Olson

Samples received at AmTest by: Client

Number of Coolers/Boxes Received: 1

Temperature at time of receipt: 3.3 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):

_____

_____

_____

_____

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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.

# CHAIN OF CUSTODY RECORD

Project Number: 421879-210
Purchase Order Number: n/a
Subcontract Laboratory: Am Test
LPM/TC: Fritz Grothkopp

Shipment Number: EL-13-15
Shipment Method: FG
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***

| | | | | | Requested Parameters | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Collect Date | Matrix | QC Required | MBAS | | | | | | | | | | | | No. of Containers | Comments |
| 3.3c P57473-1 | 3/9/2013 | LK-Fresh | Level 2 | X | | | | | | | | | | | | 1 | sample time: 3-9-13 10:09 |
| 2833 | | | | | | | | | | | | | | | | | |
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Additional Comments/Instructions: Test has 48 hour hold time.

Total Number of Containers: 1

Requested TAT: 14 Days
Data Package Due: 3/30/2013

*Please return signed original CoC with data package.*

| RELINQUISHED BY | | Date | RECEIVED BY | | Date |
|---|---|---|---|---|---|
| Signature | Frederick W. Grothkopp | 3-9-13 | Signature | | 3/9/13 |
| Printed Name | FREDERICK W. GROTHKOPP | Time 1252 | Printed Name | Suzanne Scott | Time 1252 |
| Organization | King County DNR, Environmental Laboratory | | Organization | Amtest | |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125797 BOD**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57473-1 | 421879-210 | NPDES SW Monitoring | CVBOD | FRESH WTR | 3/8/2013 10:43 | 3/11/2013 14:35 | 3/11/2013 14:35 | WG125797-1,-2 | |
| WG125797-1 | MB | | CVBOD | BLANK WTR | | 3/11/2013 14:25 | 3/11/2013 14:25 | | MB1 3/11/13 |
| WG125797-2 | SB | | CVBOD | BLANK WTR | | 3/11/2013 14:33 | 3/11/2013 14:33 | | WG125797-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125991 Anions**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVCL | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:38 | 3/22/2013 8:38 | WG125991-2,-1,-3,- | |
| L57435-1 | 421879-210 | | CVCL | STORM WTR | 3/2/2013 17:42 | 3/22/2013 10:09 | 3/22/2013 10:09 | 4,-5,-6,-7,-8,-9,-10 | |
| L57472-1 | 421879-210 | | CVCL | STORM WTR | 3/6/2013 14:52 | 3/22/2013 6:06 | 3/22/2013 6:06 | | |
| L57473-1 | 421879-210 | | CVCL | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 3:03 | 3/22/2013 3:03 | | |
| L57538-1 | 421879-210 | | CVCL | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 1:32 | 3/22/2013 1:32 | | |
| L57557-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:22 | 3/22/2013 9:08 | 3/22/2013 9:08 | | |
| L57558-1 | 421879-210 | | CVCL | STORM WTR | 3/13/2013 11:33 | 3/22/2013 2:02 | 3/22/2013 2:02 | | |
| L57595-1 | 421937 | Brightwater Operations | CVCL | GRND WTR | 3/19/2013 0:00 | 3/22/2013 0:01 | 3/22/2013 0:01 | | |
| L57595-2 | 421937 | | CVCL | BLANK WTR | 3/19/2013 0:00 | 3/21/2013 23:30 | 3/21/2013 23:30 | | |
| WG125991-1 | CS | | CVCL | BLANK WTR | | 3/21/2013 21:28 | 3/21/2013 21:28 | | RDL_LEVEL |
| WG125991-2 | MB | | CVCL | BLANK WTR | | 3/21/2013 21:59 | 3/21/2013 21:59 | | MB2 3/21/13 |
| WG125991-3 | SB | | CVCL | BLANK WTR | | 3/21/2013 22:29 | 3/21/2013 22:29 | | WG125991-2 |
| WG125991-4 | LCS | | CVCL | BLANK WTR | | 3/21/2013 23:00 | 3/21/2013 23:00 | | LEVEL1 |
| WG125991-5 | LD | | CVCL | GRND WTR | | 3/22/2013 0:31 | 3/22/2013 0:31 | | L57595-1 |
| WG125991-6 | MS | | CVCL | GRND WTR | | 3/22/2013 1:01 | 3/22/2013 1:01 | | L57595-1 |
| WG125991-7 | LD | | CVCL | FRESH WTR | | 3/22/2013 3:34 | 3/22/2013 3:34 | | L57473-1 |
| WG125991-8 | MS | | CVCL | FRESH WTR | | 3/22/2013 4:04 | 3/22/2013 4:04 | | L57473-1 |
| WG125991-9 | LD | | CVCL | STORM WTR | | 3/22/2013 6:36 | 3/22/2013 6:36 | | L57472-1 |
| WG125991-10 | MS | | CVCL | STORM WTR | | 3/22/2013 7:07 | 3/22/2013 7:07 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125890 Conductivity**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVCOND | STORM WTR | 3/6/2013 14:52 | 3/12/2013 16:44 | 3/12/2013 16:44 | WG125890-1,-2,-3,-4,-5,-6,-7,-8,-9 | |
| L57473-1 | 421879-210 | | CVCOND | FRESH WTR | 3/8/2013 10:43 | 3/12/2013 16:46 | 3/12/2013 16:46 | | |
| L57482-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVCOND | GRND WTR | 3/8/2013 10:59 | 3/12/2013 16:12 | 3/12/2013 16:12 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVCOND | LEACHATE | 3/6/2013 6:51 | 3/12/2013 18:27 | 3/12/2013 18:27 | | |
| L57490-3 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 7:46 | 3/12/2013 18:06 | 3/12/2013 18:06 | | |
| L57490-4 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/6/2013 8:34 | 3/12/2013 18:13 | 3/12/2013 18:13 | | |
| L57490-5 | 421422-CHLS-M | | CVCOND | LEACHATE | 3/7/2013 4:45 | 3/12/2013 18:20 | 3/12/2013 18:20 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVCOND | LEACHATE | 3/5/2013 7:25 | 3/12/2013 16:49 | 3/12/2013 16:49 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:42 | 3/12/2013 17:05 | 3/12/2013 17:05 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 8:40 | 3/12/2013 17:14 | 3/12/2013 17:14 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:50 | 3/12/2013 17:23 | 3/12/2013 17:23 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:35 | 3/12/2013 17:31 | 3/12/2013 17:31 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 7:37 | 3/12/2013 17:40 | 3/12/2013 17:40 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 10:15 | 3/12/2013 17:49 | 3/12/2013 17:49 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVCOND | LEACHATE | 3/5/2013 9:15 | 3/12/2013 17:57 | 3/12/2013 17:57 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVCOND | GRND WTR | 3/7/2013 8:10 | 3/12/2013 16:22 | 3/12/2013 16:22 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVCOND | BLANK WTR | 3/7/2013 10:05 | 3/12/2013 16:42 | 3/12/2013 16:42 | | |
| WG125890-1 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:00 | 3/12/2013 16:00 | | LEVEL1 |
| WG125890-2 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 16:01 | 3/12/2013 16:01 | | LEVEL2 |
| WG125890-3 | LD | | CVCOND | GRND WTR | | 3/12/2013 16:32 | 3/12/2013 16:32 | | L57509-1 |
| WG125890-4 | LD | | CVCOND | STORM WTR | | 3/12/2013 16:45 | 3/12/2013 16:45 | | L57472-1 |
| WG125890-5 | LD | | CVCOND | FRESH WTR | | 3/12/2013 16:47 | 3/12/2013 16:47 | | L57473-1 |
| WG125890-6 | LD | | CVCOND | LEACHATE | | 3/12/2013 16:57 | 3/12/2013 16:57 | | L57493-1 |
| WG125890-7 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:36 | 3/12/2013 18:36 | | LEVEL1 |
| WG125890-8 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:38 | 3/12/2013 18:38 | | LEVEL2 |
| WG125890-9 | LCS | | CVCOND | BLANK WTR | | 3/12/2013 18:39 | 3/12/2013 18:39 | | LEVEL3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125885 Dissolved Nutrients - Nitrates**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/6/2013 14:52 | 3/15/2013 12:25 | 3/15/2013 14:51 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57472-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/7/2013 14:02 | 3/15/2013 12:25 | 3/15/2013 15:32 | | |
| L57473-1 | 421879-210 | | CVNO23 | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 12:25 | 3/15/2013 14:33 | | |
| L57473-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/9/2013 11:40 | 3/15/2013 12:25 | 3/15/2013 15:30 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 9:50 | 3/15/2013 12:25 | 3/15/2013 13:53 | WG125885-1,-2,-3,-4,-5 | |
| L57509-3 | 421422-CFGW | | CVNO3 | GRND WTR | 3/15/2013 7:40 | 3/15/2013 12:25 | 3/15/2013 13:55 | | |
| L57526-1 | 421422-CFGW | | CVNO3 | GRND WTR | 3/14/2013 8:25 | 3/15/2013 12:25 | 3/15/2013 13:57 | | |
| L57529-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVNO3 | GRND WTR | 3/14/2013 8:29 | 3/15/2013 12:25 | 3/15/2013 13:59 | | |
| L57529-3 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 10:49 | 3/15/2013 12:25 | 3/15/2013 14:18 | | |
| L57529-4 | 421422-DUGW | | CVNO3 | GRND WTR | 3/14/2013 9:57 | 3/15/2013 12:25 | 3/15/2013 14:20 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | BLANK WTR | 3/7/2013 10:05 | 3/15/2013 12:25 | 3/15/2013 15:45 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | |
| L57541-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVNO23 | OTHR WTR | 3/13/2013 9:36 | 3/15/2013 12:25 | 3/15/2013 15:18 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVNO23 | STORM WTR | 3/13/2013 11:22 | 3/15/2013 12:25 | 3/15/2013 14:31 | | |
| L57557-5 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 10:20 | 3/15/2013 12:25 | 3/15/2013 15:28 | | |
| L57558-1 | 421879-210 | | CVNO23 | STORM WTR | 3/13/2013 11:33 | 3/15/2013 12:25 | 3/15/2013 14:22 | | |
| L57558-3 | 421879-210 | | CVNO23 | BLANK WTR | 3/14/2013 11:30 | 3/15/2013 12:25 | 3/15/2013 15:26 | | |
| WG125885-1 | MB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | | CONNUTS1 |
| WG125885-1 | MB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:45 | WG125885-1,-2,-3,-4,-5 | CONNUTS1 |
| WG125885-2 | SB | | CVNO23 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | WG125885-1 |
| WG125885-2 | SB | | CVNO3 | BLANK WTR | | 3/15/2013 12:25 | 3/15/2013 13:47 | WG125885-1,-2,-3,-4,-5 | WG125885-1 |
| WG125885-3 | LCS | | CVNO23 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | LEVEL1 |
| WG125885-3 | LCS | | CVNO3 | BLANK WTR | | 3/15/2013 13:49 | 3/15/2013 13:49 | WG125885-1,-2,-3,-4,-5 | LEVEL1 |
| WG125885-4 | LD | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:01 | | L57529-1 |
| WG125885-5 | MS | | CVNO3 | GRND WTR | | 3/15/2013 12:25 | 3/15/2013 14:14 | | L57529-1 |
| WG125885-6 | LD | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:24 | WG125885-1,-2,-3,-6,-7,-8,-9,-10,-11 | L57558-1 |
| WG125885-7 | MS | | CVNO23 | STORM WTR | | 3/15/2013 12:25 | 3/15/2013 14:26 | | L57558-1 |
| WG125885-8 | LD | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:45 | | L57473-1 |
| WG125885-9 | MS | | CVNO23 | FRESH WTR | | 3/15/2013 12:25 | 3/15/2013 14:47 | | L57473-1 |
| WG125885-10 | LD | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:20 | | L57541-1 |
| WG125885-11 | MS | | CVNO23 | OTHR WTR | | 3/15/2013 12:25 | 3/15/2013 15:22 | | L57541-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125950 Dissolved Nutrients - Orthophosphate Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVORTHOP | FRESH WTR | 3/11/2013 9:50 | 3/11/2013 11:45 | 3/20/2013 16:29 | WG125950-12,-13,-14,-15,-16,-3,-4,-5,-6,-7,-1,-2,-10,-11,-17,-18,-19,-20,-21,-22,-23 | |
| L57172-2 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 9:45 | 3/11/2013 11:45 | 3/20/2013 16:38 | | |
| L57172-3 | 421195-140 | | CVORTHOP | FRESH WTR | 3/11/2013 10:10 | 3/11/2013 11:45 | 3/20/2013 16:40 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 16:54 | | |
| L57382-2 | 421195-150 | | CVORTHOP | STORM WTR | 3/7/2013 10:45 | 3/8/2013 16:00 | 3/20/2013 17:03 | | |
| L57433-1 | 421195-450 | China Creek Stormwater Monitoring | CVORTHOP | STORM WTR | 3/20/2013 11:28 | 3/20/2013 16:25 | 3/20/2013 17:13 | | |
| L57433-2 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:15 | 3/20/2013 16:25 | 3/20/2013 17:30 | | |
| L57433-3 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:10 | 3/20/2013 16:25 | 3/20/2013 17:32 | | |
| L57433-4 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 11:02 | 3/20/2013 16:25 | 3/20/2013 17:34 | | |
| L57433-5 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:50 | 3/20/2013 16:25 | 3/20/2013 17:36 | | |
| L57433-6 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:42 | 3/20/2013 16:25 | 3/20/2013 17:38 | | |
| L57433-7 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:32 | 3/20/2013 16:25 | 3/20/2013 17:40 | | |
| L57433-8 | 421195-450 | | CVORTHOP | STORM WTR | 3/20/2013 10:20 | 3/20/2013 16:25 | 3/20/2013 17:42 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/6/2013 14:52 | 3/20/2013 11:50 | 3/20/2013 14:08 | | |
| L57472-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/7/2013 14:02 | 3/20/2013 11:50 | 3/20/2013 14:16 | | |
| L57473-1 | 421879-210 | | CVORTHOP | FRESH WTR | 3/8/2013 10:43 | 3/20/2013 11:50 | 3/20/2013 14:35 | | |
| L57473-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/9/2013 11:40 | 3/20/2013 11:50 | 3/20/2013 14:18 | | |
| L57490-5 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVORTHOP | LEACHATE | 3/7/2013 4:45 | 3/20/2013 11:50 | 3/20/2013 15:31 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/11/2013 9:25 | 3/20/2013 11:50 | 3/20/2013 14:41 | | |
| L57519-3 | 423258-500-1 | | CVORTHOP | BLANK WTR | 3/11/2013 9:10 | 3/20/2013 11:50 | 3/20/2013 14:58 | | |
| L57532-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water | CVORTHOP | FRESH WTR | 3/18/2013 9:13 | 3/20/2013 11:50 | 3/20/2013 15:33 | | |
| L57532-2 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 8:44 | 3/20/2013 11:50 | 3/20/2013 15:42 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | BLANK WTR | 3/7/2013 10:05 | 3/20/2013 11:50 | 3/20/2013 14:29 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVORTHOP | OTHR WTR | 3/12/2013 9:49 | 3/20/2013 11:50 | 3/20/2013 15:00 | | |
| L57541-1 | 423258-500-1 | | CVORTHOP | OTHR WTR | 3/13/2013 9:36 | 3/20/2013 11:50 | 3/20/2013 15:02 | | |
| L57557-1 | 421879-210 | NPDES SW Monitoring | CVORTHOP | STORM WTR | 3/13/2013 11:22 | 3/20/2013 11:50 | 3/20/2013 14:37 | | |
| L57557-5 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 10:20 | 3/20/2013 11:50 | 3/20/2013 14:31 | | |
| L57558-1 | 421879-210 | | CVORTHOP | STORM WTR | 3/13/2013 11:33 | 3/20/2013 11:50 | 3/20/2013 14:39 | | |
| L57558-3 | 421879-210 | | CVORTHOP | BLANK WTR | 3/14/2013 11:30 | 3/20/2013 11:50 | 3/20/2013 14:33 | | |
| L57565-1 | 421422-CHSW-M | SWD-CHSW M Cedar Hills Surface Water Monthly | CVORTHOP | FRESH WTR | 3/19/2013 5:50 | 3/20/2013 11:50 | 3/20/2013 15:44 | | |
| L57565-3 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 6:45 | 3/20/2013 11:50 | 3/20/2013 15:56 | | |
| L57565-4 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:30 | 3/20/2013 11:50 | 3/20/2013 15:58 | | |
| L57565-5 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:02 | 3/20/2013 11:50 | 3/20/2013 16:00 | | |
| L57565-6 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 7:29 | 3/20/2013 11:50 | 3/20/2013 16:02 | | |
| L57565-7 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:50 | 3/20/2013 11:50 | 3/20/2013 16:04 | | |
| L57565-8 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/19/2013 8:25 | 3/20/2013 11:50 | 3/20/2013 16:07 | | |
| L57565-9 | 421422-CHSW-M | | CVORTHOP | FRESH WTR | 3/18/2013 6:25 | 3/20/2013 11:50 | 3/20/2013 16:09 | | |
| WG125950-1 | MB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:06 | | CONNUTS3 |
| WG125950-2 | SB | | CVORTHOP | BLANK WTR | | 3/20/2013 11:50 | 3/20/2013 15:08 | | WG125950-1 |
| WG125950-3 | LCS | | CVORTHOP | BLANK WTR | | 3/20/2013 14:04 | 3/20/2013 14:04 | | LEVEL1 |
| WG125950-4 | LD | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:10 | | L57472-1 |
| WG125950-5 | MS | | CVORTHOP | STORM WTR | | 3/20/2013 11:50 | 3/20/2013 14:12 | | L57472-1 |
| WG125950-6 | LD | | CVORTHOP | OTHR WTR | | 3/20/2013 11:50 | 3/20/2013 14:43 | | L57519-1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WG125950-7 | MS | CVORTHOP | OTHR WTR | 3/20/2013 11:50 | 3/20/2013 14:45 | | L57519-1 |
| WG125950-10 | LD | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:35 | | L57532-1 |
| WG125950-11 | MS | CVORTHOP | FRESH WTR | 3/20/2013 11:50 | 3/20/2013 15:37 | | L57532-1 |
| WG125950-12 | MB | CVORTHOP | BLANK WTR | 3/20/2013 11:50 | 3/20/2013 16:13 | | CONNUTS3 |
| WG125950-13 | MB | CVORTHOP | BLANK WTR | 3/11/2013 11:45 | 3/20/2013 16:15 | | CONNUTS3 |
| WG125950-14 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 16:25 | | LEVEL1 |
| WG125950-15 | LD | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:32 | | L57172-1 |
| WG125950-16 | MS | CVORTHOP | FRESH WTR | 3/11/2013 11:45 | 3/20/2013 16:34 | | L57172-1 |
| WG125950-17 | MB | CVORTHOP | BLANK WTR | 3/8/2013 16:00 | 3/20/2013 16:44 | | CONNUTS3 |
| WG125950-18 | LD | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:57 | | L57382-1 |
| WG125950-19 | MS | CVORTHOP | STORM WTR | 3/8/2013 16:00 | 3/20/2013 16:59 | | L57382-1 |
| WG125950-20 | MB | CVORTHOP | BLANK WTR | 3/20/2013 16:25 | 3/20/2013 17:07 | | CONNUTS3 |
| WG125950-21 | LCS | CVORTHOP | BLANK WTR | 3/20/2013 17:09 | 3/20/2013 17:09 | | LEVEL1 |
| WG125950-22 | LD | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:24 | | L57433-1 |
| WG125950-23 | MS | CVORTHOP | STORM WTR | 3/20/2013 16:25 | 3/20/2013 17:26 | | L57433-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG126000 TKN**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57386-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/2/2013 16:24 | 3/22/2013 8:00 | 3/25/2013 13:00 | WG126000-2,-1,-3,-4,-5,-6,-7,-8,-9,-10,-11,-12 | |
| L57435-1 | 421879-210 | | CVTKN | STORM WTR | 3/2/2013 17:42 | 3/22/2013 8:00 | 3/25/2013 13:05 | | |
| L57440-1 | 421430-300 | OCS-Lake Haven Utility District routine testing | CVTKN | EFFLUENT | 3/4/2013 7:07 | 3/22/2013 8:00 | 3/25/2013 14:28 | | |
| L57440-3 | 421430-300 | | CVTKN | EFFLUENT | 3/4/2013 7:56 | 3/22/2013 8:00 | 3/25/2013 14:57 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTKN | STORM WTR | 3/6/2013 14:52 | 3/22/2013 8:00 | 3/25/2013 13:02 | | |
| L57473-1 | 421879-210 | | CVTKN | FRESH WTR | 3/8/2013 10:43 | 3/22/2013 8:00 | 3/25/2013 13:23 | | |
| L57490-1 | 421422-CHLS-M | SWD-CHLS-M Cedar Hills Leachate Monthly | CVTKN | LEACHATE | 3/6/2013 6:51 | 3/22/2013 8:00 | 3/25/2013 13:34 | | |
| L57490-3 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 7:46 | 3/22/2013 8:00 | 3/25/2013 13:36 | | |
| L57490-4 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/6/2013 8:34 | 3/22/2013 8:00 | 3/25/2013 14:55 | | |
| L57490-5 | 421422-CHLS-M | | CVTKN | LEACHATE | 3/7/2013 4:45 | 3/22/2013 8:00 | 3/25/2013 13:50 | | |
| L57493-1 | 421422-VALS-MSPECIAL | SWD-VALS Vashon Leachate Special | CVTKN | LEACHATE | 3/5/2013 7:25 | 3/22/2013 8:00 | 3/25/2013 13:55 | | |
| L57493-3 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:42 | 3/22/2013 8:00 | 3/25/2013 13:57 | | |
| L57493-4 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 8:40 | 3/22/2013 8:00 | 3/25/2013 13:59 | | |
| L57493-6 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:50 | 3/22/2013 8:00 | 3/25/2013 14:01 | | |
| L57493-8 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:35 | 3/22/2013 8:00 | 3/25/2013 14:03 | | |
| L57493-9 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 7:37 | 3/22/2013 8:00 | 3/25/2013 14:05 | | |
| L57493-11 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 10:15 | 3/22/2013 8:00 | 3/25/2013 14:07 | | |
| L57493-12 | 421422-VALS-MSPECIAL | | CVTKN | LEACHATE | 3/5/2013 9:15 | 3/22/2013 8:00 | 3/25/2013 14:09 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTKN | BLANK WTR | 3/7/2013 10:05 | 3/22/2013 8:00 | 3/25/2013 13:32 | | |
| WG126000-1 | MB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:50 | | MB1 3/22/13 |
| WG126000-2 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:52 | | LEVEL1 |
| WG126000-3 | LCS | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:54 | | LEVEL2 |
| WG126000-4 | SB | | CVTKN | BLANK WTR | | 3/22/2013 8:00 | 3/25/2013 12:56 | | WG126000-1 |
| WG126000-5 | LD | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:07 | | L57435-1 |
| WG126000-6 | MS | | CVTKN | STORM WTR | | 3/22/2013 8:00 | 3/25/2013 13:19 | | L57435-1 |
| WG126000-7 | LD | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:25 | | L57473-1 |
| WG126000-8 | MS | | CVTKN | FRESH WTR | | 3/22/2013 8:00 | 3/25/2013 13:27 | | L57473-1 |
| WG126000-9 | LD | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:22 | | L57493-12 |
| WG126000-10 | MS | | CVTKN | LEACHATE | | 3/22/2013 8:00 | 3/25/2013 14:24 | | L57493-12 |
| WG126000-11 | LD | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 14:59 | | L57440-3 |
| WG126000-12 | MS | | CVTKN | EFFLUENT | | 3/22/2013 8:00 | 3/25/2013 15:01 | | L57440-3 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125933 Total Nitrogen, Total Phosphorus**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTOTP | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 12:30 | 3/14/2013 13:49 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57172-2 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 12:30 | 3/14/2013 13:51 | | |
| L57172-3 | 421195-140 | | CVTOTP | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 12:30 | 3/14/2013 13:57 | | |
| L57382-1 | 421195-150 | Beaver Lake | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:15 | | |
| L57382-2 | 421195-150 | | CVTOTP | STORM WTR | 3/7/2013 10:45 | 3/13/2013 12:30 | 3/14/2013 14:17 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | STORM WTR | 3/6/2013 14:52 | 3/13/2013 12:30 | 3/14/2013 14:33 | | |
| L57473-1 | 421879-210 | | CVTOTP | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 12:30 | 3/14/2013 14:39 | | |
| L57506-1 | 421235 | MAJOR LAKES (wtr col) | CVTOTN | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-1 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:10 | 3/13/2013 12:30 | 3/14/2013 11:39 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-2 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-2 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:12 | 3/13/2013 12:30 | 3/14/2013 11:41 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-3 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-3 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:50 | 3/13/2013 12:30 | 3/14/2013 11:43 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-4 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-4 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 8:55 | 3/13/2013 12:30 | 3/14/2013 11:45 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-5 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |

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|---|---|---|---|---|---|---|---|---|
| L57506-5 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:00 | 3/13/2013 12:30 | 3/14/2013 11:47 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-6 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-6 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:04 | 3/13/2013 12:30 | 3/14/2013 11:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-8 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-8 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:27 | 3/13/2013 12:30 | 3/14/2013 11:50 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-9 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-9 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 9:30 | 3/13/2013 12:30 | 3/14/2013 11:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-10 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-10 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:37 | 3/13/2013 12:30 | 3/14/2013 12:01 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-11 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-11 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:03 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-12 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-12 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-13 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-13 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:06 | 3/13/2013 12:30 | 3/14/2013 12:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-14 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-14 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:12 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-15 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-15 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-16 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-16 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-17 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-17 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 10:04 | 3/13/2013 12:30 | 3/14/2013 12:25 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-19 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-19 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-20 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-20 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-21 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-21 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:22 | 3/13/2013 12:30 | 3/14/2013 12:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-22 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-22 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:32 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-23 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-23 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:21 | 3/13/2013 12:30 | 3/14/2013 12:38 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-25 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-25 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:40 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-26 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-26 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:20 | 3/13/2013 12:30 | 3/14/2013 12:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-27 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-27 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:19 | 3/13/2013 12:30 | 3/14/2013 12:51 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-29 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-29 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:53 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-30 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-30 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:54 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-31 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-31 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:28 | 3/13/2013 12:30 | 3/14/2013 12:56 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-32 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-32 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:27 | 3/13/2013 12:30 | 3/14/2013 12:58 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-33 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-33 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:26 | 3/13/2013 12:30 | 3/14/2013 13:00 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-37 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-37 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:35 | 3/13/2013 12:30 | 3/14/2013 13:02 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-38 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-38 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:31 | 3/13/2013 12:30 | 3/14/2013 13:04 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-39 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-39 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:27 | 3/13/2013 12:30 | 3/14/2013 13:05 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |

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|---|---|---|---|---|---|---|---|---|
| L57506-40 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-40 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:14 | 3/13/2013 12:30 | 3/14/2013 13:07 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-41 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-41 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:09 | 3/13/2013 12:30 | 3/14/2013 13:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-42 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-42 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:01 | 3/13/2013 12:30 | 3/14/2013 13:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-44 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/14/2013 13:20 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-44 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:12 | 3/13/2013 12:30 | 3/28/2013 12:14 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-45 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |
| L57506-45 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:08 | 3/13/2013 12:30 | 3/14/2013 13:26 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 |
| L57506-46 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 |

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|---|---|---|---|---|---|---|---|---|
| L57506-46 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:05 | 3/13/2013 12:30 | 3/14/2013 13:27 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-47 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-47 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 12:01 | 3/13/2013 12:30 | 3/14/2013 13:29 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-48 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-48 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:52 | 3/13/2013 12:30 | 3/14/2013 13:31 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57506-49 | 421235 | | CVTOTN | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57506-49 | 421235 | | CVTOTP | FRESH WTR | 3/11/2013 11:56 | 3/13/2013 12:30 | 3/14/2013 13:44 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57519-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 12:30 | 3/14/2013 13:59 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,- | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTOTP | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 12:30 | 3/14/2013 14:24 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTOTN | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | |
| L57540-1 | 423258-500-1 | | CVTOTP | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 12:30 | 3/14/2013 14:22 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | |
| L57545-1 | 421195-150 | Beaver Lake | CVTOTP | FRESH WTR | 3/12/2013 10:20 | 3/13/2013 12:30 | 3/14/2013 14:11 | | |
| L57545-2 | 421195-150 | | CVTOTP | FRESH WTR | 3/12/2013 10:28 | 3/13/2013 12:30 | 3/14/2013 14:13 | | |
| WG125933-1 | MB | | CVTOTN | BLANK WTR | | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB1 |

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|---|---|---|---|---|---|---|---|
| WG125933-1 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB1 |
| WG125933-2 | SB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:41 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | WG125933-1 |
| WG125933-2 | SB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | WG125933-1 |
| WG125933-3 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-3 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 11:37 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-4 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-4 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:09 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-5 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-13 |
| WG125933-5 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 12:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-13 |
| WG125933-6 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB2 |
| WG125933-6 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:34 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB2 |

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|---|---|---|---|---|---|---|---|
| WG125933-7 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 14:43 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-7 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 12:36 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-8 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:22 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-8 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:16 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-9 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:24 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-44 |
| WG125933-9 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/28/2013 12:18 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-44 |
| WG125933-10 | MB | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | MB3 |
| WG125933-10 | MB | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:33 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | MB3 |
| WG125933-11 | LCS | CVTOTN | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | LEVEL1 |
| WG125933-11 | LCS | CVTOTP | BLANK WTR | 3/13/2013 12:30 | 3/14/2013 13:42 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | LEVEL1 |
| WG125933-12 | LD | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |

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|---|---|---|---|---|---|---|---|
| WG125933-12 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:46 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57506-49 |
| WG125933-13 | MS | CVTOTN | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57506-49 |
| WG125933-13 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:48 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,- | L57506-49 |
| WG125933-14 | LD | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:53 | | L57172-2 |
| WG125933-15 | MS | CVTOTP | FRESH WTR | 3/13/2013 12:30 | 3/14/2013 13:55 | | L57172-2 |
| WG125933-16 | LD | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-16 | LD | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:08 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-17 | MS | CVTOTN | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-6,-8,-9,-10,-11,-12,-13,-16,-17,-2,-7,-1,-3,-4,-5 | L57519-1 |
| WG125933-17 | MS | CVTOTP | OTHR WTR | 3/13/2013 12:30 | 3/14/2013 14:10 | WG125933-1,-2,-3,-4,-5,-6,-7,-10,-11,-12,-13,-14,-15,-16,-17,-18,-19,-20,-21,-8,-9 | L57519-1 |
| WG125933-18 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:19 | | L57382-2 |
| WG125933-19 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:21 | | L57382-2 |
| WG125933-20 | LD | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:35 | | L57472-1 |
| WG125933-21 | MS | CVTOTP | STORM WTR | 3/13/2013 12:30 | 3/14/2013 14:37 | | L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125834 TSS**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57172-1 | 421195-140 | Lake Sawyer | CVTSS | FRESH WTR | 3/11/2013 9:50 | 3/13/2013 13:25 | 3/14/2013 9:58 | WG125834-1,-2,-3,-4,-5,-6,-7 | |
| L57172-2 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 9:45 | 3/13/2013 13:25 | 3/14/2013 10:02 | | |
| L57172-3 | 421195-140 | | CVTSS | FRESH WTR | 3/11/2013 10:10 | 3/13/2013 13:25 | 3/14/2013 10:05 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | CVTSS | STORM WTR | 3/6/2013 14:52 | 3/13/2013 13:25 | 3/14/2013 10:06 | | |
| L57473-1 | 421879-210 | | CVTSS | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 13:25 | 3/14/2013 10:08 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 10:35 | 3/13/2013 13:25 | 3/14/2013 10:10 | | |
| L57482-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/8/2013 10:59 | 3/13/2013 13:25 | 3/14/2013 10:13 | | |
| L57508-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/11/2013 13:15 | 3/13/2013 13:25 | 3/14/2013 10:14 | | |
| L57509-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | CVTSS | GRND WTR | 3/7/2013 8:10 | 3/13/2013 13:25 | 3/14/2013 10:15 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/12/2013 9:21 | 3/13/2013 13:25 | 3/14/2013 10:16 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/11/2013 9:25 | 3/13/2013 13:25 | 3/14/2013 10:17 | | |
| L57524-1 | 421422-ENLS | SWD-ENLS Enumclaw Wastewater Permit | CVTSS | IW WTR | 3/12/2013 6:00 | 3/13/2013 13:25 | 3/14/2013 10:19 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | CVTSS | GRND WTR | 3/13/2013 9:37 | 3/13/2013 13:25 | 3/14/2013 10:23 | | |
| L57526-4 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 8:44 | 3/13/2013 13:25 | 3/14/2013 10:24 | | |
| L57527-1 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 7:53 | 3/13/2013 13:25 | 3/14/2013 10:25 | | |
| L57527-3 | 421422-DUGW | | CVTSS | GRND WTR | 3/13/2013 10:42 | 3/13/2013 13:25 | 3/14/2013 10:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | CVTSS | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 13:25 | 3/14/2013 10:22 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | CVTSS | OTHR WTR | 3/12/2013 9:49 | 3/13/2013 13:25 | 3/14/2013 10:27 | | |
| WG125834-1 | MB | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:54 | | MB1 130313 |
| WG125834-2 | LCS | | CVTSS | BLANK WTR | | 3/13/2013 13:25 | 3/14/2013 9:57 | | LEVEL1 |
| WG125834-3 | LD | | CVTSS | FRESH WTR | | 3/13/2013 13:25 | 3/14/2013 10:04 | | L57172-2 |
| WG125834-4 | LD | | CVTSS | STORM WTR | | 3/13/2013 13:25 | 3/14/2013 10:07 | | L57472-1 |
| WG125834-5 | LD | | CVTSS | GRND WTR | | 3/13/2013 13:25 | 3/14/2013 10:12 | | L57482-1 |
| WG125834-6 | LD | | CVTSS | OTHR WTR | | 3/13/2013 13:25 | 3/14/2013 10:18 | | L57519-1 |
| WG125834-7 | LD | | CVTSS | IW WTR | | 3/13/2013 13:25 | 3/14/2013 10:21 | | L57524-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125716 Fecal coliform**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57473-2 | 421879-210 | NPDES SW Monitoring | MCFC-MF | FRESH WTR | 3/6/2013 8:50 | 3/6/2013 11:20 | 3/7/2013 11:15 | WG125671-1,-2,-3,-4,WG125716-1 | |
| WG125671-1 | PC | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-2 | NC | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-3 | BF | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125671-4 | AF | | MCFC-MF | BLANK WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | QC-PERFORMED:06-MAR-13 |
| WG125716-1 | LD | | MCFC-MF | FRESH WTR | | 3/6/2013 11:20 | 3/7/2013 11:15 | | L57473-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125916 Total Metals & Hardness**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57347-1 | 421195-260 | Ravensdale Monthly GW | MTICPMS | GRND WTR | 3/13/2013 10:30 | 3/19/2013 10:00 | 3/20/2013 14:16 | WG125916-1,-2,-3,-4 | |
| L57444-1 | 421184-110 | OCS-City of Enumclaw | MTICPMS | EFFLUENT | 3/3/2013 7:30 | 3/19/2013 10:00 | 3/20/2013 14:22 | | |
| L57444-3 | 421184-110 | | MTICPMS | INFLUENT | 3/3/2013 7:40 | 3/19/2013 10:00 | 3/20/2013 14:28 | | |
| L57447-31 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 2/20/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 14:34 | | |
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57472-1 | 421879-210 | | MTICPMS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 10:00 | 3/20/2013 14:40 | | |
| L57473-1 | 421879-210 | | MTHARD-ICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57473-1 | 421879-210 | | MTICPMS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 10:00 | 3/20/2013 14:45 | | |
| L57519-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTHARD-ICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57519-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:25 | 3/19/2013 10:00 | 3/20/2013 14:51 | | |
| L57519-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/11/2013 9:18 | 3/19/2013 10:00 | 3/20/2013 15:09 | | |
| L57519-5 | 423258-500-1 | | MTICPMS | BLANK WTR | 3/11/2013 9:15 | 3/19/2013 10:00 | 3/20/2013 15:15 | | |
| L57534-1 | 421937 | Brightwater Operations | MTICPMS | INFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:20 | | |
| L57534-4 | 421937 | | MTICPMS | EFFLUENT | 3/12/2013 0:00 | 3/19/2013 10:00 | 3/20/2013 15:26 | | |
| L57538-1 | 421879-210 | NPDES SW Monitoring | MTHARD-ICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57538-1 | 421879-210 | | MTICPMS | BLANK WTR | 3/7/2013 10:05 | 3/19/2013 10:00 | 3/20/2013 15:32 | | |
| L57539-1 | 421937 | Brightwater Operations | MTICPMS | BLANK WTR | 3/12/2013 9:21 | 3/19/2013 10:00 | 3/20/2013 15:38 | | |
| L57540-1 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTHARD-ICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57540-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:49 | 3/19/2013 10:00 | 3/20/2013 15:44 | | |
| L57540-2 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/12/2013 9:50 | 3/19/2013 10:00 | 3/20/2013 16:01 | | |
| L57541-1 | 423258-500-1 | | MTHARD-ICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/21/2013 11:50 | | |
| L57541-1 | 423258-500-1 | | MTICPMS | OTHR WTR | 3/13/2013 9:36 | 3/19/2013 10:00 | 3/20/2013 16:25 | | |
| L57544-1 | 421301A | Georgetown Yard Industiral SW Monitoring | MTICPMS | STORM WTR | 3/6/2013 14:00 | 3/19/2013 10:00 | 3/20/2013 16:31 | | |
| L57549-25 | 421355 | Biosolids Application/Research | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:37 | | |
| L57549-29 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:42 | | |
| L57549-31 | 421355 | | MTICPMS | OTHR WTR | 3/6/2013 13:00 | 3/19/2013 10:00 | 3/20/2013 16:48 | | |
| WG125916-1 | MB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | METHOD BLANK |
| WG125916-1 | MB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:04 | | METHOD BLANK |
| WG125916-2 | SB | | MTHARD-ICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | WG125916-1 MS-20 |
| WG125916-2 | SB | | MTICPMS | BLANK WTR | | 3/19/2013 10:00 | 3/20/2013 14:10 | | WG125916-1 MS-20 |
| WG125916-3 | LD | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 RPD-LIQ |
| WG125916-3 | LD | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:50 | | L57540-1 RPD-LIQ |
| WG125916-4 | MS | | MTHARD-ICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/21/2013 11:50 | | L57540-1 MS-20 |
| WG125916-4 | MS | | MTICPMS | OTHR WTR | | 3/19/2013 10:00 | 3/20/2013 15:55 | | L57540-1 MS-20 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125908 Dissolved Metals**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | MTICPMS-DISS | STORM WTR | 3/6/2013 14:52 | 3/19/2013 8:40 | 3/19/2013 13:29 | WG125908-1,-2,-3,-4 | |
| L57473-1 | 421879-210 | | MTICPMS-DISS | FRESH WTR | 3/8/2013 10:43 | 3/19/2013 8:40 | 3/19/2013 13:36 | | |
| L57482-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/12/2013 10:35 | 3/19/2013 8:40 | 3/19/2013 13:42 | | |
| L57482-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/8/2013 10:59 | 3/19/2013 8:40 | 3/19/2013 13:49 | | |
| L57507-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/14/2013 9:50 | 3/19/2013 8:40 | 3/19/2013 13:55 | | |
| L57508-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/11/2013 13:15 | 3/19/2013 8:40 | 3/19/2013 14:01 | | |
| L57509-3 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/15/2013 7:40 | 3/19/2013 8:40 | 3/19/2013 14:08 | | |
| L57511-1 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/12/2013 9:21 | 3/19/2013 8:40 | 3/19/2013 14:33 | | |
| L57519-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTICPMS-DISS | OTHR WTR | 3/11/2013 9:18 | 3/19/2013 8:40 | 3/19/2013 14:52 | | |
| L57519-3 | 423258-500-1 | | MTICPMS-DISS | BLANK WTR | 3/11/2013 9:10 | 3/19/2013 8:40 | 3/19/2013 14:58 | | |
| L57526-1 | 421422-CFGW | SWD-CFGW Cedar Falls Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/14/2013 8:25 | 3/19/2013 8:40 | 3/19/2013 15:05 | | |
| L57526-3 | 421422-DUGW | SWD-DUGW Duvall Groundwater Quarterly | MTICPMS-DISS | GRND WTR | 3/13/2013 9:37 | 3/19/2013 8:40 | 3/19/2013 15:11 | | |
| L57526-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 8:44 | 3/19/2013 8:40 | 3/19/2013 15:17 | | |
| L57527-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 7:53 | 3/19/2013 8:40 | 3/19/2013 15:24 | | |
| L57527-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/13/2013 10:42 | 3/19/2013 8:40 | 3/19/2013 15:30 | | |
| L57529-1 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 8:29 | 3/19/2013 8:40 | 3/19/2013 15:49 | | |
| L57529-3 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 10:49 | 3/19/2013 8:40 | 3/19/2013 15:56 | | |
| L57529-4 | 421422-DUGW | | MTICPMS-DISS | GRND WTR | 3/14/2013 9:57 | 3/19/2013 8:40 | 3/19/2013 16:02 | | |
| L57540-2 | 423258-500-1 | Brightwater Reclaimed Water Quality Testing | MTICPMS-DISS | OTHR WTR | 3/12/2013 9:50 | 3/19/2013 8:40 | 3/19/2013 16:08 | | |
| L57541-2 | 423258-500-1 | | MTICPMS-DISS | OTHR WTR | 3/13/2013 9:37 | 3/19/2013 8:40 | 3/19/2013 16:15 | | |
| WG125908-1 | MB | | MTICPMS-DISS | BLANK WTR | | 3/19/2013 8:40 | 3/19/2013 14:14 | | METHOD BLANK |
| WG125908-2 | SB | | MTICPMS-DISS | BLANK WTR | | 3/19/2013 8:40 | 3/19/2013 13:22 | | WG125908-1 MS-20 SPIKE BLANK |
| WG125908-3 | LD | | MTICPMS-DISS | GRND WTR | | 3/19/2013 8:40 | 3/19/2013 14:39 | | L57511-1 RPD-LIQ LAB DUPLICATE |
| WG125908-4 | MS | | MTICPMS-DISS | GRND WTR | | 3/19/2013 8:40 | 3/19/2013 14:46 | | L57511-1 MS-20 MATRIX SPIKE |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125869 Herbicides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57473-1 | 421879-210 | NPDES SW Monitoring | ORHERB-NPDES | FRESH WTR | 3/8/2013 10:43 | 3/15/2013 9:00 | 3/18/2013 17:31 | WG125869-4,-3,-2,-1 | |
| L57557-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/13/2013 11:22 | 3/15/2013 9:00 | 3/18/2013 18:21 | | |
| L57558-1 | 421879-210 | | ORHERB-NPDES | STORM WTR | 3/13/2013 11:33 | 3/15/2013 9:00 | 3/18/2013 17:56 | | |
| WG125869-1 | MB | | ORHERB-NPDES | BLANK WTR | | 3/15/2013 9:00 | 3/18/2013 15:50 | | MB130315 |
| WG125869-2 | SB | | ORHERB-NPDES | BLANK WTR | | 3/15/2013 9:00 | 3/18/2013 16:15 | | WG125869-1 |
| WG125869-3 | MS | | ORHERB-NPDES | FRESH WTR | | 3/15/2013 9:00 | 3/18/2013 16:40 | | L57473-1 |
| WG125869-4 | MSD | | ORHERB-NPDES | FRESH WTR | | 3/15/2013 9:00 | 3/18/2013 17:05 | | WG125869-3<br>L57473-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125841 Organophosphorus Pesticides**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | OROPPEST-NPDES | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 11:54 | WG125841-4,-3,-2,-1 | |
| L57473-1 | 421879-210 | | OROPPEST-NPDES | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:33 | | |
| L57538-1 | 421879-210 | | OROPPEST-NPDES | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:06 | | |
| WG125841-1 | MB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:12 | | MB130313 |
| WG125841-2 | SB | | OROPPEST-NPDES | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:39 | | WG125841-1 |
| WG125841-3 | MS | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:00 | | L57472-1 |
| WG125841-4 | MSD | | OROPPEST-NPDES | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:27 | | WG125841-3 L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125842 Semi Volatile Organics**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57472-1 | 421879-210 | NPDES SW Monitoring | ORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57472-1 | 421879-210 | | TICORPAHPHTH-SUR | STORM WTR | 3/6/2013 14:52 | 3/13/2013 17:00 | 3/19/2013 12:44 | WG125842-4,-1,-2,-3 | |
| L57473-1 | 421879-210 | | ORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57473-1 | 421879-210 | | TICORPAHPHTH-SUR | FRESH WTR | 3/8/2013 10:43 | 3/13/2013 17:00 | 3/19/2013 10:53 | WG125842-4,-1,-2,-3 | |
| L57538-1 | 421879-210 | | ORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | |
| L57538-1 | 421879-210 | | TICORPAHPHTH-SUR | BLANK WTR | 3/7/2013 10:05 | 3/13/2013 17:00 | 3/19/2013 10:14 | WG125842-4,-1,-2,-3 | |
| WG125842-1 | MB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | MB130313 |
| WG125842-1 | MB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 8:56 | WG125842-4,-1,-2,-3 | MB130313 |
| WG125842-2 | SB | | ORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-1 |
| WG125842-2 | SB | | TICORPAHPHTH-SUR | BLANK WTR | | 3/13/2013 17:00 | 3/19/2013 9:35 | WG125842-4,-1,-2,-3 | WG125842-1 |
| WG125842-3 | MS | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | L57472-1 |
| WG125842-3 | MS | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 11:26 | WG125842-4,-1,-2,-3 | L57472-1 |
| WG125842-4 | MSD | | ORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-4,-1,-1,-2,-2,-3,-3 | WG125842-3 L57472-1 |
| WG125842-4 | MSD | | TICORPAHPHTH-SUR | STORM WTR | | 3/13/2013 17:00 | 3/19/2013 12:05 | WG125842-4,-1,-2,-3 | WG125842-3 L57472-1 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125757 WTPH-Dx**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-DX | STORM WTR | 3/3/2013 9:30 | 3/7/2013 11:45 | 3/14/2013 18:20 | WG125757-1,-2,-3,-4 | |
| L57436-2 | 421879-210 | | ORWTPH-DX | STORM WTR | 3/6/2013 12:20 | 3/7/2013 11:45 | 3/14/2013 18:43 | | |
| L57473-2 | 421879-210 | | ORWTPH-DX | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 11:45 | 3/14/2013 19:07 | | |
| WG125757-1 | MB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 16:45 | | MB130307 |
| WG125757-2 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:09 | | WG125757-1 SB-MO |
| WG125757-3 | SB | | ORWTPH-DX | BLANK WTR | | 3/7/2013 11:45 | 3/14/2013 17:32 | | WG125757-1 SB-DSL |
| WG125757-4 | LD | | ORWTPH-DX | STORM WTR | | 3/7/2013 11:45 | 3/14/2013 17:57 | | L57436-2 |

# King County Environmental Laboratory Batch Report

# NPDES SW Permit, SWM, L57473

**WG125724 WTPH-G**

| Sample | Project | Project Description | List Type | Matrix | Collect Date | Prep Date | Anal Date | QC Association | Comments |
|---|---|---|---|---|---|---|---|---|---|
| L57435-3 | 421879-210 | NPDES SW Monitoring | ORWTPH-G | STORM WTR | 3/3/2013 9:30 | 3/7/2013 14:18 | 3/7/2013 14:18 | WG125724-1,-2,-3 | |
| L57436-2 | 421879-210 | | ORWTPH-G | STORM WTR | 3/6/2013 12:20 | 3/7/2013 14:47 | 3/7/2013 14:47 | | |
| L57472-3 | 421879-210 | | ORWTPH-G | STORM WTR | 3/7/2013 12:15 | 3/7/2013 16:46 | 3/7/2013 16:46 | | |
| L57473-2 | 421879-210 | | ORWTPH-G | FRESH WTR | 3/6/2013 8:50 | 3/7/2013 15:17 | 3/7/2013 15:17 | | |
| WG125724-1 | MB | | ORWTPH-G | BLANK WTR | | 3/7/2013 13:19 | 3/7/2013 13:19 | | MB130306 |
| WG125724-2 | SB | | ORWTPH-G | BLANK WTR | | 3/7/2013 15:47 | 3/7/2013 15:47 | | WG125724-1 |
| WG125724-3 | LD | | ORWTPH-G | STORM WTR | | 3/7/2013 13:48 | 3/7/2013 13:48 | | L57435-3 |

**Workgroup: WG125797 BOD**

**MB:WG125797-1 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:WG125797-2 MB:WG125797-1 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 | 170 | 86 | | 80--120 |

**Workgroup: WG125991 Anions**

**CS:WG125991-1 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 | 0.098 | 98 | | 70--130 |

**MB:WG125991-2 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 | |

**SB:WG125991-3 MB:WG125991-2 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 | 1.92 | 96 | | 80--120 |

**LCS:WG125991-4 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 |

**LD:WG125991-5 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Chloride | 0.25 | 0.5 | mg/L | 4.14 | 3.99 | 4 | | 0--20 |

**MS:WG125991-6 L57595-1 Matrix: GRND WTR Listtype:CVCL Method:SM4110B CL Project:421937 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 | 4.14 | 10 | 13.8 | 96 | | 75--125 |

**LD:WG125991-7 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 2.56 | 1 | | 0--20 |

**MS:WG125991-8 L57473-1 Matrix: FRESH 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 | 0.25 | 0.5 | mg/L | 2.53 | 10 | 12.7 | 102 | | 75--125 |

**LD:WG125991-9 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 10 | 12 | | 0--20 |

**MS:WG125991-10 L57472-1 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 | 0.5 | 1 | mg/L | 8.94 | 20 | 28.6 | 98 | | 75--125 |

**Workgroup: WG125890 Conductivity**

**LCS:WG125890-1 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 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-2 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 | 714 | 100 | | 90--110 |

**LD:WG125890-3 L57509-1 Matrix: GRND WTR Listtype:CVCOND Method:SM2510-B Project:421422-CFGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 34.9 | 34.3 | 2 | | 0--10 |

**LD:WG125890-4 L57472-1 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 | 60.5 | 60.6 | 0 | | 0--10 |

**LD:WG125890-5 L57473-1 Matrix: FRESH 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 | 66.3 | 66.2 | 0 | | 0--10 |

**LD:WG125890-6 L57493-1 Matrix: LEACHATE Listtype:CVCOND Method:SM2510-B Project:421422-VALS-MSPECIAL Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Conductivity | 1 | 5 | umhos/cm | 116 | 116 | 0 | | 0--10 |

**LCS:WG125890-7 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 | 73.9 | 76.6 | 104 | | 90--110 |

**LCS:WG125890-8 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 | 717.5 | 712 | 99 | | 90--110 |

**LCS:WG125890-9 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 | 6667 | 6590 | 99 | | 90--110 |

**Workgroup: WG125885 Dissolved Nutrients - Nitrates**

**MB:WG125885-1 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:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | |

**SB:WG125885-2 MB:WG125885-1 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 | 0.805 | 101 | | 80--120 |

**SB:WG125885-2 MB:WG125885-1 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.398 | 100 | | 80--120 |

**LCS:WG125885-3 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 | 0.82 | 102 | | 85--115 |

**LCS:WG125885-3 Matrix: BLANK WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project: Pkey:STD**
**(Lab Control Sample)**

| Parameter | MDL | RDL | Units | True Value | LCS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | 0.4 | 0.407 | 102 | | 85--115 |

**LD:WG125885-4 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

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

**MS:WG125885-5 L57529-1 Matrix: GRND WTR Listtype:CVNO3 Method:SM4500-NO3F NO3 Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate Nitrogen | 0.01 | 0.04 | mg/L | <MDL | 0.4 | 0.285 | 71 | * | 75--125 |

**LD:WG125885-6 L57558-1 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 | 0.582 | 0.581 | 0 | | 0--20 |

**MS:WG125885-7 L57558-1 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 | 0.582 | 0.8 | 1.37 | 99 | | 75--125 |

**LD:WG125885-8 L57473-1 Matrix: FRESH 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 | 1.02 | 1.02 | 0 | | 0--20 |

**MS:WG125885-9 L57473-1 Matrix: FRESH 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 | 1.02 | 0.8 | 1.79 | 97 | | 75--125 |

**LD:WG125885-10 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 19.2 | 0 | | 0--20 |

**MS:WG125885-11 L57541-1 Matrix: OTHR WTR Listtype:CVNO23 Method:SM4500-NO3-F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Nitrite + Nitrate Nitrogen | 0.2 | 0.8 | mg/L | 19.2 | 0.8 | 35.2 | 100 | | 75--125 |

**Workgroup: WG125950 Dissolved Nutrients - Othophosphate Phosphorus**

**MB:WG125950-1 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:WG125950-2 MB:WG125950-1 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:WG125950-3 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:WG125950-4 L57472-1 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 | 0.00979 | 0.00947 | 3 | | 0--20 |

**MS:WG125950-5 L57472-1 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 | 0.00979 | 0.04 | 0.0472 | 94 | | 75--125 |

**LD:WG125950-6 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 3.8 | 1 | | 0--20 |

**MS:WG125950-7 L57519-1 Matrix: OTHR WTR Listtype:CVORTHOP Method:SM4500-P-F Project:423258-500-1 Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.2 | 0.5 | mg/L | 3.76 | 0.04 | 7.64 | 97 | | 75--125 |

**LD:WG125950-10 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.012 | | | 0--20 |

**MS:WG125950-11 L57532-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421422-CHSW-M Pkey:STD**
**(Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.01 | 0.025 | mg/L | 0.012 | 0.04 | 0.201 | 94 | | 75--125 |

**MB:WG125950-12 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 | |

**MB:WG125950-13 Matrix: BLANK WTR Listtype:CVORTHOP Method:SM4500-P-F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125950-14 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 | 0.0386 | 97 | | 85--115 |

**LD:WG125950-15 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00916 | 0.0075 | 20 | | 0--20 |

**MS:WG125950-16 L57172-1 Matrix: FRESH WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-140 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 | 0.00916 | 0.04 | 0.0438 | 87 | | 75--125 |

**MB:WG125950-17 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 | |

**LD:WG125950-18 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00505 | 0.00573 | 13 | | 0--20 |

**MS:WG125950-19 L57382-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-150 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 | 0.00505 | 0.04 | 0.0424 | 93 | | 75--125 |

**MB:WG125950-20 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:WG125950-21 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 | 0.0387 | 97 | | 85--115 |

**LD:WG125950-22 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Orthophosphate Phosphorus | 0.002 | 0.005 | mg/L | 0.00838 | 0.00863 | 3 | | 0--20 |

**MS:WG125950-23 L57433-1 Matrix: STORM WTR Listtype:CVORTHOP Method:SM4500-P-F Project:421195-450 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 | 0.00838 | 0.04 | 0.0463 | 95 | | 75--125 |

**Workgroup: WG126000 TKN**

**MB:WG126000-1 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 | |

**LCS:WG126000-2 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 | 0.427 | 85 | | 80--120 |

**LCS:WG126000-3 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 | 5 | 4.81 | 96 | | 80--120 |

**SB:WG126000-4 MB:WG126000-1 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 |

**LD:WG126000-5 L57435-1 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 | 0.923 | 0.925 | 0 | | 0--20 |

**MS:WG126000-6 L57435-1 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 | 0.923 | 5 | 5.76 | 97 | | 70--130 |

**LD:WG126000-7 L57473-1 Matrix: FRESH 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 | 0.304 | 0.299 | 2 | | 0--20 |

**MS:WG126000-8 L57473-1 Matrix: FRESH 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 | 0.304 | 5 | 5.38 | 101 | | 70--130 |

**LD:WG126000-9 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 1.93 | 1 | | 0--20 |

**MS:WG126000-10 L57493-12 Matrix: LEACHATE Listtype:CVTKN Method:EPA 351.2 Project:421422-VALS-MSPECIAL 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 | 1.91 | 5 | 7.15 | 105 | | 70--130 |

**LD:WG126000-11 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 19 | 4 | | 0--20 |

**MS:WG126000-12 L57440-3 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 | 0.4 | 0.8 | mg/L | 19.7 | 10 | 28.9 | 91 | | 70--130 |

**Workgroup: WG125933 Total Nitrogen, Total Phosphorus**

**MB:WG125933-1 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:WG125933-1 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:WG125933-2 MB:WG125933-1 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 | 1.04 | 104 | | 80--120 |

**SB:WG125933-2 MB:WG125933-1 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 | 0.0985 | 98 | | 80--120 |

**LCS:WG125933-3 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 | 0.944 | 94 | | 85--115 |

**LCS:WG125933-3 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 | 0.0963 | 96 | | 85--115 |

**LD:WG125933-4 L57506-13 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 | 0.357 | 0.358 | 0 | | 0--20 |

**LD:WG125933-4 L57506-13 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 | 0.0134 | 0.013 | 3 | | 0--20 |

**MS:WG125933-5 L57506-13 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 | 0.357 | 1 | 1.4 | 104 | | 75--125 |

**MS:WG125933-5 L57506-13 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 | 0.0134 | 0.1 | 0.113 | 100 | | 75--125 |

**MB:WG125933-6 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:WG125933-6 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125933-7 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 | 1.02 | 102 | | 85--115 |

**LCS:WG125933-7 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:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTN Method:SM4500-N-C Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 0.05 | 0.1 | mg/L | 0.422 | 0.444 | 5 | | 0--20 |

**LD:WG125933-8 L57506-44 Matrix: FRESH WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:421235 Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.005 | 0.01 | mg/L | 0.0162 | 0.0158 | 2 | | 0--20 |

**MS:WG125933-9 L57506-44 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 | 0.422 | 1 | 1.49 | 107 | | 75--125 |

**MS:WG125933-9 L57506-44 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 | 0.0162 | 0.1 | 0.116 | 100 | | 75--125 |

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTN Method:SM4500-N-C Project: Pkey:STD**
**(Method Blank)**

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

**MB:WG125933-10 Matrix: BLANK WTR Listtype:CVTOTP Method:SM4500-P-B,F Project: Pkey:STD**
**(Method Blank)**

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

**LCS:WG125933-11 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 | 100 | | 85--115 |

**LCS:WG125933-11 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 | 0.0921 | 92 | | 85--115 |

**LD:WG125933-12 L57506-49 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 | 0.483 | 0.464 | 4 | | 0--20 |

**LD:WG125933-12 L57506-49 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 | 0.0312 | 0.0305 | 2 | | 0--20 |

**MS:WG125933-13 L57506-49 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 | 0.483 | 1 | 1.52 | 104 | | 75--125 |

**MS:WG125933-13 L57506-49 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 | 0.0312 | 0.1 | 0.13 | 99 | | 75--125 |

**LD:WG125933-14 L57172-2 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 | 0.0093 | 0.0089 | | | 0--20 |

**MS:WG125933-15 L57172-2 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 | 0.0093 | 0.1 | 0.108 | 99 | | 75--125 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 25.1 | 1 | | 0--20 |

**LD:WG125933-16 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 3.83 | 1 | | 0--20 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTN Method:SM4500-N-C Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Nitrogen | 1 | 2 | mg/L | 25.5 | 1 | 46.8 | 107 | | 75--125 |

**MS:WG125933-17 L57519-1 Matrix: OTHR WTR Listtype:CVTOTP Method:SM4500-P-B,F Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Phosphorus | 0.1 | 0.2 | mg/L | 3.86 | 0.1 | 5.91 | 102 | | 75--125 |

**LD:WG125933-18 L57382-2 Matrix: STORM 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 | 0.0199 | 0.0184 | 8 | | 0--20 |

**MS:WG125933-19 L57382-2 Matrix: STORM 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 | 0.0199 | 0.1 | 0.116 | 96 | | 75--125 |

**LD:WG125933-20 L57472-1 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 | 0.124 | 0.118 | 4 | | 0--20 |

# King County Environmental Laboratory Analytical QC Report

# NPDES SW Permit, SWM, L57473

**MS:WG125933-21 L57472-1 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 | 0.124 | 0.1 | 0.232 | 108 | | 75--125 |

**Workgroup: WG125834 TSS**

**MB:WG125834-1 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:WG125834-2 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 | 87 | 87 | | 80--120 |

**LD:WG125834-3 L57172-2 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 | 2.8 | 2.2 | 24 | | 0--25 |

**LD:WG125834-4 L57472-1 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 | 72 | 75 | 4 | | 0--25 |

**LD:WG125834-5 L57482-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUGW Pkey:STD**
**(Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 1 | 2 | mg/L | 1.4 | 2 | | | 0--25 |

**LD:WG125834-6 L57519-1 Matrix: OTHR WTR Listtype:CVTSS Method:SM2540-D Project:423258-500-1 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 |

**LD:WG125834-7 L57524-1 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 | 5 | 10 | mg/L | 37 | 41 | 10 | | 0--25 |

**Workgroup: WG125716 Fecal coliform**

**LD:WG125716-1 L57473-2 Matrix: FRESH 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 | 2 | <MDL | 0.48 | 1.56 | N1 |

**PC:WG125671-1 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:WG125671-2 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:WG125671-3 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:WG125671-4 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: WG125916 Total Metals**

**MB:WG125916-1 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:WG125916-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD**
**(Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | Qual |
|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | |
| Boron, Total, ICP-MS | 2 | 10 | 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 | |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | 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:WG125916-2 MB:WG125916-1 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 | 32.2 | 97 | | 85--115 |

**SB:WG125916-2 MB:WG125916-1 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 |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 18.5 | 93 | | 85--115 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19 | 95 | | 85--115 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | <MDL | 5000 | 4750 | 95 | | 85--115 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 5140 | 103 | | 85--115 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 4680 | 94 | | 85--115 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4420 | 88 | | 85--115 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 18.3 | 92 | | 85--115 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 4840 | 97 | | 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 | 95 | | 85--115 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 18.4 | 92 | | 85--115 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 17.8 | 89 | | 85--115 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 17.9 | 89 | | 85--115 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 18.6 | 93 | | 85--115 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.1 | 90 | | 85--115 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 19.3 | 97 | | 85--115 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 18.2 | 91 | | 85--115 |
| Tin, Total, ICP-MS | 0.3 | 1.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.7 | 93 | | 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 | 95 | | 85--115 |
| Lead, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 18.8 | 94 | | 85--115 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 55.9 | 2 | | 0--20 |

**LD:WG125916-3 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 1.9 | | | 0--20 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 157 | 2 | | 0--20 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 65900 | 3 | | 0--20 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 4730 | 3 | | 0--20 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 10.5 | 0 | | 0--20 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 13500 | 0 | | 0--20 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 14600 | 1 | | 0--20 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 0.488 | 7 | | 0--20 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 0.42 | | | 0--20 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 65.5 | 2 | | 0--20 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 38.4 | 2 | | 0--20 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 0.15 | | | 0--20 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 2.35 | 3 | | 0--20 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 7.51 | 0 | | 0--20 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 34.7 | 1 | | 0--20 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 0.851 | 4 | | 0--20 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 0.936 | 2 | | 0--20 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | <MDL | | | 0--20 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 0.095 | | | 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 | 4.85 | 4.83 | 0 | | 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 | 0.16 | 0.14 | | | 0--20 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:423258-500-1 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 | 33.1 | 82.1 | 82 | | 75--125 |

**MS:WG125916-4 L57540-1 Matrix: OTHR WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423258-500-1 Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Lithium, Total, ICP-MS | 0.5 | 2.5 | ug/L | 2.1 | 20 | 18.7 | 83 | | 75--125 |
| Beryllium, Total, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 16.6 | 83 | | 75--125 |
| Boron, Total, ICP-MS | 2 | 10 | ug/L | 154 | 20 | 165 | | 4xRule | 75--125 |
| Sodium, Total, ICP-MS | 100 | 100 | ug/L | 63800 | 5000 | 67300 | | 4xRule | 75--125 |
| Magnesium, Total, ICP-MS | 50 | 50 | ug/L | 4590 | 5000 | 8690 | 82 | | 75--125 |
| Aluminum, Total, ICP-MS | 2 | 10 | ug/L | 10.4 | 20 | 27.7 | 86 | | 75--125 |
| Potassium, Total, ICP-MS | 100 | 500 | ug/L | 13500 | 5000 | 18000 | 89 | | 75--125 |
| Calcium, Total, ICP-MS | 50 | 50 | ug/L | 14500 | 5000 | 18500 | 81 | | 75--125 |
| Vanadium, Total, ICP-MS | 0.075 | 0.375 | ug/L | 0.456 | 20 | 18.8 | 92 | | 75--125 |
| Chromium, Total, ICP-MS | 0.2 | 1 | ug/L | 0.43 | 20 | 18.4 | 90 | | 75--125 |
| Iron, Total, ICP-MS | 10 | 50 | ug/L | 64.5 | 5000 | 4810 | 95 | | 75--125 |
| Manganese, Total, ICP-MS | 0.1 | 0.5 | ug/L | 37.8 | 20 | 55.3 | 88 | | 75--125 |
| Cobalt, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.15 | 20 | 17.6 | 87 | | 75--125 |
| Nickel, Total, ICP-MS | 0.1 | 0.5 | ug/L | 2.28 | 20 | 20.2 | 89 | | 75--125 |
| Copper, Total, ICP-MS | 0.4 | 2 | ug/L | 7.5 | 20 | 25.1 | 88 | | 75--125 |
| Zinc, Total, ICP-MS | 0.5 | 2.5 | ug/L | 34.4 | 20 | 51.1 | 83 | | 75--125 |
| Arsenic, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.819 | 20 | 18.3 | 87 | | 75--125 |
| Selenium, Total, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 17.3 | 87 | | 75--125 |
| Molybdenum, Total, ICP-MS | 0.1 | 0.5 | ug/L | 0.957 | 20 | 18.9 | 90 | | 75--125 |
| Silver, Total, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 18.5 | 92 | | 75--125 |
| Cadmium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 0.069 | 20 | 17.4 | 87 | | 75--125 |
| Antimony, Total, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 18.3 | 92 | | 75--125 |
| Barium, Total, ICP-MS | 0.05 | 0.25 | ug/L | 4.85 | 20 | 23.1 | 91 | | 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 | 0.16 | 20 | 18.5 | 92 | | 75--125 |

**Workgroup: WG125908 Dissolved Metals**

**MB:WG125908-1 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:WG125908-2 MB:WG125908-1 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 | 4810 | 96 | | 85--115 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4800 | 96 | | 85--115 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | <MDL | 5000 | 5000 | 100 | | 85--115 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | <MDL | 5000 | 4970 | 99 | | 85--115 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.8 | 104 | | 85--115 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5050 | 101 | | 85--115 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.4 | 102 | | 85--115 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 21 | 105 | | 85--115 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.5 | 102 | | 85--115 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.5 | 108 | | 85--115 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | <MDL | 20 | 20 | 100 | | 85--115 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.9 | 100 | | 85--115 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 85--115 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 21.3 | 106 | | 85--115 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 19.5 | 98 | | 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 | 20.1 | 100 | | 85--115 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.1 | 100 | | 85--115 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 85--115 |

**LD:WG125908-3 L57511-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD (Lab Duplicate)**

| Parameter | MDL | RDL | Units | SAMP Value | LD Value | RPD | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | <MDL | | | 0--20 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 9700 | 9660 | 0 | | 0--20 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 14300 | 14100 | 1 | | 0--20 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1030 | 1020 | 1 | | 0--20 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 19600 | 19800 | 1 | | 0--20 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.931 | 0.916 | 2 | | 0--20 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | <MDL | | | 0--20 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | <MDL | | | 0--20 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.02 | 1.02 | 0 | | 0--20 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | <MDL | | | 0--20 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.46 | 0.45 | | | 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 | 0.51 | 0.62 | | | 0--20 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 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 | 0.07 | 0.09 | | | 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 | 5.31 | 5.22 | 2 | | 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:WG125908-4 L57511-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-DUGW Pkey:STD (Matrix Spike)**

| Parameter | MDL | RDL | Units | SAMP Value | True Value | MS Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 19.6 | 98 | | 75--125 |
| Sodium, Dissolved, ICP-MS | 100 | 100 | ug/L | 9700 | 5000 | 14500 | 96 | | 75--125 |
| Magnesium, Dissolved, ICP-MS | 50 | 50 | ug/L | 14300 | 5000 | 19300 | 100 | | 75--125 |
| Potassium, Dissolved, ICP-MS | 100 | 500 | ug/L | 1030 | 5000 | 6000 | 99 | | 75--125 |
| Calcium, Dissolved, ICP-MS | 50 | 50 | ug/L | 19600 | 5000 | 24400 | 97 | | 75--125 |
| Vanadium, Dissolved, ICP-MS | 0.075 | 0.375 | ug/L | 0.931 | 20 | 21.4 | 103 | | 75--125 |
| Chromium, Dissolved, ICP-MS | 0.2 | 1 | ug/L | <MDL | 20 | 20.6 | 103 | | 75--125 |
| Iron, Dissolved, ICP-MS | 10 | 50 | ug/L | <MDL | 5000 | 5100 | 102 | | 75--125 |
| Manganese, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 1.02 | 20 | 21.3 | 101 | | 75--125 |
| Cobalt, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | <MDL | 20 | 20.3 | 101 | | 75--125 |
| Nickel, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.46 | 20 | 20.4 | 100 | | 75--125 |
| Copper, Dissolved, ICP-MS | 0.4 | 2 | ug/L | <MDL | 20 | 21.3 | 107 | | 75--125 |
| Zinc, Dissolved, ICP-MS | 0.5 | 2.5 | ug/L | 0.51 | 20 | 20.2 | 99 | | 75--125 |
| Arsenic, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | 0.16 | 20 | 20.5 | 102 | | 75--125 |
| Selenium, Dissolved, ICP-MS | 0.5 | 1 | ug/L | <MDL | 20 | 21.1 | 106 | | 75--125 |
| Silver, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.5 | 103 | | 75--125 |
| Cadmium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 0.07 | 20 | 19.5 | 97 | | 75--125 |
| Antimony, Dissolved, ICP-MS | 0.3 | 1 | ug/L | <MDL | 20 | 20.3 | 101 | | 75--125 |
| Barium, Dissolved, ICP-MS | 0.05 | 0.25 | ug/L | 5.31 | 20 | 25.7 | 102 | | 75--125 |
| Thallium, Dissolved, ICP-MS | 0.04 | 0.2 | ug/L | <MDL | 20 | 20.7 | 104 | | 75--125 |
| Lead, Dissolved, ICP-MS | 0.1 | 0.5 | ug/L | <MDL | 20 | 20.3 | 102 | | 75--125 |

**Workgroup: WG125869 Herbicides**

**MB:WG125869-1 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 | |

**SB:WG125869-2 MB:WG125869-1 Matrix: BLANK WTR Listtype:ORHERB-NPDES Method:SW846 3535A/8151A*8270D SIM Project: Pkey:STD**
**(Spike Blank, Method Blank)**

| Parameter | MDL | RDL | Units | MB Value | True Value | SB Value | % Rec. | Qual | Lab Limit |
|---|---|---|---|---|---|---|---|---|---|
| MCPP | 0.5 | 1 | ug/L | <MDL | 5 | 4.59 | 92 | | 21--147 |
| 2,4-D | 0.5 | 1 | ug/L | <MDL | 5 | 4.72 | 94 | | 10--175 |
| Triclopyr | 0.5 | 1 | ug/L | <MDL | 5 | 4.19 | 84 | | 59--151 |

**MSD:WG125869-4 MS:WG125869-3 L57473-1 Matrix: FRESH 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 | 4.64 | 94 | | 20--162 | 4.95 | 4.5 | 91 | | 3 | | 0--40 |
| 2,4-D | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.8 | 97 | | 10--196 | 4.95 | 4.64 | 94 | | 3 | | 0--40 |
| Triclopyr | 0.5 | 0.99 | ug/L | <MDL | 4.95 | 4.46 | 90 | | 30--150 | 4.95 | 4.8 | 97 | | 8 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4-Dichlorophenylacetic acid 11--153 | mophenol 40--160 |
|---|---|---|
| L57473-1 | 87 | 101 |
| L57557-1 | 59 | 71 |
| L57558-1 | 91 | 108 |
| WG125869-1 | 82 | 91 |
| WG125869-2 | 89 | 98 |
| WG125869-3 | 89 | 111 |
| WG125869-4 | 88 | 122 |

**Workgroup: WG125841 Organophosphorus Pesticides**

**MB:WG125841-1 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:WG125841-2 MB:WG125841-1 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 | 0.25 | 0.247 | 99 | | 52--129 |
| Malathion | 0.048 | 0.05 | ug/L | <MDL | 0.25 | 0.273 | 109 | | 25--161 |
| Chlorpyrifos | 0.034 | 0.05 | ug/L | <MDL | 0.25 | 0.246 | 98 | | 57--127 |
| Dichlobenil | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.217 | 87 | | 70--98 |
| Prometon | 0.05 | 0.1 | ug/L | <MDL | 0.25 | 0.284 | 114 | | 40--160 |

**MSD:WG125841-4 MS:WG125841-3 L57472-1 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 | 0.236 | 0.234 | 99 | | 67--148 | 0.236 | 0.233 | 99 | | 1 | | 0--40 |
| Malathion | 0.045 | 0.0472 | ug/L | <MDL | 0.236 | 0.309 | 131 | | 52--190 | 0.236 | 0.328 | 139 | | 6 | | 0--40 |
| Chlorpyrifos | 0.032 | 0.0472 | ug/L | <MDL | 0.236 | 0.22 | 93 | | 57--141 | 0.236 | 0.211 | 90 | | 4 | | 0--40 |
| Dichlobenil | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.205 | 87 | | 40--160 | 0.236 | 0.206 | 87 | | 0 | | 0--40 |
| Prometon | 0.047 | 0.0943 | ug/L | <MDL | 0.236 | 0.485 | 206 | * | 40--160 | 0.236 | 0.415 | 176 | * | 16 | | 0--40 |

| Surrogate: (Lab Limits) | Chlorpyrifos-D10 41--166 |
|---|---|
| L57472-1 | 90 |
| L57473-1 | 92 |
| L57538-1 | 91 |
| WG125841-1 | 78 |
| WG125841-2 | 99 |
| WG125841-3 | 82 |
| WG125841-4 | 73 |

**Workgroup: WG125842 Semi Volatile Organics**

**MB:WG125842-1 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 | 0.027 | B |
| 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 | <MDL | |
| 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 | 0.168 | 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:WG125842-2 MB:WG125842-1 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 | 1.18 | 47 | | 32--93 |
| 2-Methylnaphthalene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 0.738 | 30 | | 25--104 |
| Dimethyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.44 | 98 | | 31--119 |
| Acenaphthylene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.27 | 51 | | 49--107 |
| Acenaphthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.18 | 47 | | 43--103 |
| Diethyl Phthalate | 0.025 | 0.05 | ug/L | 0.027 | 2.5 | 2.7 | 107 | | 26--141 |
| Fluorene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 1.67 | 67 | | 43--127 |
| Pentachlorophenol | 0.13 | 0.25 | ug/L | <MDL | 2.5 | 1.61 | 64 | | 10--137 |
| Phenanthrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.09 | 84 | | 57--114 |
| Anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.08 | 83 | | 59--122 |
| Di-N-Butyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.68 | 107 | | 52--145 |
| Fluoranthene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.3 | 92 | | 57--123 |
| Pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.72 | 109 | | 51--139 |
| Benzyl Butyl Phthalate | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 3.2 | 128 | | 49--145 |
| Benzo(a)anthracene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.33 | 93 | | 67--130 |
| Chrysene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.48 | 99 | | 58--114 |
| Bis(2-Ethylhexyl)Phthalate | 0.025 | 0.05 | ug/L | 0.168 | 2.5 | 2.92 | 110 | | 48--128 |
| Di-N-Octyl Phthalate | 0.025 | 0.05 | ug/L | <MDL | 2.5 | 2.81 | 112 | | 51--126 |
| Benzo(b,j,k)fluoranthene | 0.1 | 0.2 | ug/L | <MDL | 7.5 | 7.7 | 103 | | 49--139 |
| Benzo(a)pyrene | 0.01 | 0.02 | ug/L | <MDL | 2.5 | 2.51 | 101 | | 55--132 |
| Indeno(1,2,3-Cd)Pyrene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 53--122 |
| Dibenzo(a,h)anthracene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.41 | 96 | | 47--134 |
| Benzo(g,h,i)perylene | 0.05 | 0.1 | ug/L | <MDL | 2.5 | 2.24 | 90 | | 32--130 |

**MSD:WG125842-4 MS:WG125842-3 L57472-1 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 | <MDL | 2.36 | 1.12 | 47 | | 37--95 | 2.36 | 1.2 | 51 | | 8 | | 0--40 |
| 2-Methylnaphthalene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.05 | 45 | | 40--121 | 2.36 | 1.2 | 51 | | 13 | | 0--40 |
| Dimethyl Phthalate | 0.024 | 0.0472 | ug/L | <MDL | 2.36 | 2.14 | 91 | | 34--134 | 2.36 | 2.05 | 87 | | 4 | | 0--40 |
| Acenaphthylene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.64 | 69 | | 46--122 | 2.36 | 1.55 | 66 | | 5 | | 0--40 |
| Acenaphthene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.71 | 73 | | 47--105 | 2.36 | 1.62 | 69 | | 6 | | 0--40 |
| Diethyl Phthalate | 0.024 | 0.0472 | ug/L | 0.204 | 2.36 | 2.4 | 93 | | 33--140 | 2.36 | 2.37 | 92 | | 1 | | 0--40 |
| Fluorene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 1.93 | 82 | | 44--137 | 2.36 | 1.91 | 81 | | 1 | | 0--40 |
| Pentachlorophenol | 0.12 | 0.236 | ug/L | <MDL | 2.36 | 2.8 | 119 | | 44--145 | 2.36 | 2.81 | 119 | | 0 | | 0--40 |
| Phenanthrene | 0.0094 | 0.0189 | ug/L | 0.0403 | 2.36 | 2.22 | 92 | | 62--116 | 2.36 | 2.22 | 92 | | 0 | | 0--40 |
| Anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2 | 85 | | 32--140 | 2.36 | 2.04 | 86 | | 2 | | 0--40 |
| Di-N-Butyl Phthalate | 0.024 | 0.0472 | ug/L | 0.106 | 2.36 | 2.35 | 95 | | 44--134 | 2.36 | 2.38 | 97 | | 2 | | 0--40 |
| Fluoranthene | 0.0094 | 0.0189 | ug/L | 0.0379 | 2.36 | 2.04 | 85 | | 49--123 | 2.36 | 2.08 | 86 | | 2 | | 0--40 |
| Pyrene | 0.0094 | 0.0189 | ug/L | 0.11 | 2.36 | 2.79 | 114 | | 37--147 | 2.36 | 2.76 | 113 | | 1 | | 0--40 |
| Benzyl Butyl Phthalate | 0.047 | 0.0943 | ug/L | 0.166 | 2.36 | 3.34 | 135 | | 39--151 | 2.36 | 3.31 | 133 | | 1 | | 0--40 |
| Benzo(a)anthracene | 0.0094 | 0.0189 | ug/L | <MDL | 2.36 | 2.25 | 95 | | 50--120 | 2.36 | 2.24 | 95 | | 0 | | 0--40 |
| Chrysene | 0.0094 | 0.0189 | ug/L | 0.0561 | 2.36 | 2.23 | 92 | | 42--115 | 2.36 | 2.29 | 95 | | 3 | | 0--40 |
| Bis(2-Ethylhexyl)Phthalate | 0.024 | 0.0472 | ug/L | 1.69 | 2.36 | 4.34 | 112 | | 11--188 | 2.36 | 4.4 | 115 | | 1 | | 0--40 |
| Di-N-Octyl Phthalate | 0.024 | 0.0472 | ug/L | 0.316 | 2.36 | 3.43 | 132 | | 48--150 | 2.36 | 3.45 | 133 | | 1 | | 0--40 |
| Benzo(b,j,k)fluoranthene | 0.094 | 0.189 | ug/L | <MDL | 7.08 | 7.75 | 110 | | 42--123 | 7.08 | 7.9 | 112 | | 2 | | 0--40 |
| Benzo(a)pyrene | 0.0094 | 0.0189 | ug/L | 0.0264 | 2.36 | 2.39 | 100 | | 45--121 | 2.36 | 2.41 | 101 | | 1 | | 0--40 |
| Indeno(1,2,3-Cd)Pyrene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.82 | 77 | | 39--122 | 2.36 | 1.89 | 80 | | 4 | | 0--40 |
| Dibenzo(a,h)anthracene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.79 | 76 | | 31--121 | 2.36 | 1.87 | 79 | | 4 | | 0--40 |
| Benzo(g,h,i)perylene | 0.047 | 0.0943 | ug/L | <MDL | 2.36 | 1.6 | 68 | | 22--125 | 2.36 | 1.65 | 70 | | 3 | | 0--40 |

| Surrogate: (Lab Limits) | 2,4,6-Tribromophenol 20--142 | 2-Fluorobiphenyl 30--128 | 2-Fluorophenol 30--110 | d14-Terphenyl 51--133 | d4-2-Chlorophenol 42--113 | d5-Nitrobenzene 48--116 | 5-Phenol 31--143 |
|---|---|---|---|---|---|---|---|
| L57472-1 | 98 | 47 | 61 | 104 | 54 | 73 | 65 |
| L57473-1 | 69 | 40 | 53 | 89 | 45 | 63 | 61 |
| L57538-1 | 36 | 41 | 50 | 89 | 43 | 60 | 58 |
| WG125842-1 | 53 | 47 | 75 | 85 | 64 | 88 | 82 |
| WG125842-2 | 73 | 31 | 78 | 86 | 69 | 102 | 89 |
| WG125842-3 | 87 | 49 | 62 | 98 | 54 | 72 | 65 |
| WG125842-4 | 91 | 45 | 60 | 100 | 51 | 93 | 62 |

**Workgroup: WG125757 WTPH-Dx**

**MB:WG125757-1 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:WG125757-2 MB:WG125757-1 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 | 0.908 | 91 | | 50--150 |

**SB:WG125757-3 MB:WG125757-1 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 | 0.848 | 85 | | 50--150 |

**LD:WG125757-4 L57436-2 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) | 0.19 | 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-Fluorobiphenyl 50--150 | Pentacosane 50--150 |
|---|---|---|
| L57435-3 | 72 | 94 |
| L57436-2 | 78 | 94 |
| L57473-2 | 83 | 93 |
| WG125757-1 | 75 | 88 |
| WG125757-2 | 82 | 91 |
| WG125757-3 | 95 | 95 |
| WG125757-4 | 82 | 93 |

**Workgroup: WG125724 WTPH-G**

**MB:WG125724-1 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:WG125724-2 MB:WG125724-1 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 | 430 | 86 | | 50--150 |

**LD:WG125724-3 L57435-3 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) | 100 | 250 | ug/L | <MDL | <MDL | | | 0--40 |

| Surrogate: (Lab Limits) | 4-Bromofluorobenzene 50--150 | 8-Toluene 50--150 |
|---|---|---|
| L57435-3 | 90 | 93 |
| L57436-2 | 90 | 93 |
| L57472-3 | 89 | 93 |
| L57473-2 | 89 | 93 |
| WG125724-1 | 91 | 94 |
| WG125724-2 | 87 | 94 |
| WG125724-3 | 90 | 94 |

==========

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

# Trace Metals Data Anomaly Form

**Date(s) Occurred:** *3/7/13 & 3/11/13*

**WG #(s):** *WG125908*

☐ **All samples in WKGP(s)** **or** ☒ **Sample #(s):** *L57472-1, L57473-1*

**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)

## 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:** Kevin Cummings | | |
| **Reviewer:** Steve Talbot | | |
| **Supervisor:** *Diane McElhany* | | |
| **QA Officer:** *Colin Elliott* **(For QA1 only)** | | |
| **cc: LPM:** | | |

# Trace Organics Data Anomaly Form

**Date(s) Occurred:** *19-Mar-13*

**WG #(s):** *WG125644*

☒ **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: *7890G* |

## 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. Prometon exceeded the upper QC recovery 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. An "*" was applied to the QC report.*

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

*3. Given the recovery was high for both the MS & MSD and all associated samples are "ND, no bias is suggested and no qualifier is warranted.*

| | 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:** *2/28/2013*

**WG #(s):** *WG125623*

☐ **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<br>☐ Mettler Toledo AT201 |
| Autoanalyzer: | ☐ Astoria2+2 (freshwater system) ☐ Astoria2+2 (saltwater system)<br>☐ 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<br>☐ 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:
☐ Other

**Corrective Action Description:** *The samples were preserved 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. Because sample handling criteria were not met prior to analysis, the TKN data for these samples and the associated matrix QC were qualified with an "SH".*

## 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:** *Anthony Ocana* | | |
| **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:** *19-MAR-13*

**WG #(s):** *WG125842*

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

**Project #(s):** *421879-210 NPDES SW MON*

**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: *7890E* |

## 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:**

*1. WG125842-1 MB had a reportable levels of Diethyl Phthalate and Bis(2EthylHexyl)Phthalate.*

## 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 10X the blank level contamination were flagged "B" for Diethyl Phthalate and Bis-2(EH)phthalate.*

## 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.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** Mike Doubrava | | |
| **Reviewer:** Michael Muramoto | _____ | _____ |
| **Supervisor:** Diane McElhany | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** | | |

# Conventionals Data Anomaly Form

**Date(s) Occurred:** *2013*

**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: *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 project 421879-210 were filtered past the 15 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:
☐ Other

**Corrective Action Description:** *The samples were filtered for ORTHOP as a 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 associated matrix QC were qualified with an "H".*

## VI. Potential Effects on Data Quality

**Based upon the expected performance of this method:**

*The extended time between sample collection and filtration may have biased the ORTHOP results for these samples. The extent of any bias is unknown, therefore the ORTHOP data should be used with caution.*

| | Signatures | Signature Dates |
|---|---|---|
| **Reported By:** *Terry Siebens* | | |
| **Reviewer:** *Duc Nguyen* | _____ | _____ |
| **Supervisor:** *Brian Prosch* | _____ | _____ |
| **QA Officer:** *Colin Elliott* | _____ | _____ |
| **(For QA1 only)** | _____ | _____ |
| **cc: LPM:** *Fritz Grothkopp* | | |