

2018 Annual Monitoring Report

Island County Solid Waste Facility

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Coupeville, Washington

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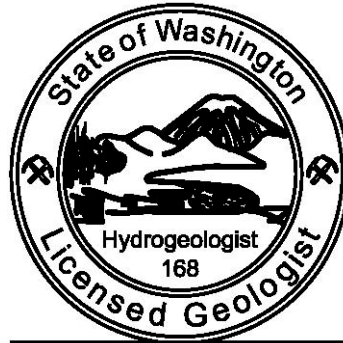
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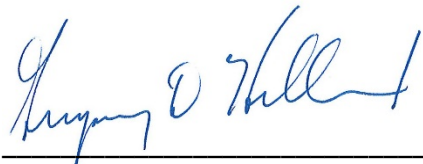
This 2018 Annual Monitoring Report for the Coupeville Solid Waste Facility located at 20062 State Route 20 in Coupeville, Washington, was prepared by Sam Graber and Daniel Venchiarutti, LHG and was reviewed by Greg Helland, LHG, of SCS Engineers.



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1.0 INTRODUCTION

This Annual Report provides a summary of the field and laboratory results for the 2018 post-closure environmental monitoring activities conducted at the Island County Coupeville Solid Waste Facility (CSWF) located at 20062 State Route 20 in Coupeville, Washington. Environmental monitoring activities completed over the 2018 reporting period included sampling and analysis of groundwater (monitoring wells and nearby water supply wells), monitoring of landfill gas probes, and source control operations including stormwater collection and the management of landfill gas extraction wells. This work was conducted in accordance with the recently updated *CSWF Groundwater Sampling and Analysis/Quality Assurance Plan* (SAP/QAP, version 1.1) dated April 2018 and the *Landfill Gas Monitoring Plan* dated September 2002, modified in 2005 and 2008 (SCS Engineers).

Post-closure groundwater monitoring is performed at the CSWF, consistent with the requirements of WAC 173-304. It should be noted that during the fall of 2017, the CSWF presented Island County Public Health (ICPH) and the Washington Department of Ecology (Ecology) with a proposed groundwater monitoring optimization program intended to enhance the effectiveness of the sampling regime. After receipt of agency comments and subsequent technical discussions, a modified optimized groundwater monitoring program was agreed to by the CSWF and ICPH. The revised monitoring program provides for quarterly water quality sampling at 11 CSWF groundwater wells. A further 16 monitoring wells are also sampled on a semi-annual basis (during the second and fourth quarter events). In addition, a site-wide, confirmational monitoring event, encompassing up to 36 facility wells, is planned after a period of two years (scheduled for the second quarter 2020). The revised program is documented in the 2018 CSWF SAP/QAP (revision 1.1), and was implemented beginning with the first quarter 2018 monitoring event.

Over the 2018 compliance period, 11 groundwater wells were monitored during the first and third quarters of 2018, while a total of 27 groundwater wells were monitored as part of the second and fourth quarter events. The environmental monitoring and sampling activities over the 2018 reporting period were performed by SCS Engineers and SCS Field Services.

1.1 REPORT CONTENTS

The 2018 Annual Monitoring Report includes:

- Background and Site Description (including figures of site location and facility layout)
- A summary of the 2018 monitoring effort
 - Measurement of groundwater levels at the sampled monitoring wells
 - Landfill gas (LFG) monitoring at
 - 10 subsurface perimeter probe locations (44 points)
 - 2 probe locations within onsite buildings (two points within the scale house/office)
 - Groundwater field measurements and sample collection for 27 monitoring and water supply wells
- An evaluation and summary of the 2018 groundwater elevation/flow direction, field monitoring, and analytical data
- A summary of the 2018 LFG monitoring results

- A summary of the contaminant source control operation results
- A comparison and summary of 2018 analytical data to regulatory criteria
- A geochemical evaluation of recent (2018) groundwater conditions
- A summary of historical (previous 5 years) groundwater elevation, field monitoring, and analytical data
- Groundwater hydrographs
- Times series graphs for select analytes
- Short and long term groundwater statistics
- Documentation of field monitoring and sampling activities from 2018
- A summary of analytical data validation and analytical laboratory data reports
- Recommendations developed from the evaluation of site conditions

1.2 SUMMARY OF RESULTS

1.2.1 Groundwater

The 2018 groundwater monitoring results for the CSWF remain generally consistent with those previously reported at the site. Water quality within or immediately adjacent to the closed waste disposal areas continues to be influenced by detectable concentrations of several VOCs (primarily vinyl chloride), as well as certain inorganic compounds, general chemistry parameters, and field parameters. However, natural attenuation of the groundwater contamination observed at the CSWF appears to be continuing, with reduced concentrations of the primary landfill contaminants in downgradient monitoring wells situated 400 to 750 feet downgradient of the disposal areas.

Vinyl chloride continues to represent the most notable site contaminant, with groundwater exceedances being historically reported as far downgradient as Aquifer 2 monitoring well E4D (approximately 400 feet northeast from the landfill edge). However, during recent years vinyl chloride has generally been absent in the CSWF wells situated beyond the immediate vicinity of the landfill. Groundwater samples collected from Aquifer 2 “sentinel” wells E9D and E10D, situated hydrologically downgradient of the observed vinyl chloride plume, have never reported detectable levels of VOCs. The 2018 results continue to corroborate the findings of past groundwater assessment and modelling efforts which concluded that VOCs originating from the CSWF disposal cells are naturally attenuating beneath the facility, and that vinyl chloride has not, and will not in the future, migrate beyond County property.

Groundwater quality criteria for specific conductivity, total dissolved solids, total nitrate/nitrite, arsenic, iron, manganese, 1,1-dichloroethane and vinyl chloride were exceeded in one or more wells during 2018. The WAC 173-200 groundwater criteria for vinyl chloride was exceeded in three Aquifer 1 monitoring wells (E1D, E2S and N2S) and four Aquifer 2 wells (E2D, E6D, E7D and N2D) during the reporting period. These results are generally consistent with previous monitoring at the facility.

Landfill closure and source control activities continue to influence most temporal trends in chemical concentrations (both long term and short term, as identified by the statistical summaries and time series plots). Short term trends indicate that the majority of chemical concentrations in the

groundwater are stabilized or have been decreasing over the past several years. However, several exceptions to this overall trend have been noted. Increasing short term trends in concentration were observed for:

- Specific conductance in Aquifer 2 wells E5D and E7D.
- Total nitrate/nitrite in Aquifer 1 well E4S.
- Sulfate in Aquifer 1 well E1D and Aquifer 2 wells N2D and N5D.

However, as illustrated on the time-series graphs provided in Appendix C, few of these short term increasing trends represent large concentration changes. In addition, several of the identified wells are situated cross-gradient of the CSWF waste disposal cells.

Groundwater elevations at the site have been gradually increasing over the past five years. Groundwater flow directions within Aquifer 1 and Aquifer 2 remain consistently towards the east-northeast and north-northeast, respectively. Over 2018, the average groundwater flow velocity in Aquifer 1 was estimated to be higher (1.23 to 1.29 ft/day) than that calculated for Aquifer 2 (0.110 to 0.115 ft/day).

1.2.2 Landfill Gas Probes

Landfill gas (LFG) probe monitoring results continue to indicate that LFG (represented by combined methane and carbon dioxide) remains present in the soils surrounding the landfill. Similar to previous years, carbon dioxide was the predominant component of LFG detected during the 2018 monitoring events. Depressed oxygen levels (less than ambient concentrations) were also detected in most of the gas probes during 2018. Depressed oxygen is associated with the displacement of air by LFG.

Methane was measured in two LFG probes (GP-S6D and GP-15) situated near the southern edge of the landfill through the first half of 2018 at levels higher than historically observed at these locations. These localized detections are suspected to be the residual effects of several LFG system interruptions/repairs that occurred during 2016 and 2017. However, recent adjustments to the LFG system appear to be mitigating this buildup, as demonstrated by reduced methane measurement recorded at these probe locations during the fourth quarter monitoring events. Continued monitoring and system adjustments are anticipated to further reduce or eliminate the accumulation of methane in this area. It should also be noted that none of the affected probes are compliance monitoring locations.

LFG regulatory requirements only apply to the methane component due to its explosive and flammable nature. Throughout the 2018 monitoring period, the CSWF remained in compliance with the regulatory threshold limits for methane in soils at the property boundary (less than 5 percent by volume) and inside of onsite structures (less than 1.25 percent by volume).

1.2.3 Contaminant Source Control Operations

Engineering controls aimed at reducing the source of contaminants to groundwater were implemented at the CSWF in 2005. These controls included stormwater collection from an upgraded drainage system at the interface of the municipal solid waste and construction, demolition and landclearing debris fill areas. The stormwater drainage and collection system was designed to reduce infiltration into the CDL wastes and limit the potential production of leachate. The engineering controls also included an enhanced LFG control system featuring improved gas

extraction from the refuse mass by adding vertical extraction wells, and the addition of a soil vapor extraction (SVE) system to recover LFG from the vadose zone surrounding the landfill.

During 2018, a total of 20,121 gallons of stormwater runoff from the closed MSW landfill and CDL landfill covers was pumped from the collection system sump near monitoring well C1S and discharged to the infiltration pond west of the disposal areas. Cumulatively, a total of 244,566 gallons of stormwater have been diverted from this area since the fall of 2005. This stormwater previously infiltrated into the subsurface near the CDL disposal area and may have contributed to leachate generation from the CDL waste.

During May 2005, a series of in-refuse vertical extraction wells were installed and activated, while an earlier air injection system was de-activated. The air injection system was de-activated in conjunction with the LFG extraction system installation because the LFG extraction system allows for source control by removing LFG through the extraction wells. Also, in November 2005, new SVE wells began operation. Between November 22, 2005 and late-December 2018, the LFG extraction system operated an average of 6.2 hours per day and the SVE system operated an average of 10.9 hours per day.

These operational times are managed to balance extraction rates with the gas generation rate. Should extraction exceed gas generation rates, oxygen may be pulled into the landfill, which could create a fire hazard. Furthermore, drawing oxygen into the system prevents the gas treatment system (flare) from operating correctly. Excessive extraction of native soil gas could induce migration of refuse generated gases from the waste cells when LFG is not being extracted. LFG monitoring was conducted at approximately 45-day intervals during 2018.

In summary, existing LFG extraction system operations appear to remain effective for controlling LFG generated within the refuse mass, thereby providing source control of LFG migration to the vadose zone. Similarly, the SVE system appears to be successful in extracting LFG from the surrounding vadose zone, thereby providing an additional measure of source control for potential groundwater contaminants.

2.0 BACKGROUND AND SITE DESCRIPTION

Detailed information regarding the site layout and history as well as the hydrogeologic setting may be found in the *Preliminary Hydrogeologic Study and Engineering Evaluation*, prepared by SCS Engineers (January, 2002), as well as the *Conceptual Model Summary Technical Memorandum*, also prepared by SCS Engineers (January, 2004). The following provides a summary of this information.

2.1 LOCATION AND OPERATIONAL HISTORY

The CSWF is located at 20062 SR-20, approximately 1.5 miles east of Coupeville, on Whidbey Island, Washington (Figure 1). The landfill-related features of the CSWF include two closed municipal solid waste (MSW) disposal areas and one construction, demolition and landclearing (CDL) debris disposal area that is currently inactive and covered with low-permeability soil. These waste disposal areas are referred to as follows:

- City MSW Landfill (1946 - 1977)
- County MSW Landfill (1971 - 1992)
- County CDL Landfill (1992 - 2002)

The City MSW Landfill operated (by the Town of Coupeville) as a burning dump from 1946 to 1969 and as a landfill from 1969 to 1977. It occupies approximately 3 acres on the west side of the property. The depth of waste is estimated to be 10 to 20 feet deep based on typical waste disposal practices from that time period. Waste disposal quantities for the City MSW Landfill are not available. The City MSW Landfill has no liner system and the cover system consists of native soils with grass vegetation.

The County MSW Landfill operated from 1971 to 1992. It occupies approximately 11 acres on the south side of the property. The depth of waste is estimated to be 20 feet deep on the west half of the fill area and approximately 50 feet deep on the east half based on historical waste disposal practices and the preceding mining (quarry) activities. The County MSW Landfill has no liner system and the cover system consists of the following from top to bottom: grass vegetation, 6 inches of topsoil, 18 inches of drainage sand, composite 8 oz/yd² non-woven geotextile / 250 mil HDPE drainage net / 8 oz/yd² non-woven geotextile, 60 mil HDPE textured geomembrane, and 18 inches of foundation sand.

The County CDL Landfill operated from 1992 to 2002. It occupies approximately 4 acres immediately adjacent to the north side of the County MSW Landfill. A portion of the County CDL Landfill overlaps the north side of the County MSW Landfill. Waste is estimated to be up to 40 feet deep based on historical filling activities. The County CDL Landfill has no liner system and has a soil cover consisting of 12 inches of native soil (installed in 2002) and 12 inches of soil with high clay content (installed in 2004). The CDL Landfill accepted inert materials including uncontaminated soils, brick, concrete, sand, and glass, as well as other construction and land clearing debris, including some organic materials such as wood. Past inspections by ICPH suggested that small quantities of unacceptable materials may have been disposed of at this site.

The CSWF also includes an asbestos landfill situated in the north-central portion of the disposal area. In addition to landfilling, other features of the CSWF include a transfer station, a moderate risk waste handling station, a recycling collection area, a septage biosolids treatment plant, and various county storage facilities. During 2018, an extensive expansion of the CSWF biosolids treatment

facility was completed. All of the CSWF facilities are situated on approximately 90 acres of land owned by the County. A site plan illustrating the general layout of the facility is presented on Figure 2.

2.2 TOPOGRAPHY AND CLIMATE

The site is situated on a wooded terrace, approximately one mile south of Penn Cove. Although the ground surface comprising the developed areas of the property remains level, the site lies in the vicinity of several large glacial kettle depressions. The elevation of the facility is approximately 200 feet above mean sea level.

Site climate is characterized by cool, moist winters and dry, warm summers which are characteristic of the Puget Sound Lowlands. Temperature extremes are moderate due to maritime influences from the adjacent Puget Sound, Strait of Juan de Fuca, and nearby Pacific Ocean. Precipitation is typically less than most areas in the Puget Sound region due to the site's location relative to the leeward side of the Olympic Mountains, which generate a rain shadow effect. The site receives an average annual rainfall of just over 21 inches, according to historical records.

2.3 LOCAL AND REGIONAL HYDROGEOLOGY

The Preliminary Hydrogeologic Study and Engineering Evaluation completed by SCS (January, 2002) identified three water-bearing zones and two confining (or semi-confining) layers beneath the CSWF. Regionally, groundwater flow in the upper aquifer (Aquifer 1) is reported to generally trend toward the east-northeast. Groundwater in the underlying aquifer (Aquifer 2) appears to flow in a more north-northeasterly direction. South of the site, the regional groundwater flow direction has a southeasterly component. Groundwater flow beneath the site likely has a vertical component, with water moving from shallowest to deepest zones across the semi-confining layers. The difference in hydraulic head between the upper and lower aquifers beneath the site is reported to be approximately 12 feet.

3.0 GROUNDWATER

Quarterly groundwater monitoring at the Island County Solid Waste Facility commenced in 1985. Groundwater monitoring has included both monitoring wells (constructed specifically for groundwater monitoring) and nearby small-scale water supply (pumping) wells. Since its inception, the monitoring program has evolved to include both onsite and off-site well locations, as well as an expanded parameter suite. As previously noted, an optimized groundwater monitoring program was implemented at the CSWF during the first quarter 2018. All the groundwater monitoring wells on the CSWF property are outfitted with dedicated low-flow sampling pumps.

The current groundwater monitoring network includes ten locations with paired shallow and deep monitoring wells, 11 single completion monitoring wells (three shallow, eight deep), and five water supply wells. It should be noted that well W1D remains in the groundwater monitoring network. It was formerly paired with a shallow monitoring well (W1S) that is not currently being monitored due to an insufficient amount of water in the well for sampling. Also, replacement well N1SR was installed in November 2005; however, this well appears to be completed in a perched zone which may not be hydraulically connected (at least directly) with the groundwater monitored by other wells at the site. A summary of the CSWF Aquifer 1, Aquifer 2 and pumping wells (and their installation dates) is provided in the exhibit below. The locations of the wells within the monitoring network are also illustrated on Figure 2.

Exhibit 1. 2018 CSWF Groundwater Monitoring Well Network (Installation Year)

Aquifer 1 Wells	Aquifer 2 Wells	Pumping Wells
C1S (2002)	E2D (1997)	DNR (1964)
E1D (1997)	E3D (2001)	WRI (1976)
E1S (1997)	E4D (2008)	S7 (1979)
E2S (1997)	E5D (2013)	DOT (1981)
E4S (2008)	E6D (2013)	STP (1993)
N1SR (2005)	E7D (2013)	
N2S (1997)	E8D (2013)	
N3S (1997)	E9D (2016)	
NE1S (2002)	E10D (2016)	
S10S (2003)	N1D (1997)	
S11S (2003)	N2D (1997)	
SE1D (2003)	N3D (1997)	
SE1S (2002)	N5D (2002)	
	N5S (2002)	
	NE1D (2002)	
	S11D (2003)	
	W1D (1997)	
	W2S (2002)	

A summary of the Aquifer 1, Aquifer 2 and pumping wells groundwater monitoring schedule is provided in Exhibit 2. Water quality monitoring at the CSWF is conducted on a quarterly basis at nine (9) Aquifer 2 groundwater wells and two (2) water supply wells. Two of these Aquifer 2 wells (E2D and E4D) are only sampled for VOCs during the first and third quarter events. An additional, nine (9) Aquifer 1 wells, six (6) Aquifer 2 wells, and one water supply well are also monitored semi-annually (during the second and fourth quarters). One Aquifer 1 well (E1S) is only sampled for nitrates during these semi-annual events. During 2018, groundwater monitoring was performed by SCS Engineers

in January, April, July, and October. It should be noted that groundwater samples were not obtained from water supply well DNR during the second quarter because this location could not be accessed.

Exhibit 2. CSWF Groundwater Monitoring Schedule

Monitoring Frequency	Groundwater Monitoring Wells		Pumping Wells
	Aquifer 1 Wells	Aquifer 2 Wells	
Quarterly Event		E2D* E4D* E5D E6D E7D E8D E9D E10D N2D	DNR WRI
Semi-Annual Event (Additional wells sampled during the Second & Fourth Quarters)	E1D E1S** E2S E4S N2S N3S NE1S S10S S11S	E3D N1D N3D N5D NE1D S11D	DOT
Two-Year Event (Additional wells to be sampled in the Second Quarter 2020)	C1S N1SR SE1D SE1S	N5S W1D W2S	S7 STP

N/A: Not Applicable

* Wells E2D and E4D are only sampled for VOCs during the first and third quarter events.

** Well E1S is only sampled for nitrates.

3.1 MONITORING ACTIVITIES

3.1.1 Water Level Measurements

As part of the routine groundwater monitoring program, static water levels at each well location were initially measured and recorded prior to initializing any well purging or groundwater collection procedures. Depth-to-water measurements (measured to the nearest 0.01 ft.) were obtained using an electronic water level indicator. Measurement results were recorded on field sampling logs and the resulting data were subsequently used to calculate groundwater elevations for each well location.

As part of the second (April) and fourth (October) quarter events, static water levels were measured at all of the 27 water quality monitoring wells sampled. The resulting water table elevation data were used for the semi-annual determination of groundwater flow characteristics.

3.1.2 Sample Collection and Analysis

Groundwater samples were collected each quarter from the monitoring locations depicted on Figure 2. The groundwater monitoring wells were sampled using the low-flow sampling procedure outlined in the SAP/QAP. Each monitoring well is outfitted with a dedicated bladder pump. Purging was completed at flow rates of less than 500 milliliters per min (ml/min) until indicator parameters (pH, temperature, specific conductance, turbidity and dissolved oxygen) stabilized according to the criteria stated in the SAP/QAP. Indicator parameters (except turbidity) were measured with a closed in-line flow-through cell to prevent atmospheric influences. Turbidity measurements were taken using a field-portable turbidity meter. After parameter stabilization, the flow-through cell was disconnected. Samples were collected by filling laboratory-prepared sample bottles directly from the pump discharge line (to prevent cross-contamination). Specific sampling procedures are outlined in the SAP/QAP.

Water supply well samples were collected from the sampling taps situated at each wellhead's surface outlet immediately before the pressure tank and other appurtenances. The tap was allowed to discharge until the pump came on (verifying that the water being sampled came from the well and not a storage or pressure tank) and indicator parameters were allowed to stabilize according to the same criteria used for monitoring well sampling. After indicator parameters stabilized, the flow splitter was removed and samples were collected directly from the sampling tap at flow rates of approximately 500 ml/min. Specific sampling procedures are outlined in the SAP/QAP.

It should be noted that the objective of purging a pumping water supply well is the same as with a monitoring well: to ultimately collect a sample representative of the groundwater in the aquifer rather than water in the well (or plumbing system). However, it should be recognized that data obtained from water supply wells may not be directly comparable to that obtained from the monitoring wells due to the differences in well construction and sampling method. Concentration averaging is also likely to occur from differences in the screen length and pumping rate for the water supply wells. The purpose of this sampling is simply to assess the quality of water at the water supply wells to verify usability of the water. In addition, a water flow meter was installed at non-potable water supply well DOT so that its water production could be recorded each time the location was sampled.

Groundwater samples were packed in coolers containing ice, stored, and transported under chain-of-custody protocols to Test America Laboratories (Test America) in Fife, Washington. Laboratory analytical data results were delivered to SCS Engineers in electronic formats.

The SAP/QAP calls for analyses including:

- Total dissolved solids by SM 2540C
- Chemical oxygen demand (COD) by SM 5220C
- Total organic carbon (TOC) by SM5310B
- Total alkalinity and bicarbonate alkalinity by SM 2320B
- Anions (sulfate and chloride) by method 300.0
- Total nitrate/nitrite and ammonia by methods 300/353.2/350.1
- Metals (arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, nickel, selenium, silver, thallium, vanadium, zinc, manganese, and lead by method 6020A; iron, calcium, magnesium, potassium and sodium by method 6010B)

- Volatile organic compounds (VOCs) by method 8260B/8260SIM (or equivalent)

The SAP/QAP also calls for field Quality Assurance/Quality Control (QA/QC) samples, including collection of one duplicate sample and one field blank each quarter.

3.2 RESULTS

3.2.1 Groundwater Elevations

Groundwater elevations in the Aquifer 1 (shallow aquifer) during 2018 ranged between 63.91 (NE1S in April) to 85.50 (W1S in October) feet above mean sea level (msl). Aquifer 2 (deep aquifer) groundwater elevations recorded over the same period ranged from 47.22 (E10D in July) to 59.46 (S11D in October) feet above msl. Groundwater elevations at the CSWF do not appear to show strong seasonal fluctuations in response to changes in precipitation recharge. Depth-to-water measurements and calculated groundwater level elevations from the CSWF monitoring wells completed in Aquifer 1 and Aquifer 2 are presented in Tables 1A and 1B, respectively. Hydrographs of the CSWF groundwater elevations are provided for Aquifer 1 and Aquifer 2 on Figures 3 and 4, respectively.

As illustrated on Figures 3 and 4, groundwater elevations at the CSWF have been gradually rising in both Aquifer 1 and Aquifer 2 over the past five years. Barring a few anomalous elevation values (likely due to inaccurate field measurement), the majority of the observed 5-year increasing elevation trends remain within a 0.5 to 3 feet range depending on well location.

Groundwater surface elevation maps were prepared (refer to Figures 5A/B and 6A/B) for Aquifer 1 and Aquifer 2. These figures display the potentiometric surfaces and groundwater flow directions observed during April and October 2018. Little change was noted in groundwater flow direction over the course of the 2018 compliance period.

The groundwater elevation surface maps for Aquifer 1 (Figures 5A and 6A) depict a generally easterly flow direction. The average hydraulic gradient for Aquifer 1 was generally consistent throughout the reporting year. The calculated gradients for Aquifer 1 during April and October 2018 were 0.0139 and 0.0146 feet/feet, respectively. Assuming an effective porosity of 25 percent and an average hydraulic conductivity of 22.0 feet/day (as determined from grain size analysis of the sandy soils found in the screened intervals of wells NE1S, S10S, and SE1S), the groundwater flow velocity during 2018 in Aquifer 1 was calculated to range between 1.23 and 1.29 feet/day.

The groundwater elevation surface maps for Aquifer 2 (Figures 5B and 6B) depict a flow direction to the north-northeast. The average hydraulic gradients for Aquifer 2 calculated for April and October 2018 were 0.0040 and 0.0038 feet/feet, respectively. Assuming an effective porosity of 33 percent and an average hydraulic conductivity of 9.40 feet/day (determined from grain size analysis of the sandy soils found in the screened intervals of landfill wells NE1D, N5D, and S11D), the groundwater flow velocity during 2018 in Aquifer 2 was estimated to range between 0.110 and 0.115 feet/day.

Water supply well water levels were not measured and are not reported because water levels cannot be guaranteed to be representative of static conditions (due to unknown pumping schedules). The water meter installed at pumping well DOT indicated that 7,102 gallons of non-potable water (mostly used for road application or fire fighting) had been pumped from this well between January and October 2018.

3.2.2 Water Quality

Measurement of field parameters and results from laboratory analyses for general chemistry and metals for 2018 are presented in Tables 2A through 2C. Results from laboratory analyses for VOCs are presented in Tables 3A through 3C. A summary of VOC detections is also provided in Table 4. Field documentation for the 2018 groundwater monitoring events is presented in Appendix A.

3.2.2.1 Field Parameters

Field parameters results for the 2018 compliance period are summarized below.

Dissolved oxygen (DO) measurements recorded at the CSWF ranged from 0.32 to 6.25 milligrams per liter (mg/L) over the reporting year. Aquifer 1 and Aquifer 2 wells reported generally similar DO ranges (0.32 to 6.25 mg/L and 0.38 to 4.41 mg/L, respectively). The water supply wells reported a DO range of 1.15 to 3.26 mg/L.

Oxidation-reduction potential (ORP) measurements varied widely across the facility ranging from negative (-) 258 to positive 289 millivolts (mV) during 2018. Water supply wells reported an ORP range of -122 to 187 mV.

The **pH** values recorded in the Aquifer 1 and Aquifer 2 wells during the reporting year ranged between 6.7 to 8.3 standard units (SU). Water supply wells reported pH results ranging between 7.1 and 8.0 SU. It should be noted that pH field measurements are most commonly reported within the 6.7 to 7.8 SU range, and that the majority of outlier results are suspected to be related to inconsistent meter performance.

Specific conductivity (SC) recorded at the CSWF in 2018 ranged between 540 and 1,800 microSiemens per centimeter ($\mu\text{S}/\text{cm}$). Aquifer 1 and Aquifer 2 wells reported generally similar SC measurements ranging between 839 to 1,800 $\mu\text{S}/\text{cm}$ and 540 to 1,794 $\mu\text{S}/\text{cm}$, respectively. The water supply wells reported a narrower SC range between 715 to 898 $\mu\text{S}/\text{cm}$.

Temperature measurements ranged from 9.5 °C to 15.6 °C in the groundwater samples collected over the reporting period. The highest temperatures were typically recorded in wells sampled during the July and October events, while the cooler temperatures were generally noted during the January and April events. As noted for previous monitoring years, the recorded values are largely interpreted to be function of changes in the ambient air temperature during sampling, and are not anticipated to represent in situ groundwater temperatures.

Groundwater turbidity recorded during 2018 was typically low in the Aquifer 1 and Aquifer 2 wells, ranging from 0.0 (undetected) to 7.8 Nephelometric Turbidity Units (NTU). The water supply wells reported slightly higher turbid readings ranging from 0.3 to 8.4 NTU.

3.2.2.2 General Chemistry

The 2018 results for the general chemistry parameters are summarized below.

Total Alkalinity at the CSWF is principally composed of bicarbonate (HCO_3). During the compliance year, total alkalinity varied between 190 and 820 mg/L. Aquifer 1 alkalinity ranged from 320 to 820 mg/L, while Aquifer 2 alkalinity ranged from 190 (E9D throughout the year) to 820 mg/L (E7D during January). The water supply wells reported an alkalinity range of 270 to 320 mg/L.

Ammonia was sporadically detected in several Aquifer 1 and Aquifer 2 monitoring wells during 2018 at concentrations ranging between <0.5 (in most wells) to 2.7 mg/L (N3S during October). Ammonia was not reported in any of water supply wells sampled over the reporting period.

Calcium detections in the Aquifer 1 and Aquifer 2 wells ranged from 29 mg/L (E9D in April) to 250 mg/L (E7D in July). Calcium detections in the water supply wells remained generally lower, ranging between 61 and 89 mg/L.

Chemical oxygen demand (COD) typically ranged between <10 (in most wells) and 45 mg/L in Aquifer 1 and Aquifer 2 wells in 2018, with the majority of wells reporting non-detects for this parameter. The highest COD concentrations were routinely reported in Aquifer 2 well E7D (32 to 45 mg/L). The only COD detection reported in the water supply wells during the compliance year occurred in WRI (13.0 mg/L during October).

Chloride concentrations reported at the CSWF ranged between 14 and 130 mg/L. Aquifer 1 chloride levels varied between 19 and 75 mg/L. Aquifer 2 chloride levels ranged from 14 to 130 mg/L. Water supply wells reported chloride concentrations ranging from 23 to 68 mg/L. The 250 mg/L groundwater quality criterion for chloride was not exceeded during the 2018 compliance year.

Fluoride levels reported in the CSWF wells over the 2018 compliance period were low across the facility ranging between <0.20 (in most wells) and 0.23 mg/L.

Magnesium concentrations in Aquifer 1 wells ranged between 34 and 120 mg/L over the reporting year. Aquifer 2 reported similar magnesium levels ranging from 26 to 110 mg/L. The water supply wells reported magnesium concentrations ranging between 40 to 52 mg/L.

Potassium concentrations ranged from 5.2 to 9.7 mg/L in Aquifer 1 during 2018. Aquifer 2 potassium levels were similar, ranging between 5.7 and 16 mg/L. The water supply wells reported potassium concentrations ranging from 5.2 to 6.5 mg/L.

Sodium levels in the Aquifer 1 wells ranged between 17 and 44 mg/L during 2018. Aquifer 2 wells reported a similar range of sodium concentrations (16 to 47 mg/L). Sodium levels in the water supply wells ranged between 24 and 35 mg/L.

Sulfate concentrations during the reporting period ranged between 13 and 160 mg/L. Sulfate concentrations in the Aquifer 1 wells varied between 28 and 110 mg/L. Aquifer 2 sulfate levels ranged from 13 to 160 mg/L. Water supply wells reported sulfate concentrations ranging between 23 and 54 mg/L. The 250 mg/L groundwater quality criterion for sulfate was not exceeded during the 2018 compliance year.

Total dissolved solids (TDS) was detected at concentrations ranging between 240 (E9D in January) and 1,100 mg/L (E7D in January, April and October) during the reporting period. Aquifer 1 and Aquifer 2 wells reported generally similar TDS ranges (430 to 1,000 mg/L and 240 to 1,100 mg/L, respectfully). The water supply wells reported lower TDS concentrations, ranging between 360 and 470 mg/L.

Nitrate/Nitrite was reported at the CSWF facility at concentrations ranging between <0.4 and 40.0 mg/L. Nitrate/nitrite detections showed the greatest variation in the Aquifer 1 wells, ranging from 0.99 to 40.0 mg/L. As noted in past monitoring years, this parameter was most elevated in S10S (34 to 40 mg/L), but routinely exceeded 5 mg/L in six of the remaining Aquifer 1 wells. The 10 mg/L groundwater quality criterion was only exceeded in Aquifer 1 wells S10S and E1S over the reporting

year. However, since S10S and E1S are situated generally cross-gradient from the landfill the latter nitrate/nitrite detections are suspected to be related to non-landfill sources.

Total organic carbon (TOC) concentrations ranged from 1.3 to 2.5 mg/L in the Aquifer 1 wells during the compliance year. Aquifer 2 reported TOC levels ranging between 1.0 to 18 mg/L, while the water supply wells reported TOC concentrations ranging from 1.2 to 2.6 mg/L. The highest TOC results (13 to 18 mg/L) were routinely observed in Aquifer 2 well E7D.

3.2.2.3 Metals

Metals results for the 2018 reporting year are summarized below. A total of seven metals, including antimony, beryllium, cadmium, lead, selenium, silver, and thallium, were either not detected or only sporadically reported above their respective laboratory reporting limits. Accordingly, these seven metals have been excluded from the discussion below.

Arsenic concentrations during the compliance year ranged between 0.0012 and 0.020 mg/L. Aquifer 1 arsenic concentrations varied from 0.0012 to 0.0057 mg/L. Aquifer 2 arsenic levels ranged between 0.0012 and 0.020 mg/L. The water supply wells reported arsenic concentrations ranging between 0.0032 and 0.0063 mg/L.

Barium concentrations at the CSWF ranged from 0.017 to 0.11 mg/L. The Aquifer 1 and water supply wells reported a similar range of barium concentrations (0.029 to 0.057 mg/L and 0.018 to 0.026 mg/L, respectfully). Aquifer 2 reported slightly higher barium levels that ranged between 0.017 and 0.11 mg/L.

Chromium was reported at concentrations that ranged between <0.0004 and 0.010 mg/L. Aquifer 1 chromium detections showed the greatest variation, ranging between 0.00074 and 0.010 mg/L. Detected chromium in the Aquifer 2 wells varied between 0.00043 and 0.0024 mg/L. The water supply wells reported chromium detections ranging from 0.0014 to 0.0042 mg/L.

Cobalt was reported in two Aquifer 1 wells (E1D and E2S) at concentrations ranging from 0.0006 to 0.0009 mg/L. Aquifer 2 well E7D reported cobalt results ranging between 0.0021 and 0.0022 mg/L during the reporting year. In addition, a single cobalt detection (0.00054 mg/L) was reported in Aquifer 2 well E9D. Cobalt was not detected in any of the water supply wells.

Copper concentrations ranged from <0.0020 to 0.049 mg/L during the compliance year. One Aquifer 1 well (NE1S) reported copper detections ranging between 0.029 and 0.0032 mg/L. Two Aquifer 2 wells (E2D and E9D) each reported a single copper detection (0.0020 and 0.0029 mg/L respectively). The water supply wells reported a greater range of copper detections from 0.0022 to 0.049 mg/L. The highest copper levels were noted in well WR1.

Iron was reported in excess of the 0.3 mg/L groundwater quality criterion at least once in five Aquifer 2 wells (E5D, E6D, E8D, E10D and N1D) and one water supply well (DOT) during 2018. The reported iron detections ranged between 0.30 and 1.7 mg/L. Iron was not detected in any of the Aquifer 1 wells during 2018.

Manganese detections ranged between 0.025 and 0.73 mg/L over the reporting period. Aquifer 1 wells reported manganese concentrations varying between 0.025 and 0.44 mg/L. Aquifer 2 manganese levels ranged from 0.031 to 0.73 mg/L. Water supply well DOT reported 0.16 mg/L of manganese during the April and October events. The highest manganese levels were reported in Aquifer 2 well E6D.

Nickel was reported at concentrations that ranged from <0.003 to 0.023 mg/L during the compliance year. Nickel detections in the Aquifer 1 wells varied between 0.0045 to 0.0091 mg/L. Aquifer 2 nickel detections showed the greatest variation, ranging between 0.0041 to 0.023 mg/L. Nickel was not detected in any of the water supply wells during the reporting period.

Vanadium was detected at low concentrations in six of the Aquifer 1 wells at concentrations ranging between 0.0042 and 0.0062 mg/L. Two Aquifer 2 wells (E2D and E7D) reported sporadic vanadium detections ranging from 0.0040 to 0.0060 mg/L. Water supply well DNR reported vanadium at concentrations ranging between 0.0058 and 0.0068 mg/L.

Zinc was not reported in any of the Aquifer 1 wells, and in one Aquifer 2 well E9D (0.0097 mg/L in October) during 2018. Zinc was detected in all of the water supply wells ranging between 0.0071 to 0.11 mg/L. The highest zinc result was reported in water supply well DOT during October.

3.2.2.4 Volatile Organic Compounds

Tables 3A through 3C present the volatile organic compound results obtained over the reporting period. Table 4 summarizes the VOCs that were detected during 2018 in the routinely monitored groundwater wells. A total of six (6) VOCs were detected in groundwater samples collected from the CSWF monitoring wells during 2018. The following compounds were detected at least once at the CSWF:

- 1,1-dichloroethane
- 1,1-dichloroethylene
- 1,1,1-trichloroethane
- acetone
- trichlorofluoromethane
- vinyl chloride

1,1-dichloroethane was detected in two monitoring wells (N2S and E7D) at concentrations ranging between 0.49 and 2.9 µg/L. Downgradient Aquifer 2 well E7D reported the highest concentrations of this parameter.

1,1-dichloroethylene was reported in Aquifer 2 well E7D at concentrations ranging between 0.3 and 1.8 µg/L.

1,1,1-trichloroethane was detected in four Aquifer 1 and 2 wells (N2S, E2D, E7D, and S10S) at concentrations ranging between 0.29 and 0.80 µg/L.

Acetone was detected once in two Aquifer 2 wells (E4D and E7D) and one water supply well (WR1) at concentrations ranging between 2.0 and 3.2 µg/L. It should be noted that acetone is a common laboratory artifact, and that all of the reported detections were associated with the first quarter 2018 sample set.

Trichlorofluoromethane was detected at seven locations during 2018, including four Aquifer 1 wells (E2S, N2S, N3S, and S10S) and three Aquifer 2 wells (E2D, E7D and N2D). Concentrations of this compound ranged from 0.54 to 76 µg/L over the course of the reporting period. The most elevated trichlorofluoromethane levels occurred in downgradient well E7D (ranging from 56 to 76 µg/L).

Vinyl chloride is the primary constituent of concern that has been detected above applicable regulatory standards at the CSWF. Vinyl chloride was detected in three Aquifer 1 wells (E1D, E2S, and N2S) and four Aquifer 2 wells (E2D, E6D, E7D and N2D) during the reporting period. The majority of these wells are located within or immediately adjacent to the disposal areas. Vinyl

chloride concentrations ranged between 0.026 and 25 µg/L during 2018. The most elevated vinyl chloride concentrations were detected in wells E2D (ranging from 19 to 25 µg/L) and E7D (ranging from 3.5 to 4.2 µg/L).

It should be noted that the remaining groundwater monitoring wells downgradient of the former disposal areas, including the two downgradient Aquifer 2 “sentinel wells” (E9D and E10D) situated near the downgradient facility border, did not report any VOC detections during the 2018 compliance period.

3.2.2.5 Groundwater Data QA/QC

All analytical data reported by the primary testing laboratory (TestAmerica, Fife, WA) during 2018 was subjected to QA/QC evaluations. The QA/QC evaluations were performed as outlined in the SAP/QAP, and included the collection and analysis of field duplicates and trip blanks. The QA/QC evaluation also provided for a detailed review of the laboratory data, including sample handling, holding times, and laboratory performance analyses including duplicates, blanks, matrix spikes, matrix spike duplicates and surrogate recoveries. Data quality issues were not identified in the majority of the analytical data sets reported during the current compliance period. However, several anomalies were noted during 2018:

- For the first quarter data set, EPA method 8260 analysis initially reported several laboratory control samples in one sample batch (580-267246) as being outside control limits for several VOCs (including 1,2-dichlorobenzene, chlorobenzene, benzene, trichloroethene, 1,2-dichloropropane and ethylbenzene). These parameters were subsequently reanalyzed by the laboratory for the effected samples.
- An instrument data loading error was initially reported by the laboratory related to the analysis of a pair of third quarter groundwater samples. This resulted in VOCs, dissolved/total metals, COD and TOC results for Aquifer 2 well E7D and water supply well DNR being inadvertently swapped in the preliminary Test America laboratory report. These faulty data assignments were all discovered and corrected prior to their population into the project database and the 2018 reporting data tables.

Data flags have been appended to the 2018 testing results as appropriate. All the data were determined to be acceptable for the intended purposes. Appendix B contains the data validation reports and the laboratory data packages for the reporting year.

3.2.3 Groundwater Quality Criteria Comparison

All analytical results were compared to the water quality criteria for groundwaters of the state of Washington (Chapter 173-200 WAC) and to Federal primary and secondary MCLs. A summary of WAC 173-200 criteria and Federal MCL exceedances for the 2018 reporting year can be found on Table 5. Water quality criteria for the following eight analytes were exceeded:

• specific conductivity	• iron
• total dissolved solids	• manganese
• nitrate/nitrite	• 1,1-dichloroethane
• arsenic	• vinyl chloride

Similar to previous year's results, the secondary Federal MCL for **specific conductivity** (700 µS/cm) was exceeded at a majority of the CSWF wells during multiple sampling events.

The WAC 173-200 criterion and secondary MCL for **total dissolved solids** (500 mg/L) was exceeded at least once during the current reporting year in a total of 14 wells, including six Aquifer 1 wells and eight Aquifer 2 wells. The water supply wells did not report any TDS exceedances. While some of the reported exceedances are almost certainly due to effects from the waste disposal activities, many of the exceedances are thought to be due to natural water quality. Total dissolved solids concentrations on the order of 500-800 mg/L are routinely observed for groundwater throughout the central portion of Island County.

The WAC 173-200 criterion and primary MCL for total **nitrate/nitrite** (10 mg/L) was exceeded twice in each of Aquifer 1 monitoring wells S10S (located immediately south of the disposal areas and east of the former animal shelter) and E1S (located adjacent to the disposal area). Given the generally cross-gradient locations of these wells, the aforementioned detections do not appear to be related to the waste disposal cells.

The WAC 173-200 groundwater quality criterion for **arsenic** (0.00005 mg/L) was exceeded in all of the CSWF groundwater monitoring and water supply wells sampled during 2018. The primary MCL of 0.01 mg/L was also exceeded in each of the samples collected from Aquifer 2 wells E4D and E9D. The source of the elevated arsenic detections reported in downgradient well E9D remains unclear. However, given the significantly lower arsenic levels observed around and immediately downgradient of the CSWF waste cells, this detection does not appear to be related to the landfill.

Iron concentrations exceeded the WAC 173-200 criterion and the secondary MCL of 0.3 mg/L at least once during the reporting year in five Aquifer 2 wells and in water supply well DOT. It should be noted that the water supply wells are not constructed to be environmental monitoring wells, and are prone to produce higher turbidity samples, which are considered to provide less representative groundwater results.

Manganese concentrations exceeded the WAC 173-200 criterion and secondary MCL of 0.05 mg/L during the reporting year in 15 wells, including two Aquifer 1 wells, 12 Aquifer 2 wells and water supply well DOT.

1,1-dichloroethane was detected in excess of the 1.0 µg/L WAC 173-200 groundwater criterion in near-refuse, Aquifer 2 well E7D during each of quarterly monitoring events.

The WAC 173-200 groundwater criterion (0.02 µg/L) for **vinyl chloride** was exceeded in seven CSWF wells during the reporting period, including: three Aquifer 1 wells (E1D, E2S and N2S) and four Aquifer 2 wells (E2D, E6D, E7D and N2D). The concentrations reported in Aquifer 2 wells E2D and E7D also exceeded the primary MCL of 2 µg/L. Vinyl chloride was not detected in any of the water supply wells during the reporting period.

3.3 EVALUATION OF GROUNDWATER QUALITY

3.3.1 Spatial Distribution

The 2018 groundwater analytical and field parameter data reflect the continuing influence of past waste disposal activities on groundwater quality at the CSWF. As previously reported, wells within or immediately adjacent to the disposal area continue to report elevated concentrations relative to background conditions for the following parameters of interest:

- specific conductivity
- nitrate/nitrite
- sulfate
- total dissolved solids
- arsenic
- iron
- manganese
- vinyl chloride

These elevated parameter concentrations typically occur within or immediately adjacent to the unlined waste disposal cells (either due to leaching from the landfill, LFG, or simply mobilization due to the landfill's presence). As previously reported for this site, the migration of these contaminants appears to be attenuating beneath the facility, as evidenced by the reduced concentrations of target analytes at monitoring wells located 400 to 750 feet downgradient of the disposal areas. The results confirm that site contaminants remain confined to the County property.

Groundwater quality impacts are generally more pronounced in the shallow aquifer wells than in the deep aquifer wells. The primary exception to this statement is found in deep aquifer wells E2D and E7D, which contain elevated concentrations of vinyl chloride among other constituents. However, it is interesting to note that vinyl chloride levels in these same wells appear to be gradually declining when compared to past year's results. In addition, groundwater samples collected from downgradient "sentinel" wells E9D and E10D have never detected the presence of vinyl chloride.

3.3.2 Temporal Trends

A statistical analysis of parameters exceeding groundwater quality criteria (specific conductivity, total nitrate/nitrite, sulfate, TDS, arsenic, iron, manganese, and vinyl chloride) was performed for both short (most recent two years) and long (all available data) term data trends. A summary of statistical parameters and the Mann-Kendall Trend analysis for these eight parameters can be found in Table 6. In addition, time series diagrams (covering the last 5-years) for additional selected parameters of interest are provided in Appendix C. These analyses were performed using AquaChem (ver. 2014.1) software and modules of Microsoft Excel (ver. 2016).

As noted in previous reports, both increasing and decreasing long-term trends have been documented for these parameters throughout the CSWF. However, fewer short-term statistically significant trends are observed for the same Aquifer 1, Aquifer 2 and the water supply (WS) wells, as summarized in the following exhibit.

Exhibit 3. Summary of Short-Term (2017-2018) Concentration Trends

Parameter	Aquifer Type	Wells with Increasing Trends	Wells with Decreasing Trends
Specific Conductance	1	None	None
	2	E5D, E7D	E2D
	WS	None	None
Nitrate/Nitrite, total	1	E4S	S10S
	2	None	None
	WS	None	None
Sulfate	1	E1D	None
	2	N2D, N5D	None
	WS	None	None
TDS	1	None	None
	2	None	None
	WS	None	None
Arsenic	1	None	None
	2	None	N1D
	WS	None	None
Iron	1	None	None
	2	None	None
	WS	None	None
Manganese	1	None	None
	2	None	None
	WS	None	None
Vinyl chloride (not detected in WS wells)	1	None	None
	2	None	None

These short-term (2 year) trends are also discernable in the 5-year time (2014-2018) series diagrams (C1 through C34) attached to Appendix C. As illustrated by these time-series charts, few of the observed short term increasing trends show large concentration changes.

3.3.3 Groundwater Geochemistry

The geochemical character of the groundwater samples collected from Aquifer 1, Aquifer 2 and the water supply wells during the semi-annual (April and October) 2018 monitoring events was evaluated using the Piper diagrams and cation/anion balance tables attached to Appendix C. As illustrated on the Piper diagrams, the water samples obtained from Aquifer 1, Aquifer 2 and water supply wells typically exhibit similar geochemical signatures. As noted for past monitoring years, these diagrams indicate that the dominant anion in the groundwater samples continues to be bicarbonate, while the cations are dominated by calcium and magnesium.

Groundwater cation/anion balance calculations were also used to assess the geochemical character of the water samples. Ideally, after the major anions and cations present in a sample are determined, the sum of the positive cations (in milliequivalents per liter [meq/L]) should approximately equal the sum of the negative anions (Hem 1986). All natural waters should be electroneutral; however, differences can arise between dissolved cations and anions in groundwater as measured by an analytical laboratory due to a number of factors including: presence of colloidal

fractions, systematic error in preparation and analysis of samples, malfunction of/poorly calibrated equipment, major species omitted from analysis, the presence of unusually high concentrations of cations/anions, and not all ions present in water are included in the balance calculation. Due to these potential issues, differences in the ion balance can be difficult to assess for imbalances due to groundwater impacts.

The range of the sum of ions and balance of ions observed at the CSWF during the 2018 compliance period typically reported relative percent differences (RPD) less than (+/-) five percent. Positive values indicate that the sum of the cations is greater than the sum of the anions. For the current reporting period, only one groundwater well location (S10S) reported a RPD (11.14 percent in October) outside (+/-) ten percent. The larger positive RPD calculated for well S10S appear to be related to comparatively low anions levels (primarily sulfate and nitrate) reported in the water sample obtained from this location. Ion balances outside a ten percent RPD threshold may be due to possible errors associated with analytical limitations in the measurements (as previously discussed) or potential low level impact from human activities at the site.

4.0 LANDFILL GAS

A LFG migration control system, consisting of a perimeter air injection system (along the south, east, and west edge of the property) and a perimeter probe monitoring network was installed at the landfill in 1988 (Figure 7). The original gas migration control system was deactivated in May 2005, coincident with the activation of the existing LFG extraction wells (described below).

Currently, the County MSW and CDL landfills employ active gas collection and control measures which consist of a LFG extraction system and an SVE system as shown on Figures 8 and 9. A cross sectional view of these systems is shown on Figure 10. Each of these systems includes a series of extraction wells and a gas conveyance system. The LFG system also employs treatment through combustion in a flare. In early 2005, system upgrades included the addition of SVE wells, LFG extraction wells, replacement plumbing components, a new gas conveyance system, replacement of a condensate sump, and an upgraded flare control. An additional SVE well (VGW-9) was installed in 2008. New LFG extraction wellheads were placed on all of the vertical and horizontal extraction wells during 2014. The upgraded wellheads allowed for better flow adjustment control and accurate flow measurement during low flow conditions. New high efficiency blowers were installed for both the LFG system and the SVE system in 2015.

Both the LFG and SVE systems operated normally throughout 2018, excepting an approximately one week period between May 22nd and May 29th when the LFG extraction system remained shut down due to a controller issue.

4.1 COMPLIANCE MONITORING ACTIVITIES

LFG monitoring is conducted quarterly to provide an assessment of the subsurface landfill gas conditions at the site and to confirm compliance with regulatory criteria for subsurface methane concentrations. LFG monitoring procedures are detailed in the *Landfill Gas Monitoring Plan, 2008 Revision, Coupeville Solid Waste Facility*, prepared by SCS (April, 2008). The monitoring program activities involve recording primary LFG (methane, carbon dioxide, and depressed oxygen) concentrations and relative soil pressures, if applicable.

The LFG probes that are currently monitored include:

- Perimeter Probes (9 total)
- Building Probes (6 total)
- On-site structures - Scale House (2 locations)

LFG probe and structure monitoring locations are illustrated on Figure 7. Note that many of the probe locations include a shallow and deep probe (S and D designations, respectively). In addition, the animal shelter building immediately south of the landfill was demolished in 2017. As a result, this former structure is no longer included as part of the building LFG monitoring program.

4.1.1 Field Procedures

LFG probes were monitored in the field using a single, portable, multi-gas analyzer. The portable gas analyzer measures methane and carbon dioxide with a dual wavelength infrared cell with a reference channel. Oxygen is measured with an electro-chemical cell and the pressure is measured with a transducer. The gas analyzer was calibrated prior to, and after, each monitoring event. Field

monitoring was conducted in accordance with Section 4 of the Landfill Gas Monitoring Plan. Field activities were documented in the field logs. Both field and calibration logs are included in Appendix A.

General weather conditions were noted during and preceding each monitoring event. Atmospheric pressure fluctuations can influence LFG concentration and pressure in the probes. Higher LFG concentrations are typically observed at the end of significantly falling barometric pressure trend. To assist with interpreting these data, barometric pressure trends were noted prior to and during each LFG monitoring event. Barometric pressure trends recorded over the course of the 2018 sampling events are included in Appendix D.

4.2 RESULTS

The following results are organized by LFG monitoring location. Due to instrument limitations, concentrations of methane and/or carbon dioxide less than (<) 0.3 percent by volume are not considered significant given the sensitivity of the field instrument at low concentrations. The LFG monitoring results for 2018 are presented in Table 7.

4.2.1 Landfill Gas Probes

The probe results represent stabilized sampling conditions after purging at least one probe casing volume. Both stabilized readings and short-term readings of elevated pressures (“spikes”) at a probe may indicate the potential presence of LFG within the landfill.

Similar to previous recent compliance years, detectable methane concentrations (>0.3 percent by volume) were recorded in three LFG probe locations (GP-30, GP-S6 and GP-15) during 2018. The GP-30 probes are completed within refuse and are where elevated methane concentrations are expected and have been historically observed. Methane concentrations at this probe location ranged widely, from <0.3 to 43.1 percent by volume in 2018. The GP-S6 probes (situated near the waste cell just north of the former location of the animal shelter) also continued to report methane levels ranging between <0.3 to 13.2 percent by volume. The GP-15 probes (located near the southeast end of the waste cell) reported methane detections between <0.3 and 8.9 by percent volume.

The methane detections reported in GP-S6 and GP-15 are suspected to be residual effects from several LFG system interruptions/repairs that occurred in 2016 and 2017. Subsequent adjustments to the LFG extraction system timer may also have allowed LFG to accumulate along the southern edge of the landfill. However, more recent adjustments to the LFG system appear to be mitigating this buildup, as demonstrated by reduced methane measurement recorded at these probe locations during the fourth quarter of 2018 (<0.3 to 3.7 percent at GP-15, and <0.3 to 2.8 percent at GP-S6). Continued monitoring and system adjustments are anticipated to further reduce or eliminate the accumulation of methane in this area. It should also be noted that none of the affected probes are compliance monitoring locations.

Carbon dioxide was observed during the reporting period in all LFG probes, ranging from less than 0.3 to 21.4 percent by volume. Depressed oxygen concentrations were recorded during the reporting period in all of the LFG probes at values ranging between 0.0 and 20.1 percent by volume. Three subsurface probes (GP-13S, GP-20-98, and GP-S60) reported an oxygen concentration above 20.3 at least once during the compliance year. Representative relative (static) pressure measured in the perimeter LFG probes during 2018 ranged from -0.22 to +0.08 inches of water.

4.2.2 Structures – Scale House

Methane was not observed in the scale house/office during the 2018 monitoring events. Carbon dioxide was detected above 0.3 percent by volume (between 0.4 and 1.1 percent by volume) at the scale house/office over the same period. Depressed oxygen was not measured in this structure during 2018.

4.3 LANDFILL GAS EVALUATION

LFG production at the CSWF likely reached its peak between 1 and 3 years after waste disposal ceased (1978 for the Town of Coupeville Landfill, 1991 for the County MSW Landfill and 2001 for the County CDL Landfill). Gas production is expected to be declining due to the nature of the waste decomposition processes.

For this site, the dominant mechanism for LFG movement in the soil is diffusion (movement from a high concentration to low concentration) due to the age of the waste and very low gas production. This method of LFG movement is much less pronounced as opposed to convective driven LFG movement (movement from high pressure to low pressure), which is predominant during active filling and within 10 years after filling has ceased. For the most part, the slow movement of LFG appears to allow the methane to oxidize before reaching the perimeter monitoring probes.

The 2018 monitoring results corroborate that LFG (combined methane and carbon dioxide) remains present in the subsurface soils surrounding the historical disposal areas at relatively low and declining concentrations. Due to the age of waste, very low LFG production, and the method of LFG movement within the surrounding geologic formation (sandy/gravelly soils), methane is generally not observed at the compliance monitoring locations.

5.0 CONTAMINANT SOURCE CONTROL MEASURES

Contaminant source control systems operating at the CSWF include stormwater collection from the waste disposal areas, LFG extraction from the waste mass, and soil vapor extraction in the vadose soils beneath the landfill. With the exception of an approximately one week period between May 22nd and 29th (when the LFG blower was reported to have shut down) these systems operated normally throughout 2018.

5.1 OPERATIONAL ACTIVITIES

5.1.1 Landfill Gas and Soil Vapor Extraction

Routine operations began at the upgraded LFG extraction system and SVE system on November 22, 2005 when the automated timers were installed for both the LFG and SVE systems. Blower motor hours for each system are manually recorded to track the operation of each system.

LFG and SVE system operations and monitoring activities consisted of obtaining field measurements of primary gas composition, gas temperature, well pressure (vacuum), system pressure, and flow from each of the LFG extraction wells, SVE wells, and blower inlets for each system. Monitoring is conducted approximately every 45 days. Adjustments are made as necessary to maintain anaerobic conditions for the LFG extraction wells. Monitoring of these systems is conducted to provide an assessment of the extraction system performance and effects of removing soil vapor from the vadose zone surrounding the disposal areas.

Between November 22, 2005 through late-December, 2018, the LFG extraction system operated an average of 6.2 hours per weekday and the SVE system operated an average of 10.9 hours per weekday, as shown on Table 8. These operational times are intended to balance extraction with the generation of LFG. If extraction exceeds gas generation, oxygen may be pulled into the landfill, which could create a fire hazard. Furthermore, drawing oxygen into the system prevents the LFG treatment system (flare) from operating correctly. Excessive extraction of native soil gas could induce migration of LFG from the waste mass to native soil when LFG is not being actively extracted.

5.1.1.1 Monitoring Activities

Monitoring locations, LFG extraction wells, SVE wells, and blower inlets are shown on Figures 7 through 10. These locations are monitored for primary LFG constituents, gas temperature, well pressure, system pressure and flow. Adjustments to individual well extraction rates are conducted on an as needed basis to maintain anaerobic conditions.

The monitoring locations are designated as follows:

- Vertical LFG Extraction Wells (five locations prefixed by VGW-#)
- Horizontal LFG Extraction Wells (nine locations prefixed by HGW-#)
- Vertical SVE Wells (four locations prefixed by VGW-# NS)
- Blower Inlets (BL-LFG and BL-SV)

General weather conditions were noted during and preceding the monitoring events. As previously noted, atmospheric pressure fluctuations can influence gas concentrations and pressure in gas

wells. Barometric pressure trends prior to sampling were recorded from the nearest available weather station (Appendix D).

5.1.2 Stormwater Collection from the Waste Disposal Areas

A stormwater drainage and collection system was installed in 2005 at the interface of the CDL/MSW landfills. The system collects stormwater runoff and water which has infiltrated into the cover soils of the MSW landfill. This water is then pumped into a ditch on the west side of the CDL landfill where it flows to an infiltration pond near the western property boundary. Discharge (in cubic feet) from the stormwater collection system sump (near monitoring well C1S) has been monitored weekly since October 25, 2005 by CSWF personnel, and continued through 2018.

5.2 RESULTS

5.2.1 Landfill Gas Collection from In-Refuse and Native Soil Extraction Points

The performance of the LFG and soil vapor extraction systems is shown on Figure 12. Operating parameter results for each system are summarized on Tables 9 and 10.

The LFG extraction system was operated under a daily intermittent cycle for a total 28,979 hours between November 22, 2005 and December 26, 2018. During this time the system has extracted approximately 81,015,814 cubic feet of LFG from the refuse mass. The rate of extraction was initially at 120 standard cubic feet per minute (scfm), but has declined to an average of approximately 42 scfm during 2018, as extraction rates have converged with gas generation rates. The LFG composition at the blower inlet averaged 52.7 percent methane, 19.3 percent carbon dioxide, and 0.3 percent depressed oxygen during 2018.

The SVE system operated under a daily intermittent cycle for a total 51,264 hours from November 22, 2005 through December 26, 2018. During this time it has extracted an estimated 130,198,676 cubic feet of soil vapor/LFG from the native soil below the disposal areas. The rate of extraction was approximately 30 scfm during 2018. The soil vapor/LFG composition at the blower inlet averaged 2.7 percent methane, 12.7 percent carbon dioxide, and 3.3 percent oxygen in 2018.

5.2.2 Stormwater Collection from the Waste Disposal Areas

As shown in Table 8 and Figure 11, over the period between October 25, 2005 and December 26, 2018, a total of 244,566 gallons of stormwater were pumped from the collection system sump and discharged to the infiltration pond west of the disposal areas. A total of 20,121 gallons of stormwater were pumped through the collection system during the 2018 reporting period.

5.3 EVALUATION OF CONTAMINANT SOURCE CONTROL OPERATIONS

5.3.1 Landfill Gas Collection from In-Refuse and Native Soil Extraction Points

The gas control system at the CSWF has been enhanced to provide additional source control of LFG (especially methane) and facilitate the removal of these gases from the vadose zone. Removal of LFG from the vadose zone also provides a measure of source control for groundwater quality. In 2005, additional LFG extraction wells were installed in the MSW and CDL landfills to provide better extraction coverage throughout the waste mass. In addition, three SVE wells were installed to extract soil vapor/gas from the vadose zone below the MSW and CDL landfills. In late 2005, the system began routine operations on a daily intermittent basis. An additional vertical LFG extraction well was installed at the site in April 2008. A program has been initiated to monitor gas quality and flow and adjust extraction rates and times to optimize both LFG and soil vapor extraction.

The gas flow rate has declined over the operating period to reflect the balancing of the LFG wells in an attempt to achieve extraction at the same rate as gas generation. As this balancing (tuning) continues, source control (to prevent LFG from entering the vadose zone) will continue.

The LFG extraction system is successfully controlling LFG generated within the refuse mass, thereby providing source control of LFG migration to the vadose zone. The success of this system's operations is evident by:

- The volume of LFG removed from the landfill (81,015,814 cubic feet)
- Well coverage/influence over greater volume of refuse mass
- Ability to adjust well extraction rates to match gas generation rates

Similarly, the SVE system is successfully removing LFG from the vadose zone, and thereby providing an additional measure of source control for groundwater contamination. The success of this system's operations is evident by:

- The volume of soil vapor removed to date (130,198,676 cubic feet)
- The gas composition at the blower inlet has averaged 52.7 percent methane, 19.3 percent carbon dioxide, and 0.3 percent oxygen in 2018.

5.3.2 Stormwater Collection from Waste Disposal Areas

For every inch of rain that falls at the CSWF, as much as 1,000 gallons of stormwater may be pumped from the collection system sump near monitoring well C1S for discharge to the infiltration pond west of the disposal areas. A total of 20,121 gallons of stormwater was removed during the 2018 reporting period. Before this improvement, this surface runoff and infiltration water flowed into the CDL Landfill.

6.0 CONCLUSIONS

Groundwater and LFG monitoring results reported for 2018 at the CSWF remain generally consistent with those reported from previous compliance years. Vinyl chloride continues to represent the primary contaminant of concern in site groundwater. The most elevated vinyl chloride detections are consistently reported in Aquifer 2 monitoring wells E2D and E7D, both of which are situated on the eastern flank of the closed CDL/MSW disposal cells. Low level vinyl chloride exceedances are also reported in several of the Aquifer 1 wells located adjacent the waste disposal cells.

However, during recent years vinyl chloride has generally been absent in the CSWF wells situated beyond the immediate vicinity of the landfill. Groundwater samples collected from Aquifer 2 “sentinel” wells E9D and E10D, situated hydrologically downgradient of the observed vinyl chloride plume, have never reported detectable levels of VOCs. These observations corroborate the findings of past groundwater assessment and modelling efforts which concluded that VOCs originating from the CSWF disposal cells are naturally attenuating beneath the facility, and that vinyl chloride has not, and will not in the future, migrate beyond County property. During 2018, vinyl chloride concentrations remained stable or were slightly lower in most of the groundwater monitoring wells reporting detections.

LFG monitoring results through 2018 continue to confirm the positive effects of removal of landfill gases from the vadose zone. Based on the estimated volume of LFG in the vadose zone and number of unaffected gas probes, continued operation of the LFG and SVE systems is recommended to continue to remove gases from the vadose zone and achieve a balanced extraction rate for the LFG wells. Ongoing LFG monitoring and well field adjustments along the southern edge of the landfill (near GP-S6D and GP-15) should focus on continuing to reduce the localized methane buildup observed in this area during 2016 and 2017. Current levels of operating, monitoring and system balancing will need to be maintained to ensure the optimum performance of both the LFG and SVE systems, while preventing potential detrimental conditions such as air intrusion and pulling of LFG into the vadose zone.





Tables



**Table 1A. Historical Groundwater Elevations - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Location	E1D		E1S		E2S		E4S		N2S		N3S		NE1S		S10S		S11S		W1S	
Reference Elevation (ft. msl)	203.98		204.26		202.72		205.04		203.83		204.87		208.02		205.65		204.99		195.15	
Monitoring Event	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE
Q418	137.41	66.57	137.58	66.68	137.47	65.25	140.57	64.47	135.36	68.47	139.23	65.64	143.92	64.10	135.31	70.34	134.03	70.96	109.65	85.50
Q218	137.47	66.51	137.80	66.46	137.48	65.24	140.93	64.11	135.92	67.91	139.78	65.09	144.11	63.91	135.38	70.27	134.24	70.75	109.70	85.45
Q417	137.65	66.33	137.78	66.48	137.53	65.19	141.02	64.02	135.94	67.89	139.90	64.97	144.46	63.56	135.70	69.95	134.52	70.47	109.71	85.44
Q317	137.61	66.37	137.92	66.34	137.39	65.33	140.87	64.17	136.03	67.80	139.38	65.49	144.16	63.86	135.70	69.95	134.41	70.58	109.73	85.42
Q217	137.78	66.20	137.91	66.35	137.44	65.28	140.85	64.19	136.11	67.72	139.48	65.39	--	--	135.73	69.92	134.59	70.40	109.70	85.45
Q117	137.96	66.02	138.26	66.00	137.69	65.03	141.33	63.71	137.21	66.62	140.05	64.82	144.44	63.58	136.00	69.65	134.82	70.17	109.72	85.43
Q416	138.03	65.95	138.19	66.07	137.72	65.00	141.47	63.57	136.65	67.18	139.67	65.20	144.68	63.34	135.96	69.69	134.87	70.12	109.45	85.70
Q316	138.12	65.86	138.38	65.88	137.88	64.84	141.45	63.59	136.90	66.93	140.13	64.74	144.64	63.38	135.94	69.71	134.92	70.07	109.73	85.42
Q216	138.22	65.76	138.52	65.74	138.06	64.66	141.49	63.55	137.50	66.33	140.42	64.45	144.66	63.36	136.04	69.61	135.04	69.95	109.72	85.43
Q116	138.30	65.68	138.58	65.68	138.22	64.50	141.69	63.35	137.75	66.08	140.74	64.13	144.71	63.31	136.14	69.51	135.04	69.95	109.66	85.49
Q415	138.47	65.51	138.72	65.54	138.30	64.42	141.86	63.18	137.00	65.04	140.71	63.12	145.20	62.82	136.41	71.61	135.12	70.53	109.64	85.51
Q315	138.50	65.48	138.76	65.50	138.39	64.33	141.74	63.30	137.60	65.04	140.56	63.27	144.88	63.14	136.19	71.83	135.02	70.63	109.65	85.50
Q215	138.60	65.38	138.89	65.37	138.30	64.42	141.88	63.16	--	--	140.55	63.28	145.00	63.02	136.16	71.86	135.15	70.50	109.52	85.63
Q115	138.53	65.45	138.79	65.47	138.43	64.29	141.87	63.17	--	--	140.80	63.03	147.00	61.02	136.55	71.47	135.30	70.35	109.65	85.50
Q414	138.37	65.61	138.63	65.63	138.47	64.25	142.00	63.04	--	--	140.32	63.51	145.20	62.82	136.56	71.46	135.35	70.30	109.62	85.53
Q314	138.68	65.30	138.93	65.33	138.55	64.17	141.99	63.05	--	--	140.45	63.38	145.10	62.92	136.85	71.17	--	--	109.60	85.55
Q214	138.75	65.23	138.95	65.31	138.61	64.11	142.00	63.04	--	--	140.65	63.18	145.10	62.92	136.72	71.30	135.44	70.21	109.77	85.38
Q114	138.74	65.24	139.00	65.26	138.47	64.25	141.97	63.07	--	--	140.65	63.18	144.44	63.58	136.66	71.36	135.41	70.24	109.65	85.50
Q413	138.96	65.02	139.25	65.01	138.75	63.97	142.21	62.83	--	--	--	--	145.45	62.57	137.00	71.02	135.72	69.93	109.70	85.45
Q313	138.90	65.08	139.20	65.06	138.63	64.09	142.15	62.89	--	--	140.95	62.88	145.30	62.72	136.70	71.32	135.70	69.95	109.71	85.44
Q213	139.13	64.85	139.50	64.76	138.91	63.81	142.31	62.73	--	--	140.77	63.06	145.35	62.67	136.60	71.42	135.75	69.90	109.58	85.57
Q113	139.00	64.98	139.40	64.86	139.00	63.72	142.30	62.74	--	--	141.00	62.83	145.34	62.68	137.12	70.90	135.80	69.85	109.75	85.40

Notes:

Monitoring Event code = Q (quarter), 3-digit number: Quarter of Year (1-digit) and Year designation (2-digit).

DTW = Depth to water (feet below the top of casing), WLE = Water level elevation (feet-msl)

-- = No measurement available

Table 1B. Historical Groundwater Elevations - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Location	E2D		E3D		E4D		E5D		E6D		E7D		E8D		E9D		E10D		N1D		N2D		N3D		N5D		NE1D		S11D	
Reference Elevation (ft-msl)	202.52		204.13		205.40		198.56		202.97		200.50		203.13		209.75		210.01		191.51		203.48		204.39		204.84		207.82		205.07	
Monitoring Event	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE	DTW	WLE
Q418	147.72	54.80	149.97	54.16	152.69	52.71	144.38	54.18	147.71	55.26	145.24	55.26	148.10	55.03	160.92	48.83	162.29	47.72	135.70	55.81	147.56	55.92	149.54	54.85	148.85	55.99	157.52	50.30	145.61	59.46
Q318	147.49	55.03	--	--	153.02	52.38	144.68	53.88	147.48	55.49	145.52	54.98	148.18	54.95	161.50	48.25	162.79	47.22	--	--	147.61	55.87	--	--	--	--	--	--	--	--
Q218	147.82	54.70	150.17	53.96	153.02	52.38	144.59	53.97	147.77	55.20	145.46	55.04	148.24	54.89	161.40	48.35	162.72	47.29	135.88	55.63	147.82	55.66	149.96	54.43	149.15	55.69	157.74	50.08	145.90	59.17
Q118	147.66	54.86	--	--	152.98	52.42	144.69	53.87	147.70	55.27	145.60	54.90	148.31	54.82	161.01	48.74	162.37	47.64	--	--	147.81	55.67	--	--	--	--	--	--	--	--
Q417	148.06	54.46	150.48	53.65	153.38	52.02	--	--	--	--	--	--	--	--	--	--	--	--	136.17	55.34	147.96	55.52	150.21	54.18	149.24	55.60	158.02	49.80	146.26	58.81
Q317	147.86	54.66	150.65	53.48	153.22	52.18	--	--	--	--	--	--	--	--	--	--	--	--	136.00	55.51	147.89	55.59	149.83	54.56	149.42	55.42	157.86	49.96	145.95	59.12
Q217	147.94	54.58	150.29	53.84	152.95	52.45	--	--	--	--	--	--	--	--	--	--	--	--	136.01	55.50	147.95	55.53	149.93	54.46	149.53	55.31	--	--	146.10	58.97
Q117	148.15	54.37	150.85	53.28	153.46	51.94	--	--	--	--	--	--	--	--	--	--	--	--	136.41	55.10	148.36	55.12	150.34	54.05	149.86	54.98	158.07	49.75	146.51	58.56
Q416	148.24	54.28	151.03	53.10	153.69	51.71	--	--	--	--	--	--	--	--	--	--	--	--	136.40	55.11	148.29	55.19	150.23	54.16	149.80	55.04	158.31	49.51	146.56	58.51
Q316	148.45	54.07	151.29	52.84	153.71	51.69	--	--	--	--	--	--	--	--	--	--	--	--	136.62	54.89	148.43	55.05	150.49	53.90	149.99	54.85	158.24	49.58	146.72	58.35
Q216	148.62	53.90	151.31	52.82	153.90	51.50	--	--	--	--	--	--	--	--	--	--	--	--	136.84	54.67	148.68	54.80	150.80	53.59	150.12	54.72	158.44	49.38	146.90	58.17
Q116	148.64	53.88	151.18	52.95	153.84	51.56	--	--	--	--	--	--	--	--	--	--	--	--	136.95	54.56	148.94	54.54	150.87	53.52	150.03	54.81	158.50	49.32	146.91	58.16
Q415	148.75	53.77	151.31	52.82	153.84	51.56	--	--	--	--	--	--	--	--	--	--	--	--	136.94	54.57	148.85	54.63	150.93	53.46	150.44	54.40	158.73	49.09	140.56	64.51
Q315	149.00	53.52	151.38	52.75	153.99	51.41	--	--	--	--	--	--	--	--	--	--	--	--	137.00	54.51	148.82	54.66	150.97	53.42	150.29	54.55	158.52	49.30	147.05	58.02
Q215	148.95	53.57	151.51	52.62	154.10	51.30	--	--	--	--	--	--	--	--	--	--	--	--	137.17	54.34	149.01	54.47	151.00	53.39	150.08	54.76	158.62	49.20	147.00	58.07
Q115	148.90	53.62	151.46	52.67	154.12	51.28	--	--	--	--	--	--	--	--	--	--	--	--	137.00	54.51	149.09	54.39	151.17	53.22	150.65	54.19	158.70	49.12	147.30	57.77
Q414	149.00	53.52	151.39	52.74	154.28	51.12	--	--	--	--	--	--	--	--	--	--	--	--	137.29	54.22	149.14	54.34	150.96	53.43	150.25	54.59	158.75	49.07	147.15	57.92
Q314	149.10	53.42	151.78	52.35	154.48	50.92	--	--	--	--	--	--	--	--	--	--	--	--	132.35	59.16	149.20	54.28	151.24	53.15	150.66	54.18	158.90	48.92	147.42	57.65
Q214	149.20	53.32	151.70	52.43	154.24	51.16	--	--	--	--	--	--	--	--	--	--	--	--	137.35	54.16	149.25	54.23	151.20	53.19	150.62	54.22	158.88	48.94	147.38	57.69
Q114	149.05	53.47	151.70	52.43	154.33	51.07	--	--	--	--	--	--	--	--	--	--	--	--	137.41	54.10	149.23	54.25	151.27	53.12	150.76	54.08	159.00	48.82	147.36	57.71
Q413	149.40	53.12	152.00	52.13	154.70	50.70	--	--	--	--	--	--	--	--	--	--	--	--	137.60	53.91	149.60	53.88	151.60	52.79	150.96	53.88	159.20	48.62	147.70	57.37
Q313	149.50	53.02	152.00	52.13	154.70	50.70	--	--	--	--	--	--	--	--	--	--	--	--	137.70	53.81	149.60	53.88	151.60	52.79	151.10	53.74	155.30	52.52	147.80	57.27
Q213	149.55	52.97	152.33	51.80	154.72	50.68	--	--	--	--	--	--	--	--	--	--	--	--	137.80	53.71	149.76	53.72	151.47	52.92	151.22	53.62	159.52	48.30	147.90	57.17
Q113	149.60	52.92	152.10	52.03	154.78	50.62	--	--	--	--	--	--	--	--	--	--	--	--	137.90	53.61	149.82	53.66	151.71	52.68	151.30	53.54	159.15	48.67	147.96	57.11

Notes:
Monitoring Event Code = Q (quarter), 3-digit number: Quarter of the year (1-digit) and Year designation (2-digit).
DTW = Depth to Water (feet below the top of casing), WLE = Water level elevation (feet-msl)
Only 2018 data listed for wells E5D, E6D, E7D, E8D, E9D, and E10D due to these wells being explicitly included in the 2018 revised Sampling and Analysis Plan
-- = No meausement available
Bold measurements are not used in historic groundwater evaluation due to anomolous results (i.e., suspected field measurement anomaly)

Table 2A. Field Parameter, General Chemistry, and Inorganic Results - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Location	E1D		E1S		E2S		E4S		N2S		N3S		NE1S		S10S		S11S	
	Units	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4
Field Measurements																			
Dissolved Oxygen	mg/L	6.25	1.08	4.91	5.98	0.43	0.43	1.51	2.01	0.75	2.03	4.57	5.63	5.16	5.26	0.61	1.04	0.32	0.35
ORP	mV	92.0	281.8	174.7	238.1	133.0	194.2	196.8	81.2	136.0	168.1	217.1	199.3	131.0	222.2	120.4	289.2	-77.2	-95.6
pH	SU	7.18	6.91	7.05	6.87	6.78	6.86	7.13	7.16	6.74	6.78	7.25	7.13	7.04	7.01	6.92	6.65	7.81	7.52
Specific Conductivity	µS/cm	1,760	1,800	1,196	1,141	1,323	1,314	1,242	1,262	1,540	1,516	1,102	1,077	839	850	1,386	1,318	940	913
Temperature	deg-C	11.1	11.7	11.1	11.3	12.1	12.8	10.5	10.9	12.8	14.2	11.7	12.6	12.0	15.0	14.0	13.8	9.7	10.2
Turbidity	NTU	1.7	0.2	1.6	0.0	1.4	1.3	2.0	0.9	1.8	2.3	2.0	0.0	4.9	1.3	3.3	0.7	1.7	0.4
General Chemistry																			
Alkalinity, Total	mg/L	810	820	—	—	590	580	530	540	700	690	440	440	320	320	380	370	350	360
Alkalinity, Bicarbonate	mg/L	810	820	—	—	590	580	530	540	700	690	440	440	320	320	380	370	350	360
Ammonia	mg-N/L	0.13	0.5 U	—	—	0.1 U	0.5 U	0.18	0.5 U	0.11	0.5 U	0.1 U	2.7	0.13	0.5 U	0.12	0.5 U	0.1 U	0.5 U
Calcium	mg/L	170	180	—	—	160	160	150	150	170	170	130	130	110	110	130	130	77	79
Chemical Oxygen Demand	mg/L	10 U	15	—	—	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	21	16	12
Chloride	mg/L	69	75	—	—	22	21	46	46	22	20	39	38	19	19	54	58	53	60
Fluoride	mg/L	1 U	0.2 U	—	—	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.22
Magnesium	mg/L	110	120	—	—	64	67	58	59	89	90	46	48	34	35	75	77	50	52
Potassium	mg/L	8.5	9.1	—	—	7.0	7.4	6.2	6.3	9.4	9.7	5.7	6.1	5.2	5.5	6.4	6.7	6.2	6.6
Sodium	mg/L	42	44	—	—	30	32	30	30	30	33	26	29	17	17	27	29	32	34
Sulfate	mg/L	76	85	—	—	69	69	46	47	110	110	47	46	70	70	93	93	28	31
Total Dissolved Solids	mg/L	970	1000	—	—	750	770	670	710	880	900	590	600	430	480	780	810	470	500
Total Nitrate/Nitrite	mg-N/L	0.4 U	0.99	12.0	14.0	8.7	8.5	1.9	2.0	6.1	6.8	6.1	6.8	5.3	3.7	40	34	0.4 U	0.4 U
Total Organic Carbon	mg/L	2.5	1.9	—	—	1.9	1.3	1.6	1.3	2.5	1.9	1.5	1.4	1.4	1.5	2.2	2.0	2.3	2.3
Metals																			
Antimony	mg/L	0.0004 U	0.0004 U	—	—	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Arsenic	mg/L	0.0043	0.0044	—	—	0.0013	0.0012	0.0024	0.0024	0.0012	0.0012	0.0024	0.0024	0.0024	0.0027	0.0020	0.0021	0.0052	0.0057
Barium	mg/L	0.046	0.045	—	—	0.053	0.056	0.046	0.047	0.052	0.057	0.033	0.033	0.031	0.029	0.033	0.031	0.032	0.030
Beryllium	mg/L	0.0004 U	0.0004 U	—	—	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium	mg/L	0.0004 U	0.0004 U	—	—	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Chromium	mg/L	0.0004 U	0.0004 U	—	—	0.0004 U	0.0004 U	0.0047	0.0043	0.0004 U	0.00074	0.0098	0.010	0.0036	0.0042	0.0035	0.0050	0.0004 U	0.0004 U
Cobalt	mg/L	0.00060	0.00073	—	—	0.00090	0.00090	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Copper	mg/L	0.002 U	0.002 U	—	—	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0029	0.0032	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3 U	0.3 U	—	—	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Lead	mg/L	0.0008 U	0.0008 U	—	—	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U
Manganese	mg/L	0.044	0.049	—	—	0.410	0.440	0.02 U	0.02 U	0.045	0.025	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.190	0.200
Nickel	mg/L	0.0051	0.0056	—	—	0.0045	0.0049	0.003 U	0.003 U	0.0091	0.0067	0.003 U	0.003 U	0.0045	0.0050	0.0048	0.0046	0.003 U	0.003 U
Selenium	mg/L	0.008 U	0.008 U	—	—	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
Silver	mg/L	0.0004 U	0.0004 U	—	—	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Thallium	mg/L	0.001 U	0.001 U	—	—	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vanadium	mg/L	0.0060	0.0062	—	—	0.004 U	0.004 U	0.0057	0.0055	0.0042	0.0042	0.0055	0.0055	0.0052	0.0052	0.0050	0.0043	0.004 U	0.004 U
Zinc	mg/L	0.007 U	0.007 U	—	—	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U

Notes:
deg-C = degress Celsius
mg/L = miligrams per liter
mV = milivolts
mg N/L = miligrams of nitrogen per liter
ORP = oxidation reduction potential
SU = Standard units
µS/cm = microSiemens per centimeter
NTU = nepthelometric turbidity units
U = not detected above reporting limit
— = analysis not performed

Table 2B. Field Parameter, General Chemistry, and Inorganic Results - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Location	E2D		E3D		E4D		E5D				E6D				E7D				E8D			
	Units	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q1	18Q2	18Q3	18Q4	18Q1	18Q2	18Q3	18Q4	18Q1	18Q2	18Q3	18Q4	18Q1	18Q2	18Q3	18Q4
Field Measurements																							
Dissolved Oxygen	mg/L	0.86	1.45	2.67	4.41	0.71	2.59	1.68	1.09	1.12	1.62	0.90	0.89	0.55	0.61	2.23	1.12	0.55	0.65	1.25	1.17	1.11	1.82
ORP	mV	244.3	214.7	250.0	243.6	37.2	-118.2	-85.6	-99.2	-79.0	-63.1	-120.3	-111.9	-119.6	-96.9	1.7	64.3	114.8	99.7	19.2	-18.1	174.8	-12.7
pH	SU	6.85	6.76	7.52	7.70	8.03	8.20	7.63	7.63	7.52	7.41	7.88	7.83	7.67	7.56	6.88	6.82	6.81	6.67	7.44	7.54	7.22	7.56
Specific Conductivity	µS/cm	1,689	1,613	775	784	559	562	1,194	1,242	1,205	1,279	684	678	664	662	1,780	1,790	1,787	1,794	573	578	567	584
Temperature	deg-C	11.9	13.3	10.3	11.5	10.4	12.0	11.1	10.9	13.1	12.2	13.6	13.5	15.6	15.6	13.3	13.4	14.8	15.0	9.9	9.8	11.9	11.4
Turbidity	NTU	1.7	1.2	3.5	0.4	7.8	1.5	3.1	1.4	0.8	0.9	2.2	1.5	0.5	1.4	2.2	1.3	0.5	0.3	3.8	3.4	1.3	1.6
General Chemistry																							
Alkalinity, Total	mg/L	800	780	330	330	220	220	610	610	640	630	270	270	280	270	820	810	810	810	240	240	240	240
Alkalinity, Bicarbonate	mg/L	800	780	330	330	220	220	610	610	640	630	270	270	280	270	820	810	810	810	240	240	240	240
Ammonia	mg-N/L	0.1 U	0.5 U	0.1 U	0.5 U	0.1	0.5 U	0.5 U	0.1 U	0.5 U	2.5	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.21	0.5 U	0.5 U
Calcium	mg/L	200	190	67	70	41	42	140	140	140	150	58	56	61	57	220	230	250	220	50	51	51	52
Chemical Oxygen Demand	mg/L	10 U	17	10 U	10 U	10 U	10 U	10 U	10 U	13	10 U	10	23	19	18	32	34	45	36	10 U	10 U	10 U	10 U
Chloride	mg/L	30	31	35	35	32	31	20	20	21	21	22	22	22	21	39	38	42	41	14	14	14	14
Fluoride	mg/L	0.2 U	0.2 U	0.2 U	0.20	0.2 U	0.22	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.23	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21
Magnesium	mg/L	94	93	40	44	28	29	66	66	68	69	30	28	31	29	93	95	110	93	27	26	27	28
Potassium	mg/L	8.5	8.6	6.1	6.6	10	11	7.1	6.9	7.3	7.4	6.1	5.9	6.4	6.0	8.5	8.7	9.7	8.5	6.7	6.3	6.4	6.4
Sodium	mg/L	36	37	24	26	31	31	30	29	31	32	42	38	42	38	32	32	36	31	26	25	26	27
Sulfate	mg/L	77	77	16	16	13	14	21	22	22	22	38	37	36	35	130	130	150	160	26	26	27	26
Total Dissolved Solids	mg/L	940	820	390	380	280	300	640	650	600	680	350	350	350	360	1,100	1,100	910	1100	280	290	310	300
Total Nitrate/Nitrite	mg-N/L	5.0	6.3	0.4 U	0.15 U	0.15 U	0.4 U	0.15 U	0.4 U	0.15 U	0.4 U	0.15 U	0.4 U	0.4 U	0.4 U	1.2	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.15 U	0.4 U
Total Organic Carbon	mg/L	2.2	2.2	1.8	1.7	3.3	3.4	2.3	1.8	1.7	1.5	5.4	4.0	3.6	3.8	18	13	14	15	1.6	1.0	1.3	1.3
Metals																							
Antimony	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Arsenic	mg/L	0.0018	0.0018	0.0060	0.0062	0.0140	0.0150	0.0059	0.0057	0.0061	0.0060	0.0013	0.0013	0.0012	0.0012	0.0021	0.0017	0.0022	0.0021	0.0022	0.0029	0.0030	0.0037
Barium	mg/L	0.044	0.044	0.026	0.028	0.033	0.035	0.061	0.057	0.059	0.067	0.082	0.082	0.075	0.078	0.051	0.049	0.052	0.054	0.083	0.077	0.075	0.081
Beryllium	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Chromium	mg/L	0.0004 U	0.0004 U	0.00071	0.00120	0.00050	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.00043	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cobalt	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0021	0.0021	0.0022	0.0022	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Copper	mg/L	0.002	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5	1.7	1.4	1.6	0.58	0.63	0.32	0.68	0.3 U	0.3	0.3 U	0.3	1.3	1.4	1.4	1.3
Lead	mg/L	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U
Manganese	mg/L	0.060	0.062	0.26	0.26	0.070	0.078	0.22	0.21	0.22	0.23	0.72	0.69	0.73	0.67	0.58	0.63	0.69	0.62	0.32	0.35	0.33	0.33
Nickel	mg/L	0.0068	0.0065	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.020	0.021	0.023	0.022	0.003 U	0.003 U	0.003 U	0.003 U
Selenium	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
Silver	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vanadium	mg/L	0.0060	0.0059	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0042	0.0040	0.004 U	0.004 U	0.004 U	0.004 U
Zinc	mg/L	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U

Notes:
deg-C = degress Celsius
mg/L = miligrams per liter
mV = millivolts
mg N/L = miligrams of nitrogen per liter
ORP = oxidation reduction potential
SU = Standard units
µS/cm = microSiemens per centimeter
NTU = nepthelometric turbidity units
U = not detected above reporting limit
— = analysis not performed

Table 2B. Field Parameter, General Chemistry, and Inorganic Results - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Location	E9D				E10D				N1D		N2D				N3D		N5D		NE1D		S11D	
	Units	18Q1	18Q2	18Q3	18Q4	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4
Field Measurements																							
Dissolved Oxygen	mg/L	1.38	0.66	0.62	1.55	1.11	0.60	0.63	0.66	0.56	3.42	1.20	0.38	0.68	0.40	2.62	0.64	1.18	1.33	0.91	1.20	0.64	1.37
ORP	mV	-118.2	-258.0	-67.9	-122.1	-125.1	-118.9	-121.3	-115.0	-40.2	195.5	135.5	200.8	131.7	107.1	125.0	266.4	110.0	177.3	169.3	149.6	-96.0	-75.2
pH	SU	7.71	8.07	8.22	8.25	7.91	7.73	7.61	7.44	7.48	7.36	7.06	7.10	7.06	7.02	6.92	7.32	7.43	7.23	7.49	7.27	7.89	7.60
Specific Conductivity	µS/cm	548	540	544	543	945	994	978	978	1,561	1,512	1,258	1,258	1,223	1,225	654	657	1,451	1,462	691	676	967	937
Temperature	deg-C	9.7	10.2	11.3	11.4	9.5	9.9	10.7	10.4	11.3	13.8	12.4	12.5	14.0	12.9	12.2	12.2	10.0	10.8	11.8	15.6	9.8	10.3
Turbidity	NTU	5.0	3.9	2.5	5.0	4.2	2.1	1.5	0.6	1.6	1.6	1.8	1.0	0.9	0.2	1.6	2.0	1.2	0.7	3.0	1.4	5.4	4.5
General Chemistry																							
Alkalinity, Total	mg/L	190	190	190	190	380	380	380	400	480	490	480	470	470	480	250	250	560	560	260	260	350	340
Alkalinity, Bicarbonate	mg/L	190	190	190	190	380	380	380	400	480	490	480	470	470	480	250	250	560	560	260	260	350	340
Ammonia	mg-N/L	0.5 U	0.19	0.5 U	0.5 U	0.5 U	0.31	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.1 U	0.5 U	0.15	0.5 U	0.15	0.5 U	0.14	0.5 U
Calcium	mg/L	30	29	33	31	97	91	110	100	120	120	110	110	110	110	71	71	110	120	61	60	75	75
Chemical Oxygen Demand	mg/L	10 U	10 U	12	10 U	10 U	10 U	15	21	10	13	10 U	10 U	10	10 U	10 U	10 U	10 U	10	10 U	10 U	10 U	17
Chloride	mg/L	41	41	42	41	57	60	61	64	120	130	67	67	68	66	38	37	100	100	38	38	70	73
Fluoride	mg/L	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U	0.21	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.20	1 U	0.23
Magnesium	mg/L	33	33	36	35	56	54	59	60	97	99	74	73	75	75	26	27	91	95	34	35	51	54
Potassium	mg/L	14	14	16	15	7.2	6.8	7.7	7.5	9.4	9.6	8.1	8.1	8.3	8.4	5.8	6.1	9.5	10	5.7	6.0	7.0	7.4
Sodium	mg/L	16	17	17	16	29	30	30	30	45	47	39	39	40	41	20	22	47	45	24	25	34	35
Sulfate	mg/L	20	21	21	20	42	44	45	44	150	150	69	69	71	69	25	25	68	71	38	37	33	32
Total Dissolved Solids	mg/L	240	280	250	300	500	500	550	550	880	900	670	660	660	690	340	340	780	780	360	370	500	510
Total Nitrate/Nitrite	mg-N/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3.2	3.4	3.2	3.0	0.15 U	0.15 U	0.4 U	0.4 U	0.15 U	0.4 U	0.4 U	0.4 U
Total Organic Carbon	mg/L	2.0	1.5	1.5	1.9	2.0	1.5	1.7	1.9	3.8	3.8	3.2	2.2	2.3	2.3	1.2	1.9	2.9	2.8	1.2	1.4	2.5	2.6
Metals																							
Antimony	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Arsenic	mg/L	0.0190	0.0180	0.020	0.020	0.0051	0.0051	0.0054	0.0054	0.0049	0.0045	0.0031	0.0030	0.0032	0.0029	0.0079	0.0083	0.0032	0.0034	0.0078	0.0074	0.0073	0.0082
Barium	mg/L	0.027	0.028	0.028	0.032	0.044	0.046	0.045	0.042	0.100	0.110	0.026	0.027	0.025	0.029	0.028	0.028	0.084	0.077	0.019	0.017	0.041	0.040
Beryllium	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Chromium	mg/L	0.0004 U	0.0004 U	0.00070	0.00240	0.0004 U	0.00096	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.00052	0.0004 U	0.0004 U	0.00062	0.0004 U	0.00054	0.00069
Cobalt	mg/L	0.0004 U	0.0004 U	0.0004 U	0.00054	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Copper	mg/L	0.002 U	0.002 U	0.002 U	0.0029	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Iron	mg/L	0.3 U	0.3 U	0.3 U	0.3 U	1.5	1.4	0.3 U	1.4	0.38	0.39	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Lead	mg/L	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U
Manganese	mg/L	0.058	0.053	0.055	0.048	0.095	0.088	0.091	0.089	0.29	0.30	0.02 U	0.02 U	0.02 U	0.02 U	0.031	0.035	0.19	0.22	0.02 U	0.02 U	0.16	0.16
Nickel	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0084	0.0130	0.0042	0.0041	0.0042	0.0044	0.003 U	0.003 U	0.0086	0.0086	0.003 U	0.003 U	0.003 U	0.003 U
Selenium	mg/L	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
Silver	mg/L	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0041	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Zinc	mg/L	0.007 U	0.007 U	0.007 U	0.0097	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U

Notes:
deg-C = degress Celsius
mg/L = miligrams per liter
mV = millivolts
mg N/L = miligrams of nitrogen per liter
ORP = oxidation reduction potential
SU = Standard units
µS/cm = microSiemens per centimeter
NTU = nepthelometric turbidity units
U = not detected above reporting limit
— = analysis not performed

Table 2C. Field Parameter, General Chemistry, and Inorganic Results - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Location	DNR				DOT		WR1			
	Units	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q1	18Q2	18Q3	18Q4
Field Measurements											
Dissolved Oxygen	mg/L	1.15	NS	2.56	1.88	1.18	1.78	3.15	2.06	3.26	2.83
ORP	mV	2.3	NS	114.0	20.7	-3.1	-121.9	75.2	186.9	157.7	177.8
pH	SU	7.53	NS	7.21	7.29	7.42	8.04	7.33	7.34	7.09	7.22
Specific Conductivity	µS/cm	860	NS	844	860	715	726	882	898	898	883
Temperature	deg-C	9.9	NS	13.7	11.7	10.0	11.5	9.6	9.6	13.5	11.0
Turbidity	NTU	8.4	NS	1.8	6.5	2.4	2.0	2.6	1.4	0.3	2.8
General Chemistry											
Alkalinity, Total	mg/L	270	NS	280	280	310	320	320	320	320	320
Alkalinity, Bicarbonate	mg/L	270	NS	280	280	310	320	320	320	320	320
Ammonia	mg-N/L	0.5 U	NS	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U
Calcium	mg/L	76	NS	84	78	61	63	79	80	89	79
Chemical Oxygen Demand	mg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	13
Chloride	mg/L	68	NS	67	66	23	23	57	53	57	56
Fluoride	mg/L	0.2 U	NS	0.2 U	0.22	0.2 U	0.2	0.2 U	1 U	0.2 U	0.2
Magnesium	mg/L	43	NS	47	44	40	42	46	45	52	45
Potassium	mg/L	5.2	NS	5.8	5.4	6.2	6.5	5.3	5.2	6.0	5.3
Sodium	mg/L	28	NS	30	28	24	26	31	30	35	31
Sulfate	mg/L	54	NS	54	53	23	23	44	46	46	44
Total Dissolved Solids	mg/L	430	NS	470	440	360	400	460	430	460	470
Total Nitrate/Nitrite	mg-N/L	0.4 U	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.42	0.4 U	1.5	1.0
Total Organic Carbon	mg/L	2.6	NS	2.1	2.1	1.3	1.2	2.4	2.2	2.0	2.2
Metals											
Antimony	mg/L	0.0004 U	NS	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Arsenic	mg/L	0.0032	NS	0.0035	0.0039	0.0063	0.0058	0.0032	0.0033	0.0033	0.0033
Barium	mg/L	0.018	NS	0.019	0.018	0.023	0.026	0.021	0.022	0.021	0.021
Beryllium	mg/L	0.0004 U	NS	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Cadmium	mg/L	0.0004 U	NS	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Chromium	mg/L	0.0042	NS	0.0029	0.0033	0.0004 U	0.0004 U	0.0014	0.0015	0.0014	0.0016
Cobalt	mg/L	0.0004 U	NS	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Copper	mg/L	0.0048	NS	0.0022	0.0036	0.002 U	0.002 U	0.049	0.049	0.048	0.048
Iron	mg/L	0.3 U	NS	0.3 U	0.3 U	0.3 U	0.33	0.3 U	0.3 U	0.3 U	0.3 U
Lead	mg/L	0.0008 U	NS	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U
Manganese	mg/L	0.02 U	NS	0.02 U	0.02 U	0.16	0.16	0.02 U	0.02 U	0.02 U	0.02 U
Nickel	mg/L	0.003 U	NS	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
Selenium	mg/L	0.008 U	NS	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U
Silver	mg/L	0.0004 U	NS	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Thallium	mg/L	0.001 U	NS	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vanadium	mg/L	0.0058	NS	0.0068	0.0068	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Zinc	mg/L	0.0074	NS	0.007 U	0.0071	0.041	0.110	0.083	0.050	0.074	0.054

Notes:
deg-C = degrees Celsius
mg/L = milligrams per liter
mV = millivolts
mg N/L = milligrams of nitrogen per liter
ORP = oxidation reduction potential
SU = Standard units
µS/cm = microSiemens per centimeter
NTU = nephelometric turbidity units
U = not detected above reporting limit
NS = DNR not sampled during 18Q2 due to inability to access sample location

Table 3A. Volatile Organic Compound Results - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	E1D		E2S		E4S		N2S		N3S		NE1S		S10S		S11S	
	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4
1,1 - Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.52	0.49	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1 - Dichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1 - Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.51	0.52	0.2 U	0.2 U	0.2 U	0.2 U	0.37	0.43	0.2 U	0.2 U
1,1,1,2 - Tetrachloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2 - Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2 - Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dibromoethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2 - Dichlorobenzene (ortho)	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2 - Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3 - Trichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,4 - Dichlorobenzene (para)	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-Pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Acrylonitrile	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis - 1,2 - Dichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis - 1,3 - Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans - 1,2 - Dichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,3 - Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,4 - Dichloro-2-Butene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.5 U	0.5 U	1.7	2.0	0.5 U	0.5 U	3.1	3.4	0.89	1.1	0.5 U	0.5 U	3.9	4.4	0.5 U	0.5 U
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	0.21	0.20	0.088	0.083	0.02 U	0.02 U	0.22	0.18	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
All concentrations presented in
micrograms per liter (µg/L)
U = not detected above reporting limit

Table 3B. Volatile Organic Compound Results - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

[illegible]

Notes:
All concentrations presented in micrograms per liter (µg/L)

U = not detected above reporting limit

Table 3B. Volatile Organic Compound Results - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	E10D				N1D		N2D				N3D		N5D		NE1D		S11D	
	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4	18Q2	18Q4
1,1 - Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1 - Dichloroethylene	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1 - Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1,2 - Tetrachloroethane	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2 - Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2 - Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dibromoethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2 - Dichlorobenzene (ortho)	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2 - Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3 - Trichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,4 - Dichlorobenzene (para)	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	15 U	10 U	10 U	10 U	10 U	10 U	15 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	2 U	3 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-Pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	6 U	6 U	6 U	6 U	6 U	2 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Acrylonitrile	5 U	10 U	10 U	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis - 1,2 - Dichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis - 1,3 - Dichloropropene	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	0.5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans - 1,2 - Dichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,3 - Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,4 - Dichloro-2-Butene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.039	0.02 U	0.026	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
All concentrations presented in micrograms
per liter (µg/L)

U = not detected above reporting limit

Table 3C. Volatile Organic Compound Results - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	DNR				DOT		WR1			
	18Q1	18Q2	18Q3	18Q4	18Q2	18Q4	18Q1	18Q2	18Q3	18Q4
1,1 - Dichloroethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1 - Dichloroethylene	0.1 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.1 U	0.2 U	0.2 U	0.2 U
1,1,1 - Trichloroethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1,2 - Tetrachloroethane	0.2 U	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2 - Trichloroethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2 - Tetrachloroethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dibromoethane	0.1 U	NS	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2 - Dichlorobenzene (ortho)	0.3 U	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2 - Dichloroethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2 - Dichloropropane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3 - Trichloropropane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	2 U	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,4 - Dichlorobenzene (para)	0.3 U	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Butanone (MEK)	15 U	NS	10 U	10 U	10 U	10 U	15 U	10 U	10 U	10 U
2-Hexanone	2 U	NS	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U
4-Methyl-2-Pentanone	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	NS	6 U	6 U	6 U	6 U	2.1	6 U	6 U	6 U
Acrylonitrile	5 U	NS	10 U	10 U	10 U	10 U	5 U	10 U	10 U	10 U
Benzene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	0.2 U	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.3 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U
cis - 1,2 - Dichloroethylene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis - 1,3 - Dichloropropene	0.5 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U
Dibromomethane	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Iodide	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	0.5 U	NS	5 U	5 U	5 U	5 U	0.5 U	5 U	5 U	5 U
Styrene	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethylene	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans - 1,2 - Dichloroethylene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,3 - Dichloropropene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans - 1,4 - Dichloro-2-Butene	2 U	NS	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethylene	0.2 U	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.5 U	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl acetate	1 U	NS	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	0.02 U	NS	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:

All concentrations presented in micrograms per liter (µg/L)

NS= Not sampled

U = not detected above reporting limit

Table 4. Volatile Organic Compound Detections
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Well Name	Aquifer	Date Sampled	Result
1,1,1-Trichloroethane	E2D	2	2/6/2018	0.33
			4/17/2018	0.29
			7/10/2018	0.36
			10/15/2018	0.35
	E7D	2	2/6/2018	0.74
			4/16/2018	0.76
			7/11/2018	0.80
			10/16/2018	0.80
	N2S	1	4/17/2018	0.51
			10/15/2018	0.52
	S10S	1	4/18/2018	0.37
			10/16/2018	0.43
1,1-Dichloroethane	E7D	2	2/6/2018	2.8
			4/16/2018	2.7
			7/11/2018	2.8
			10/16/2018	2.9
	N2S	1	4/17/2018	0.52
			10/15/2018	0.49
1,1-Dichloroethylene	E7D	2	2/6/2018	1.7
			4/16/2018	1.5
			7/11/2018	1.8
			10/16/2018	0.3
Acetone	E4D	2	2/6/2018	2.0
	E7D	2	2/6/2018	3.2
	WR1	WSW	2/7/2018	2.1
Trichlorofluoromethane	E2D	2	2/6/2018	1.9
			4/17/2018	1.8
			7/10/2018	1.9
			10/15/2018	2.0
	E2S	1	4/17/2018	1.7
			10/15/2018	2.0
	E7D	2	2/6/2018	61
			4/16/2018	60
			7/11/2018	56
			10/16/2018	76
	N2D	2	10/15/2018	0.54
	N2S	1	4/17/2018	3.1
			10/15/2018	3.4
	N3S	1	4/17/2018	0.89
			10/15/2018	1.1
			10/15/2018	1.1
	S10S	1	4/18/2018	3.9
			10/16/2018	4.4

Table 4. Volatile Organic Compound Detections
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Well Name	Aquifer	Date Sampled	Result
Vinyl chloride	E1D	1	4/17/2018	0.21
			10/16/2018	0.20
	E2D	2	2/6/2018	19
			4/17/2018	21
			7/10/2018	19
			10/15/2018	25
	E2S	1	4/17/2018	0.088
			10/15/2018	0.083
	E6D	2	4/16/2018	0.051
			10/16/2018	0.035
	E7D	2	2/6/2018	4.2
			4/16/2018	3.5
			7/11/2018	3.7
			10/16/2018	4.1
	N2D	2	2/6/2018	0.039
			7/10/2018	0.026
	N2S	1	4/17/2018	0.22
			10/15/2018	0.18

Notes:

All units measured in µg/L

WSW = Water Supply Well

**Table 5. WAC 173-200 and Federal MCL Exceedences
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Parameter	Criteria			Sample Location	Aquifer	Date Sampled	Result
	WAC 173-200	Primary MCL	Secondary MCL				
Field Measurements							
Specific Conductivity (µS/cm)	-	-	700 ^a	E1D	1	4/17/2018	1,760
						10/16/2018	1,800
				E1S	1	4/17/2018	1,196
						10/16/2018	1,141
				E2S	1	4/17/2018	1,323
						10/15/2018	1,314
				E4S	1	4/17/2018	1,242
						10/15/2018	1,262
				N2S	1	4/17/2018	1,540
						10/15/2018	1,516
				N3S	1	4/17/2018	1,102
						10/15/2018	1,077
				NE1S	1	4/17/2018	839
						10/16/2018	850
				S10S	1	4/18/2018	1,386
						10/16/2018	1,318
				S11S	1	4/18/2018	940
						10/16/2018	913
				E2D	2	2/6/2018	1,698
						4/17/2018	1,689
						7/10/2018	1,636
						10/15/2018	1,613
				E3D	2	4/16/2018	775
						10/15/2018	784
				E5D	2	2/6/2018	1,194
						4/16/2018	1,242
						7/10/2018	1,205
						10/15/2018	1,279
				E7D	2	2/6/2018	1,780
						4/16/2018	1,790
						7/11/2018	1,787
						10/16/2018	1,794
				E10D	2	2/7/2018	945
						4/18/2018	994
						7/11/2018	978
						10/16/2018	978
				N1D	2	4/18/2018	1,561
						10/15/2018	1,512
				N2D	2	2/6/2018	1,258
						4/17/2018	1,258
						7/10/2018	1,223
						10/15/2018	1,225
				N5D	2	4/18/2018	1,451
						10/16/2018	1,462
				S11D	2	4/18/2018	967
						10/16/2018	937
				DNR	3	2/7/2018	860
						7/10/2018	844
						10/16/2018	860
				DOT	3	4/16/2018	715
						10/15/2018	726
				WR1	WSW	2/7/2018	882
						4/17/2018	898
						7/11/2018	898
						10/16/2018	883

**Table 5. WAC 173-200 and Federal MCL Exceedences
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Parameter	Criteria			Sample Location	Aquifer	Date Sampled	Result
	WAC 173-200	Primary MCL	Secondary MCL				
General Chemistry							
Total Dissolved Solids (mg/L)	500	-	500	E1D	1	4/17/2018	970
						10/16/2018	1,000
				E2S	1	4/17/2018	750
						10/15/2018	770
				E4S	1	4/17/2018	670
						10/15/2018	710
				N2S	1	4/17/2018	880
						10/15/2018	900
				N3S	1	4/17/2018	590
						10/15/2018	600
				S10S	1	4/18/2018	780
						10/16/2018	810
				E2D	2	4/17/2018	940
						10/15/2018	820
				E5D	2	2/6/2018	640
						4/16/2018	650
						7/10/2018	600
						10/15/2018	680
				E7D	2	2/6/2018	1,100
						4/16/2018	1,100
						7/11/2018	910
						10/16/2018	1,100
				E10D	2	7/11/2018	550
						10/16/2018	550
				N1D	2	4/18/2018	880
						10/15/2018	900
				N2D	2	2/6/2018	670
						4/17/2018	660
7/10/2018	660						
10/15/2018	690						
N5D	2	4/18/2018	780				
		10/16/2018	780				
S11D	2	10/16/2018	510				
Total Nitrate/Nitrite (mg/L)	10	10	-	E1S	1	4/17/2018	12
						10/16/2018	14
				S10S	1	4/18/2018	40
						10/16/2018	34
Metals							
Arsenic (mg/L)	0.00005	0.01	-	E1D	1	4/17/2018	0.0043
						10/16/2018	0.0044
				E2S	1	4/17/2018	0.0013
						10/15/2018	0.0012
				E4S	1	4/17/2018	0.0024
						10/15/2018	0.0024
				N2S	1	4/17/2018	0.0012
						10/15/2018	0.0012
				N3S	1	4/17/2018	0.0024
						10/15/2018	0.0024
				NE1S	1	4/17/2018	0.0024
						10/16/2018	0.0027
				S10S	1	4/18/2018	0.0020
						10/16/2018	0.0021
				S11S	1	4/18/2018	0.0052
						10/16/2018	0.0057

**Table 5. WAC 173-200 and Federal MCL Exceedences
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Parameter	Criteria			Sample Location	Aquifer	Date Sampled	Result
	WAC 173-200	Primary MCL	Secondary MCL				
Arsenic (mg/L) (cont.)	0.00005	0.01	-	E2D	2	4/17/2018	0.0018
						10/15/2018	0.0018
				E3D	2	4/16/2018	0.0060
						10/15/2018	0.0062
				E4D	2	4/17/2018	0.0140
						10/15/2018	0.0150
				E5D	2	2/6/2018	0.0059
						4/16/2018	0.0057
						7/10/2018	0.0061
				E6D	2	10/15/2018	0.0060
						2/6/2018	0.0013
						4/16/2018	0.0013
				E7D	2	7/10/2018	0.0012
						10/16/2018	0.0012
						2/6/2018	0.0021
				E8D	2	4/16/2018	0.0017
						7/11/2018	0.0022
						10/16/2018	0.0021
				E9D	2	2/7/2018	0.0022
						4/16/2018	0.0029
						7/10/2018	0.0030
				E10D	2	10/15/2018	0.0037
						2/7/2018	0.019
						4/18/2018	0.018
				N1D	2	7/11/2018	0.020
						10/16/2018	0.020
				N2D	2	2/7/2018	0.0051
						4/18/2018	0.0051
						7/11/2018	0.0054
				N3D	2	10/16/2018	0.0054
						4/18/2018	0.0049
						10/15/2018	0.0045
				N5D	2	2/6/2018	0.0031
						4/17/2018	0.0030
						7/10/2018	0.0032
				NE1D	2	10/15/2018	0.0029
						4/17/2018	0.0079
						10/15/2018	0.0083
				S11D	2	4/18/2018	0.0032
						10/16/2018	0.0034
						4/17/2018	0.0078
				DNR	WSW	10/16/2018	0.0074
						4/18/2018	0.0073
						10/16/2018	0.0082
				DOT	WSW	2/7/2018	0.0032
						7/10/2018	0.0035
						10/16/2018	0.0039
				WR1	WSW	4/16/2018	0.0063
						10/15/2018	0.0058
						2/7/2018	0.0032
						4/17/2018	0.0033
						7/11/2018	0.0033
						10/16/2018	0.0033

**Table 5. WAC 173-200 and Federal MCL Exceedences
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Parameter	Criteria			Sample Location	Aquifer	Date Sampled	Result
	WAC 173-200	Primary MCL	Secondary MCL				
Iron (mg/L)	0.3	-	0.3	E5D	2	2/6/2018	1.5
						4/16/2018	1.7
						7/10/2018	1.4
						10/15/2018	1.6
				E6D	2	2/6/2018	0.58
						4/16/2018	0.63
						7/10/2018	0.32
						10/16/2018	0.68
				E8D	2	2/7/2018	1.3
						4/16/2018	1.4
						7/10/2018	1.4
						10/15/2018	1.3
				E10D	2	2/7/2018	1.5
						4/18/2018	1.4
						10/16/2018	1.4
Manganese (mg/L)	0.05	-	0.05	N1D	2	4/18/2018	0.38
				DOT	WSW	10/15/2018	0.39
						10/15/2018	0.33
				E2S	1	4/17/2018	0.41
				S11S	1	10/15/2018	0.44
						4/18/2018	0.19
				E2D	2	10/16/2018	0.20
						4/17/2018	0.060
				E3D	2	10/15/2018	0.062
						4/16/2018	0.28
				E4D	2	10/15/2018	0.26
						4/17/2018	0.070
				E5D	2	10/15/2018	0.078
						2/6/2018	0.22
						4/16/2018	0.21
						7/10/2018	0.22
						10/15/2018	0.23
				E6D	2	2/6/2018	0.72
						4/16/2018	0.69
						7/10/2018	0.73
						10/16/2018	0.67
				E7D	2	2/6/2018	0.58
						4/16/2018	0.63
						7/11/2018	0.69
						10/16/2018	0.62
				E8D	2	2/7/2018	0.32
						4/16/2018	0.35
						7/10/2018	0.33
						10/15/2018	0.33
				E9D	2	2/7/2018	0.058
						4/18/2018	0.053
						7/11/2018	0.055
						2/7/2018	0.095
				E10D	2	4/18/2018	0.088
						7/11/2018	0.091
						10/16/2018	0.089
						4/18/2018	0.29
				N1D	2	10/15/2018	0.30
						4/18/2018	0.19
				N5D	2	10/16/2018	0.22
						4/18/2018	0.16
				S11D	2	10/16/2018	0.16
						4/16/2018	0.16
				DOT	WSW	4/16/2018	0.16
						10/15/2018	0.16

**Table 5. WAC 173-200 and Federal MCL Exceedences
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Parameter	Criteria			Sample Location	Aquifer	Date Sampled	Result
	WAC 173-200	Primary MCL	Secondary MCL				
Volatile Organic Compounds							
1,1,-Dichloroethane (µg/L)	1.0	-	-	E7D	2	2/6/2018	2.8
						4/16/2018	2.7
						7/11/2018	2.8
						10/16/2018	2.9
Vinyl Chloride (µg/L)	0.02	2	-	E1D	1	4/17/2018	0.21
						10/16/2018	0.20
				E2S	1	4/17/2018	0.088
						10/15/2018	0.083
				N2S	1	4/17/2018	0.22
						10/15/2018	0.18
				E2D	2	2/6/2018	19.0
						4/17/2018	21.0
						7/10/2018	19.0
						10/15/2018	25.0
				E6D	2	4/16/2018	0.051
						10/16/2018	0.035
				E7D	2	2/6/2018	4.2
						4/16/2018	3.5
						7/11/2018	3.7
						10/16/2018	4.1
N2D	2	2/6/2018	0.039				
		7/10/2018	0.026				

Notes:

° = WAC 246-290-310 standard

mg/L = milligrams per liter

µg/L = micrograms per liter

MCL = Federal Maximum Contaminant Level

WSW = Water Supply Well

Table 6. Short and Long Term Statistics for Select Parameters
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Specific Conductivity (µS/cm)	1	E1D	6	0	1718	1800	1765.7	7	1.127	12.98	no trend	125	0	163	2490	1293.6	2784	5.939	0	increasing
	1	E1S	6	0	1104	1196	1150.7	0	0	50	no trend	125	0	421	2080	1201.1	1197	2.552	0.54	increasing
	1	E2S	6	0	1314	1404	1352	-7	-1.127	12.98	no trend	123	0	420	1630	1110.5	3766	8.231	0	increasing
	1	E4S	6	0	1129	1262	1208.2	11	1.879	3.01	no trend	40	0	549.7	1262	1068.7	214	2.482	0.65	increasing
	1	N2S	6	0	1516	1580	1541.7	-9	-1.503	6.64	no trend	54	0	159	1900	1416.8	-118	-0.873	19.14	no trend
	1	N3S	6	0	1037	1102	1072.7	7	1.127	12.98	no trend	123	0	119	1365	834.9	4626	10.111	0	increasing
	1	NE1S	5	0	839	892	858	0	0	50	no trend	62	0	436	1004	806.2	-64	-0.383	35.1	no trend
	1	S10S	6	0	1318	1435	1389.3	-9	-1.503	6.64	no trend	64	0	665	2400	1536.6	-979	-5.666	0	decreasing
	1	S11S	6	0	896	940	911.5	7	1.127	12.98	no trend	59	0	458.7	1033	867.7	231	1.504	6.63	no trend
	2	E2D	8	0	1613	1743	1683.9	-24	-2.846	0.22	decreasing	126	0	180	2280	1172.2	3350	7.062	0	increasing
	2	E3D	6	0	744	784	767.8	6	0.939	17.38	no trend	69	0	375.2	846	708.4	998	5.164	0	increasing
	2	E4D	8	0	544	576	561.1	-5	-0.495	31.04	no trend	44	0	431	933	579.8	-314	-3.166	0.08	decreasing
	2	E5D	8	0	1078	1279	1191	23	2.722	0.32	increasing	8	0	1078	1279	1191	23	2.722	0.32	increasing
	2	E6D	8	0	662	696	675	-8	-0.866	19.33	no trend	8	0	662	696	675	-8	-0.866	19.33	no trend
	2	E7D	8	0	1690	1794	1754.4	21	2.494	0.63	increasing	8	0	1690	1794	1754.4	21	2.494	0.63	increasing
	2	E8D	8	0	567	587	575.1	5	0.499	30.9	no trend	8	0	567	587	575.1	5	0.499	30.9	no trend
	2	E9D	8	0	535	568	549.1	-14	-1.608	5.39	no trend	8	0	535	568	549.1	-14	-1.608	5.39	no trend
	2	E10D	8	0	919	994	960.9	7	0.748	22.72	no trend	8	0	919	994	960.9	7	0.748	22.72	no trend
	2	N1D	6	0	1510	1561	1531	1	0	50	no trend	124	0	152	1850	1218.8	4051	8.747	0	increasing
	2	N2D	8	0	1218	1258	1233.6	7	0.748	22.72	no trend	131	0	122	1516	910.1	5918	11.773	0	increasing
	2	N3D	6	0	643	692	659.8	5	0.751	22.62	no trend	123	0	371	800	541.7	4183	9.142	0	increasing
	2	N5D	6	0	1321	1481	1437	1	0	50	no trend	63	0	874.2	1630	1351.3	834	4.941	0	increasing
	2	NE1D	5	0	600	697	669	-2	-0.245	40.33	no trend	62	0	335.4	763	632.5	422	2.557	0.53	increasing
	2	S11D	6	0	927	983	945.3	6	0.939	17.38	no trend	61	0	468.1	1065	892.1	155	0.958	16.9	no trend
	WSW	DNR	6	0	843	881	858	0	0	50	no trend	70	0	601	969	804.4	884	4.477	0	increasing
	WSW	DOT	6	0	678	726	702.3	9	1.503	6.64	no trend	108	0	388.4	726	579.2	3088	8.196	0	increasing
WSW	WR1	8	0	839	898	879.3	13	1.496	6.73	no trend	69	0	479	898	785.8	1198	6.2	0	increasing	

Table 6. Short and Long Term Statistics for Select Parameters
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Nitrate (mg/L)	1	E1D	6	4	<0.0750	0.99	0.2123	12	2.104	1.77	no trend	125	46	<0.000030	3.19	0.697	-2404	-5.128	0	decreasing
	1	E1S	6	0	12	14	12.5	1	0	50	no trend	125	13	<0.000030	14	4.134	3025	6.454	0	increasing
	1	E2S	6	0	7.7	8.7	8.22	3	0.376	35.36	no trend	122	45	<0.000030	8.7	1.563	-1372	-3.034	0.12	decreasing
	1	E4S	6	0	1	2	1.45	15	2.63	0.43	increasing	40	0	0.11	3.85	0.597	481	5.594	0	increasing
	1	N2S	6	0	5.6	7.6	6.53	-5	-0.751	22.62	no trend	55	17	<0.000030	7.6	1.86	-15	-0.102	45.95	no trend
	1	N3S	6	0	5.7	6.8	6.08	5	0.751	22.62	no trend	123	5	<0.2	6.8	2.49	5593	12.225	0	increasing
	1	NE1S	5	0	3.7	6.5	5.34	-10	-2.205	1.37	no trend	62	0	0.03	8.39	5.12	984	5.971	0	increasing
	1	S10S	6	0	34	46	41.2	-15	-2.63	0.43	decreasing	64	0	0.02	86	35.14	377	2.178	1.47	no trend
	1	S11S	6	6	<0.0250	<0.2	0.0646	N/A	N/A	N/A	N/A	59	57	<0.00070	0.19	0.01852	N/A	N/A	N/A	N/A
	2	E2D	6	0	3.8	6.3	4.7	7	1.127	12.98	no trend	120	14	<0.00070	6.3	0.899	581	1.316	9.42	no trend
	2	E3D	6	5	<0.0750	<0.2	0.05	N/A	N/A	N/A	N/A	69	65	<0.000030	0.18	0.01803	-1001	-5.182	0	decreasing
	2	E4D	6	6	<0.0250	<0.2	0.0542	N/A	N/A	N/A	N/A	40	40	<0.0028	<0.2	0.01688	N/A	N/A	N/A	N/A
	2	E5D	4	4	<0.0750	<0.2	0.0688	N/A	N/A	N/A	N/A	4	4	<0.0750	<0.2	0.0688	N/A	N/A	N/A	N/A
	2	E6D	4	4	<0.0750	<0.2	0.0844	N/A	N/A	N/A	N/A	4	4	<0.0750	<0.2	0.0844	N/A	N/A	N/A	N/A
	2	E7D	4	3	<0.2	1.2	0.375	-3	-0.722	23.51	no trend	4	3	<0.2	1.2	0.375	N/A	N/A	N/A	N/A
	2	E8D	4	4	<0.0750	<0.2	0.0844	N/A	N/A	N/A	N/A	4	4	<0.0750	<0.2	0.0844	N/A	N/A	N/A	N/A
	2	E9D	4	4	<0.2	<0.2	<0.2	N/A	N/A	N/A	N/A	4	4	<0.2	<0.2	<0.2	N/A	N/A	N/A	N/A
	2	E10D	4	4	<0.2	<0.2	<0.2	N/A	N/A	N/A	N/A	4	4	<0.2	<0.2	<0.2	N/A	N/A	N/A	N/A
	2	N1D	6	6	<0.0250	<0.2	0.0646	N/A	N/A	N/A	N/A	125	83	<0.000030	0.6	0.1009	-4138	-8.829	0	decreasing
	2	N2D	8	0	3	3.4	3.14	8	0.873	19.14	no trend	132	34	<0.000030	3.4	0.753	-384	-0.753	22.56	no trend
	2	N3D	6	5	<0.0750	<0.2	0.0503	N/A	N/A	N/A	N/A	122	100	<0.000030	0.7	0.0713	-3262	-7.217	0	decreasing
	2	N5D	6	5	<0.0750	<0.2	0.0608	N/A	N/A	N/A	N/A	63	59	<0.00070	0.18	0.01645	-190	-1.121	13.11	no trend
	2	NE1D	5	4	<0.0750	<0.2	0.0664	6	1.225	11.03	no trend	62	31	<0.00250	3.86	0.0897	454	2.752	0.3	increasing
	2	S11D	6	6	<0.0250	<0.2	0.0646	N/A	N/A	N/A	N/A	60	57	<0.00070	0.16	0.01803	-310	-1.972	2.43	no trend
	WSW	DNR	6	6	<0.0250	<0.2	0.0646	N/A	N/A	N/A	N/A	70	36	<0.000030	0.56	0.0583	-1139	-5.771	0	decreasing
	WSW	DOT	6	6	<0.0250	<0.2	0.0542	N/A	N/A	N/A	N/A	109	105	<0.000030	0.3	0.0514	-2125	-5.563	0	decreasing
	WSW	WR1	8	1	<0.2	1.5	1.09	-10	-1.122	13.09	no trend	69	4	<0.012	1.63	0.945	1052	5.444	0	increasing

Table 6. Short and Long Term Statistics for Select Parameters
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Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Sulfate (mg/L)	1	E1D	6	0	60	85	70.7	15	2.63	0.43	increasing	125	0	22	109	57.8	2352	5.017	0	increasing
	1	E1S	4	0	38	41	39.75	1	0	50	no trend	123	0	17	59	33.16	4362	9.534	0	increasing
	1	E2S	6	0	62	69	65.8	10	1.721	4.26	no trend	122	0	8	76	30.6	3095	6.847	0	increasing
	1	E4S	6	0	40	47	44	13	2.254	1.21	no trend	40	0	24	63	36.2	578	6.725	0	increasing
	1	N2S	6	0	98	120	109.7	3	0.383	35.1	no trend	55	0	3	130	59.4	902	6.542	0	increasing
	1	N3S	6	0	40	47	43.8	11	1.879	3.01	no trend	123	0	15	56	41.3	2018	4.41	0	increasing
	1	NE1S	5	0	67	71	69.4	3	0.505	30.67	no trend	62	0	34	97	69.5	-158	-0.954	17.01	no trend
	1	S10S	6	0	89	100	94.7	0	0	50	no trend	64	0	33	131	97.4	-345	-1.993	2.31	no trend
	1	S11S	6	0	27	31	29.17	7	1.127	12.98	no trend	59	0	25	32	28.2	847	5.534	0	increasing
	2	E2D	6	0	67	77	71.3	11	1.949	2.57	no trend	120	0	0.8	77	28.6	1783	4.042	0	increasing
	2	E3D	6	0	14	16	15.33	6	0.956	16.95	no trend	69	0	13	28	15.55	741	3.834	0.01	increasing
	2	E4D	6	0	11	14	12.5	9	1.53	6.3	no trend	40	0	10	161	22.4	-471	-5.478	0	decreasing
	2	E5D	4	0	21	22	21.75	3	0.722	23.51	no trend	4	0	21	22	21.75	N/A	N/A	N/A	N/A
	2	E6D	4	0	35	38	36.5	-6	-1.698	4.47	no trend	4	0	35	38	36.5	N/A	N/A	N/A	N/A
	2	E7D	4	0	130	160	142.5	5	1.445	7.43	no trend	4	0	130	160	142.5	N/A	N/A	N/A	N/A
	2	E8D	4	0	26	27	26.25	1	0	50	no trend	4	0	26	27	26.25	N/A	N/A	N/A	N/A
	2	E9D	4	0	20	21	20.5	0	0	50	no trend	4	0	20	21	20.5	N/A	N/A	N/A	N/A
	2	E10D	4	0	42	45	43.75	3	0.679	24.85	no trend	4	0	42	45	43.75	N/A	N/A	N/A	N/A
	2	N1D	6	0	120	170	146.7	6	0.956	16.95	no trend	125	1	<0.04	190	82.3	6519	13.91	0	increasing
	2	N2D	8	0	65	71	68	21	2.494	0.63	increasing	132	0	2	72	35.5	6250	12.293	0	increasing
	2	N3D	6	0	22	25	24	10	1.721	4.26	no trend	122	0	0.6	51	19.46	4464	9.877	0	increasing
	2	N5D	6	0	58	71	64.8	14	2.487	0.65	increasing	63	0	30	71	44.3	1748	10.363	0	increasing
	2	NE1D	5	0	34	38	36.2	4	0.783	21.67	no trend	62	0	29	81	36.4	837	5.079	0	increasing
	2	S11D	6	0	28	33	30.83	10	1.691	4.54	no trend	60	0	27	33	30.17	192	1.218	11.15	no trend
	WSW	DNR	6	0	42	54	48.3	8	1.339	9.03	no trend	70	0	16	54	36.1	1925	9.756	0	increasing
	WSW	DOT	6	0	19	23	21.17	9	1.53	6.3	no trend	109	0	10.1	32	16.9	3308	8.66	0	increasing
WSW	WR1	8	0	40	46	43.4	17	2.01	2.22	no trend	69	0	36	53.4	43.6	-773	-3.999	0	decreasing	

Table 6. Short and Long Term Statistics for Select Parameters
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Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Total Dissolved Solids (mg/L)	1	E1D	6	0	970	1000	990	0	0	50	no trend	63	0	930	1600	1141.9	-1527	-9.051	0	decreasing
	1	E1S	4	0	640	690	665	2	0.34	36.71	no trend	61	0	628	1200	815.7	-1479	-9.198	0	decreasing
	1	E2S	6	0	750	810	781.7	-4	-0.564	28.65	no trend	63	0	551	890	797.5	407	2.408	0.8	increasing
	1	E4S	6	0	650	710	685	6	0.939	17.38	no trend	40	0	540	711	650.4	221	2.563	0.52	increasing
	1	N2S	6	0	880	960	920	-11	-1.879	3.01	no trend	33	0	880	1136	998.5	-380	-5.873	0	decreasing
	1	N3S	6	0	590	650	621.7	-5	-0.751	22.62	no trend	61	0	590	724	664.4	131	0.809	20.93	no trend
	1	NE1S	5	0	430	540	500	-4	-0.735	23.12	no trend	62	0	380	620	520.1	-11	-0.061	47.58	no trend
	1	S10S	6	0	780	880	828.3	-5	-0.751	22.62	no trend	64	0	780	1410	994.1	-1350	-7.816	0	decreasing
	1	S11S	6	0	470	540	506.7	-1	0	50	no trend	59	0	470	551	518.4	-57	-0.366	35.71	no trend
	2	E2D	6	0	820	1000	955	-8	-1.315	9.43	no trend	63	0	452	1277	1109.6	-404	-2.39	0.84	decreasing
	2	E3D	6	0	380	440	418.3	-9	-1.53	6.3	no trend	63	0	338	450	418.7	828	4.905	0	increasing
	2	E4D	6	0	280	340	313.3	-5	-0.751	22.62	no trend	40	0	280	556	349.9	-541	-6.292	0	decreasing
	2	E5D	4	0	600	680	642.5	2	0.34	36.71	no trend	4	0	600	680	642.5	N/A	N/A	N/A	N/A
	2	E6D	4	0	350	360	352.5	3	0.722	23.51	no trend	4	0	350	360	352.5	N/A	N/A	N/A	N/A
	2	E7D	4	0	910	1100	1052.5	-1	0	50	no trend	4	0	910	1100	1052.5	N/A	N/A	N/A	N/A
	2	E8D	4	0	280	310	295	4	1.019	15.41	no trend	4	0	280	310	295	N/A	N/A	N/A	N/A
	2	E9D	4	0	240	300	267.5	4	1.019	15.41	no trend	4	0	240	300	267.5	N/A	N/A	N/A	N/A
	2	E10D	4	0	500	550	525	4	1.162	12.27	no trend	4	0	500	550	525	N/A	N/A	N/A	N/A
	2	N1D	6	0	880	940	901.7	-2	-0.188	42.55	no trend	62	0	860	1079	939.3	-328	-1.986	2.35	no trend
	2	N2D	8	0	660	720	685	-10	-1.122	13.09	no trend	65	0	403	767	684.4	696	3.935	0	increasing
	2	N3D	6	0	340	400	373.3	-7	-1.148	12.56	no trend	62	0	298	400	362.6	814	4.939	0	increasing
	2	N5D	6	0	780	870	816.7	-4	-0.574	28.31	no trend	63	0	657	891	804.6	984	5.83	0	increasing
	2	NE1D	5	0	360	410	384	-5	-0.98	16.36	no trend	62	0	258	549	381.5	716	4.343	0	increasing
	2	S11D	6	0	470	540	511.7	3	0.376	35.36	no trend	60	0	470	571	532.6	-185	-1.174	12.03	no trend
	WSW	DNR	6	0	430	490	463.3	-8	-1.315	9.43	no trend	63	0	430	526	480.9	494	2.924	0.17	increasing
	WSW	DOT	6	0	360	430	395	1	0	50	no trend	63	0	305	430	373.6	940	5.57	0	increasing
	WSW	WR1	8	0	430	540	482.5	-9	-0.99	16.12	no trend	54	0	378	633	477.3	308	2.29	1.1	no trend

Table 6. Short and Long Term Statistics for Select Parameters
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Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Arsenic, Total (µg/L)	1	E1D	6	0	4.3	6.1	5.12	-11	-1.879	3.01	no trend	110	33	<0.110	<200	9.96	-2320	-5.991	0	decreasing
	1	E1S	4	0	1.4	2.5	2.025	-2	-0.34	36.71	no trend	108	51	<0.024	<200	7.75	-1547	-4.105	0	decreasing
	1	E2S	6	0	1.1	3.2	1.867	-9	-1.503	6.64	no trend	111	37	<0.024	<200	10.91	-3948	-10.06	0	decreasing
	1	E4S	6	1	<2.50	3.2	2.39	-6	-0.956	16.95	no trend	40	1	<0.50	4	2.55	3	0.023	49.07	no trend
	1	N2S	6	0	1.1	3	1.683	-8	-1.339	9.03	no trend	48	27	<0.030	<20	1.13	231	2.045	2.04	no trend
	1	N3S	6	0	2.4	3.3	2.683	-11	-1.949	2.57	no trend	108	43	<0.030	<200	9.13	-2101	-5.576	0	decreasing
	1	NE1S	5	0	2.3	3.3	2.72	-4	-0.735	23.12	no trend	62	0	2	6	2.91	-386	-2.339	0.97	decreasing
	1	S10S	6	0	2	3.6	2.467	-8	-1.339	9.03	no trend	64	5	<0.030	3.6	1.925	496	2.869	0.21	increasing
	1	S11S	6	0	5.2	6.6	5.73	-8	-1.339	9.03	no trend	59	0	3	7	5.8	-354	-2.309	1.05	no trend
	2	E2D	6	0	1.8	3.9	2.35	-10	-1.721	4.26	no trend	110	44	<0.030	<200	7.81	-2100	-5.423	0	decreasing
	2	E3D	6	0	6	6.7	6.37	-8	-1.315	9.43	no trend	69	0	2	10	6.6	-708	-3.663	0.01	decreasing
	2	E4D	6	0	14	16	14.83	-7	-1.169	12.12	no trend	40	0	3	26	17.28	-372	-4.325	0	decreasing
	2	E5D	4	0	5.7	6.1	5.93	2	0.34	36.71	no trend	4	0	5.7	6.1	5.93	N/A	N/A	N/A	N/A
	2	E6D	4	0	1.2	1.3	1.25	-4	-1.162	12.27	no trend	4	0	1.2	1.3	1.25	N/A	N/A	N/A	N/A
	2	E7D	4	0	1.7	2.2	2.025	1	0	50	no trend	4	0	1.7	2.2	2.025	N/A	N/A	N/A	N/A
	2	E8D	4	0	2.2	3.7	2.95	6	1.698	4.47	no trend	4	0	2.2	3.7	2.95	N/A	N/A	N/A	N/A
	2	E9D	4	0	18	20	19.25	3	0.722	23.51	no trend	4	0	18	20	19.25	N/A	N/A	N/A	N/A
	2	E10D	4	0	5.1	5.4	5.25	4	1.162	12.27	no trend	4	0	5.1	5.4	5.25	N/A	N/A	N/A	N/A
	2	N1D	6	0	4.5	5.9	5.25	-15	-2.63	0.43	decreasing	110	34	<0.10	<200	9.94	-2920	-7.541	0	decreasing
	2	N2D	8	0	2.9	4.4	3.35	-18	-2.119	1.7	no trend	112	44	<0.10	<200	8.14	-2104	-5.289	0	decreasing
	2	N3D	6	0	7.7	8.3	7.98	2	0.191	42.42	no trend	107	29	<0.10	<200	12.64	-1573	-4.232	0	decreasing
	2	N5D	6	0	3.2	4.9	3.73	-10	-1.691	4.54	no trend	63	0	3	9	4.2	-799	-4.734	0	decreasing
	2	NE1D	5	0	7.1	8.3	7.68	-3	-0.49	31.21	no trend	62	1	<0.50	9	6.77	419	2.54	0.55	increasing
	2	S11D	6	0	7.3	8.6	8.03	-9	-1.503	6.64	no trend	60	0	3	9.6	7.83	-222	-1.41	7.93	no trend
	WSW	DNR	6	0	3.2	7.2	4.92	-3	-0.376	35.36	no trend	70	0	3.2	12	5.79	-721	-3.651	0.01	decreasing
	WSW	DOT	6	0	5.6	6.8	6.22	-5	-0.751	22.62	no trend	109	32	<0.024	<200	10.99	-2505	-6.557	0	decreasing
	WSW	WR1	8	1	<2.50	3.7	3.044	8	0.873	19.14	no trend	69	16	<0.030	5	2.494	333	1.72	4.27	no trend

Table 6. Short and Long Term Statistics for Select Parameters
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Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Iron, Total (mg/L)	1	E1D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	107	73	<0.0010	3.89	0.0934	-2401	-6.461	0	decreasing
	1	E1S	4	4	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	105	58	<0.0010	19	0.465	-3321	-9.194	0	decreasing
	1	E2S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	108	14	<0.00130	23	2.815	-3213	-8.527	0	decreasing
	1	E4S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	39	34	<0.0010	0.12	0.031	-343	-4.141	0	decreasing
	1	N2S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	46	41	<0.002	3.6	0.11	N/A	N/A	N/A	N/A
	1	N3S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	105	47	<0.0010	16	1.217	-2573	-7.122	0	decreasing
	1	NE1S	5	5	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	62	46	<0.0010	0.22	0.03965	-684	-4.15	0	decreasing
	1	S10S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	64	41	<0.0010	2.05	0.1423	-1041	-6.027	0	decreasing
	1	S11S	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	59	11	<0.002	0.25	0.1178	609	3.977	0	increasing
	2	E2D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	104	67	<0.0010	23	0.318	-2741	-7.697	0	decreasing
	2	E3D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	68	43	<0.0010	0.3	0.0447	-1195	-6.322	0	decreasing
	2	E4D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	40	10	<0.150	3.41	0.776	-356	-4.138	0	decreasing
	2	E5D	4	0	1.4	1.7	1.55	0	0	50	no trend	4	0	1.4	1.7	1.55	N/A	N/A	N/A	N/A
	2	E6D	4	0	0.32	0.68	0.553	2	0.34	36.71	no trend	4	0	0.32	0.68	0.553	N/A	N/A	N/A	N/A
	2	E7D	4	2	<0.150	0.3	0.1875	2	0.34	36.71	no trend	4	2	<0.150	0.3	0.1875	N/A	N/A	N/A	N/A
	2	E8D	4	0	1.3	1.4	1.35	0	0	50	no trend	4	0	1.3	1.4	1.35	N/A	N/A	N/A	N/A
	2	E9D	4	4	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	4	4	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A
	2	E10D	4	1	<0.150	1.5	1.094	-3	-0.679	24.85	no trend	4	1	<0.150	1.5	1.094	N/A	N/A	N/A	N/A
	2	N1D	6	1	<0.150	0.39	0.3075	9	1.503	6.64	no trend	107	2	<0.0012	2.77	0.488	-332	-0.891	18.65	no trend
	2	N2D	8	8	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	108	71	<0.0012	1.85	0.0709	-2463	-6.537	0	decreasing
	2	N3D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	104	11	<0.0012	2.04	0.348	-2043	-5.736	0	decreasing
	2	N5D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	63	54	<0.0010	<0.18	0.02184	-592	-3.507	0.02	decreasing
	2	NE1D	5	5	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	62	25	<0.0010	3.92	0.182	-871	-5.285	0	decreasing
	2	S11D	6	6	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	60	9	<0.150	2.27	0.441	-376	-2.392	0.84	decreasing
	WSW	DNR	6	3	<0.150	0.41	0.226	-11	-1.949	2.57	no trend	70	4	<0.150	15.1	0.573	20	0.096	46.16	no trend
	WSW	DOT	6	2	<0.150	0.57	0.305	2	0.188	42.55	no trend	106	7	<0.010	0.854	0.25	266	0.723	23.47	no trend
	WSW	WR1	8	8	<0.150	<0.150	<0.150	N/A	N/A	N/A	N/A	69	34	<0.0012	2.13	0.1215	-751	-3.885	0.01	decreasing

Table 6. Short and Long Term Statistics for Select Parameters
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Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Manganese, Total (mg/L)	1	E1D	6	0	0.044	0.049	0.0465	5	0.751	22.62	no trend	107	3	<0.0010	0.394	0.0463	1329	3.575	0.02	increasing
	1	E1S	4	4	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	105	10	<0	0.97	0.152	-3262	-9.03	0	decreasing
	1	E2S	6	0	0.36	0.47	0.422	7	1.127	12.98	no trend	108	1	<0.0000282	2.8	0.972	-923	-2.448	0.72	decreasing
	1	E4S	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	40	14	<0	0.484	0.02526	-491	-5.712	0	decreasing
	1	N2S	6	4	<0.010	0.045	0.015	7	1.169	12.12	no trend	46	8	<0.00170	0.283	0.0621	-90	-0.843	19.97	no trend
	1	N3S	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	105	24	<0.0000282	0.34	0.0259	-2339	-6.474	0	decreasing
	1	NE1S	5	5	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	62	27	<0	0.329	0.013	-974	-5.911	0	decreasing
	1	S10S	6	2	<0.010	0.038	0.0215	-12	-2.104	1.77	no trend	64	2	<0.010	0.365	0.1177	-1702	-9.855	0	decreasing
	1	S11S	6	0	0.19	0.21	0.2017	-5	-0.765	22.21	no trend	59	0	0.01	0.271	0.1855	660	4.31	0	increasing
	2	E2D	6	0	0.06	0.067	0.0628	2	0.188	42.55	no trend	105	27	<0.000090	2	0.0547	2434	6.737	0	increasing
	2	E3D	6	0	0.22	0.28	0.2533	4	0.564	28.65	no trend	68	0	0.07	0.344	0.238	638	3.372	0.04	increasing
	2	E4D	6	0	0.06	0.078	0.0715	6	0.939	17.38	no trend	40	0	0.002	0.393	0.1037	-479	-5.569	0	decreasing
	2	E5D	4	0	0.21	0.23	0.22	3	0.679	24.85	no trend	4	0	0.21	0.23	0.22	N/A	N/A	N/A	N/A
	2	E6D	4	0	0.67	0.73	0.703	-2	-0.34	36.71	no trend	4	0	0.67	0.73	0.703	N/A	N/A	N/A	N/A
	2	E7D	4	0	0.58	0.69	0.63	2	0.34	36.71	no trend	4	0	0.58	0.69	0.63	N/A	N/A	N/A	N/A
	2	E8D	4	0	0.32	0.35	0.3325	1	0	50	no trend	4	0	0.32	0.35	0.3325	N/A	N/A	N/A	N/A
	2	E9D	4	0	0.048	0.058	0.0535	-4	-1.019	15.41	no trend	4	0	0.048	0.058	0.0535	N/A	N/A	N/A	N/A
	2	E10D	4	0	0.088	0.095	0.0908	-2	-0.34	36.71	no trend	4	0	0.088	0.095	0.0908	N/A	N/A	N/A	N/A
	2	N1D	6	0	0.27	0.3	0.2867	7	1.148	12.56	no trend	107	0	0.002	0.96	0.187	3185	8.571	0	increasing
	2	N2D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	108	50	<0.000030	0.041	0.00747	1539	4.084	0	increasing
	2	N3D	6	0	0.027	0.046	0.035	1	0	50	no trend	104	0	0.009	0.25	0.0524	-949	-2.663	0.39	decreasing
	2	N5D	6	0	0.19	0.24	0.2233	-5	-0.765	22.21	no trend	63	1	<0.0000282	0.265	0.1815	1132	6.708	0	increasing
	2	NE1D	5	5	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	62	9	<0.00170	0.378	0.03354	-1221	-7.411	0	decreasing
	2	S11D	6	0	0.16	0.16	0.16	0	0	50	no trend	60	0	0.078	0.22	0.1642	-121	-0.765	22.2	no trend
	WSW	DNR	6	3	<0.010	0.11	0.0558	-7	-1.169	12.12	no trend	70	3	<0.010	0.147	0.0911	142	0.715	23.74	no trend
	WSW	DOT	6	0	0.14	0.17	0.155	7	1.148	12.56	no trend	106	0	0.062	0.17	0.13	718	1.957	2.52	no trend
	WSW	WR1	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	69	37	<0	0.09	0.00486	-839	-4.341	0	decreasing

Table 6. Short and Long Term Statistics for Select Parameters
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Parameter	Aquifer	Station	Short Term Statistics (2017-2018)								Long Term Statistics (1985-2018)									
			Summary Statistics					Mann-Kendall Trend Analysis			Summary Statistics					Mann-Kendall Trend Analysis				
			N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result	N	# of NDs	Min	Max	Mean ^a	S	Z	Probability	Result
Vinyl Chloride (µg/L)	1	E1D	6	0	0.16	0.26	0.2033	6	0.939	17.38	no trend	74	17	<0.010	<3.0	0.394	68	0.313	37.73	no trend
	1	E1S	4	4	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	79	39	<0.00590	2.2	0.2637	-1503	-6.36	0	decreasing
	1	E2S	6	1	<0.010	0.14	0.096	-8	-1.315	9.43	no trend	86	5	<0.010	2.98	1.008	-2263	-8.437	0	decreasing
	1	E4S	6	4	<0.010	0.031	0.01283	-3	-0.383	35.1	no trend	40	28	<0.00590	0.26	0.0406	193	2.239	1.26	no trend
	1	N2S	6	1	<0.010	0.22	0.1182	9	1.503	6.64	no trend	46	3	<0.010	7.9	2.824	-623	-5.889	0	decreasing
	1	N3S	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	79	72	<0.00590	<3.0	0.107	N/A	N/A	N/A	N/A
	1	NE1S	5	5	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	62	58	<0.00590	0.26	0.027	N/A	N/A	N/A	N/A
	1	S10S	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	64	10	<0.010	7.71	1.782	-1779	-10.3	0	decreasing
	1	S11S	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	59	55	<0.00590	0.26	0.023	N/A	N/A	N/A	N/A
	2	E2D	8	0	18	25	20.25	8	0.873	19.14	no trend	81	8	<0.02	53.6	16.48	1547	6.305	0	increasing
	2	E3D	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	69	62	<0.00590	0.26	0.0436	N/A	N/A	N/A	N/A
	2	E4D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	46	15	<0.010	0.26	0.04635	-480	-4.537	0	decreasing
	2	E5D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	21	15	<0.00590	0.4	0.0666	-59	-1.756	3.95	no trend
	2	E6D	8	3	<0.010	0.058	0.0336	-9	-0.997	15.93	no trend	21	3	<0.010	0.4	0.0876	-97	-2.902	0.19	decreasing
	2	E7D	8	0	3.5	6.4	4.41	-12	-1.361	8.68	no trend	22	0	3.2	18.1	7.47	-159	-4.455	0	decreasing
	2	E8D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	21	13	<0.00590	0.4	0.0614	-97	-2.907	0.18	decreasing
	2	E9D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	9	9	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A
	2	E10D	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	9	9	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A
	2	N1D	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	75	71	<0.00590	<3.0	0.1117	N/A	N/A	N/A	N/A
	2	N2D	8	3	<0.010	0.044	0.02525	-15	-1.732	4.16	no trend	84	18	<0.010	<3.0	0.1173	20	0.073	47.07	no trend
	2	N3D	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	73	69	<0.00590	<3.0	0.0916	N/A	N/A	N/A	N/A
	2	N5D	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	63	12	<0.010	0.26	0.0352	144	0.848	19.82	no trend
	2	NE1D	5	5	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	62	58	<0.00590	0.26	0.027	N/A	N/A	N/A	N/A
	2	S11D	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	61	57	<0.00590	0.26	0.0274	N/A	N/A	N/A	N/A
	WSW	DNR	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	70	66	<0.00590	0.26	0.0456	N/A	N/A	N/A	N/A
	WSW	DOT	6	6	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	71	67	<0.00590	<3.0	0.0837	N/A	N/A	N/A	N/A
	WSW	WR1	8	8	<0.010	<0.010	<0.010	N/A	N/A	N/A	N/A	69	65	<0.00590	0.26	0.0754	N/A	N/A	N/A	N/A

Notes

^a Arithmetic Mean

µg/L = micrograms per liter

mg/L = milligrams per liter

N = number of samples

N/A = not applicable (insufficient sample size available, or calculation not applicable due to percent of non-detects)

ND = non-detect sample results

Mann-Kendall Analysis for Short Term Statistics required a minimum of four samples in order to assess.

Mann-Kendall Analysis for Long Term Statistics required a minimum of eight samples in order to assess.

**Table 7. Landfill Gas Monitoring Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Point ID	Record Date	CH4%	CO2%	O2%	Bal Gas%	Init Temp (F)	Adj Temp (F)	Init Static Pressure ("H2O)	Adj Static Pressure ("H2O)	InitDiffPress	AdjDiffPress	Init Flow (scfm)	AdjFlow	BaroPress	SystemPressure	AmbientTemp
IC-BL-LG	2/8/2018 9:35	54.1	18.1	0	27.8	48	48	-39.2	-39.6	1.606	1.569	58	57	30		50
IC-BL-LG	2/8/2018 15:58	52.1	18.2	0	29.7	46	46	-40	-40	1.647	1.638	58	58	30		50
IC-BL-LG	3/28/2018 10:23	49.4	18.4	0	32.2	49	49	-40.6	-40.6	1.894	1.82	62	61	30.2		50
IC-BL-LG	5/16/2018 8:27	56.6	17.6	0.3	25.5	53	53	-38.5	-38.5	1.888	1.875	63	63	29.8		54
IC-BL-LG	5/17/2018 8:39	57.8	18.4	0.2	23.6	61	61	-39.1	-39.2	1.917	1.918	63	63	29.9		64
IC-BL-LG	7/5/2018 7:32	54.5	19.8	0.1	25.6	66	66	-38.7	-38.6	2.023	2.042	63	64	29.9		69
IC-BL-LG	8/20/2018 8:28	51.7	21.6	0.6	26.1	63	63	-38.5	-38.5	1.855	1.883	60	61	29.8		67
IC-BL-LG	8/20/2018 14:31	50.1	19	1.6	29.3	86	87	-36.9	-37	2.246	2.282	65	66	29.7		67
IC-BL-LG	9/17/2018 8:28	53.8	21.1	0.8	24.3	55.6	55.4	-38.7	-38.67	2.031	2.033	64.3	64.4	29.9		55
IC-BL-LG	11/7/2018 14:54	51.6	19.9	0.5	28	49	49	-40.3	-40.2	1.822	1.808	61	60	30.2		55
IC-BL-LG	11/8/2018 11:01	45.4	18.7	0	35.9	58	58	-40	-39.9	2.194	2.192	65	65	30.4		45
IC-BL-LG	12/10/2018 8:23	49.7	18	0	32.3	42	42	-39.3	-39.2	2.072	2.07	65	65	30		43
IC-BL-SV	2/8/2018 9:32	3.3	14.6	1.1	81	48	48	-50.7	-51	0.595	0.54	31	29	30		50
IC-BL-SV	2/8/2018 15:57	3	13.9	2.3	80.8	46	46	-51.1	-51.6	0.667	0.636	33	32	30		50
IC-BL-SV	3/28/2018 9:13	2.8	14.1	2.9	80.2	48	49	-51.4	-51.4	0.596	0.713	31	34	30.2		50
IC-BL-SV	5/16/2018 8:24	0.6	6.8	10.7	81.9	54	54	-51.5	-51.8	1.735	1.64	53	52	29.8		54
IC-BL-SV	5/17/2018 8:37	1.4	11.9	3.7	83	60	61	-51.6	-52	1.042	1.026	41	40	29.9		64
IC-BL-SV	7/5/2018 7:29	3.3	14.2	1.1	81.4	66	66	-51	-50.3	0.157	0.165	15	16	29.9		69
IC-BL-SV	8/20/2018 8:25	4.1	13.3	2.4	80.2	63	63	-49.9	-50.5	1.058	1.267	41	45	29.8		67
IC-BL-SV	8/20/2018 14:16	3.5	11.3	1.8	83.4	84	85	-48.5	-48.4	1.332	1.148	46	42	29.8		67
IC-BL-SV	9/17/2018 8:25	2.5	11.8	3.2	82.5	55.8	55.1	-50.18	-49.97	0.54	0.524	29.9	29.5	29.9		55
IC-BL-SV	11/7/2018 15:02	3.3	14.1	1.9	80.7	49	49	-53	-52.9	1.205	1.281	44	46	30.2		55
IC-BL-SV	11/8/2018 10:59	3	14.6	1.1	81.3	60	59	-46	-46.1	1.553	1.499	50	49	30.4		45
IC-BL-SV	12/10/2018 8:20	1.7	12.3	3.3	82.7	42	42	-45.6	-45.6	1.372	1.373	48	48	30		43
IC-FL-In	2/8/2018 9:43	53.5	18.3	0	28.2	59	59	0.9	0.9	0.138	0.144	66	67	30		50
IC-FL-In	2/8/2018 16:02	51.9	18.4	0	29.7	53	53	0.7	0.9	0.117	0.105	61	58	30		50
IC-FL-In	3/28/2018 10:26	50.2	18.1	0	31.7	54	54	0.9	0.9	0.137	0.156	65	70	30.2		50
IC-FL-In	5/16/2018 8:35	55	18.2	0.3	26.5	59	58	0.6	0.6	0.102	0.102	57	57	29.8		54
IC-FL-In	5/17/2018 8:42	56.9	18.6	0.2	24.3	63	63	0.3	0.4	0.125	0.134	63	65	29.9		64
IC-FL-In	7/5/2018 7:42	54.6	20.1	0.2	25.1	67	67	1	1	0.173	0.169	73	72	29.8		69
IC-FL-In	8/20/2018 8:39	52.5	21.3	0.3	25.9	66	66	0.9	0.9	0.134	0.141	64	65	29.8		67
IC-FL-In	8/20/2018 14:23	53.8	21.2	0.1	24.9	83	82	1	1	0.136	0.136	63	63	29.8		67
IC-FL-In	9/17/2018 8:36	54.4	21.6	0.5	23.5	66.4	65.6	1.03	1.03	0.133	0.133	64	64.2	29.9		55
IC-FL-In	11/7/2018 15:16	50	20.8	0.3	28.9	48	48	0.9	0.9	0.167	0.153	72	69	30.2		55
IC-FL-In	11/8/2018 11:06	45.6	18.8	0	35.6	56	56	1.1	1.1	0.155	0.163	69	70	30.4		45
IC-FL-In	12/10/2018 8:34	49	18.7	0	32.3	44	44	1.2	1.2	0.138	0.143	66	67	30		43
IC-GP11D	2/8/2018 14:50	0	1.9	19	79.1									30		50
IC-GP11D	5/16/2018 11:21	0	1.7	19.1	79.2									29.8		54
IC-GP11D	8/20/2018 8:01	0	1.7	19.9	78.4									29.8		67
IC-GP11D	11/8/2018 10:01	0	1.5	19.5	79									30.4		45
IC-GP11S	2/8/2018 14:48	0	2.3	18.5	79.2									30		50
IC-GP11S	5/16/2018 11:20	0	2.8	18.1	79.1									29.8		54
IC-GP11S	8/20/2018 8:00	0	1.9	19.4	78.7									29.8		67
IC-GP11S	11/8/2018 10:00	0	2.2	18.8	79									30.4		45
IC-GP13D	2/8/2018 15:24	0	1.1	19.2	79.7									30		50
IC-GP13D	5/16/2018 11:38	0	1.4	19.2	79.4									29.8		54
IC-GP13D	8/20/2018 7:13	0	2.3	19	78.7									29.8		67
IC-GP13D	11/8/2018 8:13	0	1.1	19.9	79									30.3		45
IC-GP13S	2/8/2018 15:22	0	0.4	20.3	79.3									30		50
IC-GP13S	5/16/2018 11:37	0	0.9	20.1	79									29.8		54
IC-GP13S	8/20/2018 7:11	0	2.9	18.6	78.5									29.8		67
IC-GP13S	11/8/2018 8:12	0	1.2	19.7	79.1									30.3		45
IC-GP15D	2/8/2018 11:57	0.7	18.3	0	81									30		50
IC-GP15D	3/28/2018 9:50	0.3	15.2	3.3	81.2									30.2		50
IC-GP15D	5/16/2018 10:37	1.5	17.5	0.3	80.7									29.8		54
IC-GP15D	7/5/2018 9:46	3.3	19.1	0	77.6									29.8		69
IC-GP15D	8/20/2018 6:49	5	21.4	0	73.6									29.8		67
IC-GP15D	9/17/2018 11:08	7.9	20.8	0.5	70.8									30		55

**Table 7. Landfill Gas Monitoring Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Point ID	Record Date	CH4%	CO2%	O2%	Bal Gas%	Init Temp (F)	Adj Temp (F)	Init Static Pressure ("H2O)	Adj Static Pressure ("H2O)	InitDiffPress	AdjDiffPress	Init Flow (scfm)	AdjFlow	BaroPress	SystemPressure	AmbientTemp
IC-GP15D	11/7/2018 16:39	3.7	20.2	0	76.1									30.2		55
IC-GP15D	12/10/2018 8:56	0.4	17.8	0.3	81.5									30		43
IC-GP15S	2/8/2018 11:56	1.7	18	0	80.3									30		50
IC-GP15S	3/28/2018 9:49	0.1	8.3	11.9	79.7									30.2		50
IC-GP15S	5/16/2018 10:36	0	17.4	1.6	81									29.8		54
IC-GP15S	7/5/2018 9:44	4.2	20	0	75.8									29.8		69
IC-GP15S	8/20/2018 6:48	8.9	23	0	68.1									29.8		67
IC-GP15S	9/17/2018 11:05	2.9	19.6	0	77.5									29.9		55
IC-GP15S	11/7/2018 16:38	0.1	14.6	6.3	79									30.2		55
IC-GP15S	12/10/2018 8:54	0.1	13.5	6	80.4									30		43
IC-GP17D	2/8/2018 11:54	0	8.4	10	81.6									30		50
IC-GP17D	3/28/2018 9:46	0.1	7.9	11.1	80.9									30.3		50
IC-GP17D	5/16/2018 10:34	0	10.1	8.7	81.2									29.8		54
IC-GP17D	7/5/2018 9:48	0	9.3	9.1	81.6									29.8		69
IC-GP17D	8/20/2018 6:44	0	10.9	8.3	80.8									29.8		67
IC-GP17D	9/17/2018 11:13	0	9.5	8.6	81.9									30		55
IC-GP17D	11/7/2018 16:36	0.1	9.7	10.6	79.6									30.2		55
IC-GP17D	12/10/2018 9:00	0.1	8.9	10.9	80.1									30		43
IC-GP17S	2/8/2018 11:52	0	6	13.8	80.2									30		50
IC-GP17S	3/28/2018 9:45	0.1	4.5	15.6	79.8									30.2		50
IC-GP17S	5/16/2018 10:31	0.1	6	13.7	80.2									29.8		54
IC-GP17S	7/5/2018 9:48	0.1	7.4	13.1	79.4									29.8		69
IC-GP17S	8/20/2018 6:42	0	8	12	80									29.8		67
IC-GP17S	9/17/2018 11:11	0	6.8	12.3	80.9									30		55
IC-GP17S	11/7/2018 16:34	0.1	5.6	15.3	79									30.2		55
IC-GP17S	12/10/2018 8:58	0.1	5.7	15.6	78.6									30		43
IC-GP-1D	2/8/2018 17:52	0	3.8	16.3	79.9									30		50
IC-GP-1D	5/16/2018 14:37	0	3.5	15.6	80.9									29.8		54
IC-GP-1D	8/20/2018 14:11	0	4.5	14.9	80.6									29.8		67
IC-GP-1D	11/8/2018 10:11	0	2.7	18.4	78.9									30.4		45
IC-GP-1S	2/8/2018 17:50	0	2.3	17.7	80									30		50
IC-GP-1S	5/16/2018 14:34	0	2.9	17.2	79.9									29.7		54
IC-GP-1S	8/20/2018 14:09	0	2.8	17.8	79.4									29.8		67
IC-GP-1S	11/8/2018 10:09	0	0.7	20.2	79.1									30.4		45
ICGP2018	2/8/2018 12:39	0	3.4	16.5	80.1									30		50
ICGP2018	5/16/2018 11:49	0	4.1	16.6	79.3									29.8		54
ICGP2018	8/20/2018 7:24	0	4.7	16.9	78.4									29.8		67
ICGP2018	11/8/2018 8:27	0	2.9	18.9	78.2									30.3		45
ICGP2038	2/8/2018 12:45	0	6.4	13.5	80.1									30		50
ICGP2038	5/16/2018 11:53	0	5.7	14.1	80.2									29.8		54
ICGP2038	8/20/2018 7:28	0	6.7	13.8	79.5									29.8		67
ICGP2038	11/8/2018 8:35	0	6.4	14.3	79.3									30.3		45
ICGP2058	2/8/2018 12:57	0	8.5	10.8	80.7									30		50
ICGP2058	5/16/2018 12:01	0	8	10.8	81.2									29.8		54
ICGP2058	8/20/2018 7:33	0	8.9	10.7	80.4									29.8		67
ICGP2058	11/8/2018 8:41	0	8.5	11.1	80.4									30.4		45
ICGP2078	2/8/2018 13:05	0	8.3	9.4	82.3									30		50
ICGP2078	5/16/2018 12:07	0	7.4	9.8	82.8									29.8		54
ICGP2078	8/20/2018 7:43	0	9.3	9.4	81.3									29.8		67
ICGP2078	11/8/2018 8:46	0	8.5	10	81.5									30.4		45
ICGP2098	2/8/2018 13:12	0	6.4	10.6	83									30		50
ICGP2098	5/16/2018 12:13	0	0.1	20.8	79.1									29.8		54
ICGP2098	8/20/2018 7:47	0	6.7	10.7	82.6									29.8		67
ICGP2098	11/8/2018 8:50	0	0.2	20.8	79									30.4		45
ICGP2118	2/8/2018 13:21	0	3.2	17.7	79.1									30		50
ICGP2118	5/16/2018 12:20	0	2.7	18	79.3									29.8		54
ICGP2118	8/20/2018 12:11	0	2.6	18.7	78.7									29.8		67
ICGP2118	11/8/2018 8:58	0	2.8	18.3	78.9									30.4		45
ICGP2138	2/8/2018 13:25	0	3.9	16.6	79.5									30		50
ICGP2138	5/16/2018 12:25	0	3.7	16.6	79.7									29.8		54

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Point ID	Record Date	CH4%	CO2%	O2%	Bal Gas%	Init Temp (F)	Adj Temp (F)	Init Static Pressure ("H2O)	Adj Static Pressure ("H2O)	InitDiffPress	AdjDiffPress	Init Flow (scfm)	AdjFlow	BaroPress	SystemPressure	AmbientTemp
ICGP2138	8/20/2018 12:15	0	3.5	17.3	79.2									29.8		67
ICGP2138	11/8/2018 9:05	0	4	16.9	79.1									30.4		45
ICGP2158	2/8/2018 13:30	0	4.4	15.9	79.7									30		50
ICGP2158	5/16/2018 12:29	0	3.6	16.6	79.8									29.8		54
ICGP2158	8/20/2018 12:18	0	3.1	17.4	79.5									29.8		67
ICGP2158	11/8/2018 9:14	0	4.6	15.8	79.6									30.4		45
ICGP2178	2/8/2018 13:45	0	4.6	15.3	80.1									30		50
ICGP2178	5/16/2018 12:35	0	3.6	16.3	80.1									29.8		54
ICGP2178	8/20/2018 12:23	0	3.7	16.4	79.9									29.8		67
ICGP2178	11/8/2018 9:19	0	4.7	15.6	79.7									30.4		45
ICGP2198	2/8/2018 13:52	0	4.5	15.2	80.3									30		50
ICGP2198	5/16/2018 12:39	0	3.7	16	80.3									29.8		54
ICGP2198	8/20/2018 12:28	0	4	15.7	80.3									29.8		67
ICGP2198	11/8/2018 9:23	0	4.4	15.4	80.2									30.4		45
IC-GP-22	2/8/2018 15:46	0	5.8	13.5	80.7									30		50
IC-GP-22	5/16/2018 13:02	0	4.3	14.6	81.1									29.8		54
IC-GP-22	8/20/2018 8:18	0	5.4	14.3	80.3									29.8		67
IC-GP-22	11/8/2018 9:38	0	3.9	17.3	78.8									30.4		45
ICGP2318	2/8/2018 18:04	0	2.5	18.3	79.2									30		50
ICGP2318	5/16/2018 14:48	0	2.4	17.6	80									29.7		54
ICGP2318	8/20/2018 12:40	0	3.2	17.9	78.9									29.8		67
ICGP2318	11/7/2018 15:12	0	0.1	21.6	78.3									30.2		55
ICGP2338	2/8/2018 18:10	0	3.1	17.8	79.1									30		50
ICGP2338	5/16/2018 14:53	0	2.6	17.6	79.8									29.8		54
ICGP2338	8/20/2018 12:46	0	3	17.8	79.2									29.8		67
ICGP2338	11/7/2018 15:17	0	0.1	21.4	78.5									30.3		55
ICGP2358	2/8/2018 18:18	0	3.1	17.5	79.4									30		50
ICGP2358	5/16/2018 15:02	0	1.2	18.9	79.9									29.8		54
ICGP2358	8/20/2018 12:50	0	2.9	17.4	79.7									29.8		67
ICGP2358	11/7/2018 15:21	0	0.1	21.4	78.5									30.2		55
ICGP2378	2/8/2018 18:25	0	3.1	17.3	79.6									30		50
ICGP2378	5/16/2018 15:09	0	0.2	19.4	80.4									29.8		54
ICGP2378	8/20/2018 12:56	0	2.8	16.6	80.6									29.8		67
ICGP2378	11/7/2018 15:27	0	0.1	21.4	78.5									30.3		55
ICGP2398	2/8/2018 18:33	0	3.3	17.1	79.6									30		50
ICGP2398	5/16/2018 15:19	0	2.9	17	80.1									29.8		54
ICGP2398	8/20/2018 13:01	0	2.8	16.9	80.3									29.7		67
ICGP2398	11/7/2018 15:31	0	0.1	21.4	78.5									30.2		55
ICGP2418	2/8/2018 17:20	0	4.7	14.8	80.5									30		50
ICGP2418	5/16/2018 14:03	0	4.2	13.9	81.9									29.8		54
ICGP2418	8/20/2018 13:42	0	5.6	13.2	81.2									29.8		67
ICGP2418	11/7/2018 14:41	0	0.1	21	78.9									30.2		55
ICGP2438	2/8/2018 17:25	0	6.7	11.6	81.7									30		50
ICGP2438	5/16/2018 14:09	0	6.1	10.8	83.1									29.8		54
ICGP2438	8/20/2018 13:47	0	6.8	10.6	82.6									29.8		67
ICGP2438	11/7/2018 14:45	0	0.1	21.2	78.7									30.2		55
ICGP2458	2/8/2018 17:31	0	6.5	11	82.5									30		50
ICGP2458	5/16/2018 14:13	0	1.2	19.6	79.2									29.8		54
ICGP2458	8/20/2018 13:54	0	6.6	10.3	83.1									29.8		67
ICGP2458	11/7/2018 14:50	0	0.1	21.4	78.5									30.2		55
ICGP2478	2/8/2018 17:38	0	5.1	11.4	83.5									30		50
ICGP2478	5/16/2018 14:20	0	3.1	13.5	83.4									29.8		54
ICGP2478	8/20/2018 13:59	0	5.1	11	83.9									29.8		67
ICGP2478	11/7/2018 14:55	0	0.1	21.5	78.4									30.2		55
ICGP2498	2/8/2018 17:43	0	3.7	12.6	83.7									30		50
ICGP2498	5/16/2018 14:23	0	0.1	20.2	79.7									29.8		54

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ICGP2498	8/20/2018 14:04	0	4	11.7	84.3									29.8		67
ICGP2498	11/7/2018 14:59	0	0.1	21.6	78.3									30.2		55
ICGP2518	2/8/2018 16:24	0	6	15	79									30		50
ICGP2518	5/16/2018 13:15	0	6.4	12.8	80.8									29.8		54
ICGP2518	8/20/2018 13:10	0	9.5	11.5	79									29.8		67
ICGP2518	11/7/2018 14:03	0	0.1	21	78.9									30.2		55
ICGP2538	2/8/2018 16:31	0	6	14.4	79.6									30		50
ICGP2538	5/16/2018 13:21	0	5.5	13.6	80.9									29.8		54
ICGP2538	8/20/2018 13:18	0	7	12.2	80.8									29.7		67
ICGP2538	11/7/2018 14:06	0	0.1	21.1	78.8									30		55
ICGP2558	2/8/2018 16:38	0	5.7	14.2	80.1									30		50
ICGP2558	5/16/2018 13:27	0	5.2	13.8	81									29.8		54
ICGP2558	8/20/2018 13:18	0	7	12.2	80.8									29.7		67
ICGP2558	11/7/2018 14:11	0	0.1	21.1	78.8									30.2		55
ICGP2578	2/8/2018 16:50	0	5.4	14.2	80.4									30		50
ICGP2578	5/16/2018 13:36	0	5	13.7	81.3									29.8		54
ICGP2578	8/20/2018 13:26	0	5.2	13.7	81.1									29.7		67
ICGP2578	11/7/2018 14:15	0	0.1	21.1	78.8									30.2		55
ICGP2598	2/8/2018 16:57	0	4.9	14.5	80.6									30		50
ICGP2598	5/16/2018 13:42	0	1	18.7	80.3									29.8		54
ICGP2598	8/20/2018 13:31	0	4.7	13.8	81.5									29.7		67
ICGP2598	11/7/2018 14:19	0	0.1	21.2	78.7									30.2		55
ICGP2618	2/8/2018 15:02	0	4.3	14.7	81									30		50
ICGP2618	5/16/2018 11:28	0	0.8	20	79.2									29.8		54
ICGP2618	8/20/2018 6:58	0	4.3	15.5	80.2									29.8		67
ICGP2618	11/8/2018 8:01	0	4.1	15.1	80.8									30.4		45
ICGP2638	2/8/2018 15:07	0	2.5	17.7	79.8									30		50
ICGP2638	5/16/2018 11:31	0	2.3	17.7	80									29.8		54
ICGP2638	8/20/2018 7:00	0	3.4	17.5	79.1									29.9		67
ICGP2638	11/8/2018 8:05	0	2.9	17.8	79.3									30.4		45
ICGP2658	2/8/2018 15:11	0	3.4	14.7	81.9									30		50
ICGP2658	5/16/2018 11:33	0	2.5	16.6	80.9									29.8		54
ICGP2658	8/20/2018 7:04	0	3.4	15.6	81									29.9		67
ICGP2658	11/8/2018 7:57	0	3.3	15.3	81.4									30.4		45
IC-GP-27	2/8/2018 15:34	0	9	9.9	81.1									30		50
IC-GP-27	5/16/2018 11:44	0	8.6	9.7	81.7									29.8		54
IC-GP-27	8/20/2018 7:19	0	9.7	9.5	80.8									29.8		67
IC-GP-27	11/8/2018 8:22	0	9.2	10	80.8									30.3		45
IC-GP-28	2/8/2018 13:59	0	8.4	10.9	80.7									30		50
IC-GP-28	5/16/2018 12:44	0	8	10.7	81.3									29.8		54
IC-GP-28	8/20/2018 12:32	0	7.8	11.2	81									29.8		67
IC-GP-28	11/8/2018 9:27	0	8.5	11.1	80.4									30.4		45
ICGP2998	2/8/2018 15:42	0	5.8	11.3	82.9									30		50
ICGP2998	5/16/2018 12:58	0	5.6	11.5	82.9									29.8		54
ICGP2998	8/20/2018 8:15	0	6.9	9.4	83.7									29.8		67
ICGP2998	11/8/2018 9:36	0	7.3	9.4	83.3									30.3		45
ICGP3018	2/8/2018 11:22	39.5	5.7	1.8	53									30		50
ICGP3018	3/28/2018 9:58	31.8	5.7	4	58.5									30.2		50
ICGP3018	5/16/2018 9:35	37.5	4.9	2	55.6									29.8		54
ICGP3018	7/5/2018 8:53	37.9	4.7	1.9	55.5									29.8		69
ICGP3018	8/20/2018 9:49	41.6	5.3	0.6	52.5									29.8		67
ICGP3018	9/17/2018 10:21	40.7	5.4	1.6	52.3									29.9		55
ICGP3018	11/7/2018 16:07	43.1	7.6	1.8	47.5									30.2		55
ICGP3018	12/10/2018 9:07	35.3	6.1	3.3	55.3									30		43
ICGP3038	2/8/2018 11:30	24.3	11.8	0	63.9									30		50
ICGP3038	3/28/2018 10:02	27	11.1	0	61.9									30.3		50
ICGP3038	5/16/2018 9:41	22.9	10.9	0	66.2									29.8		54
ICGP3038	7/5/2018 9:00	23.3	10.9	0	65.8									29.8		69
ICGP3038	8/20/2018 9:56	23.3	11.6	0	65.1									29.8		67
ICGP3038	9/17/2018 10:27	25.9	10	0	64.1									30		55

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ICGP3038	11/7/2018 16:11	29.4	10.2	0	60.4									30.2		55
ICGP3038	12/10/2018 9:13	27.6	10.7	0	61.7									30		43
ICGP3069	2/8/2018 11:35	7.4	16	0	76.6									30		50
ICGP3069	3/28/2018 10:07	7.7	16	0	76.3									30.3		50
ICGP3069	5/16/2018 9:48	7.5	15.5	0	77									29.8		54
ICGP3069	7/5/2018 9:06	7.9	15.5	0	76.6									29.8		69
ICGP3069	8/20/2018 10:01	7.6	15.3	0	77.1									29.8		67
ICGP3069	9/17/2018 10:36	8.1	15.3	0	76.6									29.9		55
ICGP3069	11/7/2018 16:18	9.2	16.1	0	74.7									30.2		55
ICGP3069	12/10/2018 9:18	9.6	15.7	0	74.7									30		43
ICGP3081	2/8/2018 11:41	5.1	15.5	0	79.4									30		50
ICGP3081	3/28/2018 10:13	5.6	15.8	0	78.6									30.2		50
ICGP3081	5/16/2018 9:55	5.4	15.3	0	79.3									29.8		54
ICGP3081	7/5/2018 9:13	5.8	15	0	79.2									29.8		69
ICGP3081	8/20/2018 10:08	5.6	15.9	0	78.5									29.8		67
ICGP3081	9/17/2018 10:56	6	15	0	79									29.9		55
ICGP3081	11/7/2018 16:24	7	15.7	0	77.3									30.2		55
ICGP3081	12/10/2018 9:23	7.3	15.6	0	77.1									30		43
ICGP3092	2/8/2018 11:49	2.5	15.3	0	82.2									30		50
ICGP3092	3/28/2018 10:19	3	15.3	0	81.7									30.2		50
ICGP3092	5/16/2018 10:03	2.9	14.6	0	82.5									29.8		54
ICGP3092	7/5/2018 9:28	3.2	14.2	2.7	79.9									29.8		69
ICGP3092	8/20/2018 10:15	3.2	14.9	0	81.9									29.8		67
ICGP3092	9/17/2018 11:01	3.6	13.8	0.7	81.9									30		55
ICGP3092	11/7/2018 16:30	5	15.4	0	79.6									30.2		55
ICGP3092	12/10/2018 9:29	4.8	15.2	0	80									30		43
IC-GP-6D	2/8/2018 17:10	0	5	15.4	79.6									30		50
IC-GP-6D	5/16/2018 13:56	0	0.6	19.4	80									29.8		54
IC-GP-6D	8/20/2018 13:36	0	3.3	16.9	79.8									29.8		67
IC-GP-6D	11/7/2018 14:33	0	0.1	21.2	78.7									30.2		55
IC-GP-6S	2/8/2018 17:06	0	4.4	15.6	80									30		50
IC-GP-6S	5/16/2018 13:53	0	2.6	16.7	80.7									29.8		54
IC-GP-6S	8/20/2018 13:35	0	5.3	13.8	80.9									29.7		67
IC-GP-6S	11/7/2018 14:29	0	0.1	21.1	78.8									30.2		55
IC-GPS6D	2/8/2018 14:16	9.4	15.1	0	75.5									30		50
IC-GPS6D	3/28/2018 9:42	0.2	13.5	9.3	77									30.2		50
IC-GPS6D	5/16/2018 10:29	12.4	15.1	0	72.5									29.8		54
IC-GPS6D	7/5/2018 9:40	0.4	1.3	19.6	78.7									29.8		69
IC-GPS6D	8/20/2018 6:32	13.2	15.6	0	71.2									29.8		67
IC-GPS6D	9/17/2018 11:26	10	15.4	0.7	73.9									30		55
IC-GPS6D	11/7/2018 16:44	0	0.4	20.8	78.8									30.2		55
IC-GPS6D	12/10/2018 8:47	2.8	15.1	0	82.1									30		43
IC-GPS6S	2/8/2018 14:12	0	11.9	1.8	86.3									30		50
IC-GPS6S	3/28/2018 9:40	0.4	2.1	19.9	77.6									30.2		50
IC-GPS6S	5/16/2018 10:27	0	0.5	20.8	78.7									29.8		54
IC-GPS6S	7/5/2018 9:39	0.1	2.9	19.8	77.2									29.8		69
IC-GPS6S	8/20/2018 6:31	0	0.6	20.9	78.5									29.8		67
IC-GPS6S	9/17/2018 11:18	0	1.8	20.8	77.4									30		55
IC-GPS6S	11/7/2018 16:43	0	1	20.8	78.2									30.2		55
IC-GPS6S	12/10/2018 8:45	0.2	0.6	20.7	78.5									30		43
IC-GP-W1	2/8/2018 14:36	0	3.4	17.7	78.9									30		50
IC-GP-W1	5/16/2018 11:12	0	0.8	20.4	78.8									29.8		54
IC-GP-W1	8/20/2018 7:54	0	2.5	20.1	77.4									29.8		67
IC-GP-W1	11/8/2018 9:52	0	0.2	20.5	79.3									30.4		45
IC-HGW-1	2/8/2018 9:56	58.9	19.4	0	21.7	50	50	-0.4	-0.4	6.996	6.849	2	2	29.9	-7.2	50
IC-HGW-1	3/28/2018 10:42	50	17.9	0	32.1	50	50	-0.5	-0.5	7.301	7.26	2	2	30.2	-7.5	50
IC-HGW-1	5/16/2018 8:43	56.4	18.4	0	25.2	58	58	-0.8	-0.8	5.441	5.474	2	2	29.8	-5.9	54
IC-HGW-1	7/5/2018 7:59	56.6	19.5	0	23.9	80	79	-0.4	-0.4	5.585	5.578	2	2	29.8	-5.7	69
IC-HGW-1	8/20/2018 8:46	56.3	22.4	0	21.3	68	68	-0.4	-0.4	5.923	5.809	2	2	29.8	-5.8	67
IC-HGW-1	9/17/2018 8:46	56.4	21.6	0	22	75.4	79	-0.21	-0.21	4.53	4.667	2	2	29.9	-4.5	55

**Table 7. Landfill Gas Monitoring Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Point ID	Record Date	CH4%	CO2%	O2%	Bal Gas%	Init Temp (F)	Adj Temp (F)	Init Static Pressure ("H2O)	Adj Static Pressure ("H2O)	InitDiffPress	AdjDiffPress	Init Flow (scfm)	AdjFlow	BaroPress	SystemPressure	AmbientTemp
IC-HGW-1	11/7/2018 15:21	55	21.4	0	23.6	58	58	-0.2	-0.2	5.455	5.558	2	2	30.2	-5.6	55
IC-HGW-1	12/10/2018 9:39	53.2	20.2	0	26.6	49	49	-0.2	-0.2	3.07	3.066	1	1	30	-3.3	43
IC-HGW-2	2/8/2018 10:09	64.6	22.5	0	12.9	52	52	-0.6	-0.6	7.247	7.561	6	6	29.9	-7.2	50
IC-HGW-2	3/28/2018 10:49	68.8	19.9	0	11.3	51	52	-0.7	-0.7	7.509	7.203	6	6	30.2	-7.3	50
IC-HGW-2	5/16/2018 8:52	67.2	23.5	0	9.3	56	56	-0.8	-0.8	5.648	5.635	5	5	29.8	-5.7	54
IC-HGW-2	7/5/2018 8:11	68.5	24.8	0	6.7	72	73	-0.5	-0.5	5.948	5.922	5	5	29.8	-5.6	69
IC-HGW-2	8/20/2018 9:05	71.1	26.2	0	2.7	75	76	-0.5	-0.5	5.594	5.815	5	5	29.8	-5.7	67
IC-HGW-2	9/17/2018 8:57	65.7	28	0	6.3	65.5	64.4	-0.43	-0.44	4.231	4.35	4.6	4.7	29.9	-4.3	55
IC-HGW-2	11/7/2018 15:29	69	26.9	0	4.1	63	64	-0.5	-0.5	5.55	5.267	5	5	30.2	-5.5	55
IC-HGW-2	12/10/2018 9:47	66	24.4	0	9.6	49	49	-0.5	-0.4	2.755	2.783	3	3	30	-3.3	43
IC-HGW-3	2/8/2018 10:17	50.3	26.6	0	23.1	51	51	-0.2	-0.2	7.376	7.46	2	2	29.9	-7.2	50
IC-HGW-3	3/28/2018 10:51	42.2	22.5	0	35.3	51	51	-0.2	-0.2	7.771	7.605	2	2	30.2	-7.4	50
IC-HGW-3	5/16/2018 8:56	57.5	26.4	0	16.1	57	57	-0.4	-0.4	5.722	5.642	2	2	29.8	-5.9	54
IC-HGW-3	7/5/2018 8:14	54	29	0	17	74	74	-0.1	-0.1	5.951	5.881	2	2	29.8	-5.7	69
IC-HGW-3	8/20/2018 9:09	62.1	30.6	0	7.3	75	76	-0.1	-0.1	5.94	5.918	2	2	29.8	-5.9	67
IC-HGW-3	8/20/2018 11:41	56.1	29.7	0	14.2	77	78	0	0	5.139	5.164	2	2	29.8	-4.9	67
IC-HGW-3	9/17/2018 9:01	56.5	31	0	12.5	64	64	-0.33	-0.32	4.673	4.713	4.7	4.7	29.9	-4.4	55
IC-HGW-3	11/7/2018 15:31	50.3	28.6	0	21.1	63	63	-0.3	-0.4	5.558	5.482	5	5	30.2	-5.6	55
IC-HGW-3	12/10/2018 9:49	46.5	26.5	0	27	49	49	-0.3	-0.3	2.202	2.502	3	3	30	-3.2	43
IC-HGW-4	2/8/2018 10:27	51.1	24.5	0	24.4	50	51	-0.2	-0.2	7.45	7.28	2	2	30	-7.3	50
IC-HGW-4	3/28/2018 10:54	45.2	23.7	0	31.1	51	51	-0.2	-0.2	7.515	7.514	2	2	30.2	-7.3	50
IC-HGW-4	5/16/2018 9:01	56.8	24.7	0	18.5	56	56	-0.5	-0.5	5.76	5.739	2	2	29.8	-5.9	54
IC-HGW-4	7/5/2018 8:19	56	27.1	0	16.9	76	76	-0.1	-0.1	5.92	5.934	2	2	29.8	-5.7	69
IC-HGW-4	8/20/2018 9:14	60.5	28.2	0	11.3	77	77	-0.1	-0.1	6.347	6.308	2	2	29.8	-5.9	67
IC-HGW-4	8/20/2018 11:44	54.8	30.5	0	14.7	80	80	0	0	4.817	5.069	1	2	29.8	-4.3	67
IC-HGW-4	9/17/2018 9:07	55	26.8	0	18.2	63	63	-0.34	-0.33	4.72	4.693	4.8	4.8	29.9	-4.3	55
IC-HGW-4	11/7/2018 15:35	48.9	26.7	0	24.4	62	62	-0.4	-0.4	5.742	5.599	5	5	30.2	-5.3	55
IC-HGW-4	12/10/2018 9:53	43.7	24.2	0	32.1	49	49	-0.5	-0.5	3.06	2.987	3	3	30	-3.4	43
IC-HGW-5	2/8/2018 10:34	51.7	23.1	0	25.2	50	50	-0.2	-0.2	7.622	7.651	2	2	30	-7.5	50
IC-HGW-5	3/28/2018 10:56	54	23.9	0	22.1	51	51	-0.2	-0.2	7.695	7.776	2	2	30.2	-7.4	50
IC-HGW-5	5/16/2018 9:04	59.4	24.7	0	15.9	56	56	-0.5	-0.5	5.878	5.833	2	2	29.8	-6	54
IC-HGW-5	7/5/2018 8:22	57.2	26.9	0	15.9	75	75	-0.1	-0.1	6.117	6.059	2	2	29.8	-5.9	69
IC-HGW-5	8/20/2018 9:16	55.4	29.5	0	15.1	77	77	-0.1	-0.1	6.014	6.179	2	2	29.8	-6	67
IC-HGW-5	9/17/2018 9:15	59	29.3	0	11.7	62.2	62.5	-0.25	-0.24	4.664	4.593	2	2	29.9	-4.3	55
IC-HGW-5	11/7/2018 15:39	58.3	27.3	0	14.4	61	61	-0.3	-0.3	5.69	5.76	2	2	30.2	-5.7	55
IC-HGW-5	12/10/2018 9:57	49.2	23.9	0	26.9	49	49	-0.6	-0.6	3.117	2.762	3	3	30	-3.4	43
IC-HGW-6	2/8/2018 10:37	53.7	17.2	0	29.1	49	50	-0.2	-0.2	7.936	7.731	2	2	30	-7.7	50
IC-HGW-6	3/28/2018 10:58	39.9	18.4	0	41.7	51	50	-0.3	-0.3	7.568	7.902	2	2	30.2	-7.6	50
IC-HGW-6	5/16/2018 9:07	54.2	17.4	0	28.4	57	57	-0.5	-0.5	5.942	5.959	2	2	29.8	-6.1	54
IC-HGW-6	7/5/2018 8:25	54.7	19.6	0	25.7	72	72	-0.1	-0.1	6.154	6.195	2	2	29.8	-6	69
IC-HGW-6	8/20/2018 9:19	58.8	22.4	0	18.8	77	78	-0.1	-0.1	6.217	6.311	2	2	29.8	-6.1	67
IC-HGW-6	8/20/2018 11:48	54.1	22.1	0	23.8	82	83	0	0	4.263	4.209	1	1	29.8	-3.7	67
IC-HGW-6	9/17/2018 9:19	51.1	18.5	0	30.4	65.3	65	-0.33	-0.32	4.393	4.438	4.7	4.7	29.9	-4.3	55
IC-HGW-6	11/7/2018 15:41	43.8	16.9	0	39.3	62	62	-0.4	-0.4	5.85	5.927	5	5	30.2	-5.7	55
IC-HGW-6	12/10/2018 9:59	43.4	17.2	0	39.4	50	50	-0.5	-0.5	3.002	3.129	3	3	30	-3.8	43
IC-HGW-7	2/8/2018 10:43	50.9	18.7	0	30.4	49	50	-0.2	-0.2	7.555	7.877	2	2	30	-7.7	50
IC-HGW-7	3/28/2018 11:03	41.3	14.3	0	44.4	52	51	-0.2	-0.2	7.876	7.989	2	2	30.2	-7.7	50
IC-HGW-7	5/16/2018 9:11	51	17.6	0	31.4	55	55	-0.5	-0.5	6.069	6.09	2	2	29.8	-6.1	54
IC-HGW-7	7/5/2018 8:29	52.4	18.4	0	29.2	74	75	-0.1	-0.1	6.272	6.229	2	2	29.8	-6	69
IC-HGW-7	8/20/2018 9:24	55.5	21.7	0	22.8	81	81	-0.1	-0.1	6.29	6.322	2	2	29.8	-6.1	67
IC-HGW-7	8/20/2018 11:54	56	17.8	0	26.2	87	87	0	0	3.868	3.904	1	1	29.8	-3.5	67
IC-HGW-7	9/17/2018 9:25	51.1	19.5	0	29.4	62.2	62.5	-0.39	-0.38	5.008	4.829	5	4.9	29.9	-4.4	55
IC-HGW-7	11/7/2018 15:44	43.1	17.5	0	39.4	62	62	-0.4	-0.4	5.861	5.895	5	5	30.2	-5.9	55
IC-HGW-7	11/8/2018 10:41	38.3	16.9	0	44.8	64	64	-0.4	-0.4	6.01	6.106	5	5	30.3	-5.9	45
IC-HGW-7	11/8/2018 10:42	40.6	17.4	0	42	64	64	-1.2	-1.2	3.359	3.362	15	15	30.3	-3.5	45

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IC-HGW-7	12/10/2018 10:03	48.2	16.2	0	35.6	50	50	-1.5	-1.5	2.619	2.572	13	13	30	-3.4	43
IC-HGW-8	2/8/2018 10:51	47.5	15.6	0	36.9	50	50	-0.2	-0.2	7.979	8.216	2	2	30	-7.7	50
IC-HGW-8	3/28/2018 11:07	43.5	16.2	0	40.3	51	51	-0.2	-0.2	8.017	8.071	2	2	30.2	-7.7	50
IC-HGW-8	5/16/2018 9:16	45.9	15.2	0	38.9	56	56	-0.5	-0.5	5.986	6.03	2	2	29.8	-6.2	54
IC-HGW-8	7/5/2018 8:34	46.3	16.9	0	36.8	78	79	-0.1	-0.1	6.197	6.251	2	2	29.8	-6	69
IC-HGW-8	8/20/2018 9:30	48.6	19.4	0	32	77	77	-0.1	-0.1	6.37	6.351	2	2	29.8	-6.1	67
IC-HGW-8	9/17/2018 9:32	49.6	17.8	0	32.6	64.7	64.9	-0.16	-0.16	4.668	4.668	2	2	29.9	-4.7	55
IC-HGW-8	11/7/2018 15:48	49	16.2	0	34.8	56	56	-0.2	-0.2	6.029	6.061	2	2	30.2	-5.9	55
IC-HGW-8	12/10/2018 10:07	47.9	15.9	0	36.2	50	50	-0.4	-0.4	3.375	3.362	1	1	30	-3.8	43
IC-HGW-9	2/8/2018 11:10	56	15.2	0.5	28.3	49	49	0	0	-0.018	-0.018			30	-8.6	50
IC-HGW-9	3/28/2018 11:13	52.6	16.9	1.2	29.3	52	52	0	0	-0.011	-0.01			30.3	-7.2	50
IC-HGW-9	5/16/2018 9:26	52.5	14.8	0.5	32.2	57	57	0	0	0	-0.004			29.8	-5.4	54
IC-HGW-9	7/5/2018 8:43	47.3	17.2	2.6	32.9	83	85	0	0	-0.008	-0.016			29.8	-5.6	69
IC-HGW-9	8/20/2018 9:41	47	18.2	2.5	32.3	80	81	0	0	-0.014	-0.015			29.8	-5.6	67
IC-HGW-9	9/17/2018 9:52	47.2	17.9	2.8	32.1	56	56	0.01	0.01	-0.009	-0.007	0	0	29.9	-4.5	55
IC-HGW-9	11/7/2018 15:59	52.1	19.1	2	26.8	57	57	0	0	-0.009	-0.004			30.2	-5.5	55
IC-HGW-9	11/8/2018 10:31	56.3	20.9	0	22.8	55	58	0	-0.2	0	0.493		0	30.4	-5.9	45
IC-HGW-9	12/10/2018 10:17	62.1	21.3	0.2	16.4	49	49	0	0	-0.011	-0.003			30	-3.9	43
IC-SC-OF	2/8/18 15:49	0	0.2	20.8	79									30		50
IC-SC-OF	5/16/18 13:04	0	1.1	19.9	79									29.8		54
IC-SC-OF	8/20/18 12:03	0.1	0.5	20.9	78.5									29.8		67
IC-SC-OF	11/8/18 9:41	0	0.3	20.7	79									30.4		45
IC-SH-BA	2/8/18 15:47	0	0.4	20.7	78.9									30		50
IC-SH-BA	5/16/18 13:05	0	0.4	20.1	79.5									29.8		54
IC-SH-BA	8/20/18 12:02	0.2	0.9	20.7	78.2									29.8		67
IC-SH-BA	11/8/18 9:40	0	0.4	20.4	79.2									30.4		45
IC-T--LG	2/8/18 9:37	54.5	18.3	0	27.2	49	49	-10.1	-10.1	10.249	9.979	0	0	30		50
IC-T--LG	3/28/18 8:43	50.3	18.1	0	31.6	46	46	-8.8	-8.7	9.038	8.79	0	0	30.3		50
IC-T--LG	5/16/18 8:29	56.3	18.2	0.1	25.4	57	58	-6.8	-6.8	6.622	6.59	0	0	29.8		54
IC-T--LG	7/5/18 7:34	54.9	20.3	0	24.8	67	67	-7.2	-7.2	6.896	6.914	0	0	29.9		69
IC-T--LG	8/20/18 8:30	52.9	21.8	0.3	25	64	65	-6.8	-6.8	6.811	6.824	0	0	29.8		67
IC-T--LG	9/17/18 8:32	55	21.6	0.4	23	55.2	54.5	-5.34	-5.32	5.346	5.346	0	0	29.9		55
IC-T--LG	11/7/18 15:12	50.4	21.5	0.3	27.8	48	48	-6.5	-6.5	6.375	6.614	0	0	30.2		55
IC-T--LG	12/10/18 8:28	49.8	18.8	0	31.4	43	43	-4.2	-4.2	4.406	4.384	0	0	30		43
IC-T--SV	2/8/18 9:38	3.7	15.2	0.8	80.3	49	49	-16.9	-16.9	16.993	16.979	0	0	30		50
IC-T--SV	3/28/18 8:44	3.5	14.8	1.5	80.2	47	47	-16.6	-16.6	16.747	16.698	0	0	30.2		50
IC-T--SV	5/16/18 8:30	1.5	11	5.9	81.6	56	57	-17.3	-17.3	17.099	17.141	0	0	29.8		54
IC-T--SV	7/5/18 7:35	4	14.9	1	80.1	66	67	-18.6	-18.6	18.431	18.404	0	0	29.9		69
IC-T--SV	8/20/18 8:31	5.7	15.2	1	78.1	65	65	-18.6	-18.6	18.584	18.627	0	0	29.8		67
IC-T--SV	9/17/18 8:34	3	12.8	2.7	81.5	54	53.9	-10.13	-10.04	9.997	9.893	0	0	29.9		55
IC-T--SV	11/7/18 15:11	3.6	14.7	1.2	80.5	48	48	-3.2	-3.2	3.182	3.199	0	0	30.2		55
IC-T--SV	11/8/18 10:21	2.1	14.1	1.6	82.2	49	48	-2.6	-5	2.596	5.016	0	0	30.4		45
IC-T--SV	12/10/18 8:30	2.4	13.9	1.9	81.8	43	43	-5.3	-5.4	5.574	5.608	0	0	30		43
IC-VGW-1	2/8/18 9:58	5.4	16	0	78.6	48	48	-2.6	-2.6	15.492	15.667	8	8	29.9	-16.2	50
IC-VGW-1	3/28/18 10:45	5.6	15.7	0	78.7	49	49	-2.8	-2.8	15.912	16.024	8	8	30.2	-16.9	50
IC-VGW-1	5/16/18 8:45	3.5	13.7	1.8	81	63	63	-2.9	-2.9	15.796	15.965	8	8	29.8	-16.6	54
IC-VGW-1	7/5/18 8:01	6.4	15.7	0	77.9	77	78	-2.7	-2.7	17.015	16.985	8	8	29.8	-17.6	69
IC-VGW-1	8/20/18 8:58	5.2	13.7	0	81.1	72	75	-2.7	-2.7	17.363	17.692	8	8	29.8	-18.1	67
IC-VGW-1	9/17/18 8:48	5.5	14.6	0.9	79	62.7	62.9	-2.08	-2.07	8.83	8.749	6.1	6.1	29.9	-9.9	55
IC-VGW-1	11/7/18 15:23	6.1	16	0	77.9	54	54	-2	-2	0.563	0.539	5	5	30.2	-2.2	55
IC-VGW-1	12/10/18 9:41	6	15.9	0	78.1	49	49	-3.6	-3.6	1.607	1.645	9	10	30	-4.7	43
IC-VGW-2	2/8/18 10:06	57	11.4	0	31.6	47	47	-0.6	-0.6	7.171	7.043	2	2	29.9	-7.2	50
IC-VGW-2	3/28/18 10:47	53.3	13.7	0	33	48	48	-0.7	-0.7	7.077	7.117	2	2	30.2	-7.4	50
IC-VGW-2	5/16/18 8:50	52.4	12.3	0	35.3	66	66	-0.8	-0.8	5.327	5.35	2	2	29.8	-5.9	54

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IC-VGW-2	7/5/18 8:10	56.1	11.8	0	32.1	69	70	-0.5	-0.5	5.5	5.534	2	2	29.8	-5.6	69
IC-VGW-2	8/20/18 9:03	51.4	14.9	0	33.7	75	76	-0.4	-0.4	2.9	5.523	1	2	29.8	-5.8	67
IC-VGW-2	9/17/18 8:54	56	11.9	0	32.1	62.2	62.4	-0.54	-0.52	4.314	4.3	2	2	29.9	-4.6	55
IC-VGW-2	11/7/18 15:28	57.1	12.2	0	30.7	56	56	-0.5	-0.5	5.201	5.253	2	2	30.2	-5.6	55
IC-VGW-2	12/10/18 9:45	56.9	13.2	0	29.9	49	49	-1	-1	2.666	2.461	3	3	30	-3.3	43
IC-VGW-3	2/8/18 10:25	49.3	16.4	0	34.3	48	48	-0.5	-0.5	7.167	7.107	2	2	30	-7.3	50
IC-VGW-3	3/28/18 10:53	50.6	19.1	0	30.3	48	48	-0.5	-0.5	7.324	7.374	2	2	30.2	-7.3	50
IC-VGW-3	5/16/18 9:00	53.6	18.7	0	27.7	61	61	-0.7	-0.7	5.517	5.501	2	2	29.8	-5.9	54
IC-VGW-3	7/5/18 8:18	48.9	16.7	0	34.4	72	72	-0.3	-0.4	5.663	5.685	2	2	29.8	-5.7	69
IC-VGW-3	8/20/18 9:13	48.9	17.6	0	33.5	77	77	-0.3	-0.4	5.173	5.775	2	2	29.8	-5.9	67
IC-VGW-3	9/17/18 9:05	54.8	19.9	0	25.3	64.9	64.9	-0.38	-0.38	4.31	4.308	2	2	29.9	-4.4	55
IC-VGW-3	11/7/18 15:34	56.4	19.8	0	23.8	56	56	-0.5	-0.5	5.34	5.343	2	2	30.2	-5.7	55
IC-VGW-3	12/10/18 9:52	45.8	17	0	37.2	49	49	-0.9	-0.9	3.298	3.042	4	3	30	-3.4	43
IC-VGW-4	2/8/18 10:39	51.4	9	0	39.6	47	47	-0.7	-0.6	7.206	7.384	2	2	30	-7.7	50
IC-VGW-4	3/28/18 10:59	51.6	10.9	0	37.5	49	49	-0.7	-0.7	7.245	7.44	2	2	30.2	-7.6	50
IC-VGW-4	5/16/18 9:08	49.7	10.9	0	39.4	62	62	-0.8	-0.8	5.659	5.636	2	2	29.8	-6.1	54
IC-VGW-4	7/5/18 8:26	48.2	8.8	0	43	75	75	-0.5	-0.5	5.719	5.801	2	2	29.8	-5.9	69
IC-VGW-4	8/20/18 9:21	48.4	9.7	0	41.9	79	80	-0.4	-0.4	6.057	6.164	2	2	29.8	-6.1	67
IC-VGW-4	8/20/18 11:50	46.8	8	0	45.2	86	86	-0.5	-0.5	3.672	3.899	1	1	29.8	-3.8	67
IC-VGW-4	9/17/18 9:22	52.1	12	0	35.9	62.1	62.1	-1.03	-1.02	4.065	4.029	4.6	4.6	29.9	-4.6	55
IC-VGW-4	11/7/18 15:42	53.9	12.8	0	33.3	53	53	-1.2	-1.2	5.118	4.988	5	5	30.2	-4.7	55
IC-VGW-4	12/10/18 10:00	46.1	10.1	0	43.8	50	50	-1.3	-1.3	2.893	2.599	3	3	30	-3.6	43
IC-VGW-5	2/8/18 10:47	4.6	16.8	0	78.6	46	47	-0.8	-0.8	16.647	16.625	3	3	30	-16.6	50
IC-VGW-5	3/28/18 11:05	3.8	15.6	0	80.6	51	51	-0.9	-0.9	16.722	16.703	3	3	30.2	-16.7	50
IC-VGW-5	5/16/18 9:14	2.3	14.1	1.2	82.4	62	62	-1.1	-1.1	16.727	16.717	3	3	29.8	-16.8	54
IC-VGW-5	7/5/18 8:33	4.4	16	0	79.6	74	74	-0.7	-0.7	18.079	17.941	3	3	29.8	-17.7	69
IC-VGW-5	8/20/18 9:27	5.1	16.9	0	78	80	80	-0.6	-0.6	18.435	18.325	3	3	29.8	-18	67
IC-VGW-5	8/20/18 11:17	4.2	15.6	0	80.2	76	77	-1.5	-1.5	9.932	9.988	2	2	29.7	-10	67
IC-VGW-5	9/17/18 9:28	2.5	14	1.2	82.3	63.1	63.4	-1.25	-1.25	9.641	9.648	6.3	6.3	29.9	-9.8	55
IC-VGW-5	11/7/18 15:47	6.1	16.6	0	77.3	55	55	-1.6	-1.6	1.262	1.218	8	8	30.2	-2.3	55
IC-VGW-5	11/8/18 10:36	3.2	16	0	80.8	61	62	-2.5	-2.6	2.313	2.432	11	12	30.3	-4.4	45
IC-VGW-5	12/10/18 10:05	5.3	16.3	0	78.4	50	50	-2.9	-2.9	2.622	2.635	12	12	30	-4.6	43
IC-VGW-6	2/8/18 10:53	34	15.2	0	50.8	47	47	-0.4	-0.4	1.857	1.853	1	1	30	-7.9	50
IC-VGW-6	3/28/18 11:08	38	14.3	0	47.7	52	52	-0.3	-0.3	2.072	2.037	1	1	30.2	-7.8	50
IC-VGW-6	5/16/18 9:17	34.7	14	0	51.3	62	62	-0.6	-0.6	1.56	1.557	1	1	29.8	-6.2	54
IC-VGW-6	5/17/18 8:48	37.6	13.8	0	48.6	59	59	-0.7	0	1.515	-0.001	1		29.9	-5.9	64
IC-VGW-6	7/5/18 8:36	41.5	13.5	1	44	81	82	0	0.1	-0.021	-0.02			29.8	-5.5	69
IC-VGW-6	8/20/18 9:32	37.8	14	2.4	45.8	77	77	0	0	-0.015	-0.012			29.8	-5.6	67
IC-VGW-6	9/17/18 9:40	36.5	13	0	50.5	63.9	64	-0.03	-0.04	0	0	0	0	29.9	-4.3	55
IC-VGW-6	11/7/18 15:50	45.9	14.9	0	39.2	54	55	0	0	-0.005	-0.006			30.2	-5.5	55
IC-VGW-6	12/10/18 10:09	46.5	13.7	0	39.8	49	49	0	0	-0.002	-0.003			30	-3.6	43
IC-VGW-7	2/8/18 11:06	1.7	19.5	0	78.8	47	48	-4.9	-4.8	7.378	7.392	2	2	30	-16.5	50
IC-VGW-7	3/28/18 11:11	3.4	21.7	0	74.9	51	51	-5.6	-5.4	6.797	6.922	2	2	30.3	-16.9	50
IC-VGW-7	5/16/18 9:24	2.9	20.4	0	76.7	61	61	-5.5	-5.7	6.846	6.581	2	2	29.8	-16.5	54
IC-VGW-7	5/17/18 8:53	2.9	19.8	0	77.3	59	58	-5.5	-3.1	6.774	0.007	2	0	29.9	-19.6	64
IC-VGW-7	7/5/18 8:41	2.9	20.5	0	76.6	82	83	-4.5	-4.5	0.35	0.307	0	0	29.8	-18.3	69
IC-VGW-7	8/20/18 9:39	2.6	21.2	0.2	76	78	79	-4.8	-4.7	0.239	0.228	0	0	29.9	-18.3	67
IC-VGW-7	9/17/18 9:50	3.3	18.3	2.1	76.3	57.2	57.1	-4.52	-4.52	0.046	0.049	0.2	0.2	29.9	-9.9	55
IC-VGW-7	11/7/18 15:56	0.9	5.6	15.5	78	58	59	-2.4	-2.4	0.006	0.009	0	0	30.2	-2.5	55
IC-VGW-7	12/10/18 10:15	0.3	2.7	18.2	78.8	49	49	-4.7	-4.7	0.006	0.008	0	0	30	-4.8	43
IC-VGW-8	2/8/18 10:58	22.1	25.6	0.7	51.6	46	47	0	0	-0.017	-0.01			30	-6.5	50
IC-VGW-8	3/28/18 11:10	17.2	26.4	0	56.4	52	52	0	0	-0.015	-0.016			30.3	-6.6	50
IC-VGW-8	5/16/18 9:22	16.5	25.5	0	58	57	58	0	0	-0.002	0			29.8	-4.8	54
IC-VGW-8	7/5/18 8:40	16.4	25.5	0	58.1	80	81	0	0.1	-0.025	-0.027			29.8	-4.8	69
IC-VGW-8	8/20/18 9:37	15.9	24.5	0.4	59.2	77	77	0	0	-0.016	-0.013			29.8	-5.3	67
IC-VGW-8	9/17/18 9:48	14.9	23.2	1.2	60.7	55	54.9	0.01	0.02	0	0	0	0	29.9	-4	55

**Table 7. Landfill Gas Monitoring Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Point ID	Record Date	CH4%	CO2%	O2%	Bal Gas%	Init Temp (F)	Adj Temp (F)	Init Static Pressure ("H2O)	Adj Static Pressure ("H2O)	InitDiffPress	AdjDiffPress	Init Flow (scfm)	AdjFlow	BaroPress	SystemPressure	AmbientTemp
IC-VGW-8	11/7/18 15:53	14	20.9	2.7	62.4	58	58	0	0	-0.015	-0.012			30.2	-5.2	55
IC-VGW-8	12/10/18 10:12	13	19.3	3.8	63.9	49	49	0	0	-0.012	-0.007			30	-3.4	43
IC-VGW-9	2/8/18 11:14	0.4	10.4	5.1	84.1	46	47	-0.8	-0.8	16.706	16.776	3	3	30	-16.7	50
IC-VGW-9	3/28/18 11:15	1.3	11.2	4.5	83	45	45	-0.8	-0.8	16.791	17.232	3	3	30.3	-16.7	50
IC-VGW-9	5/16/18 9:30	0.2	10	5.8	84	64	64	-0.7	-0.7	16.884	16.6	3	3	29.8	-16.5	54
IC-VGW-9	7/5/18 8:45	0.9	11.4	4.3	83.4	82	82	-0.8	-0.8	18.382	18.39	3	3	29.8	-18.1	69
IC-VGW-9	8/20/18 9:43	0.7	11.7	4	83.6	78	77	-0.7	-0.7	18.216	18.262	3	3	29.8	-17.8	67
IC-VGW-9	8/20/18 11:13	0.1	11.6	4.4	83.9	77	77	-1.3	-1.3	12.493	12.589	2	2	29.8	-12.5	67
IC-VGW-9	9/17/18 9:56	0.3	11.2	4.5	84	56.1	56.3	-1.43	-1.43	9.485	9.482	6.3	6.3	29.9	-9.7	55
IC-VGW-9	11/7/18 16:02	0.7	12.2	3.8	83.3	55	55	-1.7	-1.7	0.985	0.997	7	7	30.2	-2.2	55
IC-VGW-9	12/10/18 10:19	1.1	12.7	3.7	82.5	49	49	-2.9	-2.9	2.543	2.496	12	12	30	-4.6	43

Table 8. Source Control Operations Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Date	LFG Blower (cumulative hrs.)	Soil Gas Blower (cumulative hrs.)	Sump Discharge (cumulative cu. ft.)	Sump Discharge (cumulative gallons)	Comments
10/25/2005			1	6	
12/27/2005	43,217	49,603	317	2,371	
12/26/2006	45,921	53,933	3,027	22,642	
12/31/2007	49,169	58,359	4,682	35,021	
12/31/2008	52,316	62,748	6,970	52,136	
12/29/2009	55,487	67,095	9,286	69,459	
12/14/2010	58,094	71,249	11,877	88,840	
12/27/2011	60,562	75,787	14,481	108,318	
12/26/2012	62,956	80,160	20,061	150,056	
12/31/2013	65,243	84,585	21,430	160,296	
12/30/2014	67,247	88,899	23,850	178,398	
12/30/2015	69,882	93,290	26,260	196,425	
1/5/2016	69,879	93,344	26,260	196,425	
12/31/2016	70,865	95,440	28,568	213,689	
12/26/2017	71,395	98,345	30,006	224,445	
1/2/2018	71,399	98,389	30,117	225,275	
1/9/2018	71,409	98,429	30,225	226,083	
1/16/2018	71,421	98,475	30,431	227,624	
1/23/2018	71,431	98,516	30,488	228,050	
1/30/2018	71,441	98,558	30,578	228,723	
2/6/2018	71,450	98,598	30,840	230,685	
2/13/2018	71,468	98,647	30,936	231,400	
2/20/2018	71,474	98,686	31,092	232,566	
2/27/2018	71,482	98,731	31,151	233,009	
3/6/2018	71,494	98,773	31,210	233,451	
3/13/2018	71,502	98,809	31,244	233,705	
3/20/2018	71,510	98,851	31,322	234,289	
3/27/2018	71,518	98,893	31,383	234,745	
4/3/2018	71,521	98,903	31,457	235,298	
4/10/2018	71,521	98,903	31,591	236,301	
4/17/2018	71,527	98,934	31,783	237,737	
4/24/2018	71,539	98,976	31,852	238,253	
5/1/2018	71,551	99,013	31,885	238,500	
5/8/2018	71,561	99,057	31,903	238,634	
5/15/2018	71,569	99,096	31,913	238,709	
5/22/2018	71,577	99,142	31,916	238,732	
5/29/2018	71,577	99,186	31,917	238,739	
6/5/2018	71,587	99,229	31,920	238,762	
6/12/2018	71,597	99,265	31,922	238,777	
6/19/2018	71,607	99,313	31,923	238,784	
6/26/2018	71,619	99,355	31,926	238,806	
7/3/2018	71,631	99,393	31,928	238,821	
7/10/2018	71,646	99,393	31,929	238,829	
7/17/2018	71,658	99,438	31,929	238,829	
7/24/2018	71,670	99,483	31,929	238,829	
7/31/2018	71,678	99,567	31,929	238,829	
8/7/2018	71,688	99,603	31,929	238,829	
8/14/2018	71,696	99,645	31,938	238,896	
8/21/2018	71,712	99,696	31,938	238,896	

Table 8. Source Control Operations Data
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Date	LFG Blower (cumulative hrs.)	Soil Gas Blower (cumulative hrs.)	Sump Discharge (cumulative cu. ft.)	Sump Discharge (cumulative gallons)	Comments
8/28/2018	71,722	99,736	31,938	238,896	
9/4/2018	71,728	99,776	31,938	238,896	
9/11/2018	71,738	99,816	31,939	238,904	
9/18/2018	71,750	99,865	31,941	238,919	
9/26/2018	71,768	99,907	31,943	238,934	
10/2/2018	71,776	99,943	31,944	238,941	
10/9/2019	71,794	99,991	31,960	239,061	
10/16/2018	71,812	100,031	31,964	239,091	
10/23/2018	71,830	100,075	31,965	239,098	
10/30/2018	71,848	100,116	32,002	239,375	
11/6/2018	71,863	100,159	32,250	241,230	
11/13/2018	71,882	100,203	32,335	241,866	
11/20/2018	71,899	100,242	32,390	242,277	
11/27/2018	71,915	100,282	32,440	242,651	
12/4/2018	71,933	100,328	32,490	243,025	
12/11/2018	71,949	100,366	32,519	243,242	
12/18/2018	71,967	100,409	32,614	243,953	
12/26/2018	71,989	100,458	32,696	244,566	
Total Hours	28,979	51,264			
Avg hrs./day	6.16	10.90			

Data obtained from 2005 through 2017 has been summarized as annual totals for brevity.

Table 9. Soil Gas and Landfill Gas Removal Volumes
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		10/25/2005															
		11/2/2005															
		11/15/2005															
		11/22/2005		43,010									49,194				
		11/29/2005		43,069	59	120	424,800	424,800	70	247,800	247,800		49,267	73	94	411,720	411,720
		12/5/2005		43,069									49,267				
		12/13/2005		43,147									49,434				
		12/20/2005		43,190									49,519				
		12/27/2005		43,217	148	120	1,065,600	1,490,400	70	621,600	869,400		49,603	336	94	1,895,040	2,306,760
		1/3/2006		43,259									49,688				
1/13/2006		1/10/2006		43,295									49,722				
		1/17/2006		43,325									49,816				
		1/24/2006		43,384									49,940				
		1/31/2006		43,431	214	120	1,540,800	3,031,200	70	898,800	1,768,200		50,036	433	94	2,442,120	4,748,880
		2/7/2006		43,465									50,099				
		2/14/2006		43,506									50,184				
		2/21/2006		43,539									50,268				
3/1/2006		2/28/2006		43,587	156	87	814,320	3,845,520	53	496,080	2,264,280		50,351	315	85	1,606,500	6,355,380
		3/7/2006		43,628									50,435				
		3/14/2006		43,670									50,519				
		3/21/2006		43,710									50,603				
4/3/2006		3/28/2006		43,752	165	88	871,200	4,716,720	59	584,100	2,848,380		50,687	336	77	1,552,320	7,907,700
		4/4/2006		43,782									50,768				
		4/11/2006		43,845									50,854				
		4/18/2006		43,881									50,938				
		4/25/2006		43,924									51,021				
5/1/2006		5/2/2006		43,977	225	82	1,107,000	5,823,720	46	621,000	3,469,380		51,106	419	81	2,036,340	9,944,040
		5/9/2006		44,018									51,190				
		5/16/2006		44,057									51,274				
		5/23/2006		44,118									51,357				
6/5/2006		5/30/2006		44,166	189	83	941,220	6,764,940	54	612,360	4,081,740		51,442	335.5	65	1,308,450	11,252,490
		6/6/2006		44,214									51,526				
		6/13/2006		44,257									51,610				
		6/20/2006		44,309									51,693				
		6/27/2006		44,350									51,778				
		7/4/2006		44,375									51,862				
7/13/2006		7/11/2006		44,400	234	53	744,120	7,509,060	34	477,360	4,559,100		51,944	502.5	81	2,442,150	13,694,640
		7/18/2006		44,511									52,026				
		7/25/2006		44,577									52,113				
		8/1/2006		44,637									52,193				
		8/8/2006		44,700									52,278				
		8/15/2006		44,763									52,362				
8/18/2006	8/18/2006	8/22/2006	44,795	44,817	417	73	1,826,460	9,335,520	42	1,050,840	5,609,940	52,403	52,439	495	81	2,405,700	16,100,340
		8/29/2006		44,872									52,517				
		9/5/2006		44,943									52,614				
9/14/2006	9/14/2006	9/13/2006	45,028	45,014	197	62	732,840	10,068,360	40	472,800	6,082,740	52,727	52,710	271	87	1,414,620	17,514,960
		9/18/2006		45,068									52,782				
		9/26/2006		45,131									52,866				
		10/3/2006		45,195									52,952				
		10/10/2006		45,259									53,036				
10/19/2006		10/17/2006		45,324	310	63	1,171,800	11,240,160	42	781,200	6,863,940		53,122	412	93	2,298,960	19,813,920
		10/31/2006		45,447									53,288				
		11/7/2006		45,500									53,371				
		11/14/2006		45,563									53,455				
		11/21/2006		45,618									53,528				
		11/28/2006		45,680									53,612				
12/4/2006	12/4/2006	12/5/2006	45,739	45,746	422	75	1,899,000	13,139,160	51	1,291,320	8,155,260	53,689	53,700	578	93	3,225,240	23,039,160
		12/12/2006		45,802									53,776				
		12/19/2006		45,854									53,844				
		12/26/2006		45,921									53,933				
		1/1/2007		45,966									54,000				
		1/2/2007		45,982									54,016				
1/15/2007		1/9/2007		46,039	293	49	861,420	14,000,580	33	580,140	8,735,400		54,094	394	90	2,127,600	25,166,760
		1/16/2007		46,096									54,176				
		1/23/2007		46,156									54,257				
		1/30/2007		46,223									54,346				
		2/7/2007		46,290									54,437				
		2/13/2007		46,344									54,509				
2/23/2007		2/20/2007		46,397	358	86	1,847,280	15,847,860	57	1,224,360	9,959,760		54,593	499	88	2,634,720	27,801,480
		2/27/2007		46,460									54,676				
		3/6/2007		46,525									54,763				
		3/13/2007		46,580									54,841				
3/23/2007		3/20/2007		46,643	246	86	1,269,360	17,117,220	65	959,400	10,919,160		54,926	333	84	1,678,320	29,479,800
		3/27/2007		46,707									55,011				
		4/3/2007		46,762									55,096				
		4/10/2007		46,813									55,178				
		4/17/2007		46,876									55,262				
		4/24/2007		46,938									55,345				
5/1/2007		5/1/2007		47,001	358	58	1,245,840	18,363,060	40	859,200	11,778,360		55,429	503	86	2,595,480	32,075,280
		5/8/2007		47,064									55,514				
5/17/2007		5/15/2007		47,127	126	56	423,360	18,786,420	38	287,280	12,065,640		55,597	168	86	866,880	32,942,160
		5/22/2007		47,190									55,683				
		5/29/2007		47,253									55,766				
		6/5/2007		47,377									55,850				
6/14/2007		6/12/2007		47,440	313	67	1,258,260	20,044,680	44	826,320	12,891,960		55,932	335	84	1,688,400	34,630,560

**Table 9. Soil Gas and Landfill Gas Removal Volumes
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Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		6/19/2007		47,440									56,102				
		6/26/2007		47,495									56,185				
		7/3/2007		47,588									56,185				
		7/10/2007		47,620									56,269				
7/19/2007		7/17/2007		47,684									56,354	422	80	2,025,600	36,656,160
		7/24/2007		--									--				
		7/31/2007		47,811									56,524				
8/8/2007		8/7/2007		47,873	433	46	1,195,080	21,239,760	30	779,400	13,671,360		56,606	252	87	1,315,440	37,971,600
		8/14/2007		47,946									56,703				
		8/21/2007		47,998									56,773				
		8/28/2007		48,061									56,858				
9/7/2007		9/4/2007		48,126	253	42	637,560	21,877,320	29	440,220	14,111,580		56,944	338	86	1,744,080	39,715,680
		9/11/2007		48,186									57,025				
		9/18/2007		48,249									57,109				
		9/24/2007		48,311									57,193				
		10/2/2007		48,372									57,278				
		10/9/2007		48,434									57,360				
10/26/2007		10/24/2007		48,566	440	44	1,161,600	23,038,920	30	792,000	14,903,580		57,541	597	94	3,367,080	43,082,760
		10/30/2007		48,614									57,613				
		11/7/2007		48,676									57,698				
		11/13/2007		48,739									57,782				
11/26/2007		11/21/2007		48,812	246	45	664,200	23,703,120	36	531,360	15,434,940		57,879	338	92	1,865,760	44,948,520
		11/27/2007		48,864									57,949				
		12/4/2007		48,927									58,033				
12/12/2007		12/11/2007		48,995	183	85	933,300	24,636,420	71	779,580	16,214,520		58,124	245	91	1,337,700	46,286,220
		12/18/2007		49,052									58,202				
		12/24/2007		49,110									58,358				
		12/31/2007		49,169									58,359				
		1/8/2008		49,243									58,510				
		1/15/2008		49,303									58,544				
		1/22/2008		49,359									58,622				
		1/29/2008		49,408									58,705				
1/30/2008		1/30/2008		49,425	430	47	1,212,600	25,849,020	43	1,109,400	17,323,920		58,726	182	91	993,720	47,279,940
		2/5/2008		49,469									58,790				
		2/13/2008		49,541									58,886				
		2/19/2008		49,595									58,958				
2/27/2008		2/25/2008		49,657	232	59	821,280	26,670,300	35	487,200	17,811,120		59,041	251	91	1,370,460	48,650,400
		3/4/2008		49,720									59,126				
		3/11/2008		49,781									59,208				
3/19/2008		3/18/2008		49,844	187	39	437,580	27,107,880	36	403,920	18,215,040		59,292	251	81	1,219,860	49,870,260
		3/25/2008		49,907									59,376				
		4/1/2008		49,970									59,461				
		4/8/2008		50,035									59,547				
		4/15/2008		50,096									59,629				
4/22/2008		4/22/2008		50,158	314	121	2,279,640	29,387,520	102	1,921,680	20,136,720		59,712	251	162	2,439,720	52,309,980
		4/23/2008		50,173									59,730				
		4/29/2008		50,221									59,796				
		5/6/2008		50,280									59,879				
		5/13/2008		50,344									59,965				
		5/20/2008		50,407									60,048				
5/29/2008		5/27/2008		50,470	312	51	954,720	30,342,240	43	804,960	20,941,680		60,133	254	81	1,234,440	53,544,420
		6/3/2008		50,529									60,217				
		6/10/2008		50,591									60,301				
		6/17/2008		50,654									60,385				
6/30/2008		6/24/2008		50,717	247		0	30,342,240		0	20,941,680		60,469	252		0	53,544,420
		7/1/2008		50,780									60,553				
		7/8/2008		50,840									60,639				
		7/15/2008		50,895									60,716				
7/22/2008		7/23/2008		50,964	247	46	681,720	31,023,960	31	459,420	21,401,100		60,809	256	83	1,274,880	54,819,300
		7/29/2008		51,021									60,883				
		8/5/2008		51,084									60,968				
		8/12/2008		51,140									61,049				
		8/19/2008		51,201									61,134				
8/26/2008		8/27/2008		51,275	311	48	895,680	31,919,640	26	485,160	21,886,260		61,232	264	85	1,346,400	56,165,700
		9/2/2008		51,326									61,301				
		9/9/2008		51,389									61,385				
		9/16/2008		51,450									61,469				
9/24/2008		9/23/2008		51,506	231	49	679,140	32,598,780	28	388,080	22,274,340		61,553	252	90	1,360,800	57,526,500
		9/29/2008		51,568									61,637				
		10/8/2008		51,640									61,733				
		10/14/2008		51,694									61,805				
		10/21/2008		51,757									61,892				
10/29/2008		10/28/2008		51,820	314	37	697,080	33,295,860	29	546,360	22,820,700		61,973	240	87	1,252,800	58,779,300
		11/4/2008		51,884									62,059				
		11/11/2008		51,945									62,141				
		11/18/2008		52,001									62,227				
11/25/2008		11/25/2008		52,062	242	36	522,720	33,818,580	25	363,000	23,183,700		62,309	250	91	1,365,000	60,144,300
		12/2/2008		--									--				
		12/9/2008		52,179									62,478				
		12/16/2008		52,235									62,563				
		12/23/2008		52,252									62,648				
12/30/2008		12/30/2008		52,302	240	30	432,000	34,250,580	22	316,800	23,500,500		62,730	252	91	1,375,920	61,520,220
		12/31/2008		52,316									62,748				
		1/13/2009		52,431									62,902				
		1/21/2009		52,480									62,995				

Table 9. Soil Gas and Landfill Gas Removal Volumes
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Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
1/28/2009		1/27/2009		52,523	271	31	504,060	34,754,640	24	390,240	23,890,740		63,068	420	86	2,167,200	63,687,420
		2/4/2009		52,593									63,162				
		2/10/2009		52,657									63,243				
		2/17/2009		52,713									63,323				
2/24/2009		2/24/2009	246	52,769	246	37	546,120	35,300,760	32	472,320	24,363,060		63,402	334	86	1,723,440	65,410,860
		3/3/2009		52,829									63,487				
		3/10/2009		52,891									63,569				
		3/17/2009		52,957									63,657				
3/23/2009		3/23/2009	246	53,015	246	38	560,880	35,861,640	30	442,800	24,805,860		63,737	335	87	1,748,700	67,159,560
		3/31/2009		53,078									63,822				
		4/7/2009		53,141									63,906				
		4/14/2009		53,208									63,989				
4/20/2009		4/21/2009	208	53,223	208	37	461,760	36,323,400	24	299,520	25,105,380		64,074	337	86	1,738,920	68,898,480
		4/28/2009		53,318									64,158				
		5/5/2009		53,380									64,244				
		5/12/2009		53,440									64,325				
5/18/2009		5/18/2009	276	53,499	276	36	596,160	36,919,560	24	397,440	25,502,820		64,325	251	84	1,265,040	70,163,520
		5/19/2009		53,502									64,408				
		5/26/2009		53,563									64,490				
		6/3/2009		53,635									64,586				
		6/11/2009		53,689									64,659				
		6/16/2009		53,754									64,744				
		6/23/2009		53,814									64,826				
6/25/2009		6/25/2009	338	53,837	338	38	770,640	37,690,200	22	446,160	25,948,980		64,854	529	84	2,666,160	72,829,680
		6/30/2009		53,879									64,913				
		7/7/2009		54,002									65,080				
		7/14/2009		53,937									64,994				
7/16/2009		7/16/2009	186	54,023	186	41	457,560	38,147,760	26	290,160	26,239,140		65,107	253	83	1,259,940	74,089,620
		7/21/2009		54,063									65,162				
		7/28/2009		54,126									65,246				
		8/4/2009		54,189									65,330				
		8/11/2009		54,254									65,416				
		8/18/2009		54,314									65,497				
8/26/2009		8/25/2009	354	54,377	354	35	743,400	38,891,160	22	467,280	26,706,420		65,582	475	82	2,337,000	76,426,620
		9/1/2009		54,440									65,666				
		9/8/2009		54,503									65,750				
		9/15/2009		54,565									65,833				
9/22/2009		9/22/2009	252	54,629	252	37	559,440	39,450,600	31	468,720	27,175,140		65,918	336	67	1,350,720	77,777,340
		9/29/2009		54,690									66,002				
		10/6/2009		54,753									66,085				
		10/13/2009		54,816									66,170				
		10/20/2009		54,880									66,254				
		10/27/2009		54,943									66,339				
		11/3/2009		55,008									66,425				
		11/10/2009		55,069									66,507				
		11/17/2009		55,131									66,591				
11/23/2009		11/24/2009	563	55,192	563	38	1,283,640	40,734,240	22	743,160	27,918,300		66,673	755	67	3,035,100	80,812,440
		12/1/2009		55,256									66,759				
		12/8/2009															
		12/15/2009		55,372									66,927				
		12/22/2009		55,432									67,010				
12/28/2009		12/29/2009	356	55,487	356	38	811,680	41,545,920	23	491,280	28,409,580		67,095	504	82	2,479,680	83,292,120
		1/5/2010		55,549									67,178				
		1/12/2010		55,616									67,266				
		1/19/2010		55,676									67,348				
		1/26/2010		55,739									67,432				
		2/2/2010		55,800									67,515				
2/10/2010		2/9/2010	362	55,849	362	37	803,640	42,349,560	23	499,560	28,909,140		67,601	506	49	1,487,640	84,779,760
		2/16/2010		55,909									67,683				
		2/23/2010		55,963									67,767				
		3/2/2010		56,008									67,851				
		3/9/2010		56,071									67,935				
		3/16/2010		56,012									68,018				
3/26/2010		3/23/2010	333	56,182	333	39	779,220	43,128,780	3	59,940	28,969,080		68,101	500	53	1,590,000	86,369,760
		3/30/2010		56,243									68,188				
		4/7/2010		56,316									68,287				
		4/14/2010		56,391									68,364				
		4/21/2010		56,459									68,440				
		4/27/2010		56,575									68,522				
		5/4/2010		56,649									68,606				
		5/11/2010		56,730									68,689				
5/21/2010		5/18/2010	692	56,874	692	6	249,120	43,377,900	1	41,520	29,010,600		68,776	675	62	2,511,000	88,880,760
		5/25/2010		56,914									68,826				
		6/1/2010		56,969									68,909				
		6/8/2010		57,035									68,997				
		6/15/2010		57,073									69,078				
		6/22/2010		57,115									69,162				
6/28/2010		6/28/2010	282	57,156	282	36	609,120	43,987,020	17	287,640	29,298,240		69,246	470	21	592,200	89,472,960
		7/6/2010		57,197									69,331				
		7/13/2010		57,235									69,323				
		7/20/2010		57,279									69,497				
		7/27/2010		57,320									69,581				
		8/3/2010		57,362									69,665				
8/11/2010		8/11/2010	254	57,410	254	39	594,360	44,581,380	24	365,760	29,664,000		69,761	515	28	865,200	90,338,160
		8/17/2010		57,441									69,835				

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Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		8/25/2010		57,493									69,940				
		8/31/2010		57,520									70,001				
		9/7/2010		57,562									70,085				
		9/15/2010		57,610									70,185				
9/23/2010		9/21/2010	233	57,643	35	489,300	45,070,680	26	363,480	30,027,480			70,253	492	72	2,125,440	92,463,600
		9/28/2010		57,684									70,336				
		10/5/2010		57,720									70,422				
		10/12/2010		57,759									70,506				
		10/19/2010		57,798									70,588				
		10/26/2010		57,836									70,673				
		11/2/2010		57,878									70,757				
11/18/2010		11/9/2010	277	57,920	36	598,320	45,669,000	34	565,080	30,592,560			70,845	592	69	2,450,880	94,914,480
		11/16/2010															
		12/8/2010		58,059									71,178				
12/22/2010		12/14/2010	174	58,094	36	375,840	46,044,840	41	428,040	31,020,600			71,249	404	81	1,963,440	96,877,920
		1/4/2011		58,192									71,500				
		1/11/2011		58,228									71,585				
		1/18/2011		58,271									71,670				
		1/25/2011		58,311									71,756				
		2/1/2011		58,350									71,837				
2/9/2011		2/8/2011	292	58,386	65	1,138,800	47,183,640	47.41	830,623	31,851,223			71,920	671	102	1,787,040	98,664,960
		2/15/2011		58,419									72,004				
		2/22/2011		58,457									72,091				
		3/1/2011		58,487									72,173				
3/10/2011		3/8/2011	139	58,525	55	458,700	47,642,340	42.9	357,786	32,209,009			72,259	339	92	767,280	99,432,240
		3/15/2011		58,555									72,340				
		3/22/2011		58,593									72,422				
		3/29/2011		58,632									72,508				
		4/5/2011		58,690									72,593				
		4/12/2011		58,730									72,674				
		4/19/2011		58,772									72,760				
		4/26/2011		58,814									72,844				
5/4/2011		5/3/2011	330	58,855	56	1,108,800	48,751,140	50.736	1,004,573	33,213,582			72,926	667	86	1,702,800	101,135,040
		5/10/2011		58,898									73,012				
		5/17/2011		58,939									73,096				
		5/24/2011		58,978									73,180				
		5/31/2011		58,021									73,265				
		6/7/2011		59,061									73,346				
6/17/2011		6/15/2011	—	59,111	—	—	—	—	—	—			73,446	—	—	—	—
		6/22/2011		59,145									73,516				
		6/28/2011		59,186									73,591				
		7/5/2011		59,228									73,683				
		7/12/2011		59,262									73,767				
		7/19/2011		59,276									73,851				
		7/26/2011		59,282									73,934				
8/4/2011		8/2/2011	433	59,288	57	1,480,860	50,232,000	53.124	1,380,162	34,593,744			74,019	1093	84	2,182,320	103,317,360
		8/9/2011		59,328									74,103				
		8/16/2011		59,368									74,184				
		8/23/2011		59,407									74,267				
		8/31/2011		59,474									74,365				
		9/5/2011		59,528									74,436				
		9/13/2011		59,571									74,520				
9/20/2011		9/22/2011	392	59,680	67	1,575,840	51,807,840	42.344	995,931	35,589,674			74,631	612	99	2,328,480	105,645,840
		9/27/2011		59,743									74,688				
		10/4/2011		59,818									74,772				
		10/11/2011		59,898									74,855				
		10/18/2011		59,957									74,940				
		10/25/2011		60,016									75,023				
11/3/2011		11/1/2011	447	60,127	54	1,448,280	53,256,120	32.94	883,451	36,473,125			75,108	477	62	1,662,840	107,308,680
		11/8/2011		60,256									75,193				
		11/16/2011		60,347									75,290				
		11/22/2011		60,382									75,361				
		12/6/2011		60,460									75,532				
		12/13/2011		60,497									75,614				
		12/20/2011		60,538									75,699				
12/29/2011		12/27/2011	435	60,562	54	1,409,400	54,665,520	39.744	1,037,318	37,510,444			75,787	679	78	2,035,800	109,344,480
		1/3/2012		60,599									75,865				
		1/10/2012		60,659									75,949				
		1/17/2012															
		1/24/2012		60,740									76,117				
		1/31/2012		60,781									76,201				
2/7/2012		2/7/2012	261	60,823	55	861,300	55,526,820	37	579,420	38,089,864			76,286	499	51	798,660	110,143,140
		2/14/2012		60,868									76,373				
		2/21/2012		60,906									76,453				
		2/28/2012		60,951									76,541				
		3/6/2012		60,990									76,621				
		3/13/2012		61,032									76,706				
		3/20/2012		61,073									76,789				
3/28/2012		3/27/2012	292	61,115	51	893,520	56,420,340	42	735,840	38,825,704			76,873	587	51	893,520	111,036,660
		4/3/2012		61,157									76,957				
		4/10/2012		61,234									77,040				
		4/17/2012		61,295									77,124				
		4/24/2012		61,338									77,209				
		5/1/2012		61,380									77,293				
5/9/2012		5/8/2012	324	61,439	46	894,240	57,314,580	29	563,760	39,389,464			77,376	503	51	991,440	112,028,100

Table 9. Soil Gas and Landfill Gas Removal Volumes
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Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		5/15/2012		61,534									77,462				
		5/22/2012		61,611									77,545				
		5/29/2012		61,672									77,628				
		6/5/2012		61,714									77,712				
		6/12/2012		61,756									77,796				
		6/19/2012		61,823									77,880				
6/27/2012		6/26/2012		61,864	425	81	2,065,500	59,380,080	75	1,912,500	41,301,964		77,964	588	37	943,500	112,971,600
		7/3/2012		61,907									78,046				
		7/10/2012		61,948									78,133				
		7/18/2012		61,996									78,229				
		7/24/2012		62,031									78,300				
		7/31/2012		62,073									78,385				
		8/7/2012		62,117									78,471				
8/9/2012		8/14/2012		62,157	293	74	1,300,920	60,681,000	65	1,142,700	42,444,664		78,553	589	52	914,160	113,885,760
		8/21/2012		62,201									78,640				
		8/28/2012		62,240									78,720				
		9/4/2012		62,284									78,807				
		9/11/2012		62,330									78,899				
		9/18/2012		62,366									78,973				
9/26/2012		9/25/2012		62,407	250	40	600,000	61,281,000	35	525,000	42,969,664		79,056	503	54	810,000	114,695,760
		10/2/2012		62,449									79,139				
		10/9/2012		62,491									79,225				
		10/16/2012		62,534									79,310				
		10/22/2012		62,575									79,393				
		11/6/2012		62,658									79,561				
11/6/2012		11/13/2012		62,703	296	45	799,200	62,080,200	43	763,680	43,733,344		79,649	593	69	1,225,440	115,921,200
		11/20/2012		62,742									79,728				
		11/27/2012		62,781									79,814				
		12/4/2012		62,825									79,895				
		12/11/2012		62,866									79,979				
		12/18/2012		62,908									80,064				
12/20/2012		12/26/2012		62,956	253	84	1,275,120	63,355,320	71	1,077,780	44,811,124		80,160	346	67	1,017,060	116,938,260
		1/2/2013		62,998									80,244				
		1/8/2013		63,033									80,318				
		1/15/2013		63,065									80,394				
		1/22/2013		63,104									80,478				
1/30/2013		1/29/2013		63,148	192	21	241,920	63,597,240	13.44	154,829	44,965,952		80,564	404	14	161,280	117,099,540
		2/5/2013		63,184									80,646				
		2/12/2013		63,231									80,736				
		2/19/2013		63,268									80,815				
		2/26/2013		63,309									80,897				
		3/5/2013		63,347									80,976				
		3/12/2013		63,389									81,059				
		3/19/2013		63,431									81,143				
3/21/2013		3/26/2013		63,473	325	26	507,000	64,104,240	15.08	294,060	45,260,012		81,228	664	17	331,500	117,431,040
		4/2/2013		63,511									81,311				
		4/9/2013		63,556									81,395				
		4/16/2013		63,594									81,479				
		4/23/2013		63,633									81,569				
4/30/2013		4/30/2013		63,666	193	24	277,920	64,382,160	14.592	168,975	45,428,988		81,647	419	14	162,120	117,593,160
		5/7/2013		63,705									81,731				
		5/14/2013		63,744									81,815				
		5/21/2013		63,784									81,898				
		5/28/2013		63,818									81,980				
		6/4/2013		63,861									82,067				
		6/11/2013		63,901									82,149				
6/18/2013		6/18/2013		63,942	276	27	447,120	64,829,280	19.44	321,926	45,750,914		82,233	586	17	281,520	117,874,680
		6/25/2013		63,987									82,320				
		7/2/2013		64,028									82,405				
		7/9/2013		64,067									82,485				
		7/16/2013		64,125									82,569				
		7/23/2013		64,182									82,653				
		7/30/2013		64,225									82,738				
8/1/2013		8/6/2013		64,268	326	15	293,400	65,122,680	9.18	179,561	45,930,475		82,823	590	15	293,400	118,168,080
		8/13/2013		64,309									82,907				
		8/20/2013		64,349									82,989				
		8/27/2013		64,393									83,077				
		9/4/2013		64,470									83,159				
		9/10/2013		64,509									83,241				
		9/17/2013		64,553									83,327				
9/19/2013		9/24/2013		64,593	325	20	390,000	65,512,680	15.92	310,440	46,240,915		83,409	586	15	292,500	118,460,580
		10/1/2013		64,636									83,495				
		10/8/2013		64,677									83,578				
		10/15/2013		64,717									83,661				
		10/22/2013		64,762									83,749				
10/29/2013		10/29/2013		64,819	226	34	461,040	65,973,720	18.836	255,416	46,496,331		83,831	422	9	122,040	118,582,620
		11/5/2013		64,860									83,914				
		11/12/2013		64,890									83,998				
		11/26/2013		64,970									84,160				
		12/3/2013		65,012									84,250				
		12/10/2013		65,051									84,334				
		12/17/2013		65,096									84,422				
		12/24/2013		65,141									84,510				
12/17/2013		12/31/2013		65,243	424	39	992,160	66,965,880	23.244	591,327	47,087,658		84,585	754	12	305,280	118,887,900
		1/8/2014		65,289									84,672				

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Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		1/14/2014		65,328									84,750				
		1/21/2014		65,368									84,833				
		1/28/2014		35,048									84,916				
		2/4/2014		65,449									85,000				
2/13/2014		2/11/2014	65,478		235	27	380,700	67,346,580	16.1	226,897	47,314,556		85,084	499	11	155,100	119,043,000
		2/18/2014	65,515										85,164				
		2/25/2014	65,555										85,212				
		3/4/2014	65,598										85,300				
		3/11/2014	65,640										85,380				
		3/18/2014	65,663										85,465				
		3/25/2014	65,693										85,549				
		4/1/2014	65,718										85,630				
		4/8/2014	65,742										85,714				
		4/15/2014	65,769										85,800				
		4/22/2014	65,787										85,881				
		4/29/2014	65,803										85,966				
5/7/2014		5/6/2014	65,826		348	34	709,920	68,056,500	20.3	423,112	47,737,668		86,049	965	0	0	119,043,000
		5/20/2014	65,880										86,218				
		6/3/2014	65,974										86,391				
		6/10/2014	66,012										86,474				
6/18/2014		6/17/2014	66,052		226	14	189,840	68,246,340	8.3	113,145	47,850,813		86,556	507	0	0	119,043,000
		6/24/2014	66,092										86,638				
		7/1/2014	66,133										86,723				
		7/8/2014	66,174										86,806				
		7/16/2014	66,224										86,904				
		7/22/2014	66,257										86,973				
		7/29/2014	66,299										87,059				
8/5/2014		8/5/2014	66,340		288	30.1	520,128	68,766,468	17.9	309,996	48,160,809		87,141	585	0	0	119,043,000
		8/12/2014	66,382										87,225				
		8/19/2014	66,464										87,313				
		8/26/2014	66,507										87,393				
		9/2/2014	66,591										87,480				
		9/9/2014	66,547										87,562				
9/16/2014		9/16/2014	66,591		251	25.3	381,018	69,147,486	15.1	227,087	48,387,896		87,649	508	0	0	119,043,000
		9/23/2014	66,630										87,730				
		9/30/2014	66,669										87,813				
		10/7/2014	66,713										87,901				
		10/14/2014	66,749										87,984				
		10/21/2014	66,789										88,068				
10/29/2014		10/28/2014	66,830		239	23.4	335,556	69,483,042	13.9	199,991	48,587,887		88,150	501	0	0	119,043,000
		11/4/2014	66,892										88,236				
		11/18/2014	66,974										88,403				
		11/25/2014	67,016										88,487				
		12/2/2014	67,016										88,571				
		12/9/2014	67,093										88,655				
12/16/2014		12/16/2014	67,129		299	41	735,540	70,218,582	30.3	542,829	49,130,716		88,728	578	0	0	119,043,000
		12/23/2014	67,206										88,814				
		12/30/2014	67,247										88,899				
		1/6/2015	67,291										88,987				
		1/13/2015	67,329										89,065				
		1/20/2015	67,370										89,149				
		1/27/2015	67,485										89,234				
2/3/2015		2/3/2015	67,517		388	41.2	959,136	71,177,718	24.9	579,318	49,710,034		89,317	589	0	0	119,043,000
		2/10/2015	67,557										89,400				
		2/17/2015	67,598										89,485				
		2/24/2015	67,637										89,567				
		3/3/2015	67,667										89,650				
		3/10/2015	67,717										89,733				
3/18/2015		3/17/2015	67,758		241	45.5	657,930	71,835,648	24.7	356,598	50,066,632		89,824	507	21.4	650,988	119,693,988
		3/24/2015	67,790										89,904				
		3/31/2015	67,825										89,986				
		4/7/2015	67,861										90,069				
		4/14/2015	67,897										90,154				
		4/21/2015	67,936										90,239				
4/29/2015		4/28/2015	67,975		217	44	572,880	72,408,528	24.1	313,938	50,380,570		90,323	499	13.4	401,196	120,095,184
		5/5/2015	68,014										90,407				
		5/12/2015	68,054										90,491				
		5/19/2015	68,095										90,576				
		5/26/2015	68,134										90,658				
		6/2/2015	68,170										90,744				
		6/9/2015	68,209										90,826				
6/16/2015		6/16/2015	68,250		275	41.9	691,350	73,099,878	24.0	395,452	50,776,022		90,909	586	17.6	618,816	120,714,000
		6/23/2015	68,377										90,995				
		6/30/2015	68,450										91,076				
		7/7/2015	68,513										91,162				
		7/14/2015	68,568										91,247				
		7/21/2015	68,589										91,329				
		7/28/2015	68,666										91,413				
8/4/2015		8/11/2015	68,831		581	43.9	1,530,354	74,630,232	20.5	713,145	51,489,167		91,586	677	0	0	120,714,000
		8/18/2015	68,893										91,666				
		8/25/2015	68,941										91,749				
		9/1/2015	69,033										91,832				
		9/8/2015	69,074										91,918				
9/15/2015		9/15/2015	69,145		314	42.3	796,932	75,427,164	21.3	401,654	51,890,821		91,997	411	16.7	411,822	121,125,822
		9/22/2015	69,199										92,086				

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								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		9/29/2015		69,283									92,166				
		10/6/2015		69,344									92,253				
		10/13/2015		69,395									92,340				
		10/20/2015		69,395									92,418				
10/28/2015		10/27/2015		69,466	321	38.7	745,362	76,172,526	22.6	435,291	52,326,112		92,502	505	19.1	578,730	121,704,552
		11/3/2015		69,533									92,588				
		11/10/2015		69,553									92,672				
		11/17/2015		69,621									92,755				
		11/24/2015		69,674									92,839				
		12/1/2015		69,694									92,925				
12/10/2015		12/8/2015		69,759	293	40.4	710,232	76,882,758	25.5	448,867	52,774,979		93,010	508	5.3	161,544	121,866,096
		12/15/2015		69,809									93,093				
		12/22/2015		69,835									93,175				
		12/29/2015		69,871									93,259				
		12/30/2015		69,882									93,290				
		1/5/2016		69,879									93,344				
		1/12/2016		69,925									93,430				
		1/19/2016		69,957									93,518				
		1/26/2016		69,957									93,596				
2/3/2016		2/2/2016		70,020	261	0	0	76,882,758	0.0	0	52,774,979		93,680	670	0	0	121,866,096
		2/9/2016		70,085									93,760				
		2/16/2016		70,114									93,844				
		2/23/2016		70,155									93,929				
		3/1/2016		70,178									94,013				
		3/8/2016		70,221									94,096				
		3/15/2016		70,278									94,179				
3/23/2016		3/21/2016		70,312	292	0	0	76,882,758	0.0	0	52,774,979		94,262	582	0	0	121,866,096
		3/29/2016		70,363									94,346				
		4/5/2016		70,407									94,430				
		4/12/2016		70,408									94,515				
		4/19/2016		70,496									94,599				
		4/25/2016		70,533									94,681				
		5/3/2016		70,607									94,765				
5/12/2016		5/10/2016		70,657	345	50	1,035,000	77,917,758	22.2	459,540	53,234,519		94,852	590	18	637,200	122,503,296
		5/17/2016		70,699									94,888				
		5/24/2016		70,702									94,896				
		5/31/2016		70,702									94,986				
		6/7/2016		70,710									94,921				
		6/14/2016		70,728									94,949				
		6/21/2016		70,741									94,987				
		6/28/2016		70,754									95,023				
		7/5/2016		70,754									95,062				
		7/12/2016		70,759									95,077				
7/25/2016		7/19/2016		70,761	104	51	318,240	78,235,998	46.9	292,781	53,527,300		95,080	228	0	0	122,503,296
		7/26/2016		70,773									95,102				
		8/2/2016		70,775									95,105				
		8/9/2016		70,775									95,105				
		8/16/2016		70,775									95,105				
		8/23/2016		70,775									95,105				
		8/30/2016		70,775									95,105				
		9/6/2016		70,775									95,105				
		9/12/2016		70,775									95,105				
		9/20/2016		70,775									95,105				
		9/27/2016		70,775									95,105				
		10/4/2016		70,775									95,105				
		10/11/2016		70,775									95,105				
		10/18/2016		70,775									95,105				
		11/1/2016		70,775									95,105				
		11/2/2016		70,775									95,105				
		11/3/2016		--									--				
		11/9/2016		70,791									95,133				
11/18/2016		11/15/2016		70,805	44	50	132,000	78,367,998	50.7	133,848	53,661,148		95,168	88	33	174,240	122,677,536
		11/22/2016		70,816									95,213				
		11/29/2016		70,836									95,253				
		12/6/2016		70,828									95,294				
		12/13/2016		70,836									95,339				
12/20/2016		12/20/2016		70,848	43	50	129,000	78,496,998	48.1	124,098	53,785,246		95,379	211	29	367,140	123,044,676
		12/27/2016		70,859									95,422				
		12/31/2016		70,865									95,440				
		1/3/2017		70,871									95,463				
		1/10/2017		70,874									95,506				
		1/17/2017		70,885									95,547				
2/1/2017		1/31/2017		70,891	43	32	82,560	78,579,558	29.1	74,964	53,860,210		95,583	204	19.6	239,904	123,284,580
		2/7/2017		70,914									95,672				
		2/14/2017		70,924									95,710				
		2/26/2017		70,930									95,756				
		2/28/2017		70,934									95,794				
		3/7/2017		70,944									95,836				
		3/14/2017		70,954									95,878				
		3/21/2017		70,962									95,924				
		3/28/2017		70,972									96,036				
		4/4/2017		70,980									96,201				
		4/11/2017		70,984									96,371				
		4/25/2017		71,002									96,708				
5/4/2017		5/2/2017		71,002	111	38.8	258,408	78,837,966	36.9	246,004	54,106,215		96,874	1,291	20.1	1,556,946	124,841,526
		5/9/2017		71,012									96,984				

**Table 9. Soil Gas and Landfill Gas Removal Volumes
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft ³)	Flow @ 50% CH ₄ (scfm)	Monthly Volume @ 50% CH ₄ (ft ³)	Accum. Volume @ 50% CH ₄ (ft ³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft ³)	Accum. Volume (ft ³)
		5/16/2017		71,023									97,001				
		5/23/2017		71,043									97,037				
		5/30/2017		71,053									97,085				
		6/6/2017		71,061									97,127				
		6/13/2017		71,069									91,163				
		6/20/2017		71,084									97,211				
		6/27/2017		71,094									97,247				
		5/16/2017		71,023									97,001				
		5/23/2017		71,043									97,037				
		5/30/2017		71,053									97,085				
		6/6/2017		71,061									97,127				
6/14/2017		6/13/2017		71,069	67	39.3	157,986	78,995,952	38.0	152,614	54,258,829		97,163	289	20.4	353,736	125,195,262
		6/20/2017		71,084									97,211				
		6/27/2017		71,094									97,247				
		7/25/2017		71,135									97,421				
8/2/2017		8/1/2017		71,145	76	35.7	162,792	79,158,744	35.1	160,187	54,419,016		97,463	300	21	378,000	125,573,262
		8/9/2017		71,162									97,505				
		8/15/2017		71,174									97,541				
		8/22/2017		71,186									97,589				
		8/29/2017		71,198									97,627				
		9/5/2017		71,205									97,667				
		9/12/2017		71,215									97,709				
		9/19/2017		71,227									97,751				
9/27/2017		9/26/2017		71,235	90	30.3	163,620	79,322,364	29.9	161,657	54,580,673		97,797	334	18.9	378,756	125,952,018
		10/3/2017		71,271									97,841				
		10/10/2017		71,285									97,885				
		10/17/2017		71,291									97,923				
		10/24/2017		71,303									97,969				
		10/31/2017		71,315									98,012				
11/8/2017		11/7/2017		71,323	88	36.2	191,136	79,513,500	35.2	185,784	54,766,457		98,053	256	21.2	325,632	126,277,650
		11/14/2017		71,338									98,097				
		11/21/2017		71,350									98,139				
		11/28/2017		71,358									98,175				
		12/2/2017		71,368									98,218				
12/15/2017		12/12/2017		71,376	53	31.1	98,898	79,612,398	30.8	97,909	54,864,366		98,262	209	21.6	270,864	126,548,514
		12/19/2017		71,387									98,304				
		12/26/2017		71,395									98,345				
		1/2/2018		71,399									98,389				
		1/9/2018		71,409									98,429				
		1/16/2018		71,421									98,475				
		1/23/2018		71,431									98,516				
		1/30/2018		71,441									98,558				
2/8/2018		2/6/2018		71,450	74	39.0	173,349	79,785,747	42.2	187,564	55,051,930		98,598	336	23.5	474,414	127,022,928
		2/13/2018		71,468									98,647				
		2/20/2018		71,474									98,686				
		2/27/2018		71,482									98,731				
		3/6/2018		71,494									98,773				
		3/13/2018		71,502									98,809				
		3/20/2018		71,510									98,851				
3/28/2018		3/27/2018		71,518	68	41.3	168,470	79,954,217	40.8	166,448	55,218,378		98,893	295	25.4	449,456	127,472,384
		4/3/2018		71,521									98,903				
		4/10/2018		71,521									98,903				
		4/17/2018		71,527									98,934				
		4/24/2018		71,539									98,976				
		5/1/2018		71,551									99,013				
		5/8/2018		71,561									99,057				
5/16/2018		5/15/2018		71,569	51	41.2	126,218	80,080,435	46.7	142,879	55,361,257		99,096	203	30.2	367,452	127,839,836
		5/22/2018		71,577									99,142				
		5/29/2018		71,577									99,186				
		6/5/2018		71,587									99,229				
		6/12/2018		71,597									99,265				
		6/19/2018		71,607									99,313				
		6/26/2018		71,619									99,355				
7/5/2018		7/3/2018		71,631	62	42.9	159,686	80,240,121	46.8	174,058	55,535,315		99,393	297	29.8	531,803	128,371,639
		7/10/2018		71,646									99,393				
		7/17/2018		71,658									99,438				
		7/24/2018		71,670									99,483				
		7/31/2018		71,678									99,567				
		8/7/2018		71,688									99,603				
8/20/2018		8/14/2018		71,696	65	40.9	159,320	80,399,441	42.2	164,737	55,700,051		99,645	252	30.0	453,217	128,824,856
		8/21/2018		71,712									99,696				
		8/28/2018		71,722									99,736				
		9/4/2018		71,728									99,776				
9/17/2018		9/11/2018		71,738	42	48.5	122,157	80,521,598	52.2	131,441	55,831,492		99,816	171	30.2	309,560	129,134,416
		9/18/2018		71,750									99,865				
		9/26/2018		71,768									99,907				
		10/2/2018		71,776									99,943				
		10/9/2019		71,794									99,991				
		10/16/2018		71,812									100,031				
		10/23/2018		71,830									100,075				
		10/30/2018		71,848									100,116				
11/7/2018		11/6/2018		71,863	125	41.3	309,813	80,831,411	42.6	319,728	56,151,220		100,159	343	33.1	682,018	129,816,434
		11/13/2018		71,882									100,203				
		11/20/2018		71,899									100,242				
		11/27/2018		71,915									100,282				

**Table 9. Soil Gas and Landfill Gas Removal Volumes
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

Date Flow Recorded	Date Blower Hours Recorded	Date Blower Hours Recorded	Actual Elapsed Blower Hours	Actual Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft³)	Landfill Gas Removal					Soil Gas/Vapor Removal				
								Accum. Volume (ft³)	Flow @ 50% CH4 (scfm)	Monthly Volume @ 50% CH4 (ft³)	Accum. Volume @ 50% CH4 (ft³)	Actual Elapsed Blower Hours	Elapsed Blower Hours	Monthly Blower Hours	Flow (scfm)	Monthly Volume (ft³)	Accum. Volume (ft³)
12/10/2018		12/4/2018		71,933	70	43.9	184,402	81,015,814	43.6	183,296	56,334,516		100,328	169	37.7	382,242	130,198,676
		12/11/2018		71,949									100,366				
		12/18/2018		71,967									100,409				
		12/26/2018		71,989									100,458				
Total Hours				28,979								Total Hours	51,264				
Avg hrs./day				6.10								Avg hrs./day	10.78				
Total Days Operational				4,754													

Table 10. LFG and SVE System Flow Rates
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Date	SVE System				LFG System				
	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Flow @ 50% CH ₄ (scfm)
1/13/2006	4.4	19.6	0.2	94	29.3	21.0	0.1	120	70
3/1/2006	4.0	18.5	1.3	85	30.5	19.7	0.6	87	53
4/3/2006	3.2	18.0	1.7	77	33.8	20.6	1.1	88	59
5/1/2006	2.6	15.2	4.3	81	27.8	19.1	1.1	82	46
6/5/2006	2.9	16.7	2.4	65	32.8	20.5	0.3	83	54
7/13/2006	2.9	16.3	2.8	81	32.1	21.1	0.5	53	34
8/18/2006	2.7	15.8	3.0	81	29.1	20.8	0.5	73	42
9/14/2006	2.8	15.9	3.1	87	32.2	21.8	0.4	62	40
10/19/2006	2.8	16.0	3.3	93	33.3	21.3	0.4	63	42
12/4/2006	3.0	16.1	3.3	93	34.0	21.0	0.7	75	51
1/15/2007	2.8	16.0	3.0	90	33.6	20.0	0.6	49	33
2/23/2007	1.8	10.0	10.0	88	33.2	19.3	1.0	86	57
3/23/2007	3.2	15.6	3.4	84	37.9	25.0	0.0	86	65
5/1/2007	2.8	15.3	3.5	86	34.3	20.1	0.1	58	40
5/17/2007	2.9	14.9	3.6	86	33.7	20.3	0.2	56	38
6/14/2007	2.9	14.9	3.9	84	32.8	21.6	0.4	67	44
7/19/2007	2.9	14.5	3.9	80	36.5	22.2	0.5	N/M	
8/8/2007	2.9	14.4	4.5	87	32.6	20.9	2.7	46	30
9/7/2007	3.0	14.8	4.1	86	34.3	21.3	2.6	42	29
10/26/2007	3.2	15.0	4.0	94	34.5	19.5	4.0	44	30
11/26/2007	3.2	15.6	3.8	92	40.1	19.1	3.6	45	36
12/12/2007	3.3	15.3	3.6	91	41.8	20.0	2.5	85	71
1/30/2008	3.0	14.7	3.9	91	45.4	20.3	0.3	47	43
2/27/2008	2.9	14.7	4.2	91	29.8	18.4	0.9	59	35
3/18/2008	3.4	12.2	4.5	87	32.3	17.2	1.0	43.0	28
3/19/2008	3.5	14.5	3.9	81	46.5	19.4	0.0	39.0	36
8/26/2008	2.4	11.9	6.5	86.0	27.5	20.3	0.7	45.0	25
9/24/2008	2.7	12.6	6.2	90.0	29.0	21.3	0.3	45.0	26
10/29/2008	2.5	12.4	6.6	87.0	39.6	20.5	0.4	35.0	28
11/25/2008	2.8	12.8	6.2	88.0	34.3	19.6	0.2	34.0	23
12/30/2008	2.8	13.0	6.0	89.0	36.9	17.7	0.0	24.0	18
1/28/2009	2.4	12.8	11.4	86.0	39.0	19.5	0.0	31.0	24
2/24/2009	2.7	14.1	4.5	86.0	42.7	19.4	0.0	37.0	32
3/23/2009	2.7	14.4	4.4	87.0	39.8	19.6	0.0	38.0	30
4/20/2009	2.5	12.4	5.4	86.0	32.0	17.6	1.3	37.0	24
5/18/2009	2.0	12.7	5.8	84.0	33.9	18.3	0.6	36.0	24
6/25/2009	2.2	13.3	5.6	84.0	29.4	22.0	0.9	38.0	22
7/16/2009	2.5	14.3	4.4	83.0	31.7	21.5	0.9	41.0	26
8/26/2009	2.0	12.4	5.4	82.0	32.0	21.0	0.2	35.0	22
9/22/2009	3.8	15.2	0.5	67.0	42.0	21.5	0.0	37.0	31
11/23/2009	3.4	14.7	2.5	67.0	29.4	18.4	0.9	38.0	22
12/28/2009	8.9	14.1	3.7	82.0	30.3	17.5	1.8	38.0	23
2/10/2010	8.9	14.1	4.2	49.0	30.9	18.2	0.5	37.0	23
3/26/2010	0.0	8.1	3.8	53.0	4.0	8.9	1.6	39.0	3
5/21/2010	16.2	17.4	0.2	62.0	4.6	3.5	15.4	6.0	1
6/28/2010	12.8	17.7	0.9	21.0	24.0	18.7	0.6	36.0	17
8/11/2010	14.1	16.1	2.2	28.0	30.3	19.2	0.4	39.0	24
9/23/2010	4.5	22.7	3.0	72.0	36.8	35.6	0.0	35.0	26
11/18/2010	2.1	16.0	4.6	69.0	46.6	24.2	0.0	36.0	34

Table 10. LFG and SVE System Flow Rates
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

Date	SVE System				LFG System				
	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Flow @ 50% CH ₄ (scfm)
12/22/2010	2.0	12.8	6.1	81.0	56.7	24.0	0.5	36.0	41
2/9/2011	1.5	13.5	7.6	102.0	43.1	16.8	0.7	55.0	47
3/10/2011	1.8	11.7	7.9	92.0	39.0	16.8	2.5	55.0	43
5/4/2011	3.6	13.5	5.8	86.0	45.3	19.2	1.3	56.0	51
8/4/2011	5.2	14.6	4.2	84.0	46.6	24.5	0.1	57.0	53
9/20/2011	4.3	12.5	6.3	99.0	31.6	17.1	5.2	67.0	42
11/3/2011	2.3	14.4	4.5	62.0	30.5	18.4	0.0	54.0	33
12/29/2011	5.6	13.6	4.0	78.0	36.8	18.4	0.7	54.0	40
2/7/2012	5.4	12.3	3.4	51.0	34.1	17.0	0.5	55.0	38
3/28/2012	35.7	14.9	1.2	51.0	0.3	4.0	20.4	51.0	0
5/9/2012	30.4	17.0	0.0	51.0	3.2	13.6	2.9	46.0	3
6/27/2012	1.0	14.4	4.0	37.0	30.3	18.5	0.1	81.0	49
8/9/2012	4.1	14.1	4.2	52.0	31.7	19.4	1.4	74.0	47
9/26/2012	2.9	9.2	10.1	54.0	31.9	18.3	4.2	40.0	26
11/8/2012	1.5	7.8	11.9	69.0	36.2	20.8	0.9	45.0	33
12/20/2012	2.8	11.9	7.9	67.0	37.8	20.1	1.0	84.0	64
1/30/2013	2.9	11.9	6.8	14.0	32.0	17.4	1.7	21.0	13
3/21/2013	2.5	12.3	7.3	17.0	29.0	18.3	1.2	26.0	15
4/30/2013	2.9	12.1	7.1	14.0	30.4	17.6	1.4	24.0	15
6/18/2013	2.7	11.5	6.9	17.0	36.0	19.3	0.9	27.0	19
8/1/2013	2.4	10.5	8.7	15.0	30.6	18.2	3.6	15.0	9
9/19/2013	1.9	8.2	11.6	15.0	39.8	22.3	0.3	20.0	16
10/29/2013	1.9	8.0	11.4	9.0	27.7	15.7	5.3	34.0	19
12/17/2013	2.3	10.1	9.5	12.0	29.8	16.0	4.0	39.0	23
2/13/2014	19.8	14.4	5.3	16.0	29.3	16.1	1.0	32.0	19
5/7/2014	N/M	N/M	N/M	N/M	33.9	17.7	1.3	54.0	37
6/18/2014	N/M	N/M	N/M	N/M	37.8	19.2	0.0	46.0	35
8/5/2014	N/M	N/M	N/M	N/M	32.5	19.3	1.7	41.4	27
9/16/2014	N/M	N/M	N/M	N/M	36.3	20.4	1.5	43.8	32
10/29/2014	N/M	N/M	N/M	N/M	33.4	19.2	1.7	41.3	28
12/16/2014	N/M	N/M	N/M	N/M	36.9	18.7	1.1	41.0	30
2/3/2015	N/M	N/M	N/M	N/M	30.2	17.2	1.6	41.2	25
3/18/2015	0.1	0.5	21.1	21.4	27.1	16.5	1.6	45.5	25
4/29/2015	9.4	10.1	8.5	13.4	27.4	17.1	0.9	44.0	24
6/16/2015	0.0	0.3	20.2	17.6	28.6	18.7	1.3	41.9	24
8/4/2015	0.1	0.6	19.8	0.0	23.3	16.9	3.1	43.9	20
9/15/2015	4.1	3.7	17.3	16.7	25.2	15.2	6.8	42.3	21
10/28/2015	0.0	0.5	20.3	19.1	29.2	19.2	0.5	38.7	23
12/10/2015	0.0	0.2	21.0	5.3	31.6	15.9	3.5	40.4	26
2/3/2016	0.0	0.6	20.5	0.0	24.6	14.1	3.8	0.0	0
3/23/2016	11.1	15.7	1.3	0.0	26.9	16.8	0.7	0.0	0
5/12/2016	24.5	15.9	1.4	18.0	22.2	13.5	2.9	50.0	22
7/25/2016	21.1	16.3	0.1	0.0	46.0	21.5	0.0	51.0	47
11/18/2016	1.4	15.0	0.9	33.0	50.7	21.2	0.2	50.0	51
12/20/2016	0.8	12.3	4.3	29.0	48.1	19.9	0.0	50.0	48
2/1/2017	13.8	12.4	1.7	19.6	45.4	17.8	2.2	32.0	29
5/4/2017	2.8	13.7	0.9	20.1	47.6	17.6	0.3	38.8	37
6/14/2017	3.6	12.5	3.8	20.4	48.3	18.1	1.1	39.3	38
8/2/2017	4.3	12.5	2.6	21.0	49.2	18.7	1.6	35.7	35

Table 10. LFG and SVE System Flow Rates
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Coupeville Solid Waste Facility, Island County, Washington

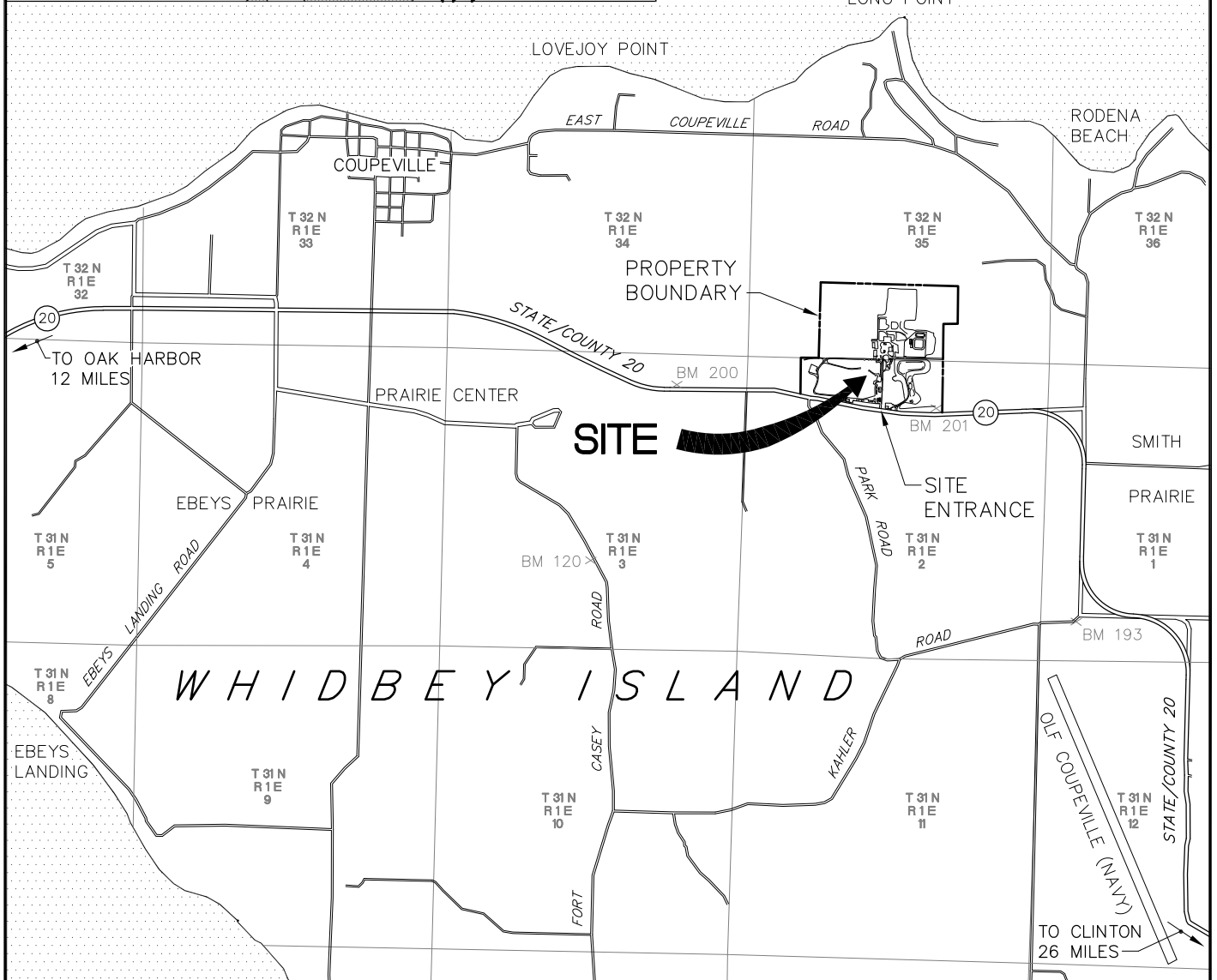
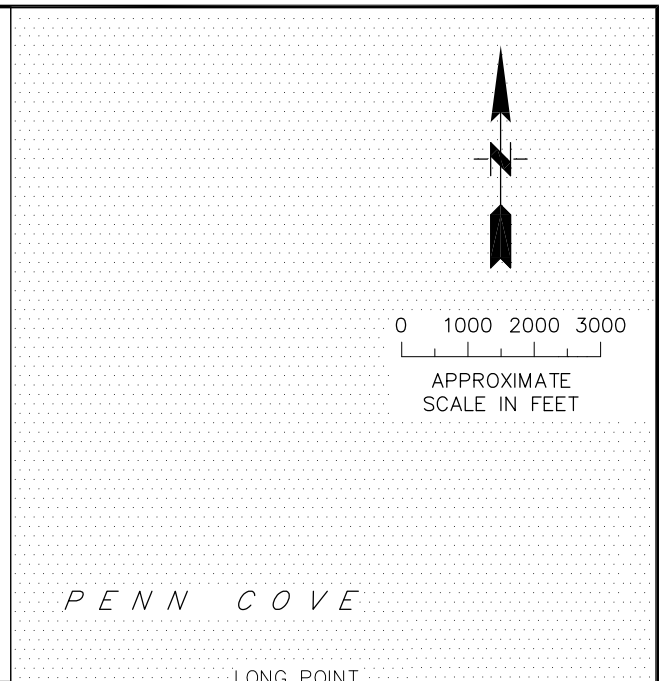
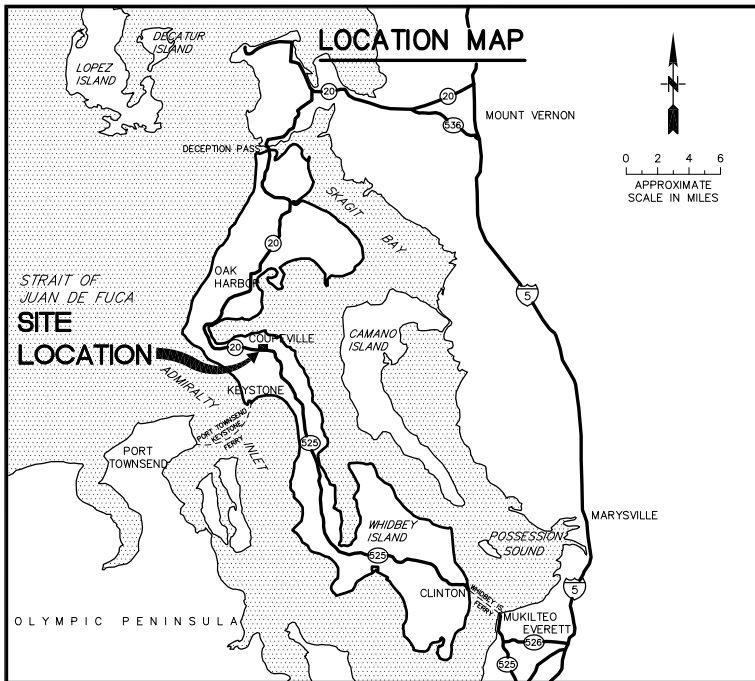
Date	SVE System				LFG System				
	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Methane (% vol.)	Carbon Dioxide (% vol.)	Oxygen (% vol.)	Flow (scfm)	Flow @ 50% CH ₄ (scfm)
9/27/2017	0.9	3.6	15.8	18.9	49.4	20.3	1.9	30.3	30
11/8/2017	0.0	1.8	20.1	21.2	48.6	21.3	0.1	36.2	35.2
12/15/2017	2.7	14.9	1.2	21.6	49.5	20.7	0.1	31.1	30.8
2/8/2018	3.3	14.6	1.1	23.5	54.1	18.1	0.0	39.0	42
3/28/2018	2.8	14.1	2.9	25.4	49.4	18.4	0.0	41.3	41
5/16/2018	0.6	6.8	10.7	30.2	56.6	17.6	0.3	41.2	47
7/5/2018	3.3	14.2	1.1	29.8	54.5	19.8	0.1	42.9	47
8/20/2018	4.1	13.3	2.4	30.0	51.7	21.6	0.6	40.9	42
9/17/2018	2.5	11.8	3.2	30.2	53.8	21.1	0.8	48.5	52
11/7/2018	3.3	14.1	1.9	33.1	51.6	19.9	0.5	41.3	43
12/10/2018	1.7	12.3	3.3	37.7	49.7	18.0	0.0	43.9	44

N/M - Not measured



Figures





SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (425) 746-6747	PROJECT NO. 04207033.11	DES BY L.L.	SITE LOCATION MAP ANNUAL ENVIRONMENTAL MONITORING DATA REPORT ISLAND COUNTY COUPEVILLE SOLID WASTE FACILITY COUPEVILLE, WASHINGTON	DATE JANUARY 2019 FIGURE 1
	SCALE AS SHOWN	CHK BY G.H.		
	CAD FILE FIGURE 1	APP BY D.V.		

NOTES:
THE SITE TOPOGRAPHIC BASE MAP WAS CREATED BY AERIAL PHOTOGRAMMETRY. BASE MAP PREPARED BY OTHERS. DATE OF PHOTOGRAPH 12-OCT-02.

HORIZONTAL DATUM
HORIZONTAL CONTROL IS BASED ON ASSUMED COORDINATE SYSTEM WITH POINT OF BEGINNING AT USGS BENCH MARK (BM 000).

VERTICAL DATUM
VERTICAL CONTROL IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM.

LEGEND

Groundwater Monitoring Well

Pumping Well

Location of Sump

E2D

Well Location Sampled during Each Quartely Event

E2D

Well Location only Sampled during Q2 and Q4 Events

N4S

Well Location Not Sampled during 2018

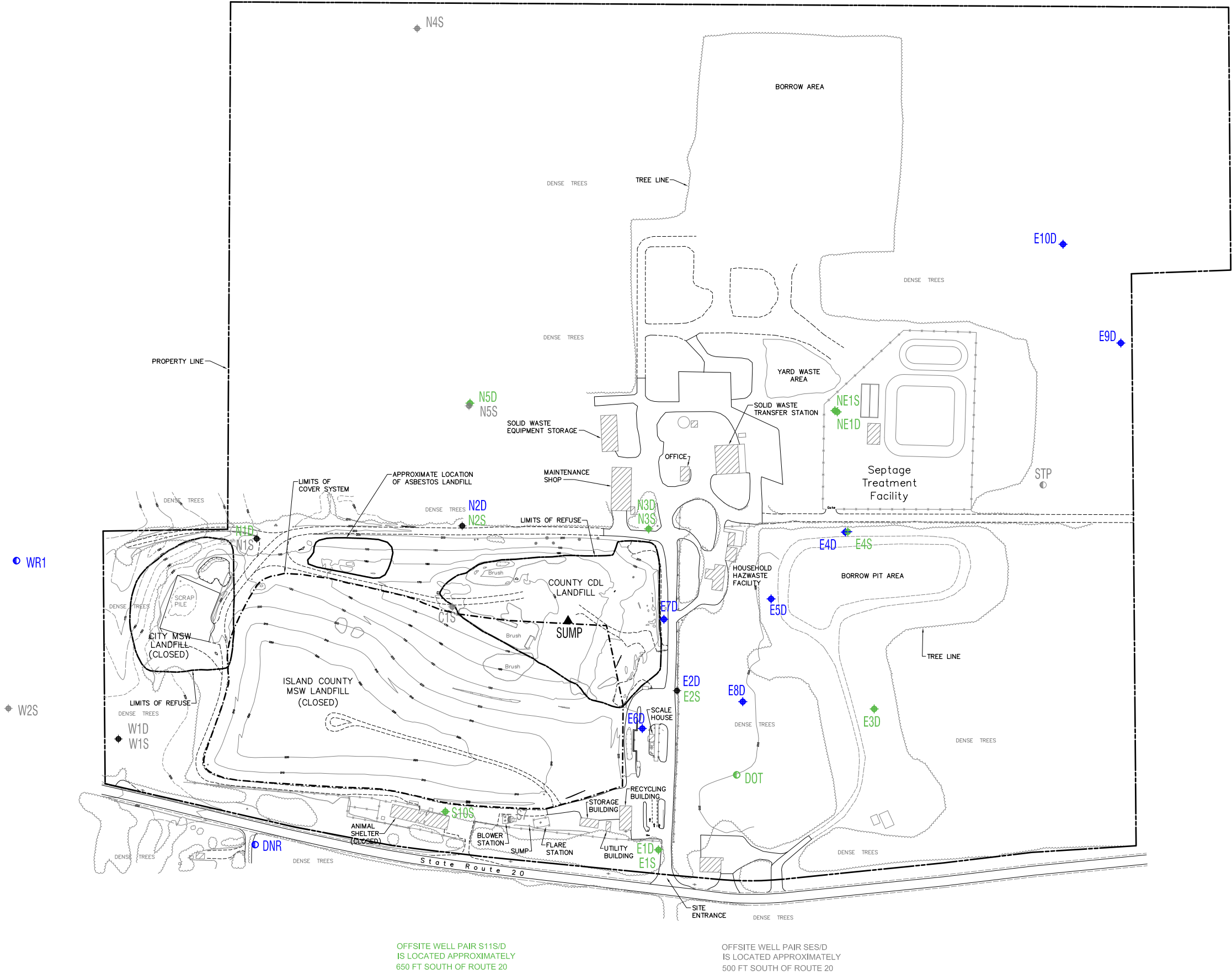
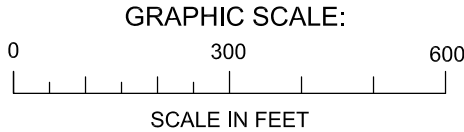


Figure 3. Groundwater Elevation Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

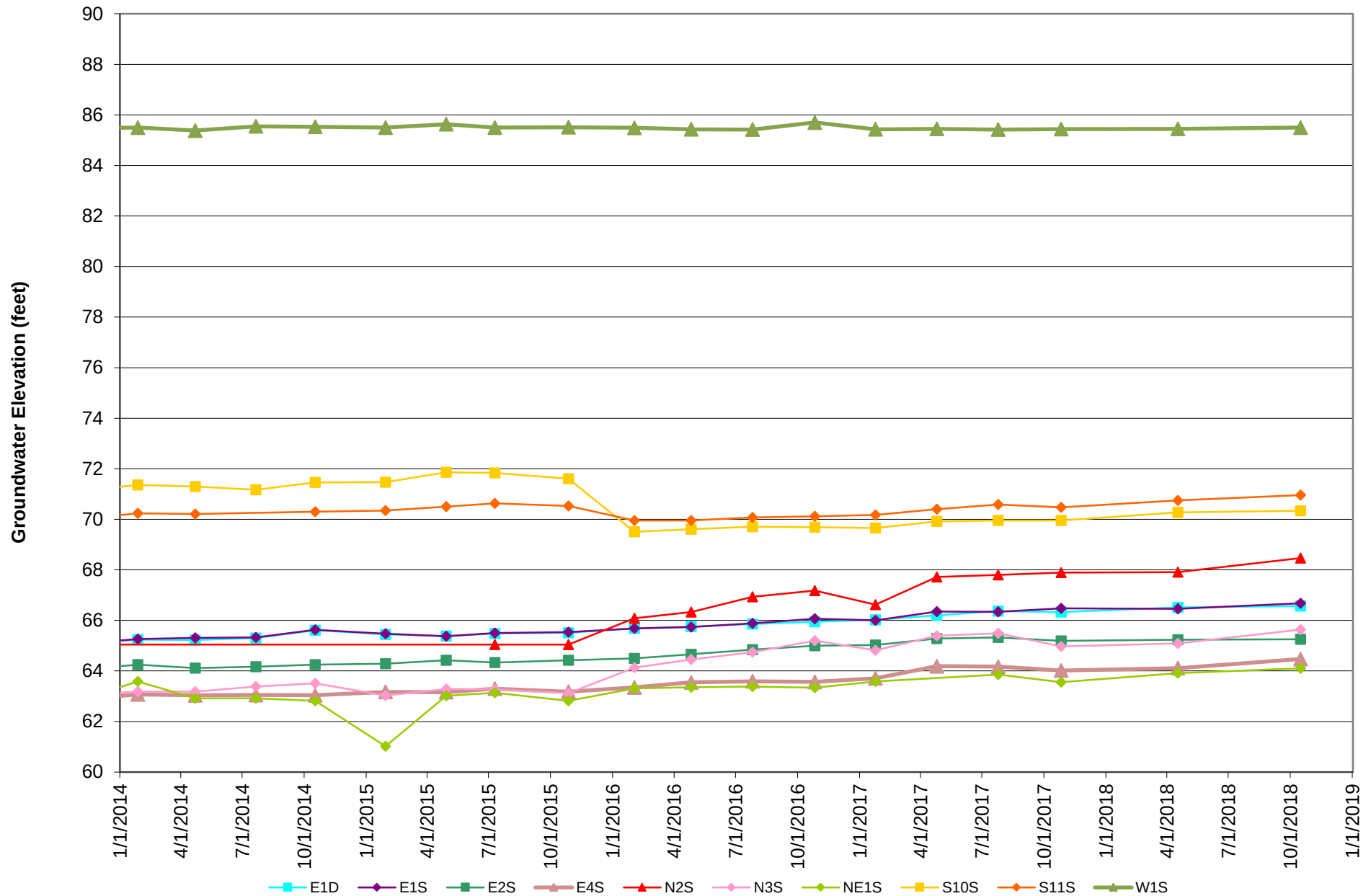
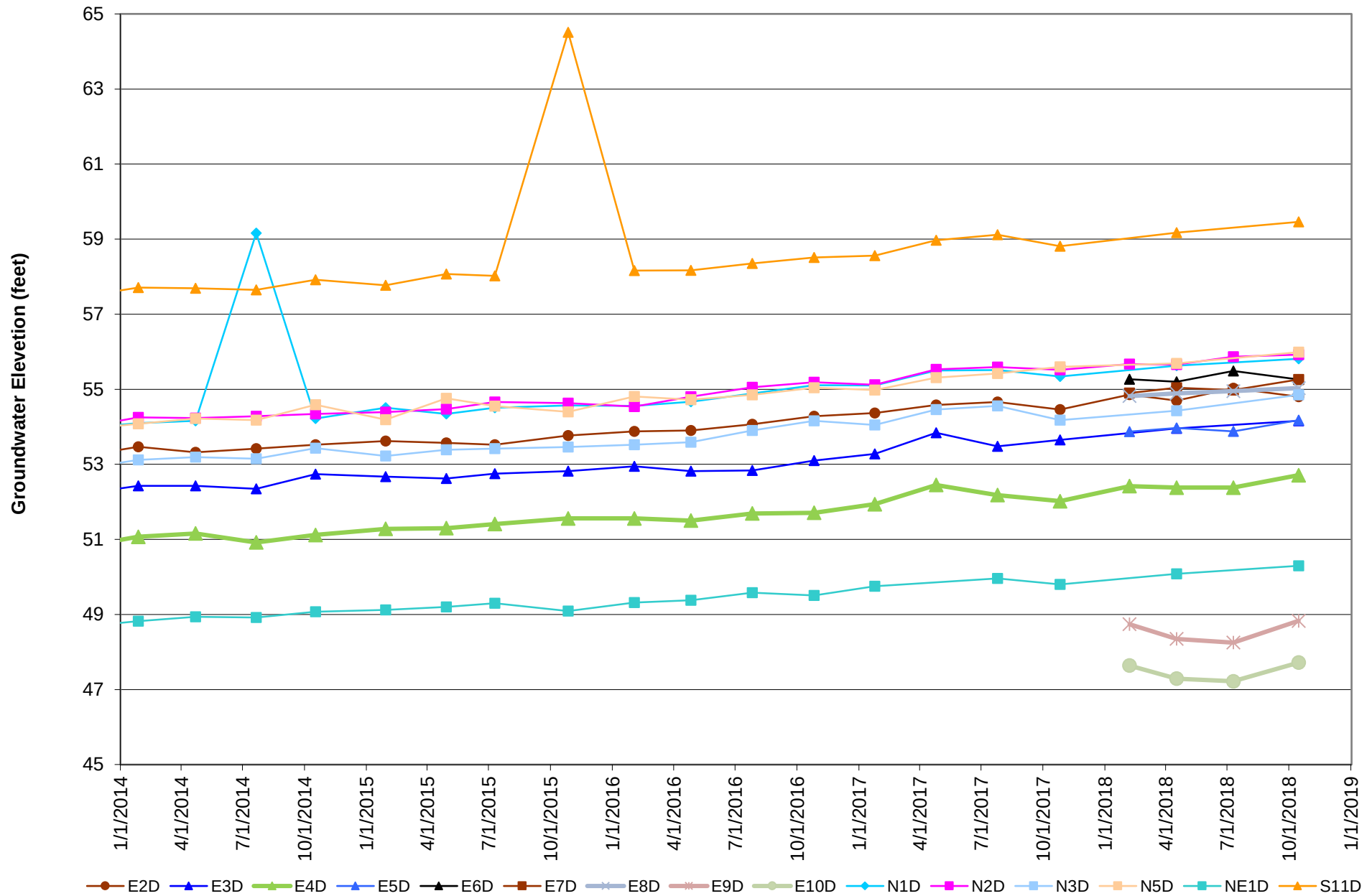
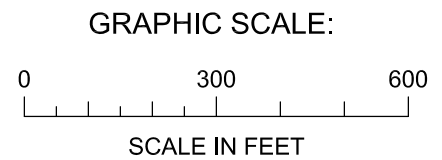
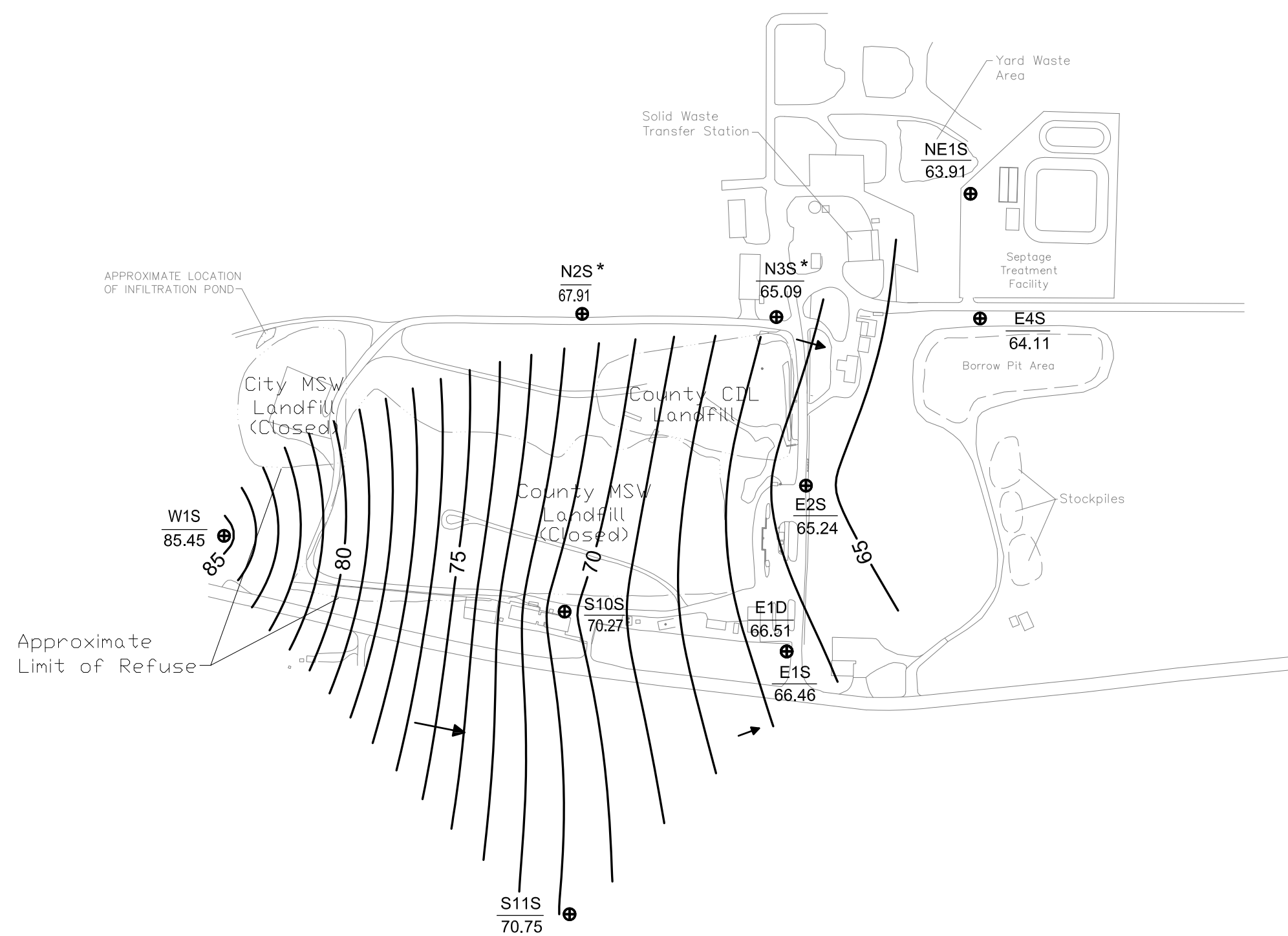


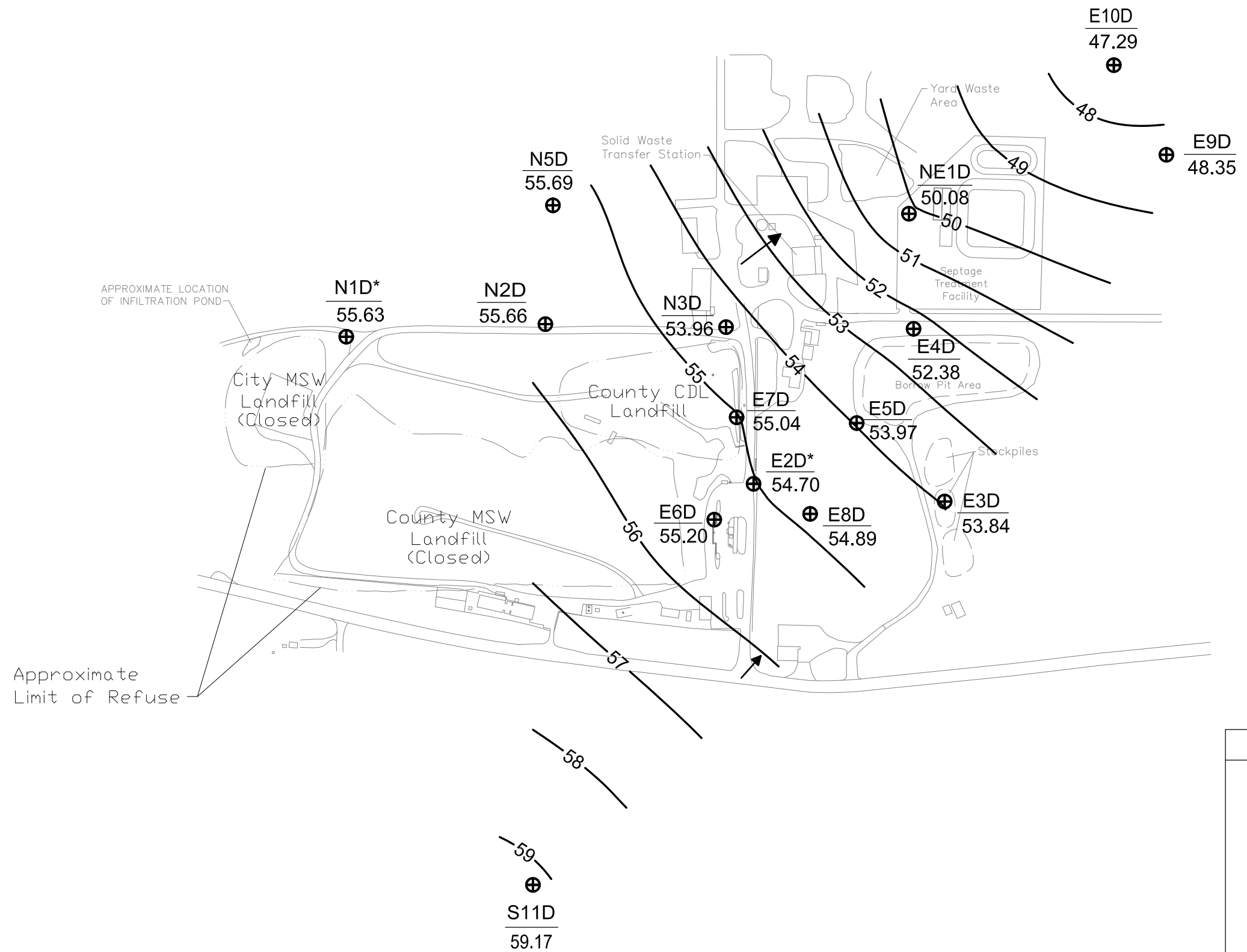
Figure 4. Groundwater Elevation Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington





Notes: Water Levels at N2S and N3S were not used to make contours because they are thought to be in a perched aquifer.

LEGEND	
$\frac{E2S}{65.24}$	Well Name Groundwater Elevation
$\oplus$	Groundwater Monitoring Well
$\leftarrow$	Groundwater Flow Direction
*	Not used in contouring
NM	Not Measured



APPROXIMATE LOCATION
OF INFILTRATION POND

City MSW
Landfill
(Closed)

County CDL
Landfill

County MSW
Landfill
(Closed)

Solid Waste
Transfer Station

Yard Waste
Area

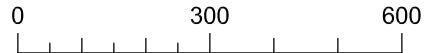
Septage
Treatment
Facility

Borrow Pit Area

Stockpiles

Approximate
Limit of Refuse

GRAPHIC SCALE:



SCALE IN FEET

Notes: Water Levels at N1D were not
used to make contours.

LEGEND	
<u>E3D</u> 53.84	Well Name Groundwater Elevation
⊕	Groundwater Monitoring Well
←	Groundwater Flow Direction
*	Not used in contouring
NM	Not Measured

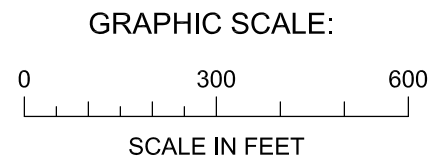
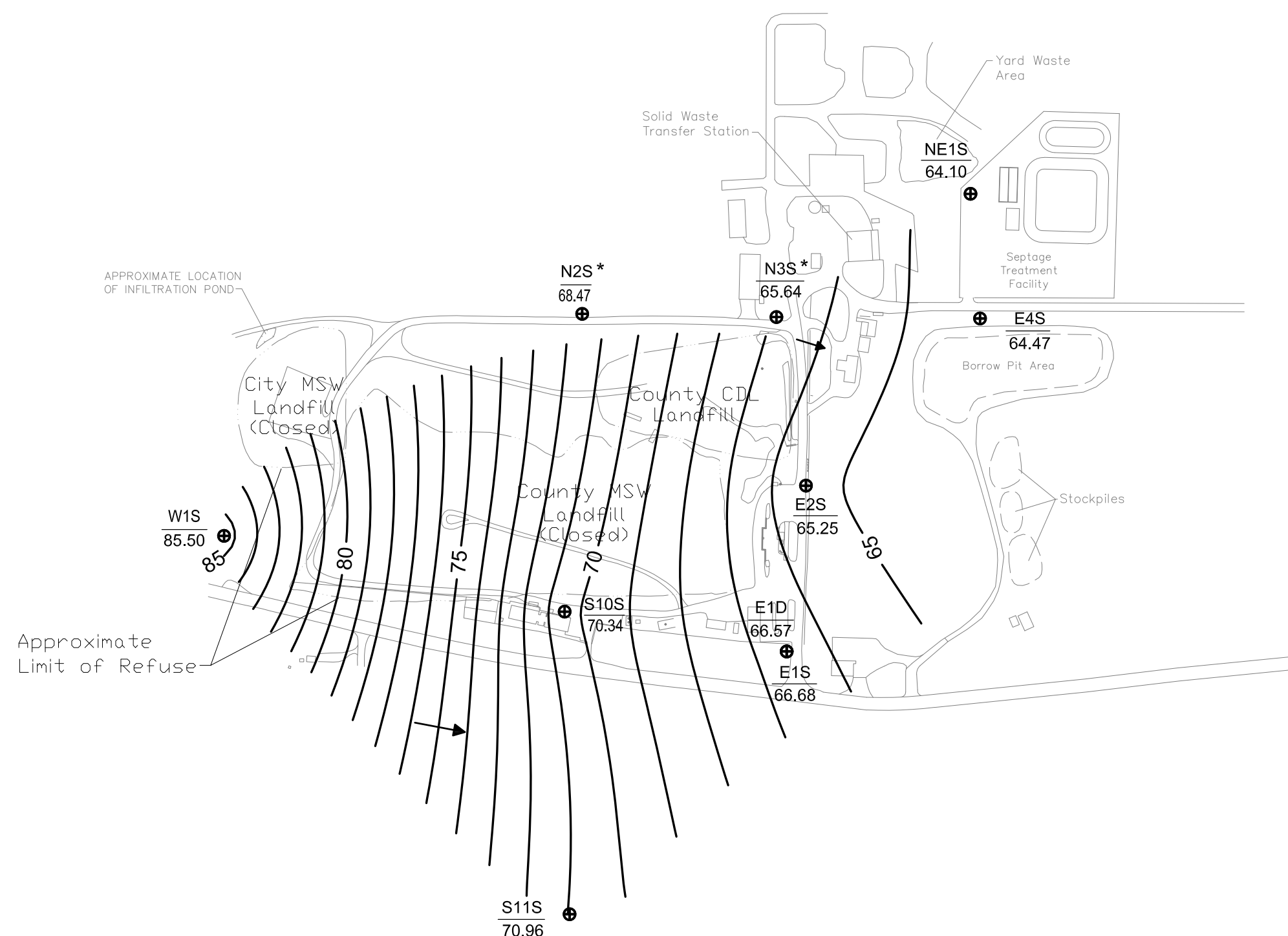
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

2018 ANNUAL ENVIRONMENTAL
MONITORING DATA REPORT
ISLAND COUNTY COUPEVILLE SOLID WASTE FACILITY
COUPEVILLE, WASHINGTON

PROJECT NO.	04207033.11	DES BY	S.G.
SCALE	1" = 300'	CHK BY	D.V.
CAD FILE	Figure 5B	APP BY	G.H.

APRIL 2018
AQUIFER 2 GROUNDWATER ELEVATION MAP

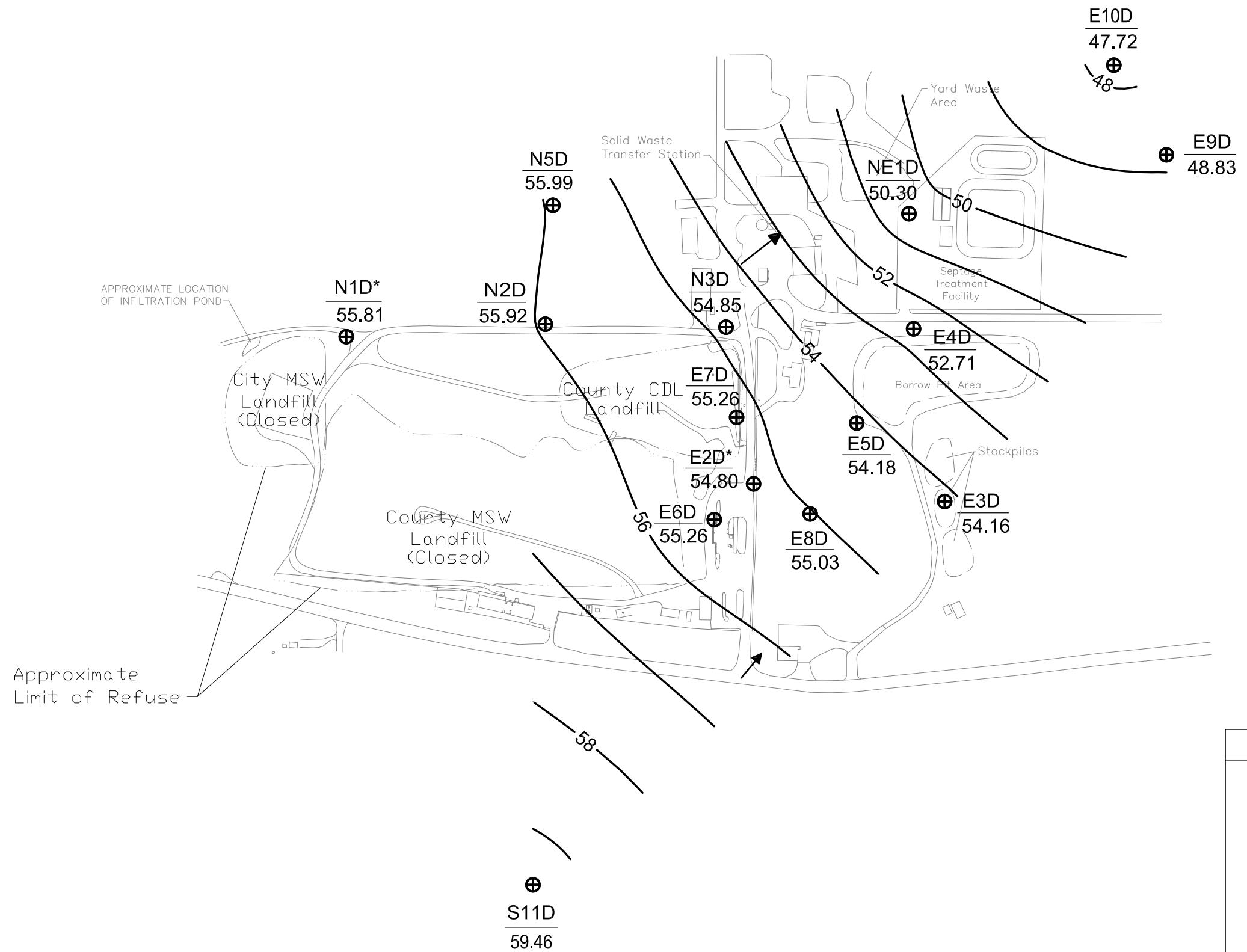
DATE
JANUARY 2019
FIGURE
5B



Notes: Water Levels at N2S and N3S were not used to make contours because they are thought to be in a perched aquifer.

LEGEND	
$\frac{E2S}{65.25}$	Well Name Groundwater Elevation
$\oplus$	Groundwater Monitoring Well
$\leftarrow$	Groundwater Flow Direction
*	Not used in contouring
NM	Not Measured

SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (425) 746-6747	2018 ANNUAL ENVIRONMENTAL MONITORING DATA REPORT ISLAND COUNTY COUPEVILLE SOLID WASTE FACILITY COUPEVILLE, WASHINGTON	PROJECT NO. 04207033.11		DES BY S.G.	OCTOBER 2018 AQUIFER 1 GROUNDWATER ELEVATION MAP	DATE JANUARY 2019
		SCALE 1" = 300'	CHK BY D.V.			
		CAD FILE Figure 6A	APP BY G.H.			



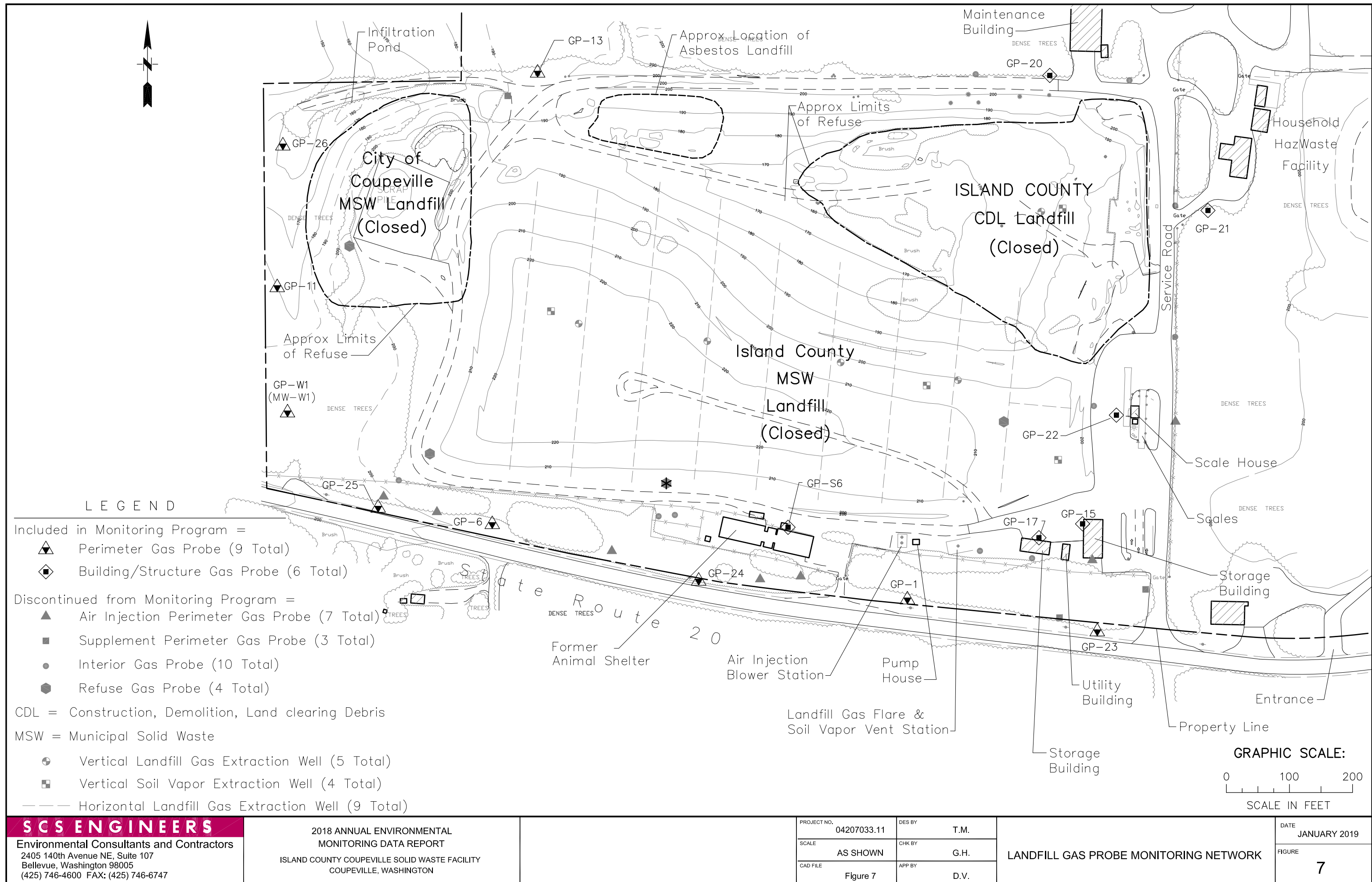
GRAPHIC SCALE:

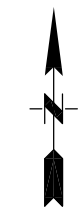


SCALE IN FEET

Notes: Water Levels at N1D and E2D were not used to make contours.

LEGEND	
$\frac{E3D}{54.16}$	Well Name Groundwater Elevation
$\oplus$	Groundwater Monitoring Well
$\leftarrow$	Groundwater Flow Direction
*	Not used in contouring
NM	Not Measured





Approx Limits of Refuse

Infiltration Pond

GP-13

Approx Limits of Refuse

Maintenance Building

GP-20

Household HazWaste Facility

VGW-7 (NS)

VGW-8

GP-21

GP-11

VGW-1 (NS)

VGW-2

Gas Conveyance Header

VGW-3

HGW-1

HGW-2

HGW-3

HGW-4

HGW-5

VGW-4

VGW-5 (NS)

VGW-6

GP-29

Vertical Gas Extraction Well (Typical 5 Places)

GP-W1 (MW-N1)

Air Injection Blower Station

Scales

Scale House

VGW-9 (NS)

Storage Building

State Route 20

GP-24

Former Animal Shelter

Pump House

Landfill Gas Flare & Soil Vapor Vent Station

Sediment Trap

Utility Building

Storage Building

Property Line

GRAPHIC SCALE:

0 100 200

SCALE IN FEET

LEGEND

- VGW-# (NS) Vertical Soil Vapor Extraction Well (in Native Soil)
- VGW-# Vertical Landfill Gas Extraction Well (in Refuse)
- HGW-# Horizontal Landfill Gas Extraction Well Head (in Refuse)
- Air Injection Well/Well Head (Discontinued)
- ▲ Gas Probe
- Above Ground PVC Pipe (Solid)
- - - Buried CPE Pipe (Perforated)
- - - Buried PVC or HDPE Pipe (Solid)

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COUPEVILLE, WASHINGTON

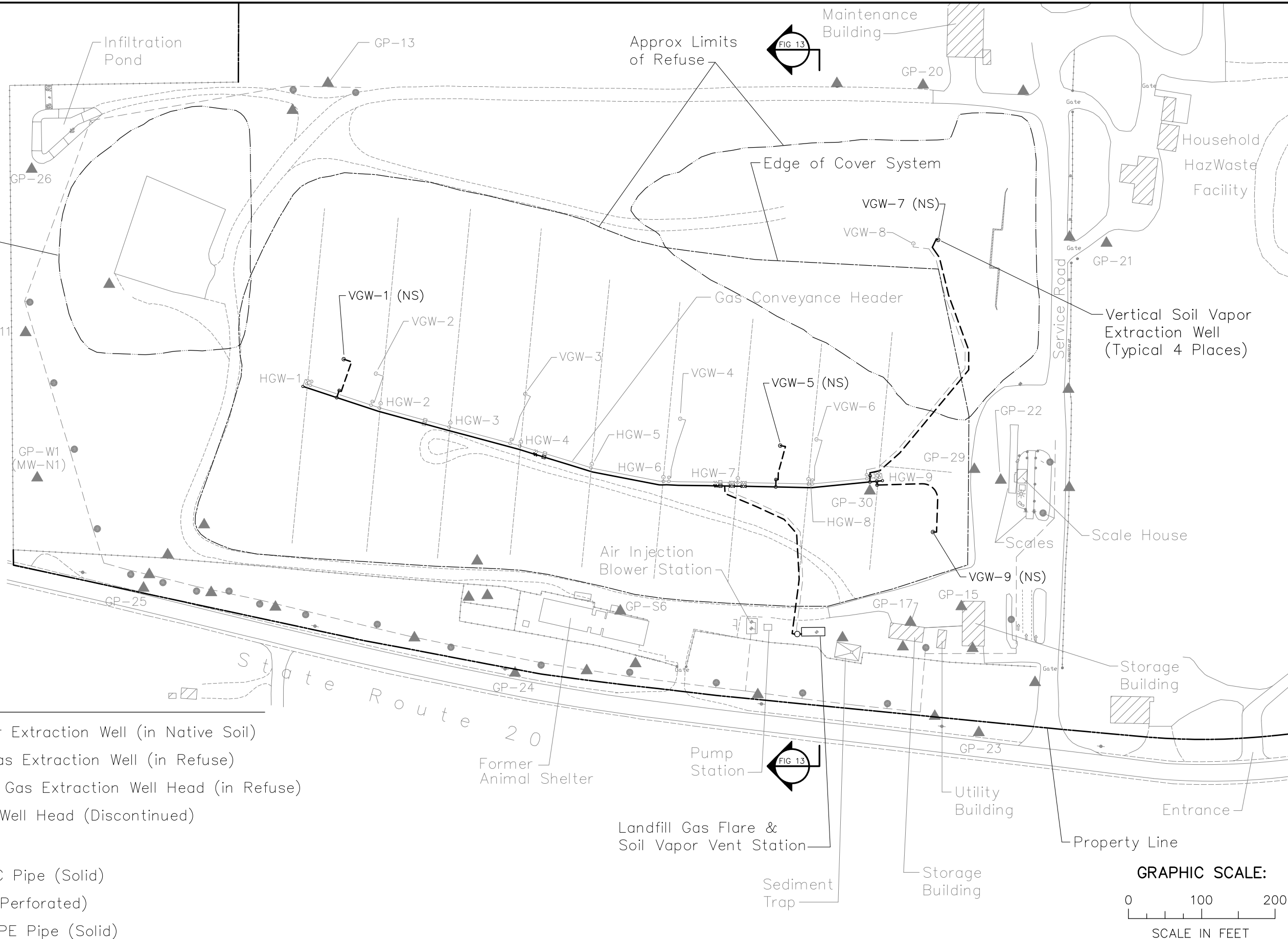
PROJECT NO.	04207033.11	DES BY	T.M.
SCALE	AS SHOWN	CHK BY	G.H.
CAD FILE	Figure 8	APP BY	D.V.

LANDFILL GAS EXTRACTION SYSTEM

DATE	JANUARY 2019
FIGURE	8



Approx Limits
of Refuse



LEGEND

- VGW-# (NS) Vertical Soil Vapor Extraction Well (in Native Soil)
- VGW-# Vertical Landfill Gas Extraction Well (in Refuse)
- HGW-# Horizontal Landfill Gas Extraction Well Head (in Refuse)
- Air Injection Well/Well Head (Discontinued)
- Gas Probe
- Above Ground PVC Pipe (Solid)
- Buried CPE Pipe (Perforated)
- Buried PVC or HDPE Pipe (Solid)

GRAPHIC SCALE:

0 100 200

SCALE IN FEET

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2018 ANNUAL ENVIRONMENTAL
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ISLAND COUNTY COUPEVILLE SOLID WASTE FACILITY
COUPEVILLE, WASHINGTON

PROJECT NO.	04207033.11	DES BY	T.M.
SCALE	AS SHOWN	CHK BY	G.H.
CAD FILE	Figure 9	APP BY	D.V.

SOIL VAPOR EXTRACTION SYSTEM

DATE
JANUARY 2019
FIGURE
9

- L E G E N D
- GP-1 = GAS PROBE
 - AIW-18 = AIR INJECTION WELL
 - GEW-9 = GAS EXTRACTION WELL
 - MW-S105 = GROUNDWATER MONITORING WELL

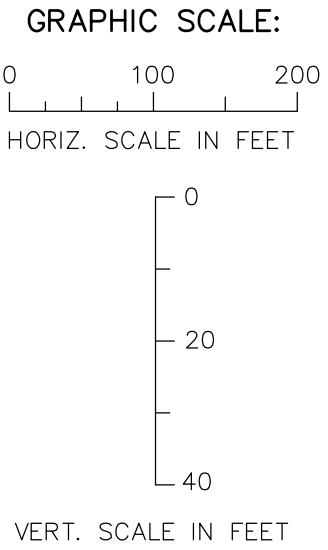
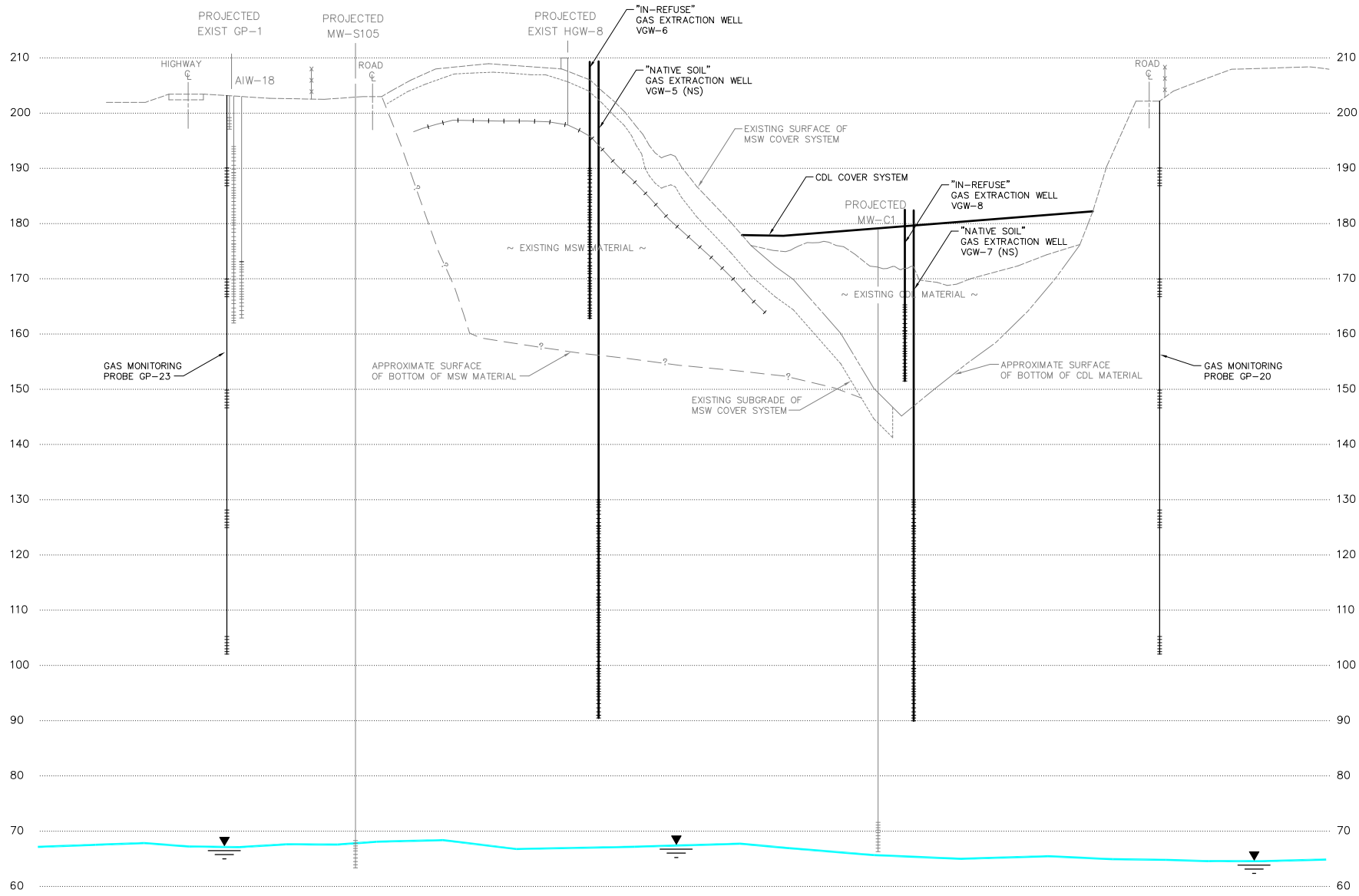
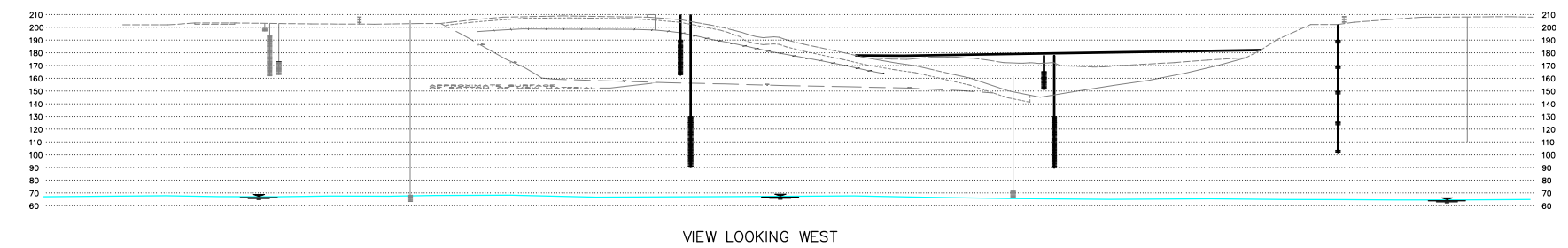


**Figure 11. Water Removed from Stormwater Pump Station
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**

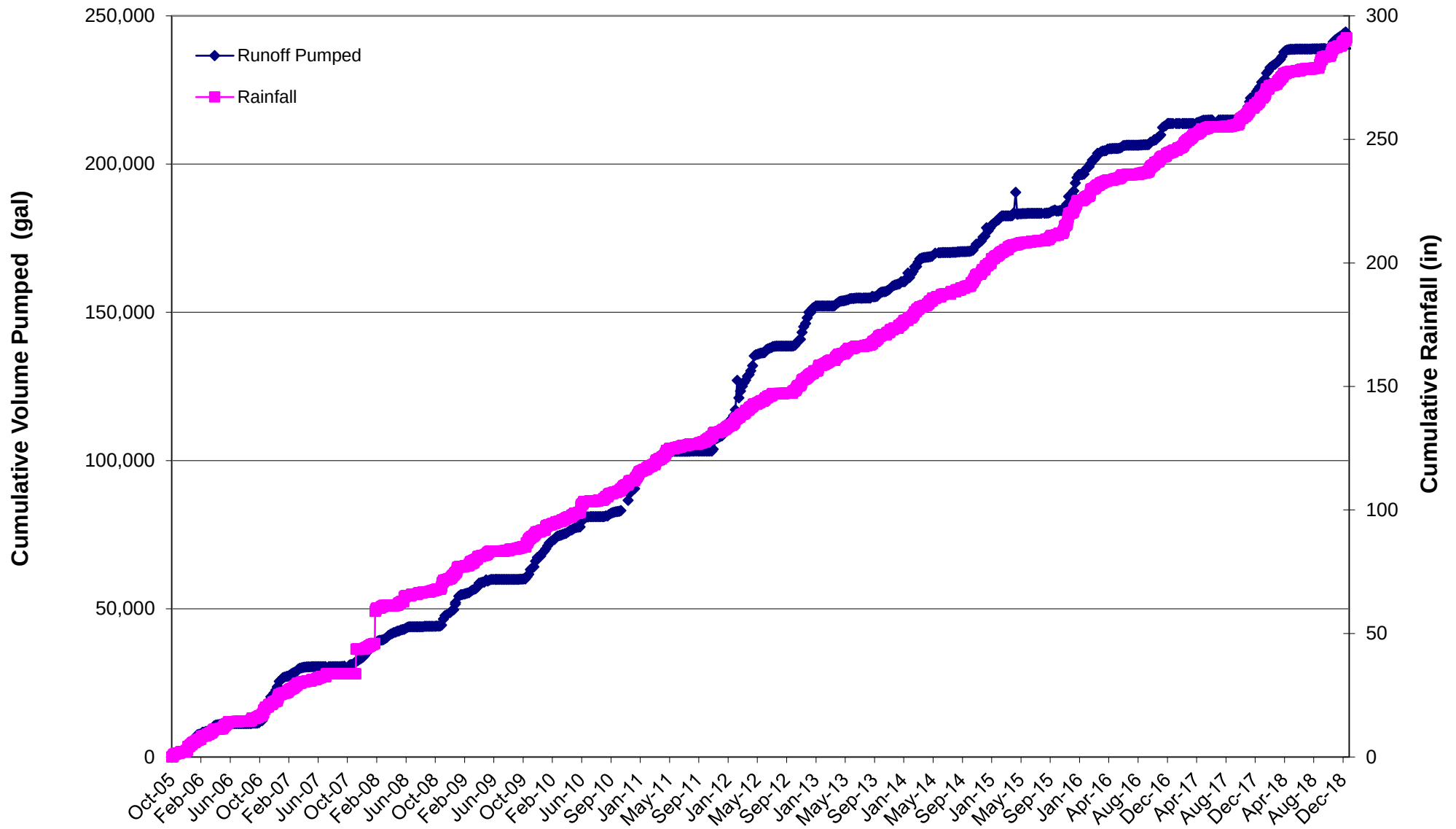
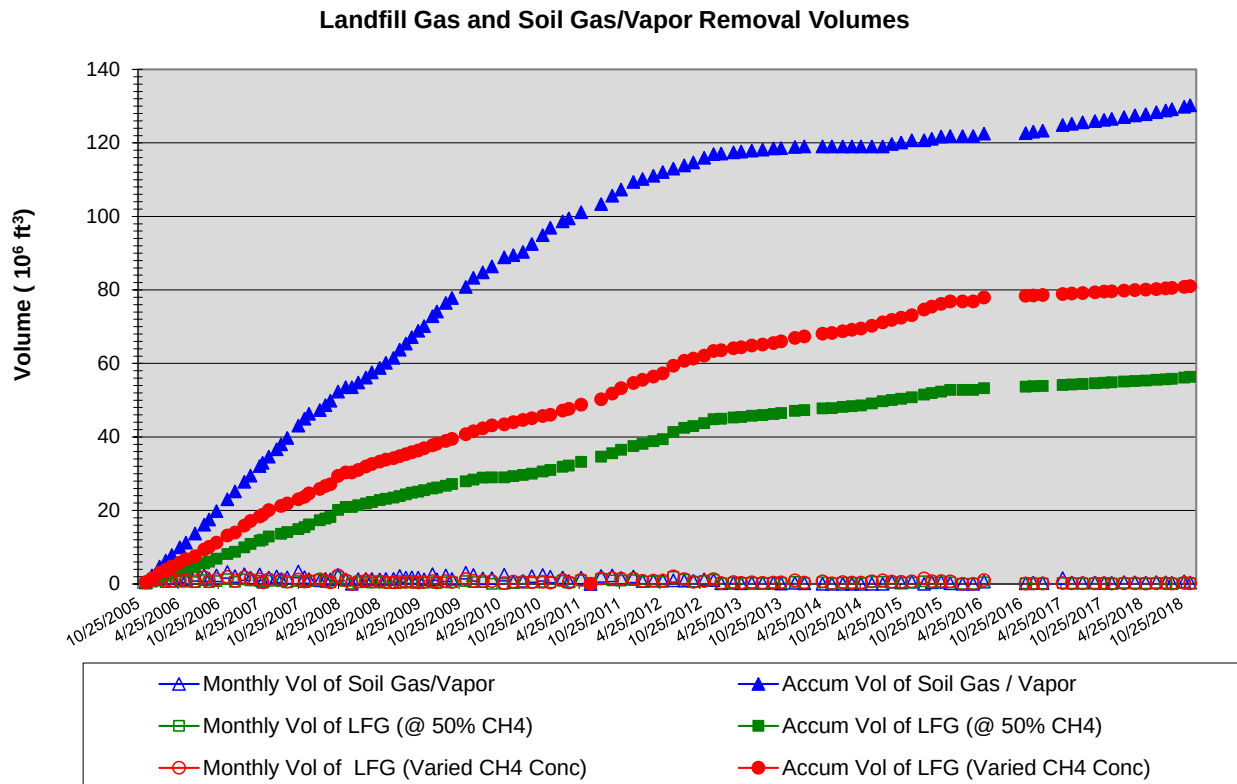
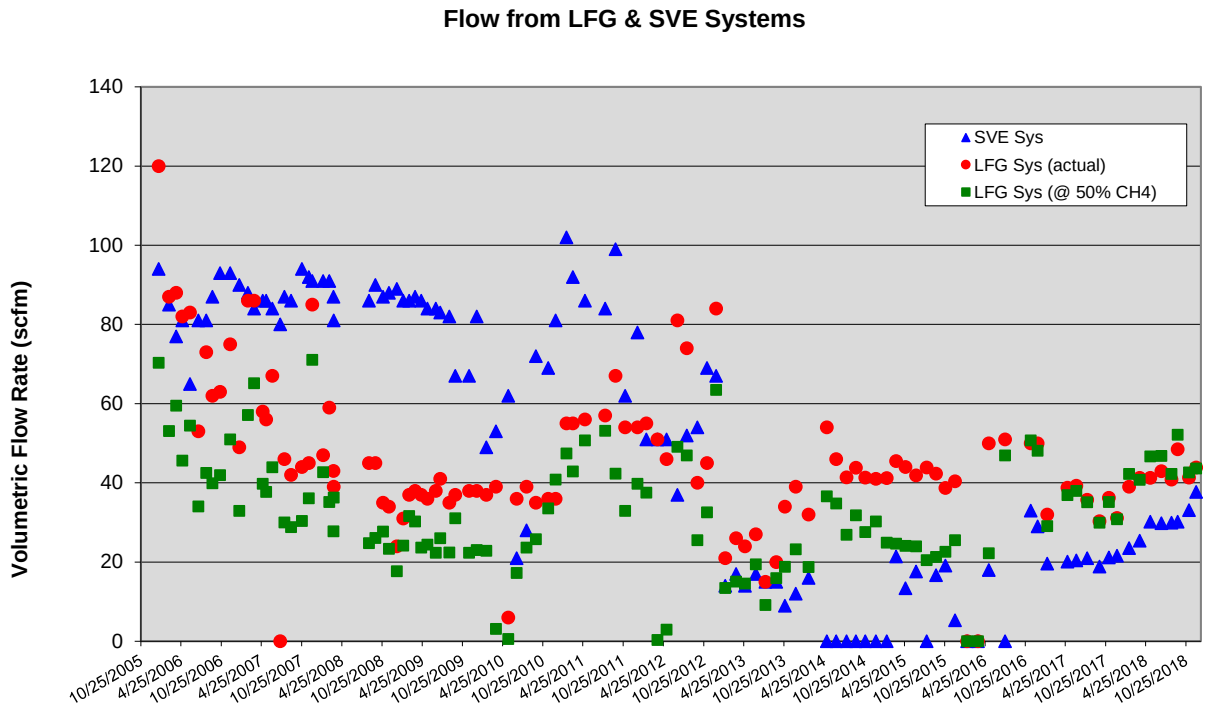


**Figure 12. Flow Rates and Removal Volumes for LFG and SVE Systems
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington**





Appendix A

2018 Field Documentation



SCS ENGINEERS

February 8, 2018

File No. 04207033.11

**Subject: First Quarter 2018 Groundwater Monitoring Event
Coupeville Solid Waste Facility, Island County, Washington**

Sampling Dates: February 6 & 7

Personnel: Sam Graber

NOTES/SAMPLING DECODING:

- This was the first sampling event under the new monitoring plan.
- A Duplicate sample was taken at monitoring well N2D.
- Meters were calibrated daily prior to sampling.

Date Sampled	Sample Number	Well Number
2/6/18	020618-01	N2D
2/6/18	020618-02	N2D Duplicate
2/6/18	020618-03	E5D
2/6/18	020618-04	E6D
2/6/18	020618-05	E4D
2/6/18	020618-06	E7D
2/6/18	020618-07	E2D
2/7/18	020718-08	E10D
2/7/18	020718-09	E9D
2/7/18	020718-10	E8D
2/7/18	020718-11	DNR
2/7/18	020718-12	WR1

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island County	Meter: <u>MP-20</u>	CONTROL SETTINGS:		1 ft water = 0.62L 1L = 0.24 gallons		
Well ID: <u>N2D</u>	DTW: <u>147.81</u>	Refill: <u>12</u>	One Well Volume (liters):	Other: _____		
Sample ID: <u>020618-01</u>	TOS: _____	Discharge: <u>8</u>	Total Volume Bailed (liters):	Flow Setting: _____		
Date: <u>2/6/2018</u>	Intake: _____	Pressure: <u>90</u>				
Weather: <u>cloudy</u>	BOS: _____	Flow: <u>300</u>				
Filtered? <u>Y</u> N	Total Depth: _____					
Locked? <u>Y</u> N	Water in Protector? <u>Y</u> N	Damage? <u>Y</u> N				
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1020		12.40	1248	4.00	6.68	162.5		
1025		12.38	1249	2.81	6.86	153.6		
1028		12.37	1250	2.04	7.02	146.8		
1031		12.37	1255	1.79	7.04	143.1		
1034		12.37	1256	1.54	7.05	140.2		
1037		12.34	1257	1.34	7.06	137.8		
1040		12.36	1258	1.20	7.06	135.5	1.80	

Notes / Observations (color, odor, anomalies, etc):

Dup taken at 020618-02
@ 1100

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER:

Printed Name

Sam Graber

Signature

[Signature]

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island County		144.69	DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons
Well ID: <u>E5D</u>		TOS	MP-20	Refill <u>9</u>	One Well Volume	Other:	
Sample ID: <u>020618-03</u>		Intake	<u>YSI</u>	Discharge <u>11</u>	(liters)	Flow	
Date: <u>21 6 12018</u>		BOS	Pressure <u>100</u>	Total Volume Bailed	Setting:		
Weather: <u>cloudy</u>		Total Depth	Flow <u>75 mL/min</u>	(liters)			
Filtered? <u>Y</u> <u>N</u>	Locked? <u>Y</u> <u>N</u>	Water in Protector? <u>Y</u> <u>N</u>	Damage? <u>Y</u> <u>N</u>				
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly			
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber			
	125 ml NaOH						

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1140		10.63	549	8.29	7.65	101.2		
1145		11.31	1136	5.13	7.45	102.3		
1148		11.20	1141	3.32	7.52	19.6		
1151		11.19	1150	2.66	7.57	-23.5		
1154		11.14	1168	2.04	7.61	-63.8		
1157		11.14	1185	1.85	7.62	-74.8		
1200		11.14	1194	1.68	7.63	-85.6	3.10	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER:

Printed Name

Sam Graber

Signature

[Signature]

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site:	Island County		Meter:	CONTROL SETTINGS:			1 ft water = 0.62L	1L = 0.24 gallons	
Well ID:	ESD E6D		MP-20	Refill	16 9	One Well Volume	Other:		
Sample ID:	020618-04		YSI	Discharge	16 11	(liters)	Flow		
Date:	2/6/2018			Pressure	100	Total Volume Bailed	Setting:		
Weather:	rainy		Flow	910 mL/min	(liters)				
Filtered?	Y N	Locked?	Y N	Water in Protector?	Y N	Damage?	Y N		
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1305		12.47	681	4.30	7.94	60.5		
1310		13.56	683	1.55	7.92	-42.7		
1313		13.54	683	1.30	7.40	-101.2		
1316		13.53	683	1.15	7.89	-105.6		
1319		13.52	683	1.03	7.88	-113.4		
1322		13.57	683	0.99	7.88	-117.7		
1325		13.56	684	0.40	7.88	-120.3	2.24	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Guber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: Island County			DTW	Meter:	CONTROL SETTINGS:				
Well ID: E4D			TOS	MP-20	1 ft water = 0.62L 1L = 0.24 gallons				
Sample ID: 020618-DS			Intake	YSI	Refill	8		One Well Volume	Other:
Date: 2/6/2018			BOS	Discharge	12		(liters)	Flow	
Weather: Cloudy			Total Depth	Pressure	100		Total Volume Bailed	Setting:	
				Flow	100 mL/min		(liters)		
Filtered? Y ☒ N	Locked? Y ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N						
Sample Containers:		1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly				
		500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
		125 ml NaOH							
Notes / Observations (color, odor, anomalies, etc):									

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1430		9.52	585	8.27	8.27	57.7		
1435		9.87	587	5.66	8.02	11.6		
1438		10.22	591	3.29	7.88	-30.1		
1441		10.25	580	2.18	8.00	-71.3		
1444		10.24	564	1.35	8.18	-105.3		
1447		10.22	560	1.13	8.26	-116.3		
1450		10.21	558	1.03	8.30	-122.2	2.67	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11	Sampling Method:		Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island County		Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID:	E70		TOS	MP-20	Refill	10	One Well Volume	Other:	
Sample ID:	020619-06		Intake	YSI	Discharge	10	(liters)	Flow	
Date:	2/6/2018		BOS		Pressure	100	Total Volume Bailed	Setting:	
Weather:	cloudy		Total Depth		Flow	176 ml/min	(liters)		
Filtered?	Y N	Locked?	Y N	Water in Protector?	Y N	Damage?	Y N		
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1520		12.22	1285	7.60	7.54	-17.0		
1525		12.60	1472	5.01	7.40	-12.6		
1528		12.95	1633	3.40	7.25	-4.2		
1531		13.11	1692	3.02	7.03	0.9		
1534		13.37	1753	2.38	6.90	5.4		
1537		13.41	1769	2.42	6.88	3.3		
1540		13.28	1780	2.23	6.80	1.7	2.22	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Lachner
Printed Name

Signature _____

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island County	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L	1L = 0.24 gallons			
Well ID: <u>E20</u>	MP-20	Refill: <u>10</u>	One Well Volume (liters)	Other: _____		
Sample ID: <u>020618-07</u>	<u>YSI</u>	Discharge: <u>10</u>	Total Volume Bailed (liters)	Flow Setting: _____		
Date: <u>2/6/2018</u>	BOS	Pressure: <u>100</u>				
Weather: <u>cloudy</u>	Total Depth	Flow: <u>100 mL/min</u>				
Filtered? Y <u>(N)</u>	Locked? Y <u>(N)</u>	Water in Protector? Y <u>(N)</u>	Damage? Y <u>(N)</u>			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1632		8.85	1363	8.71	7.69	63.5		
1637		11.63	1427	6.12	7.27	68.2		
1640		11.76	1663	5.54	7.20	73.7		
1643		11.77	1721	3.50	7.05	77.5		
1646		11.71	1724	2.97	6.96	79.5		
1649		11.70	1713	3.12	6.92	80.7		
1652		11.76	1702	2.27	6.89	81.5		
1655		11.75	1698	2.11	6.88	81.9	2.00	

Notes / Observations (color, odor, anomalies, etc):

VOCs only

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Sam Graber

Signature

[Signature]

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island County			Meter:	CONTROL SETTINGS:			1 ft water = 0.62L 1L = 0.24 gallons		
Well ID:	E100			MP-20	Refill	8			One Well Volume (liters)	Other:
Sample ID:	020718-08			YSI	Discharge	12			Total Volume Bailed (liters)	Flow Setting:
Date:	2/7/2018				Pressure	105				
Weather:	rainy				Flow	7500/mL				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N							
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
950		8.06	840	8.01	7.19	190.8		
955		9.40	916	7.17	7.67	161.5		
959		9.42	921	4.51	7.82	21.2		
1001		9.43	928	2.90	7.98	-65.8		
1004		9.47	925	2.45	7.99	-79.1		
1007		9.47	923	1.91	8.00	-96.6	6.09	
1010		9.49	924	1.56	8.01	-108.2		
1014		9.52	930	1.78	8.00	-115.2		
1017		9.55	935	1.27	7.99	-120.5	5.16	
1020		9.53	945	1.11	7.91	-125.1	4.16	

Notes / Observations (color, odor, anomalies, etc):

small amount of particulates observed in sample

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Sam Gruber

Signature

[Signature]

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island County	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>E9D</u>	MP-20	Refill: <u>9</u>	One Well Volume (liters)		Other: _____	
Sample ID: <u>020718-09</u>	<u>YSI</u>	Discharge: <u>1/</u>	Total Volume Bailed (liters)		Flow Setting: _____	
Date: <u>2/7/2018</u>	BOS	Pressure: <u>100</u>				
Weather: <u>rainy</u>	Total Depth	Flow: <u>100 mL/min</u>				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1105		9.15	417	8.21	8.08	33.1		
1110		9.41	491	5.46	8.13	23.2		
1113		9.60	551	3.14	8.19	18.5		
1116		9.64	551	2.62	8.35	-20.4		
1119		9.67	551	2.21	8.44	-71.6		
1122		9.69	550	2.05	8.53	-82.3		
1125		9.71	544	1.96	8.56	-92.7		
1129		9.72	549	1.67	*7.67	-105.2	6.24	
1132		9.74	549	1.48	7.70	-111.9	5.32	
1135		9.73	548	1.38	7.71	-118.2	4.96	

Notes / Observations (color, odor, anomalies, etc):

* recalibrated pH meter

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Sam Graber

Signature

[Signature]

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island County			Meter: CONTROL SETTINGS:	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: E8D	TOS		MP-20	Refill: 8	One Well Volume	Other:		
Sample ID: 020718-10	Intake		YSI	Discharge: 12	(liters)	Flow		
Date: 2/7/2018	BOS			Pressure: 100	Total Volume Bailed	Setting:		
Weather: overcast	Total Depth			Flow: 100 mL/min	(liters)			
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N					
Sample Containers:		1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly			
		500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber			
		125 ml NaOH						
Notes / Observations (color, odor, anomalies, etc):								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1230		9.87	299	4.03	7.71	42.5		
1235		9.82	571	5.02	7.43	44.1		
1239		4.86	572	3.81	7.41	45.6		
1241		4.90	572	2.42	7.40	41.3		
1244		9.90	572	1.81	7.41	34.6		
1247		9.90	572	1.40	7.42	29.0		
1250		9.92	573	1.25	7.44	19.2	3.75	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Gruber
Printed Name

Signature

Bellevue, WA 98005

Groundwater Sampling Data Sheet

Green base found in building used.
Hard pump kick on prior to
sampling

Signature

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other		
Site	Island County		Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons				
Well ID:	W21		MP-20	Refill		One Well Volume (liters)	Other:				
Sample ID:	020718-12		YSI	Discharge			Flow Setting:				
Date:	2/7/2018		BOS	Pressure		Total Volume Bailed (liters)					
Weather:	cloudy		Total Depth	Flow							
Filtered?	Y	N	Locked?	Y	N	Water in Protector?	Y	N	Damage?	Y	N
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										

[illegible]

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature _____

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/6/18					
Time	930					
Weather (sky or precip, temp)	no cloud					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1420	4.01	6.91	8.26		
Post Cal Reading	1413	4.01	7.00	8.5	718, 97.2, 21.8, 1.52	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	2/7/18					
Time	830					
Weather (sky or precip, temp)	rainy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1431	4.02	6.91	8.77		
Post Cal Reading	1413	4.01	7.00	8.50	710, 96.4, 22.5, 1.31	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556				MicoTPW / HACH2000	
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

LANDFILL GAS MONITORING
GEM 2000 CALIBRATION AND PERTINENT DATA

Date: 2-8-18

Site Name: Island County Landfill

Technician: Simon Garibaldo

Job No.04207033.11

WEATHER OBSERVATIONS

Wind Speed: 1 MPH Wind Direction: SE Barometric Pressure: 29.97" Hg

Air Temperature: 50 F General Weather Conditions: Overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 2% of the calibration gas value.

Instrument Serial No. 11614

Calibration Gas: %CH₄ - 50.0% %CO₂ - 35.0% %O₂ - 20.9%

Time	CH ₄	CO ₂	O ₂
0815	49.8%	35.0%	20.8%

Post-monitoring Calibration Check

Time	CH ₄	CO ₂	O ₂
1845	49.9%	35.0%	20.9%

NOTES:

SCS ENGINEERS

April 19, 2018

File No. 04207033.11

**Subject: Second Quarter 2018 Groundwater Monitoring Event
Coupeville Solid Waste Facility, Island County, Washington**

Sampling Dates: April 16 – 18, 2018
Personnel: Sam Graber & Travis Berndahl

NOTES/SAMPLING DECODING:

- This was a semi-annual sampling event under the new monitoring plan.
- Duplicate samples were taken at monitoring wells N3D & S10S.
- Meters were calibrated daily prior to sampling.
- Sample not collected at Water Supply Well - DNR. Site personnel could not find key necessary to access sample location.
- Only Nitrate/Nitrite sample collected at E1S.
- Collected filtered arsenic sample at E9D.

Date Sampled	Sample Number	Well Number
4/16/18	0418-01	E3D
4/16/18	0418-02	E5D
4/16/18	0418-03	E8D
4/16/18	0418-04	DOT
4/16/18	0418-05	E7D
4/16/18	0418-06	E6D
4/17/18	0418-07	E2D
4/17/18	0418-08	E2S
4/17/18	0418-09	N3D
4/17/18	0418-10	N3S
4/17/18	0418-11	N3D (Duplicate)
4/17/18	0418-12	N2D
4/17/18	0418-13	N2S
4/17/18	0418-14	NE1S
4/17/18	0418-15	NE1D

4/17/18	0418-16	E4S
4/17/18	0418-17	E4D
4/17/18	0418-18	E1S
4/17/18	0418-19	E1D
4/17/18	0418-20	WR1
4/18/18	0418-21	S11S
4/18/18	0418-22	S11D
4/18/18	0418-23	S10S
4/18/18	0418-24	S10S (Duplicate)
4/18/18	0418-25	N1D
4/18/18	0418-26	N5D
4/18/18	0418-27	E9D
4/18/18	0418-28	E10D

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other		
Site	Island Co. Landfill			Meter:	CONTROL SETTINGS:							
Well ID:	E3D			MP-20	1 ft water = 0.62L 1L = 0.24 gallons							
Sample ID:	0418-01			YSI	Refill	11	One Well Volume	Other:				
Date:	4/16 / 2018				Discharge	9	(liters)	Flow				
Weather:	Rainy				Pressure	100	Total Volume Bailed	Setting:				
					Flow	180 ml/min	(liters)					
Filtered?	Y	N		Locked?	Y	N	Water in Protector?	Y	N	Damage?	Y	N
Sample Containers:	1000 ml Poly			500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2			500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1040		8.68	722	11.00	7.13	244.2		
1045	150.25	10.30	748	8.94	7.57	252.2		
1048	150.25	10.37	773	8.57	7.59	254.9		
1051	150.23	10.23	775	7.55	7.55	255.0		
1054	150.23	10.26	775	5.60	7.49	254.4		
1057		10.24	775	3.22	7.48	253.3		
1100	150.23	10.25	775	2.67	7.52	250.0	3.53	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Signature

Notes / Observations (color, odor, anomalies, etc):

Bellevue, WA 98005

Groundwater Sampling Data Sheet

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
11:50		10.66	1096	8.54	7.46	183.4		
11:55		10.84	1170	2.20	7.52	-36.4		
11:58		10.88	1183	1.56	7.59	-70.4	2.27	
		~~10.87~~	~~1221~~					
12:01		10.87	1221	1.27	7.61	-87.2		
12:04		10.89	1282	1.19	7.62	-91.7		
12:07		10.93	1240	1.14	7.62	-96.3		
12:10	144.62	10.86	1242	1.04	7.63	-99.2	1.34	

SAMPLER:

Printed Name

Travis Berndt

Signature

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Beneville, WA 98005						(425) 746-4600						Groundwater Sampling Form					
Project #: 04207033.11				Sampling Method : Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other			
Site Island Co. Landfill				148.24 DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons							
Well ID: EBD				TOS		MP-20		Refill 10		One Well Volume		Other :					
Sample ID: 0418.03				Intake		YSI		Discharge 10		(liters)		Flow					
Date: 4/16 / 2018				BOS				Pressure 100		Total Volume Bailed		Setting :					
Weather: Rainy				Total Depth				Flow 120 ml/min		(liters)							
Filtered? ☒ N		Locked? ☒ N		Water in Protector? ☒ N		Damage? ☒ N											
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly		Notes / Observations (color, odor, anomalies, etc):							
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber									
		125 ml NaOH															

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1306	148.24	9.74	580	4.30	7.72	167.7		
1311		9.40	574	4.70	7.38	172.8		
1314		9.49	574	3.20	7.34	168.0	3.44	
1317	148.60	9.62	575	2.09	7.34	162.6		
1320		9.70	577	1.46	7.35	145.2		
1323		9.74	578	1.24	7.39	91.1		
1326	148.77	9.76	578	1.17	7.51	-18.1	3.35	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Bernicki
Printed Name

Signature

Bellevue, WA 98005

Groundwater Sampling Data Sheet

[illegible]

meter reading 1,298

Signature _____

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other	
Site: Island Co. Landfill		DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons					
Well ID: E7D		TOS		MP-20		Refill 10		One Well Volume		Other:			
Sample ID: 0418-05		Intake		YSI		Discharge 10		(liters)		Flow			
Date: 4/16/2018		BOS				Pressure 100		Total Volume Bailed		Setting:			
Weather: rainy		Total Depth				Flow 120 mL/min		(liters)					
Filtered? ☒ Y ☐ N		Locked? ☐ Y ☒ N		Water in Protector? ☐ Y ☒ N		Damage? ☐ Y ☒ N							
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly					
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber					
		125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):													

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1530		13.14	1734	8.41	7.32	100.0		
1535		13.39	1737	2.15	6.84	100.1		
1538		13.40	1777	1.64	6.81	86.7	2.45	
1541	145.53	13.40	1785	1.45	6.81	76.4		
1544		13.41	1788	1.28	6.81	71.4		
1547		13.42	1789	1.20	6.81	67.5		
1550	145.63	13.38	1790	1.12	6.82	64.3	1.25	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature

**2405 140th ave NE #107
Bellevue, WA 98005**

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: <u>Island Co. Landfill</u>		Meter: <u>CONTROL SETTINGS:</u>		1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>E6D</u>		MP-20		Refill	One Well Volume	Other:		
Sample ID: <u>0413-06</u>		<u>YSI</u>		Discharge	(liters)	Flow		
Date: <u>4/15/2018</u>		BOS		Pressure	Total Volume Bailed	Setting:		
Weather: <u>Rainy</u>		Total Depth		Flow	(liters)			
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N		Damage? ☒ N				
Sample Containers:		500 ml Poly		250 ml Poly		125 ml Poly		
500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber		
125 ml NaOH								
Notes / Observations (color, odor, anomalies, etc):								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1650		13.10	678	1.53	7.86	173.8		
~~1655~~		~~13.46~~	~~679~~	~~1.53~~	~~7.84~~	~~-107.0~~		
1655		13.46	679	1.35	7.84	-107.0	1.58	
1658	148.78	13.59	679	1.19	7.83	-100		
1701		13.54	679	1.06	7.83	-104		
1704		13.51	679	0.98	7.83	-107.0		
1707		13.46	679	0.93	7.83	-107.5	1.51	
1710	149.05	13.52	678	0.89	7.83	-111.7	1.51	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndt
Printed Name

Signature _____

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>5-2-D</u>	MP-20	Refill	<u>10.5</u>	One Well Volume	Other:	
Sample ID: <u>0418-07</u>	<u>YSI</u>	Discharge	<u>9.5</u>	(liters)	Flow Setting:	
Date: <u>4/17/2018</u>		Pressure	<u>100</u>	Total Volume Bailed		
Weather: <u>Partly Sunny</u>		Flow	<u>120</u>	(liters)		
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1017		10.61	1383	9.92	6.53	238.3		
1022		11.91	1658	5.18	7.14	248.0		
1025		12.00	1696	3.73	7.05	249.2		
1028		11.98	1701	1.97	6.90	249.5		
1031		11.95	1685	1.50	6.87	248.8		
1034		11.97	1676	1.20	6.86	247.7		
1037	147.91	11.98	1679	1.02	6.85	246.3		
1040	147.91	11.92	1689	0.36	6.85	244.3	1.72	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

[Signature]
Signature

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11	Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill	DTW	137.48	Meter:	CONTROL SETTINGS:			
Well ID:	E25	TOS	/	MP-20	Refill	9.5	1 ft water = 0.62L	1L = 0.24 gallons
Sample ID:	0418-08	Intake	/	YSI	Discharge	8.5	One Well Volume (liters)	Other:
Date:	4/17/2018	BOS	/		Pressure	90	Total Volume Bailed (liters)	Flow Setting:
Weather:	Sunny	Total Depth	/		Flow	200 mL/min		
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☒ Y ☐ N					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
	125 ml NaOH							
Notes / Observations (color, odor, anomalies, etc):								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1023		12.11	1328	7.52	6.41	164		
1025		12.13	1319	0.88	6.68	150		
1031		12.11	1324	0.70	6.70	147		
1040		11.69	1328	0.69	6.73	139		
1043		12.05	1331	0.65	6.75	136		
1046		12.06	1322	0.44	6.77	135		
1049		12.04	1333	0.46	6.77	134		
1052		12.06	1323	0.43	6.78	133	1.42	

Notes / Observations (color, odor, anomalies, etc):

Gorilla typed regulator for first part of pulse.

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature _____

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Groundwater Sampling Data Sheet

Project #: 04207033.11

Site: Island Co. Landfill

Well ID: N20

Sample ID: 0413-12

Date: 4/17/2018

Weather: Overcast

Filtered? ☒ N

Locked? ☒ N

Water in Protector? Y ☒ N

Damage? Y ☒ N

Sample Containers:

1000 ml Poly

500 ml Poly

250 ml Poly

125 ml Poly

500 ml HNO3 x2

500 ml H2SO4 x2

40 ml VOA x3 x6

1000 ml Amber

125 ml NaOH

Sampling Method:

Dedicated

1.75" QED SamplePro

Bail

Peristaltic

Grab

Other

Meter:

CONTROL SETTINGS:

1 ft water = 0.62L

1L = 0.24 gallons

DTW

TOS

Intake

BOS

Total Depth

Refill 12

One Well Volume

Other:

Discharge 8

(liters)

Flow

Pressure 90

Total Volume Bailed

Setting:

Flow 300 mL/min.

(liters)

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1315		12.50	1242	4.83	7.17	211.1		
~~1320~~		~~12.46~~	~~1252~~	~~0.73~~				
1320		12.46	1252	0.73	7.11	207.9		
1323		12.58	1253	0.54	7.11	205.7		
1326		12.53	1255	0.48	7.11	204.0		
1329		12.49	1256	0.42	7.11	202.8		
1332		12.58	1256	0.40	7.11	201.8		
1335	147.82	12.49	1258	0.38	7.10	200.8	1.64	

Stabilization Parameters: pH/DO $\pm$ 0.2, SpC $\pm$ 10%, Temp $\pm$ 0.5°C, Turb. $\pm$ 10% or $\leq$ 5

SAMPLER: Travis Berndahl

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Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

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Groundwater Sampling Data Sheet

Project #: 04207033.11

Site: Island Co. Landfill

Well ID: VEIS

Sample ID: 0418-14

Date: 4/17/2018

Weather: overcast, L. rain

Filtered? ☒ N

Locked? Y ☒ N

Water in Protector? Y ☒ N

Damage? Y ☒ N

Sample Containers:

1000 ml Poly

500 ml Poly

250 ml Poly

125 ml Poly

500 ml HNO3 x2

500 ml H2SO4 x2

40 ml VOA x3 x6

1000 ml Amber

125 ml NaOH

Sampling Method: Dedicated

1.75" QED SamplePro

Bail

Peristaltic

Grab

Other

Meter: CONTROL SETTINGS:

MP-20

YSI

Refill 10

Discharge 10

Pressure 85

Flow 120 mL/min

1 ft water = 0.62L

1L = 0.24 gallons

One Well Volume (liters)

Total Volume Bailed (liters)

Other:

Flow Setting:



144.11

DTW

TOS

Intake

BOS

Total Depth

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1440		11.42	617	7.72	7.92	99		
1445		12.17	748	6.36	7.30	120		
1448		12.18	821	5.46	7.06	129		
1451		12.18	827	5.29	7.04	129		
1454		12.06	829	5.23	7.03	130		
1457		12.04	833	5.20	7.03	131		
1500		12.03	839	5.16	7.04	131	4.91	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

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Project #:	04207033.11	Sampling Method:		Dedicated	6.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill		157.74 DTW	Meter:	CONTROL SETTINGS:				
Well ID:	NEID		TOS	MP-20	Refill	9	One Well Volume	Other :	
Sample ID:	0418-15		Intake	YSI	Discharge	11	(liters)	Flow	
Date:	4/17/2018		BOS	Pressure	100	Total Volume Bailed	Setting :		
Weather:	Cloudy		Total Depth	Flow	120 ml/min	(liters)			
Filtered? ☒ Y ☐ N	Locked? ☐ Y ☒ N	Water in Protector? ☐ Y ☒ N	Damage? ☐ Y ☒ N						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

[illegible]

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

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Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	Island Co. Landfill			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons				
Well ID:	E45			MP-20	Refill	8	One Well Volume (liters)	Other:				
Sample ID:	0413-16			(YS)	Discharge	7	Total Volume Bailed (liters)	Flow Setting:				
Date:	4/17/2018			BOS	Pressure	80						
Weather:	cloudy			Total Depth	Flow	150 mL/min						
Filtered? (Y) N	Locked? (Y) N	Water in Protector? Y (N)	Damage? Y (N)									
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly								
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber								
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

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Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site: Island Co. Landfill		 153.02 DTW TOS Intake BOS Total Depth	Meter: <u>MP-20</u>		CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID: <u>E40</u>			Refill: <u>9</u>		One Well Volume (liters)		Other:		
Sample ID: <u>0418-17</u>			Discharge: <u>12</u>				Flow Setting:		
Date: <u>4/17/2018</u>			Pressure: <u>100</u>		Total Volume Bailed (liters)				
Weather: <u>overcast</u>			Flow: <u>140 mL/min</u>						
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N		Damage? ☒ N					
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly	
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber	
		125 ml NaOH							

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1600		10.73	556	7.79	8.17	85		
1605		10.76	560	5.08	8.33	-96		
1608		10.64	555	3.30	8.93	-228		
1625		10.44	544	1.97	8.82	-223		
	Switched to YSI							
1630		10.41	565	1.09	7.96	84.1	8.12	
1638		10.36	559	0.79	8.00	56.6	8.30	
1636		10.38	559	0.71	8.03	37.2	7.83	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Gruber
Printed Name

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Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons			
Well ID: EIS		MP-20		Refill 12.5		One Well Volume		Other:	
Sample ID: 0418-18		YSI		Discharge 7.5		(liters)		Flow	
Date: 4/17/2018				Pressure 80		Total Volume Bailed		Setting:	
Weather: Partly Cloudy				Flow 375 mL/min		(liters)			
Filtered? ☒ N	Locked? ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N						
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly	
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber	
		125 ml NaOH							
Notes / Observations (color, odor, anomalies, etc):									
Only Nitrate / Nitrite									

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

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Project #:	04207033.11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	<u>Grab</u>	Other
Site	Island Co. Landfill			Meter:	<u>CONTROL SETTINGS:</u>		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID:	WRI			MP-20	Refill		One Well Volume	Other:		
Sample ID:	0418-20			<u>YSI</u>	Discharge		(liters)	Flow		
Date:	4/17/2018			BOS	Pressure		Total Volume Bailed	Setting:		
Weather:	Partly Sunny			Total Depth	Flow		(liters)			
Filtered?	☒ N	Locked?	Y ☒ N	Water in Protector?	Y ☒ N	Damage?	Y ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									
Notes / Observations (color, odor, anomalies, etc):										
Purged line for 5 min.										

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

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Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>5115</u>		TOS	MP-20	Refill	<u>12</u>	One Well Volume	Other: _____	
Sample ID: <u>0418-21</u>		Intake	<u>YSI</u>	Discharge	<u>8</u>	(liters)	Flow	
Date: <u>4/18/2018</u>		BOS	Pressure	<u>75</u>	Total Volume Bailed	Setting: _____		
Weather: <u>Partly Sunny</u>		Total Depth	Flow	<u>300 mL/min.</u>	(liters)			
Filtered? <u>(Y) N</u>	Locked? <u>(Y) N</u>	Water in Protector? <u>(Y) N</u>	Damage? <u>Y (N)</u>					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):			
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
	125 ml NaOH							

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
925		9.70	940	0.93	7.14	58.5		
930		9.68	946	0.72	7.89	-24.8		
933		9.50	945	0.51	7.76	-49.7		
936		9.69	944	0.43	7.76	-61.3		
939		9.63	942	0.38	7.80	-62.5	1.79	
942		9.67	940	0.33	7.81	-74.3		
945	134.97	9.66	940	0.32	7.81	-77.2	1.69	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

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Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>MP-20</u> <u>YSI</u>	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID: <u>511D</u>		Refill: <u>10</u>	One Well Volume (liters)		Other: _____	
Sample ID: <u>0418-22</u>		Discharge: <u>10</u>	Total Volume Bailed (liters)		Flow Setting: _____	
Date: <u>4/18/2018</u>		Pressure: <u>100</u>				
Weather: <u>partly sunny</u>	Total Depth	Flow: <u>300 mL/min</u>				

Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? Y ☒ N
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6
	125 ml NaOH		1000 ml Amber

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
920		8.65	920	8.37	7.12	143		
925		9.73	931	7.63	7.60	140		
928		9.81	930	3.43	8.14	6		
931		9.84	918	1.64	8.65	-35		
946	148.35	9.77	964	1.80	7.93	-63.8	5.65	
949		9.78	965	0.69	7.95	-80.0	5.81	
952	149.10	9.81	967	0.64	7.89	-96.0	5.42	

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature [Signature]

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Groundwater Sampling Data Sheet

Project #: 04207033.11

Site: Island Co. Landfill

Well ID: S105

Sample ID: 0418-23

Date: 4/18/2018

Weather: Partly Sunny

Sampling Method: Dedicated

1.75" QED SamplePro

Bail

Peristaltic

Grab

Other

Meter:

MP-20

YSI

CONTROL SETTINGS:

1 ft water = 0.62L

1L = 0.24 gallons

Refill 9.5

One Well Volume

Other:

Discharge 5.5

(liters)

Flow

Pressure 80

Total Volume Bailed

Setting:

Flow 250 mL/min

(liters)

Filtered? ☒ N

Locked? ☒ N

Water in Protector? Y ☒ N

Damage? Y ☒ N

Sample Containers:

1000 ml Poly

500 ml Poly

250 ml Poly

125 ml Poly

500 ml HNO3 x2

500 ml H2SO4 x2

40 ml VOA x3 x6

1000 ml Amber

125 ml NaOH

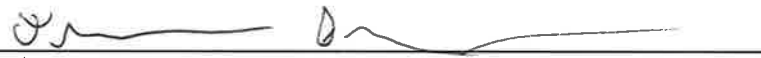
Notes / Observations (color, odor, anomalies, etc):

Dup taken as 0418-24
@ 1140

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1105		14.19	1405	2.96	7.16	139.3		
1110		14.09	1390	0.83	6.94	127.2		
1113		14.12	1391	0.76	6.93	122.7		
1116		14.03	1391	0.72	6.93	121.1	3.79	
1119		13.98	1391	0.67	6.93	120.7		
1122		13.97	1388	0.65	6.92	121.0	2.91	
1125	135.71	14.03	1386	0.61	6.92	120.4	3.33	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name


Signature

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Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>NID</u>	MP-20	Refill: <u>8.5</u>	One Well Volume (liters)	Other: _____		
Sample ID: <u>0413-25</u>	<u>YSI</u>	Discharge: <u>6.5</u>	Total Volume Bailed (liters)	Flow Setting: _____		
Date: <u>4/18/2018</u>	BOS	Pressure: <u>85</u>				
Weather: <u>Partly Sunny</u>	Total Depth	Flow: <u>300 mL/min.</u>				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1230		10.61	1556	7.81	7.58	166.8		
1235		11.50	1559	2.64	7.26	167.5		
1238		11.43	1560	1.40	7.31	101.3	1.92	
1241		11.34	1563	0.82	7.45	-3.5		
1244		11.38	1561	0.72	7.46	-18.1		
1247		11.39	1562	0.65	7.47	-27.7		
1250	136.81	11.32	1561	0.56	7.48	-40.2	1.57	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

[Signature]
Signature

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Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		 149.15 DTW	Meter: <u>MP-20</u>	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID: <u>N5D</u>	TOS		Refill	<u>15</u>	One Well Volume			
Sample ID: <u>0413 - 26</u>	Intake		Discharge	<u>15</u>	(liters)	Other: _____		
Date: <u>4/13/2018</u>	BOS		Pressure	<u>105</u>	Total Volume Bailed	Flow Setting: _____		
Weather: <u>partly sunny</u>	Total Depth		Flow	<u>1.50 mL/min</u>				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? Y ☒ N					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
	125 ml NaOH							

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1115		9.19	1098	7.63	8.05	103		
1120		9.80	1352	4.14	7.48	117		
1123		9.83	1393	3.40	7.45	118		
1126		9.90	1434	2.39	7.42	117		
1129		9.94	1452	1.86	7.42	115		
1132		10.00	1466	1.35	7.42	112		
1135	149.20	10.03	1451	1.18	7.43	110	1.22	

Notes / Observations (color, odor, anomalies, etc):

WIS = 109.70

DTW

Stabilization Parameters: pH/DO $\pm$ 0.2, SpC $\pm$ 10%, Temp $\pm$ 0.5°C, Turb. $\pm$ 10% or $\leq$ 5

SAMPLER: Sam Graber
Printed Name

[Signature]
Signature

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Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>MP-20</u>	CONTROL SETTINGS:		1 ft water = 0.62L 1L = 0.24 gallons		
Well ID: <u>E9D</u>	DTW: <u>161.40</u>	Refill: <u>9</u>	One Well Volume (liters)		Other:	
Sample ID: <u>0418-27</u>	TOS: <u>/</u>	Discharge: <u>11</u>			Flow Setting:	
Date: <u>4/18/2018</u>	Intake: <u>/</u>	Pressure: <u>100</u>	Total Volume Bailed (liters)			
Weather: <u>cloudy</u>	BOS: <u>/</u>	Flow: <u>130 mL/min</u>				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1302		10.39	545	7.65	7.62	~~8.28~~ -71		
1307		10.08	541	4.13	7.89	-138		
1310		10.08	540	2.65	7.92	-209		
1313		10.08	541	1.71	7.94	-218		
1316		10.08	542	1.48	7.95	-233		
1319		10.11	540	1.05	7.99	-245	4.43	
1322		10.12	541	0.96	8.01	-248	4.11	
1325		10.13	541	0.86	8.02	-252	3.85	
1328		10.13	539	0.74	8.06	-255	3.70	
1331		10.15	540	0.66	8.07	-258	3.91	

Notes / Observations (color, odor, anomalies, etc):

Filtered Arsenic Sample collected here.

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Sum Graber
Printed Name

[Signature]
Signature

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>MP-20</u>	CONTROL SETTINGS:		1 ft water = 0.62L 1L = 0.24 gallons		
Well ID: <u>E10D</u>	TOS	Refill: <u>8</u>	One Well Volume (liters)	Other: _____		
Sample ID: <u>8418-28</u>	Intake	Discharge: <u>12</u>	Total Volume Bailed (liters)	Flow Setting: _____		
Date: <u>4/18/2018</u>	BOS	Pressure: <u>105</u>				
Weather: <u>partly sunny</u>	Total Depth	Flow: <u>150 ml/min</u>				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1342		9.70	987	2.25	7.63	125.8		
1347		9.92	1017	6.28	7.61	133.8		
1350		9.90	1029	4.47	7.63	37.2	4.42	
1353		9.90	999	2.53	7.75	-70.9	5.50	
1356		9.89	981	1.65	7.75	-82.6	5.07	
1359	162.82	9.90	972	1.22	7.74	-99.2	4.41	
1402		9.90	~~969~~ 969	1.01	7.74	-104.9	3.94	
1405		9.90	970	0.82	7.73	-109.6	3.42	
1408		9.91	974	0.74	7.73	-112.8	3.13	
1411		9.91	982	0.66	7.73	-115.9	2.38	
1414	162.83	9.91	994	0.60	7.73	-118.9	2.08	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5 SAMPLER: Travis Berndahl
Printed NameTravis Berndahl
Signature

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	4/16/18					
Time	940					
Weather (sky or precip, temp)	overcast, rainy					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1414	4.03	7.02	9.35		
Post Cal Reading	1413	4.01	7.00	9.50	755, 101, 211, 123	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWP (Island 607)					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	4/17/18					
Time	9:00					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1302	3.66	6.40	8.91		
Post Cal Reading	1413	4.00	7.00	~~8.47~~ 8.50	931.1, 12.75, 0.00	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	4/17/18					
Time	900					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1407	3.30	6.81	1091		
Post Cal Reading	1413	4.01	7.00	8.50	735, 102, 24.5, 2.38	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	4/18/13					
Time	800					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1413	4.37	6.71			
Post Cal Reading	1413	4.01	7.00	8.49	976.3, 12.12, 0.25	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	4/13/13					
Time	815					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1397	4.35	6.75			
Post Cal Reading	1413	4.01	7.00	7.51	735, 102, 22.3, 2.14	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	GWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method : Dedicated		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site Island Co. Landfill			DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID: DNR			TOS		MP-20		One Well Volume		Other :
Sample ID:			Intake		YSI		(liters)		Flow
Date: 4/13/2018			BOS		Refill		Total Volume Bailed		Setting :
Weather:			Total Depth		Discharge		(liters)		
Filtered? Y N		Locked? Y N		Water in Protector? Y N		Damage? Y N			
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly	
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber	
		125 ml NaOH							
Notes / Observations (color, odor, anomalies, etc):									

[illegible]

Notes / Observations (color, odor, anomalies, etc):

Unable to sample. Site personnel could not find key necessary to access sample location

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: _____
Printed Name

Signature

LANDFILL GAS MONITORING
GEM 2000 CALIBRATION AND PERTINENT DATA

Date: 5-16-18

Site Name: Island County Landfill

Technician: Simon Garibaldo

Job No.04207033.11

WEATHER OBSERVATIONS

Wind Speed: 23 MPH Wind Direction: W Barometric Pressure: 29.80" Hg

Air Temperature: 54 F General Weather Conditions: Overcast

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 2% of the calibration gas value.

Instrument Serial No. 11614

Calibration Gas: %CH₄ - 50.0% %CO₂ - 35.0% %O₂ - 20.9%

Time	CH ₄	CO ₂	O ₂
07:55	49.8%	34.5%	20.9%

Post-monitoring Calibration Check

Time	CH ₄	CO ₂	O ₂
15:30	50.0%	35.0%	20.8%

NOTES:

SCS ENGINEERS

July 13, 2018

File No. 04207033.11

**Subject: Third Quarter 2018 Groundwater Monitoring Event
Coupeville Solid Waste Facility, Island County, Washington**

Sampling Dates: July 10-11, 2018

Personnel: Sam Graber

NOTES/SAMPLING DECODING:

- This was a quarterly sampling event under the new monitoring plan.
- A duplicate sample was taken at monitoring well N2D.
- YSI Multiparameter Meter was calibrated daily prior to sampling.
- Only VOC samples collected at E2D and E4D.

Date Sampled	Sample Number	Well Number
7/10/18	0718-01	E4D
7/10/18	0718-02	E5D
7/10/18	0718-03	N2D
7/10/18	0718-04	N2D (Duplicate)
7/10/18	0718-05	E2D
7/10/18	0718-06	E8D
7/10/18	0718-07	E6D
7/10/18	0718-08	DNR
7/11/18	0718-09	E7D
7/11/18	0718-10	E10D
7/11/18	0718-11	E9D
7/11/18	0718-12	WR1

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.14	Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	GSF	Meter:	CONTROL SETTINGS:			1 ft water = 0.62L	1L = 0.24 gallons	
Well ID:	E4D	MP-20	Refill	8	One Well Volume	Other:		
Sample ID:	0718-01	YSI	Discharge	12	(liters)	Flow		
Date:	7/10/18		Pressure	100	Total Volume Bailed	Setting:		
Weather:	overcast		Flow	100 mL/min	(liters)			
Filtered? Y ☒ N	Locked? Y ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):			
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
	125 ml NaOH							

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1035		14.17	540	9.13	6.35	264.1		
1045		13.79	530	9.14	7.51	263.9		
1050		12.04	536	5.76	7.47	258.1		
1053		11.93	569	3.04	7.58	179.0		
1056	153.20	11.75	557	2.07	7.69	118.5		
1059		11.70	547	2.07	7.79	80.6	1.80	
1102		11.59	546	1.28	7.83	66.6		
1105		11.60	544	1.11	7.87	48.8	1.25	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Greber
Printed Name

Signature _____

Notes / Observations (color, odor, anomalies, etc):

VIXs only

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	CSWF			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons			
Well ID:	E50			MP-20	Refill	9	One Well Volume	Other:			
Sample ID:	0713-02			YSI	Discharge	11	(liters)	Flow			
Date:	7/10/13			BOS	Pressure	100	Total Volume Bailed	Setting:			
Weather:	partly cloudy			Total Depth	Flow	100 mL/min	(liters)				
Filtered? ☒ N	Locked? ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N								
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly							
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										
Notes / Observations (color, odor, anomalies, etc):											

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1140		13.87	1125	8.75	7.47	156.2		
1145		13.47	1154	5.50	7.41	160.2		
1148		13.26	1162	3.87	7.45	58.6		
1151		13.01	1170	2.43	7.48	7.0		
1154		12.84	1142	1.39	7.52	-62.3		
1157		12.95	1145	1.27	7.52	-68.5		
1200		13.13	1205	1.12	7.52	-79.0	0.75	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Gruber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #: <u>6u207033-11</u>		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: <u>CSWF</u>		DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons		
Well ID: <u>N2D</u>		TOS	MP-20	Refill <u>12</u>	One Well Volume	Other: _____		
Sample ID: <u>0718-03</u>		Intake	<u>YST</u>	Discharge <u>8</u>	(liters)	Flow Setting: _____		
Date: <u>7/10/18</u>		BOS	Pressure <u>85</u>	Total Volume Bailed	_____ (liters)			
Weather: <u>partly cloudy</u>		Total Depth	Flow <u>300 mL/min</u>					
Filtered? ☒ N	Locked? ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N					
Sample Containers:		1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):		
		500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber			
		125 ml NaOH						

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1310		14.32	1227	2.02	7.20	152.4		
1315		14.24	1213	1.47	7.08	149.5		
1318		14.00	1208	1.14	7.00	143.9		
1321		14.10	1208	1.05	7.07	142.0		
1324		13.87	1222	0.84	7.07	137.2		
1327		13.86	1223	0.75	7.06	134.9		
1330		14.03	1223	0.68	7.06	131.7	0.89	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11		Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site:	CSWF		DTW	147.49		Meter: CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.24 gallons				
Well ID:	E2D		TOS	MP-20		Refill	10		One Well Volume	Other:
Sample ID:	0718-05		Intake	YSI		Discharge	10		(liters)	Flow
Date:	7/10/18		BOS			Pressure	100		Total Volume Bailed	Setting:
Weather:	sunny		Total Depth			Flow	100 mL/min		(liters)	
Filtered? Y ☒ N	Locked? ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N							
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):					
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1450		20.01	1395	8.41	7.60	153.4		
1455		19.25	1502	8.03	7.26	181.9		
1458		14.85	1650	5.70	7.11	190.1		
1501		14.42	1659	2.77	6.92	190.7		
1504		14.41	1635	1.65	6.87	186.4		
1507		14.18	1631	1.32	6.86	182.6		
1510	147.53	14.14	1636	1.15	6.85	175.6	0.93	

Notes / Observations (color, odor, anomalies, etc):

VOLs only

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Signature

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other		
Site	CSWF			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons				
Well ID:	E8D			MP-20	Refill	3	One Well Volume (liters)	Other:				
Sample ID:	0718-06			YSD	Discharge	12		Flow Setting:				
Date:	7/10/18				Pressure	100	Total Volume Bailed (liters)					
Weather:	Sunny				Flow	110 mL/min						
Filtered?	Y	N		Locked?	Y	N	Water in Protector?	Y	N	Damage?	Y	N
Sample Containers:	1000 ml Poly			500 ml Poly			250 ml Poly			125 ml Poly		
	500 ml HNO3 x2			500 ml H2SO4 x2			40 ml VOA x3 x6			1000 ml Amber		
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

[illegible]Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Signature

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: <u>04207033.11</u>		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: <u>CSWF</u>		DTW		Meter: <u>CONTROL SETTINGS:</u>		1 ft water = 0.62L		1L = 0.24 gallons	
Well ID: <u>E6D</u>		TOS		MP-20		Refill <u>10</u>		One Well Volume _____ Other: _____	
Sample ID: <u>0718-07</u>		Intake		<u>YSI</u>		Discharge <u>10</u>		Flow Setting: _____	
Date: <u>7/10/18</u>		BOS		Pressure <u>110</u>		Total Volume Bailed _____			
Weather: <u>Sunny</u>		Total Depth		Flow <u>110 mL/min</u>		Total Volume Bailed (liters)			
Filtered? <u>N</u>	Locked? Y <u>N</u>	Water in Protector? Y <u>N</u>	Damage? Y <u>N</u>						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1655		17.13	670	2.77	7.92	161.8		
1700		16.18	666	1.39	7.78	-25.0		
1703		15.91	664	0.94	7.75	-90.6		
1706		15.77	664	0.74	7.72	-106.4		
1709		15.76	662	0.66	7.69	-110.8		
1712		15.77	663	0.62	7.68	-114.8		
1715		15.61	664	0.55	7.67	-119.6	0.53	

Notes / Observations (color, odor, anomalies, etc):

* Filter metals in lab.

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: <u>04207033.11</u>		Sampling Method:		Dedicated	1.75" QED SamplePro	Bail	Peristaltic	<u>Grab</u>	Other
Site: <u>CSWF</u>				Meter:	CONTROL SETTINGS: 1 ft water = 0.62L 1L = 0.24 gallons One Well Volume _____ Other: _____ Discharge _____ Flow _____ Pressure _____ Total Volume Bailed _____ Flow _____				
Well ID: <u>DNR</u>				MP-20					
Sample ID: <u>0718-08</u>				<u>YSI</u>					
Date: <u>7/10/13</u>									
Weather: <u>sunny</u>		Total Depth							
Filtered? Y <u>(N)</u>	Locked? <u>(Y)</u> N	Water in Protector? Y N <u>(NA)</u>		Damage? Y <u>(N)</u>					
Sample Containers:		1000 ml Poly 500 ml Poly 250 ml Poly 125 ml Poly 500 ml HNO3 x2 500 ml H2SO4 x2 40 ml VOA x3 x6 1000 ml Amber 125 ml NaOH		Notes / Observations (color, odor, anomalies, etc): <u>Heard 3 loud clicks while purging</u>					

[illegible]

SAMPLER:

Sam Gruber

Printed Name _____

Signature

Notes / Observations (color, odor, anomalies, etc):

Heard 3 loud clicks while purring

Started pump at 1810 19/25 sec

at 1830 1g/10 sec

* filter metals in lab

1 gallon in 25 seconds

164 gallon tank

(32x2)

$$164 \times 25 = 4,100 \div 60 = 68 \text{ minutes at } 1\text{g}/25\text{ sec}$$

$$164 \times 10 = 1,640 \div 60 = 27.33 \text{ minutes at } 1\text{g}/10\text{ sec}$$

43 y by 1630

$$164 - 48 = 116 \text{ g left}$$
$$116 \div 164 = 0.7$$
$$0.7 \times 27 \text{ min} = 19 \text{ min longer}$$
$$1930 + 14 \text{ mm} = 1944 \leq 1949 \text{ g pumped}$$

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033-11			Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	CSWF			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons			
Well ID:	E7D			MP-20	Refill	10	One Well Volume	Other:			
Sample ID:	0718-09			YSI	Discharge	10	(liters)	Flow			
Date:	7/11/18			BOS	Pressure	100 psi	Total Volume Bailed	Setting:			
Weather:	sunny			Total Depth	Flow	100 mL/min	(liters)				
Filtered? Y (N)	Locked? Y (N)	Water in Protector? Y (N)	Damage? Y (N)								
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly							
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										
Notes / Observations (color, odor, anomalies, etc):											

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature

**2405 140th ave NE #107
Bellevue, WA 98005**

Groundwater Sampling Data Sheet

Project #: 0420703211		Sampling Method: Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other			
Site: CSWF		DTW: 161.50		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons							
Well ID: E9D		TOS		MP-20		Refill: 8		One Well Volume (liters)		Other:					
Sample ID: 0713-11		Intake		YSI		Discharge: 12				Flow Setting:					
Date: 7/11/18		BOS				Pressure: 105		Total Volume Bailed (liters)							
Weather: sunny		Total Depth				Flow: 200 mL/min									
Filtered? Y (N)		Locked? Y (N)		Water in Protector? Y (N)		Damage? Y (N)		Notes / Observations (color, odor, anomalies, etc):							
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly								125 ml Poly	
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6								1000 ml Amber	
		125 ml NaOH													

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1145		12.76	554	10.08	8.10	137.9		
1150		12.12	550	3.22	8.23	103.6		
1153		11.38	546	1.36	8.31	82.8		
1156		11.35	545	1.03	8.30	47.5		
1159		11.36	544	0.85	8.27	11.6		
1202		11.33	544	0.72	8.25	-34.9	3.07	
1205		11.30	544	0.62	8.22	-67.9	2.50	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Greber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic <u>Grab</u>	Other	
Site:	Meter:	<u>CONTROL SETTINGS:</u>		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID:	MP-20	Refill		One Well Volume (liters)	Other:		
Sample ID:	<u>YSI</u>	Discharge		Total Volume Bailed (liters)	Flow Setting:		
Date:		Pressure					
Weather:		Flow					
Filtered? Y <u>N</u>	Locked? Y <u>N</u>	Water in Protector? Y <u>N</u>	Damage? Y <u>N</u>	Notes / Observations (color, odor, anomalies, etc):			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly				125 ml Poly
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6				1000 ml Amber
	125 ml NaOH						

[illegible]

Notes / Observations (color, odor, anomalies, etc):

* Metals Filtered in lab

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Baber
Printed Name

Signature _____

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	7/10/18					
Time	940					
Weather (sky or precip, temp)	overcast					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1466	4.05	7.03	4.36		
Post Cal Reading	1413	4.01	7.00	8.50	773, 93.6, 22.4, 0.37	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / ~~YSI 556~~			MicoTPW / ~~HACH2000~~		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	7/11/18					
Time	820					
Weather (sky or precip, temp)	sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1399	4.09	6.90	9.21		
Post Cal Reading	1413	4.01	7.00	8.50	795, 98.5, 20.7, 0.30	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEG					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

DAILY LOG

[illegible]

PREPARED BY: Simon Garibaldi

LANDFILL GAS MONITORING
GEM 2000 CALIBRATION AND PERTINENT DATA

Date: 8-20-18

Site Name: Island County Landfill

Technician: Simon Garibaldo

Job No.04207033.11

WEATHER OBSERVATIONS

Wind Speed: 7 MPH Wind Direction: N Barometric Pressure: 29.75" Hg

Air Temperature: 54 F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 2% of the calibration gas value.

Instrument Serial No. 11614

Calibration Gas: %CH₄ - 50.0% %CO₂ - 35.0% %O₂ - 20.9%

Time	CH ₄	CO ₂	O ₂
06:17	49.9%	35.0%	20.5%

Post-monitoring Calibration Check

Time	CH ₄	CO ₂	O ₂
14:45	50.0%	35.0%	20.9%

NOTES:

SCS ENGINEERS

October 23, 2018

File No. 04207033.11

**Subject: Fourth Quarter 2018 Groundwater Monitoring Event
Coupeville Solid Waste Facility, Island County, Washington**

Sampling Dates: October 15-16, 2018

Personnel: Sam Graber & Travis Berndahl

NOTES/SAMPLING DECODING:

- This was a semi-annual sampling event under the new monitoring plan.
- Duplicate samples were taken at monitoring wells N3S and S11S.
- YSI Multiparameter Meter was calibrated daily prior to sampling.
- Only a Nitrate/Nitrite sample was collected at E1S.
- An additional dissolved Arsenic sample was collected at E9D.

Date Sampled	Sample Number	Well Number
10/15/2018	1018-01	N3D
10/15/2018	1018-02	E3D
10/15/2018	1018-03	N3S
10/15/2018	1018-04	E5D
10/15/2018	1018-05	N3S (Duplicate)
10/15/2018	1018-06	E4D
10/15/2018	1018-07	N2D
10/15/2018	1018-08	E4S
10/15/2018	1018-09	N2S
10/15/2018	1018-10	E8D
10/15/2018	1018-11	N1D
10/15/2018	1018-12	DOT
10/15/2018	1018-13	E2D
10/16/2018	1018-14	S11S
10/15/2018	1018-15	E2S
10/16/2018	1018-16	S11S (Duplicate)

Fourth Quarter 2018 Monitoring Event

Page 2

10/16/2018	1018-17	S10S
10/16/2018	1018-18	S11D
10/16/2018	1018-19	E1D
10/16/2018	1018-20	WR1
10/16/2018	1018-21	E1S
10/16/2018	1018-22	N5D
10/16/2018	1018-23	E7D
10/16/2018	1018-24	E10D
10/16/2018	1018-25	E6D
10/16/2018	1018-26	E9D
10/16/2018	1018-27	NE1D
10/16/2018	1018-28	DNR
10/16/2018	1018-29	NE1S

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11		Sampling Method :		Dedicated		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill		 149.94	DTW	Meter:	CONTROL SETTINGS:						
Well ID:	N3D			TOS	MP-20	1 ft water = 0.62L		1L = 0.24 gallons				
Sample ID:	1018-01			Intake	(YSD)	Refill	9	One Well Volume		Other :		
Date:	10/15/2018			BOS		Discharge	6	(liters)		Flow		
Weather:	Sunny			Total Depth		Pressure	80	Total Volume Bailed		Setting :		
						Flow	2.50 mL/min.	(liters)				
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☒ Y ☐ N									
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly								
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber								
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	Meter: <u>MP-20</u>	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons	
Well ID: <u>E3D</u>	<u>YSI</u>	Refill: <u>11</u>	One Well Volume (liters)	Other: _____		
Sample ID: <u>1018-02</u>	Intake	Discharge: <u>9</u>	Total Volume Bailed (liters)	Flow Setting: _____		
Date: <u>10/15/2018</u>	BOS	Pressure: <u>100</u>				
Weather: <u>sunny</u>	Total Depth	Flow: <u>175 ml/min</u>				
Filtered? <u>(Y)N</u>	Locked? <u>(Y)N</u>	Water in Protector? <u>(Y)N</u>	Damage? <u>(Y)N</u>			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly		
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber		
	125 ml NaOH					

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1055		12.4	657	9.21	8.06	252.8		
1100		12.6	742	6.87	8.01	248.2		
1103		12.4	756	5.62	7.99	246.8		
1106		12.0	774	4.90	7.96	245.9		
1109		11.8	781	4.58	7.88	244.1		
1112		11.6	783	4.49	7.80	244.1		
1115		11.5	784	~~4.41~~ 4.41	7.70	243.6	0.35	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Sam Baber

Signature

[Signature]

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11

Site: Island Co. Landfill

Well ID: N35

Sample ID: 1018-03

Date: 10/15/2018

Weather: Sunny

Filtered? ☒ N

Locked? ☒ N

Water in Protector? ☒ N

Damage? ☒ N

Sample Containers:

1000 ml Poly

500 ml Poly

250 ml Poly

125 ml Poly

500 ml HNO3 x2

500 ml H2SO4 x2

40 ml VOA x3 x6

1000 ml Amber

125 ml NaOH

Sampling Method: Dedicated

1.75" QED SamplePro

Bail

Peristaltic

Grab

Other

Meter: CONTROL SETTINGS:

MP-20

YSI

Refill 10

Discharge 5

Pressure 80

Flow 300ml/min.

1 ft water = 0.62L

1L = 0.24 gallons

One Well Volume (liters)

Other:

Total Volume Bailed (liters)

Flow Setting:



139.23 DTW

TOS

Intake

BOS

Total Depth

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1137		14.05	996	6.70	7.46	242.6		
1142		12.86	1084	3.59	7.20	247.7		
1145		12.69	1094	4.08	7.13	245.5		
1148		12.63	1083	5.03	7.13	244.3		
1151		12.63	1078	5.70	7.15	181.6		
1154		12.63	1077	5.65	7.15	186.7		
1157	139.41	12.64	1077	5.63	7.13	199.3	0.0	

Notes / Observations (color, odor, anomalies, etc):

Duplicate collected

@ 1205

1018-05

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl

Printed Name

Signature

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11			Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill			DTW	144.38		1 ft water = 0.62L		1L = 0.24 gallons		
Well ID:	E5D			TOS			Meter:	CONTROL SETTINGS:			
Sample ID:	1013-04			Intake			MP-20	Refill	10	One Well Volume	Other :
Date:	10/15/2018			BOS			YSL	Discharge	10	(liters)	Flow
Weather:	Sunny			Total Depth				Pressure	100	Total Volume Bailed	Setting :
								Flow	140 mL/min	(liters)	
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☒ Y ☐ N								
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly							
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										
Notes / Observations (color, odor, anomalies, etc):											

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1230		14.6	1020	9.61	7.37	191.4		
1235		13.6	1177	9.58	7.59	203.3		
1243		13.3	1200	8.73	7.53	174.4		
1241		12.8	1222	4.91	7.51	96.1		
1244		12.4	1245	2.63	7.47	-28.2		
1247		12.3	1265	1.80	7.43	-50.0		
1250	144.50	12.2	1279	1.62	7.41	-63.1	0.85	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11	Sampling Method:		Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	Island Co. Landfill		152.69	DTW	Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons	
Well ID:	~~E4D~~ E4D		TOS	MP-20	Refill	10	One Well Volume	_____	Other :	_____
Sample ID:	1013-06		Intake	YSI	Discharge	10	(liters)		Flow	Setting :
Date:	10/15/2018		BOS		Pressure	100	Total Volume Bailed	_____		
Weather:	Sunny		Total Depth		Flow	10.26/min	(liters)			
Filtered?	(Y) N	Locked?	(Y) N	Water in Protector?	Y (N)	Damage?	Y (N)			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									
Notes / Observations (color, odor, anomalies, etc):										

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1355		15.0	634	10.38	8.58	31.6		
1400		13.8	601	7.91	8.21	32.2		
1403		12.0	574	6.77	7.94	3.4		
1406		11.8	571	4.77	7.98	-53.8		
1409		11.9	567	3.53	8.05	-83.2		
1412		12.0	565	2.75	8.12	-101.2		
1415	152.92	12.0	562	2.59	8.20	-118.2	1.51	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature _____

SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11	▽	Sampling Method: <u>Dedicated</u>	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill	147.56 DTW TOS Intake BOS Total Depth	Meter: MP-20	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID: N20		YSI	Refill: 12	One Well Volume (liters)		Other:	
Sample ID: 1018-07			Discharge: 8	Total Volume Bailed (liters)		Flow Setting:	
Date: 10/15/2018			Pressure: 90				
Weather: Sunny		Flow: 300 mL/min					

Filtered? ☒ N

Sample Containers:

Locked? ☒ N

1000 ml Poly

500 ml HNO3 x2

125 ml NaOH

Water in Protector? Y ☒ N

500 ml Poly

500 ml H2SO4 x2

Damage? Y ☒ N

250 ml Poly

40 ml VOA x3 x6

1000 ml Amber

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1258		13.51	1248	2.22	7.32	52.7		
1303		13.01	1213	0.62	7.11	77.6		
~~1304~~		~~12.94~~	~~1219~~	~~0.55~~	~~7.08~~	~~84.3~~		
~~1305~~		~~12.93~~	~~1221~~	~~0.47~~	~~7.06~~	~~92.1~~		
~~1309~~		~~12.92~~	~~1222~~	~~0.47~~	~~7.04~~	~~97.7~~		
~~1312~~		~~12.89~~	~~1224~~	~~0.43~~	~~7.03~~	~~102.6~~		
1318	147.64	12.89	1225	0.40	7.02	107.1	0.18	

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2, SpC ± 10%, Temp ± 0.5°C, Turb. ± 10% or ≤ 5

SAMPLER: Travis Berndahl
Printed Name


Signature

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other	
Site: Island Co. Landfill		DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons					
Well ID: E45		TOS		MP-20		Refill 10		One Well Volume		Other:			
Sample ID: 1018-08		Intake		YSI		Discharge 10		(liters)		Flow			
Date: 10/15/2018		BOS				Pressure 90		Total Volume Bailed		Setting:			
Weather: Sunny		Total Depth				Flow 300 mL/min		(liters)					
Filtered? ☒ N		Locked? ☒ N		Water in Protector? Y ☒ N		Damage? Y ☒ N							
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly					
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber					
		125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):													

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1520		12.0	749	8.51	8.00	-28.6		
1525		10.9	1211	3.20	7.18	55.5		
1528		10.9	1231	2.79	7.16	63.3		
1531		10.9	1251	2.40	7.16	71.4		
1534		10.9	1255	2.24	7.16	73.2		
1537		10.9	1260	2.10	7.16	77.0		
1540		10.9	1262	2.01	7.16	81.2	0.86	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method:	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other		
Site	Island Co. Landfill		BTW	Meter:	CONTROL SETTINGS:					1 ft water = 0.62L	1L = 0.24 gallons
Well ID:	N25		TOS	MP-20	Refill	10.5	One Well Volume		Other:		
Sample ID:	1018-09		Intake	YSI	Discharge	4.5	(liters)		Flow		
Date:	10/15/2018		BOS		Pressure	90	Total Volume Bailed		Setting:		
Weather:	Sunny	Total Depth		Flow	~~100 mL/min~~	(liters)					
Filtered? ☒ N	Locked? ☒ N	Water in Protector? ☒ N	Damage? ☒ N								
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly							
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										
Notes / Observations (color, odor, anomalies, etc):											

[illegible]

Notes / Observations (color, odor, anomalies, etc):

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		DTW	Meter: YSI	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID: E8D		TOS	MP-20	Refill	10	One Well Volume	Other:		
Sample ID: 1019-10		Intake		Discharge	10	(liters)	Flow		
Date: 10/15/2018		BOS		Pressure	100	Total Volume Bailed	Setting:		
Weather: Sunny		Total Depth		Flow	75 mL/min	(liters)			
Filtered? Y N	Locked? Y N	Water in Protector? Y N	Damage? Y N						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Gruber
Printed Name

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Bellevue, WA 98005

(425) 746-4600

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill		DTW	Meter:	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons
Well ID:	NID		TOS	MP-20	Refill	<u>8.5</u>	One Well Volume		
Sample ID:	1018-11		Intake	YSI	Discharge	<u>6.5</u>	(liters)	Other: _____	
Date:	10/15/2018		BOS		Pressure	<u>85</u>	Total Volume Bailed	Flow Setting: _____	
Weather:	Sunny		Total Depth		Flow	<u>300 mL/min.</u>	(liters)		
Filtered? <u>Y</u> N	Locked? <u>Y</u> N	Water in Protector? <u>Y</u> N	Damage? <u>Y</u> <u>N</u>						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly					
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								
					Notes / Observations (color, odor, anomalies, etc):				

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

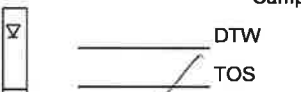
SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method :	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	<u>Grab</u>	Other
Site	Island Co. Landfill				Meter:	<u>CONTROL SETTINGS:</u>				
Well ID:	DOT				MP-20	Refill	1 ft water = 0.62L		1L = 0.24 gallons	
Sample ID:	1018-12				<u>YSI</u>	Discharge	One Well Volume _____		Other : _____	
Date:	10/15/2018					Pressure	(liters)		Flow Setting : _____	
Weather:	Sunny			Total Depth	Flow	Total Volume Bailed _____		(liters)		
Filtered? <u>Y</u> N	Locked? Y <u>N</u>	Water in Protector? Y <u>N</u>		Damage? Y <u>N</u>						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):					
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name _____

Signature

Notes / Observations (color, odor, anomalies, etc):

Meter Reading = 7102

Bellevue, WA 98005

(425) 746-4600

[illegible][illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Travis Berndahl
Printed Name

Signature _____

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(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other	
Site: Island Co. Landfill		DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons					
Well ID: 5115		TOS		MP-20		Refill 12		One Well Volume (liters)		Other:			
Sample ID: 1018-14		Intake		YSD		Discharge 8				Flow Setting:			
Date: 10/16/2018		BOS				Pressure 75		Total Volume Bailed (liters)					
Weather: sunny		Total Depth				Flow 300 mL/min							
Filtered? ☒ N		Locked? ☒ N		Water in Protector? ☒ N		Damage? Y ☒ N							
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly					
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber					
		125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):													

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
950		10.2	909	6.90	7.30	-54.3		
955		10.2	916	1.95	7.43	-108.4		
958		10.2	917	1.11	7.48	-110.0		
1001		10.2	917	0.62	7.54	-111.4		
1004	134.86	10.2	916	0.48	7.53	-105.3		
1007		10.2	914	0.41	7.52	-100.0		
1010	135.00	10.2	913	0.35	7.52	-95.6	0.40	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

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Signature _____

Bellevue, WA 98005

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	Island Co. Landfill			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons			
Well ID:	B2S			MP-20	Refill	9.5	One Well Volume		Other:			
Sample ID:	1018-15			YSI	Discharge	5.5	(liters)		Flow			
Date:	10/15/2018				Pressure	80	Total Volume Bailed		Setting:			
Weather:	Sunny				Flow	200 mL/min.	(liters)					
Filtered?	☒ N	Locked?	☒ N	Water in Protector?	☒ N	Damage?	☒ N					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly								
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber								
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1718		13.91	1328	6.12	7.01	246.5		
1723		12.93	~~12.93~~ 1315	3.14	6.82	185.4		
1726		12.57	1314	0.70	6.83	191.6		
1729		12.85	1314	0.58	6.83	193.3		
1732		12.81	1314	0.52	6.84	194.4		
1735		12.78	1314	0.49	6.85	194.1		
1738	137.68	12.80	1314	0.43	6.86	194.2	1.26	

SAMPLER: Travis Berndahl
Printed Name

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SCS ENGINEERS

2405 140th ave NE #107

Bellevue, WA 98005

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Groundwater Sampling Data Sheet

Project #: 04207033.11

Site: Island Co. Landfill

Well ID: S10.5

Sample ID: 1018-17

Date: 10/16/2018

Weather: Sunny

Filtered? ☒ N

Locked? ☒ N

Water in Protector? ☒ N

Damage? ☒ N

Sample Containers:

1000 ml Poly

500 ml Poly

250 ml Poly

125 ml Poly

500 ml HNO3 x2

500 ml H2SO4 x2

40 ml VOA x3 x6

1000 ml Amber

125 ml NaOH

Sampling Method:

Dedicated

1.75" QED SamplePro

Bail

Peristaltic

Grab

Other

Meter:

CONTROL SETTINGS:

1 ft water = 0.62L

1L = 0.24 gallons

MP-20

Refill

9.5

One Well Volume

Other:

YSI

Discharge

5.5

(liters)

Flow

Pressure

80

Total Volume Bailed

Setting:

Flow

250 mL/min

(liters)

Notes / Observations (color, odor, anomalies, etc):

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
929		13.72	1144	6.99	5.97	283.1		
929		13.76	1329	1.75	6.56	297.0		
932		13.90	1321	1.41	6.57	296.7		
935		13.85	1319	1.27	6.60	295.2		
938		13.87	1321	1.20	6.62	293.3		
941		13.86	1320	1.08	6.64	291.0		
944	135.49	13.82	1318	1.04	6.65	289.2	0.67	

Stabilization Parameters: pH/DO $\pm$ 0.2, SpC $\pm$ 10%, Temp $\pm$ 0.5°C, Turb. $\pm$ 10% or $\leq$ 5

SAMPLER: Travis Berndahl

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(425) 746-4600

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill			DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons	
Well ID: <u>SIID</u>	TOS		MP-20	Refill <u>10</u>	One Well Volume		Other:	
Sample ID: <u>1018-18</u>	Intake		<u>YSI</u>	Discharge <u>10</u>	(liters)		Flow	
Date: <u>10/16/2018</u>	BOS		Pressure <u>100</u>	Total Volume Bailed		Setting:		
Weather: <u>Sunny</u>	Total Depth		Flow <u>300 mL/min</u>	(liters)				
Filtered? <u>Y</u> N	Locked? <u>Y</u> N	Water in Protector? <u>Y</u> N	Damage? <u>Y</u> <u>N</u>					
Sample Containers:		1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):		
		500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber			
		125 ml NaOH						

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1100		11.0	924	7.76	7.33	59.4		
1105		10.8	926	4.26	7.74	21.8		
1108		10.6	927	2.81	7.62	-4.7		
1111		10.4	927	1.64	7.54	-36.3		
1114		10.3	929	1.33	7.56	-58.0		
1117		10.3	932	1.25	7.57	-63.9		
1120		10.3	937	1.37	7.60	-75.2	4.47	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Baker
Printed Name

Signature

Bellevue, WA 98005

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail		Peristaltic		Grab		Other	
Site: Island Co. Landfill		DTW: 137.41		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons					
Well ID: E10*		TOS		MP-20		Refill: 8		One Well Volume		Other:			
Sample ID: 1018-19		Intake		YSI		Discharge: 7		(liters)		Flow			
Date: 10/16/2018		BOS				Pressure: 80		Total Volume Bailed		Setting:			
Weather: Sunny		Total Depth				Flow: 225 mL/min.		(liters)					
Filtered? ☒ N		Locked? ☒ N		Water in Protector? ☒ N		Damage? ☒ Y							
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly					
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber					
		125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):													

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1024		12.28	1416	8.35	7.24	283.1		
1029		11.72	15.93	6.87	7.17	283.7		
1032		11.69	1722	6.44	7.17	283.6		
1035		11.62	1756	4.07	7.09	285.1		
1038		11.59	1788	1.65	6.94	285.1		
1041		11.66	1796	1.28	6.92	283.7		
1044	137.79	11.68	1800	1.08	6.91	281.8	0.24	

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill			DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L		1L = 0.24 gallons	
Well ID: <u>1013-20</u>			TOS	MP-20	Refill	One Well Volume		Other:
Sample ID: <u>WR1</u>			Intake	<u>YSI</u>	Discharge	(liters)		Flow
Date: <u>10/16</u> /2018			BOS		Pressure	Total Volume Bailed		Setting:
Weather: <u>Sunny</u>			Total Depth		Flow	(liters)		
Filtered? <u>Y</u> <u>N</u>	Locked? <u>Y</u> <u>N</u>	Water in Protector? <u>Y</u> <u>N</u>	Damage? <u>Y</u> <u>N</u>	Notes / Observations (color, odor, anomalies, etc):				
Sample Containers:		1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly			
		500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber			
		125 ml NaOH						

[illegible]

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

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Signature

Bellevue, WA 98005

(425) 746-4600

Project #: 04207033.11		Sampling Method: Dedicated		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		DTW		Meter: CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons	
Well ID: E15		TOS		MP-20		Refill 12.5		One Well Volume (liters)	
Sample ID: 1018-21		Intake		YSI		Discharge 7.5		Other:	
Date: 10/16/2018		BOS		Pressure 80		Total Volume Bailed (liters)		Flow Setting:	
Weather: Sunny		Total Depth		Flow 300 mL/min					
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N		Damage? ☒ Y ☐ N					
Sample Containers:		1000 ml Poly		500 ml Poly		250 ml Poly		125 ml Poly	
		500 ml HNO3 x2		500 ml H2SO4 x2		40 ml VOA x3 x6		1000 ml Amber	
		125 ml NaOH							
Notes / Observations (color, odor, anomalies, etc):									
250 ml									

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1115		11.81	1183	7.44	7.59	261.9		
1120		11.35	1137	6.07	6.96	273.7		
1123		11.35	1138	6.81	6.93	211.5		
1126		11.32	1137	6.13	6.92	222.6		
1129		11.29	1138	6.03	6.90	229.8		
1132		11.29	1141	5.98	6.88	235.2		
1135	137.74	11.31	1141	5.98	6.87	238.1	0.0	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Groundwater Sampling Data Sheet

Project #:	04207033.11			Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	Island Co. Landfill			Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons				
Well ID:	N5D			MP-20	Refill	15	One Well Volume (liters)	Other:				
Sample ID:	1019-22			(YSI)	Discharge	15	Flow Setting:					
Date:	10/16/2018			BOS	Pressure	105	Total Volume Bailed (liters)					
Weather:	sunny			Total Depth	Flow	150 mL/min						
Filtered?	(Y) N	Locked?	(Y) N	Water in Protector?	(Y) N	Damage?	Y (N)					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly								
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber								
	125 ml NaOH											
Notes / Observations (color, odor, anomalies, etc):												

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1323		11.9	7.82	1115	7.82	166.0		
1328		11.1	1212	7.45	7.51	176.9		
1331		11.0	1314	6.26	7.36	180.3		
1334		10.8	1361	3.92	7.31	180.5		
1337		10.7	1426	2.75	7.26	180.6		
1340		10.7	1455	1.64	7.24	178.6		
1343		10.8	1462	1.33	7.23	177.3	0.65	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER:

Printed Name

Signature

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(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro		Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill		145.24 DTW	Meter: MP-20	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons	
Well ID: E70		TOS	YSI	Refill	10	One Well Volume	Other:		
Sample ID: 1018-23		Intake		Discharge	10	(liters)	Flow		
Date: 10/16/2018		BOS		Pressure	100	Total Volume Bailed	Setting:		
Weather: Sunny		Total Depth		Flow	120 mL/min	(liters)			
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☐ Y ☒ N						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):				
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1207		15.77	1363	5.68	7.19	250.7		
1212		15.11	1562	3.44	7.03	252.7		
1215		15.05	1744	1.49	6.74	239.0		
1218		14.84	1789	0.99	6.65	190.0		
1221		14.93	1792	0.81	6.65	157.7		
1224		14.92	1797	0.72	6.62	116.0		
1227	145.24	15.03	1794	0.65	6.67	99.7	0.31	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method :	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill		Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID:	E100		MP-20	Refill	10	One Well Volume	Other :		
Sample ID:	1018 - 24		YSI	Discharge	10	(liters)	Flow		
Date:	10/16/2018		BOS	Pressure	100	Total Volume Bailed	Setting :		
Weather:	sunny		Total Depth	Flow	150 mL/min	(liters)			
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☒ Y ☐ N						
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly					
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber					
	125 ml NaOH								
Notes / Observations (color, odor, anomalies, etc):									

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1510		10.8	1023	7.93	7.75	106.4		
1515		10.6	999	4.22	7.60	22.8		
1518		10.5	975	2.17	7.53	-50.5		
1521		10.4	951	1.31	7.48	-105.2		
1524		10.4	955	0.95	7.46	-109.6		
1527		10.4	962	0.77	7.44	-112.4		
1530		10.4	978	0.66	7.44	-115.0	0.59	

Notes / Observations (color, odor, anomalies, etc):

odor from truck in air. Drove through black liquid laid on road near LF. Smells like asphalt.

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Sam Graber
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method:	Dedicated		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other	
Site	Island Co. Landfill		DTW	Meter:	CONTROL SETTINGS:		1 ft water = 0.62L		1L = 0.24 gallons		
Well ID:	E6D		TOS	MP-20	Refill	10	One Well Volume	Other :			
Sample ID:	1018-25		Intake	YSI	Discharge	10	(liters)	Flow			
Date:	10/16/2018		BOS		Pressure	100	Total Volume Bailed	Setting :			
Weather:	Sunny		Total Depth		Flow	120 mL/min	(liters)				
Filtered? ☒ Y ☐ N	Locked? ☒ Y ☐ N	Water in Protector? ☒ Y ☐ N	Damage? ☒ Y ☐ N								
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly							
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber							
	125 ml NaOH										
Notes / Observations (color, odor, anomalies, etc):											

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1315		16.56	707	3.00	7.76	156.5		
1320		15.74	666	1.09	7.73	-50.8		
1323		15.65	665	0.92	7.69	-74.3		
1326		15.62	663	0.94	7.61	-84.9		
1329		15.63	663	0.97	7.60	-89.6		
1332		15.60	663	0.68	7.58	-93.7		
1335	149.02	15.57	662	0.61	7.56	-96.9	1.35	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

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(425) 746-4600

Groundwater Sampling Data Sheet

Project #: 04207033.11		Sampling Method: <u>Dedicated</u>		1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site: Island Co. Landfill			DTW	Meter: <u>CONTROL SETTINGS:</u>	1 ft water = 0.62L	1L = 0.24 gallons		
Well ID: E9D	TOS		MP-20	Refill: <u>9</u>	One Well Volume	Other:		
Sample ID: 1010-26	Intake		<u>YSI</u>	Discharge: <u>11</u>	(liters)	Flow		
Date: 10/16/2018	BOS		Pressure: <u>100</u>	Total Volume Bailed	Setting:			
Weather: <u>sunny</u>	Total Depth		Flow: <u>120 ml/min.</u>	(liters)				
Filtered? <u>Y</u> N	Locked? <u>Y</u> N	Water in Protector? <u>Y</u> <u>N</u>	Damage? <u>Y</u> <u>N</u>					
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly	Notes / Observations (color, odor, anomalies, etc):			
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber				
	125 ml NaOH							

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1622		12.6	532	7.36	7.74	113.6		
1633		11.8	561	5.55	7.96	28.6		
1636		11.1	544	4.17	8.15	-55.4		
1639		11.0	545	2.95	8.21	-94.6		
1650		11.1	543	1.57	8.24	-127.5	11.47	
1653		11.2	543	1.57	8.23	-118.8	6.43	
1656		11.4	543	1.55	8.25	-122.1	4.96	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11		Sampling Method:		Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other
Site	Island Co. Landfill		DTW	Meter:	CONTROL SETTINGS:		1 ft water = 0.62L	1L = 0.24 gallons		
Well ID:	NEID		TOS	MP-20	Refill	9	One Well Volume			Other:
Sample ID:	1018-27		Intake	YSI	Discharge	11	(liters)			Flow
Date:	10/16/2018		BOS		Pressure	100	Total Volume Bailed			Setting:
Weather:	Sunny	Total Depth		Flow	120 mL/min	(liters)				
Filtered?	Y (N)	Locked?	Y (N)	Water in Protector?	Y (N)	Damage?	Y (N)			
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									
Notes / Observations (color, odor, anomalies, etc):										

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1420		18.90	698	6.27	7.39	184.6		
1425		17.14	699	5.67	7.03	189.1		
1428		16.72	695	4.00	7.07	172.0		
1431		15.97	681	2.30	7.17	167.0		
1434		15.79	677	1.92	7.20	163.7		
1437		15.66	676	1.40	7.22	160.3		
1440		15.60	676	1.20	7.27	149.6	1.42	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

Bellevue, WA 98005

Groundwater Sampling Data Sheet

Notes / Observations (color, odor, anomalies, etc):

Signature _____

Bellevue, WA 98005

(425) 746-4600

Project #:	04207033.11	Sampling Method :	Dedicated	1.75" QED SamplePro	Bail	Peristaltic	Grab	Other		
Site	Island Co. Landfill	DTW	143.92	Meter:	CONTROL SETTINGS:				1 ft water = 0.62L	1L = 0.24 gallons
Well ID:	NE15	TOS	/	MP-20	Refill	10	One Well Volume		Other :	
Sample ID:	1018-29	Intake	/	YSI	Discharge	10	(liters)		Flow	
Date:	10/16/2018	BOS	/		Pressure	85	Total Volume Bailed		Setting :	
Weather:	Sunny	Total Depth	/		Flow	120 mL/min.	(liters)			
Filtered? ☒ N	Locked? Y ☒ N	Water in Protector? Y ☒ N	Damage? Y ☒ N							
Sample Containers:	1000 ml Poly	500 ml Poly	250 ml Poly	125 ml Poly						
	500 ml HNO3 x2	500 ml H2SO4 x2	40 ml VOA x3 x6	1000 ml Amber						
	125 ml NaOH									
Notes / Observations (color, odor, anomalies, etc):										

TIME	DTW	Temp.	Sp. Cond.	DO	pH	Eh	Turbidity	Q / Vol.
1540		18.12	602	6.70	7.70	209.3		
1545		15.96	769	6.64	7.32	218.6		
1548		15.48	825	5.98	7.14	221.6		
1551		15.25	844	5.49	7.06	222.3		
1554		15.07	844	5.34	7.02	222.2		
1557		15.04	850	5.27	7.02	222.1		
1600	144.03	14.95	850	5.26	7.01	222.2	1.28	

Stabilization Parameters: pH/DO ± 0.2 , SpC $\pm 10\%$, Temp $\pm 0.5^\circ\text{C}$, Turb. $\pm 10\%$ or ≤ 5

SAMPLER: Travis Berndahl
Printed Name

Signature _____

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	10/15/18					
Time	900					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1380	4.05	7.02	100%	791, 94, 19.6, 0.21	
Post Cal Reading	1413	4.01	7.00	100%		
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556 rental			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	10/15/18					
Time	900					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1440	4.10	7.02			
Post Cal Reading	1413	4.01	7.00	6.73	933.1, 9.54, 0.25	
Discrepancy	No					
Calib. Successful?	yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	10/16/18					
Time	745					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1412	4.31	7.00			
Post Cal Reading	1413	4.01	6.80	3.5	944.6, 9.11, 0.0	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556			MicoTPW / HACH2000		
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

	Conductivity	pH4	pH 7	DO	Turbidity	Comments/Exceptions
Date	10/16/13					
Time	745					
Weather (sky or precip, temp)	Sunny					
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.01	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1440	3.92	6.92			
Post Cal Reading	1413	4.01	7.00	8.5	736, 95, 14.2, 0.16	
Discrepancy	No					
Calib. Successful?	Yes					
Calibration by	SEB					
Instrument Type, ID	MP20 / YSI 556 (rental)				MicoTPW HACH2000	
Calibration Location	CSWF					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

DAILY LOG

[illegible]

PREPARED BY: Simon Garibaldo

LANDFILL GAS MONITORING
GEM 2000 CALIBRATION AND PERTINENT DATA

Date: 11-7-18

Site Name: Island County Landfill

Technician: Simon Garibaldo

Job No.04207033.11

WEATHER OBSERVATIONS

Wind Speed: 1MPH Wind Direction: W Barometric Pressure: 30.22" Hg

Air Temperature: 55 F General Weather Conditions: Clear

CALIBRATION INFORMATION

Pre-monitoring Calibration Precision Check

Procedure: Calibrate the instrument. Make a total of three measurements by alternating zero air and the calibration gas. Record the readings and calculate the average algebraic difference between the instrument reading and the calibration gas as a percentage. The calibration precision must be less than or equal to 2% of the calibration gas value.

Instrument Serial No. 11614

Calibration Gas: %CH₄ - 50.0% %CO₂ - 35.0% %O₂ - 20.9%

Time	CH ₄	CO ₂	O ₂
13:15	49.9%	35.0%	20.8%

Post-monitoring Calibration Check

Time	CH ₄	CO ₂	O ₂
16:00	50.0%	35.0%	20.8%

NOTES:

Appendix B

2018 Analytical Data Validation
& Laboratory Reports



DATA VALIDATION REPORT – ISLAND COUNTY CSWF 1Q 2018

Project Details

Project No.	04207033.11	Site Name	Island County Coupeville SWF
Data Validator	Alexa Deep	Data Level	Level II
Date	4/3/2018	DV Tier	Tier I
QA Document	CSWF Groundwater Sampling, Analysis, and Quality Assurance Project Plan (Revised September 2007)		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
580-74978-1	Samples arrived in good condition. One unpreserved VOA vial sample container for sample 020618-1 arrived broken. To ensure holding times were met, changed the following samples to 353.2: 020618-1, 020618-2, 020618-3, and 020618-4.	Test America

Analytical Summary

Sample Group	Analyses						
	Metals	Ns, COD	VOCs	Ions/TDS	Alk	TOC	Herbicides
580-74978-1	X	X	X	X	X	X	-

X = Analysis performed on at least one sample in sample group.

- = Analysis not performed on any sample in sample group.

Laboratory Quality Assurance Samples

Lab QA Samples	Results	Comments
Method Blank	Acceptable	See case narrative (580-74978-1)
LCS/LCSD	Acceptable	See case narrative (580-74978-1)
Duplicates	Acceptable	See case narrative (580-74978-1)
MS/MSD	Acceptable	See case narrative (580-74978-1)

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Field Replicates		See below.	See detailed results below.
Trip Blank	580-74978-1	VOCs	Acetone

Detailed Field Replicate Evaluation

Analyte	Units	N2D (020618-1)	N2D DUP (020618-2)	RPD (%)
Alkalinity	mg/L	480	470	2.11
Arsenic	mg/L	0.0031	0.003	3.28
Barium	mg/L	0.026	0.027	3.77
Bicarbonate	mg/L	480	470	2.11
Calcium	mg/L	110	110	0.00
Chloride	mg/L	67	67	0.00
Magnesium	mg/L	74	74	0.00
Nickel	mg/L	0.0042	0.0044	4.65
Nitrate/Nitrite, Total	mg/L	3.2	3.5	8.96
Potassium	mg/L	8.1	8.1	0.00
Sodium	mg/L	39	40	2.53
Sulfate	mg/L	69	69	0.00
Total Dissolved Solids	mg/L	670	660	1.50
Total Organic Carbon	mg/L	3.2	3.3	3.08
Vinyl Chloride	mg/L	0.039	0.033	16.67

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
*	LCS or LCSD is outside acceptance limits. RPD of the LCS and LCSD exceed the control limits.	580-74978-1
F1	MS and/or MSD Recovery is outside acceptance limits.	580-74978-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	580-74978-1

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-74978-1

Client Project/Site: CSWF Island Co. Landfill, Washington

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
2/22/2018 3:12:59 PM

Cathy Gamble, Project Manager I
(253)922-2310
cathy.gamble@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Job ID: 580-74978-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 2/8/2018 11:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.4° C, 5.1° C and 5.4° C.

Receipt Exceptions

One container for the following sample was received broken: 020618-1 (580-74978-1): 1 unpreserved VOA Vial was received broken.

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

The TestAmerica PM and the sampler requested that we change the following samples to 353.2 to ensure holding times are met:" 020618-1 (580-74978-1), 020618-2 (580-74978-2), 020618-3 (580-74978-3) and 020618-4 (580-74978-4)

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-267246 recovered outside acceptance criteria, low biased, for Vinyl chloride, Dichlorodifluoromethane and Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-267246 recovered outside control limits for the following analytes: 1,2-Dichlorobenzene, Chlorobenzene, Benzene, Trichloroethene, 1,2-Dichloropropane and Ethylbenzene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 580-267246 recovered outside control limits for the following analytes: 1,4-Dichlorobenzene. The individual LCS and LCS percent recoveries met acceptance criteria; therefore, the data have been reported.

Method(s) 8260C: The following samples were reanalyzed for vinyl chloride due to failing QC in the initial batch: 020618-1 (580-74978-1), 020618-2 (580-74978-2), 020618-6 (580-74978-6) and 020618-7 (580-74978-7)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-01

Date Collected: 02/06/18 10:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 18:12	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 18:12	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 18:12	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 18:12	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 18:12	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 18:12	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 18:12	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 18:12	1
2-Butanone	ND		15		ug/L			02/13/18 18:12	1
2-Hexanone	ND		2.0		ug/L			02/13/18 18:12	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 18:12	1
Acetone	ND		2.0		ug/L			02/13/18 18:12	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 18:12	1
Benzene	ND	*	0.20		ug/L			02/13/18 18:12	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 18:12	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 18:12	1
Bromoform	ND		0.50		ug/L			02/13/18 18:12	1
Bromomethane	ND		1.0		ug/L			02/13/18 18:12	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 18:12	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 18:12	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 18:12	1
Chloroethane	ND		0.50		ug/L			02/13/18 18:12	1
Chloroform	ND		0.20		ug/L			02/13/18 18:12	1
Chloromethane	ND		0.30		ug/L			02/13/18 18:12	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 18:12	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 18:12	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 18:12	1
Dibromomethane	ND		0.20		ug/L			02/13/18 18:12	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 18:12	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 18:12	1
Methyl iodide	ND		0.50		ug/L			02/13/18 18:12	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 18:12	1
o-Xylene	ND		0.50		ug/L			02/13/18 18:12	1
Styrene	ND		0.50		ug/L			02/13/18 18:12	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 18:12	1
Toluene	ND		0.20		ug/L			02/13/18 18:12	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 18:12	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 18:12	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 18:12	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 18:12	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 18:12	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 18:12	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-01

Date Collected: 02/06/18 10:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150		02/13/18 18:12	1
4-Bromofluorobenzene (Surr)	100		81 - 120		02/13/18 18:12	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 18:12	1
Toluene-d8 (Surr)	103		75 - 125		02/13/18 18:12	1
Trifluorotoluene (Surr)	104		74 - 118		02/13/18 18:12	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.039		0.020		ug/L			02/14/18 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		46 - 150		02/14/18 17:13	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/14/18 17:13	1
Dibromofluoromethane (Surr)	101		42 - 132		02/14/18 17:13	1
Toluene-d8 (Surr)	102		75 - 125		02/14/18 17:13	1
Trifluorotoluene (Surr)	103		74 - 118		02/14/18 17:13	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		02/09/18 08:59	02/12/18 16:14	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 16:14	1
Magnesium	74	F1	1.1		mg/L		02/09/18 08:59	02/12/18 16:14	1
Manganese	ND		0.020		mg/L		02/09/18 08:59	02/12/18 16:14	1
Potassium	8.1		3.3		mg/L		02/09/18 08:59	02/12/18 16:14	1
Sodium	39		2.0		mg/L		02/09/18 08:59	02/12/18 16:14	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Arsenic	0.0031		0.0010		mg/L		02/09/18 09:13	02/12/18 16:01	1
Barium	0.026		0.0012		mg/L		02/09/18 09:13	02/12/18 16:01	1
Beryllium	ND	F1	0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:01	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:01	1
Nickel	0.0042		0.0030		mg/L		02/09/18 09:13	02/12/18 16:01	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:01	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:01	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:01	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 21:50	1
Chloride	67		0.90		mg/L			02/08/18 21:50	1
Sulfate	69		1.2		mg/L			02/08/18 21:50	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Nitrate Nitrite as N	3.2		0.75		mg/L			02/21/18 13:17	5

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-01

Date Collected: 02/06/18 10:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-1

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	3.2		1.0		mg/L			02/20/18 13:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	480		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	480		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	670		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-02

Date Collected: 02/06/18 11:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 18:39	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 18:39	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 18:39	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 18:39	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 18:39	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 18:39	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 18:39	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 18:39	1
2-Butanone	ND		15		ug/L			02/13/18 18:39	1
2-Hexanone	ND		2.0		ug/L			02/13/18 18:39	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 18:39	1
Acetone	ND		2.0		ug/L			02/13/18 18:39	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 18:39	1
Benzene	ND	*	0.20		ug/L			02/13/18 18:39	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 18:39	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 18:39	1
Bromoform	ND		0.50		ug/L			02/13/18 18:39	1
Bromomethane	ND		1.0		ug/L			02/13/18 18:39	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 18:39	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 18:39	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 18:39	1
Chloroethane	ND		0.50		ug/L			02/13/18 18:39	1
Chloroform	ND		0.20		ug/L			02/13/18 18:39	1
Chloromethane	ND		0.30		ug/L			02/13/18 18:39	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 18:39	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 18:39	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 18:39	1
Dibromomethane	ND		0.20		ug/L			02/13/18 18:39	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 18:39	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 18:39	1
Methyl iodide	ND		0.50		ug/L			02/13/18 18:39	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 18:39	1
o-Xylene	ND		0.50		ug/L			02/13/18 18:39	1
Styrene	ND		0.50		ug/L			02/13/18 18:39	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 18:39	1
Toluene	ND		0.20		ug/L			02/13/18 18:39	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 18:39	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 18:39	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 18:39	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 18:39	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 18:39	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 18:39	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-02

Date Collected: 02/06/18 11:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		02/13/18 18:39	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 18:39	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 18:39	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 18:39	1
Trifluorotoluene (Surr)	101		74 - 118		02/13/18 18:39	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.033		0.020		ug/L			02/14/18 17:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150					02/14/18 17:40	1
4-Bromofluorobenzene (Surr)	101		81 - 120					02/14/18 17:40	1
Dibromofluoromethane (Surr)	102		42 - 132					02/14/18 17:40	1
Toluene-d8 (Surr)	102		75 - 125					02/14/18 17:40	1
Trifluorotoluene (Surr)	103		74 - 118					02/14/18 17:40	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		02/09/18 08:59	02/12/18 16:39	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 16:39	1
Magnesium	74		1.1		mg/L		02/09/18 08:59	02/12/18 16:39	1
Manganese	ND		0.020		mg/L		02/09/18 08:59	02/12/18 16:39	1
Potassium	8.1		3.3		mg/L		02/09/18 08:59	02/12/18 16:39	1
Sodium	40		2.0		mg/L		02/09/18 08:59	02/12/18 16:39	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Arsenic	0.0030		0.0010		mg/L		02/09/18 09:13	02/12/18 16:37	1
Barium	0.027		0.0012		mg/L		02/09/18 09:13	02/12/18 16:37	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:37	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:37	1
Nickel	0.0044		0.0030		mg/L		02/09/18 09:13	02/12/18 16:37	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:37	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:37	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:37	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 22:25	1
Chloride	67		0.90		mg/L			02/08/18 22:25	1
Sulfate	69		1.2		mg/L			02/08/18 22:25	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Nitrate Nitrite as N	3.5		0.75		mg/L			02/21/18 13:18	5

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-02

Date Collected: 02/06/18 11:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	3.3		1.0		mg/L			02/20/18 13:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	470		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	470		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	660		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-03

Date Collected: 02/06/18 12:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 19:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 19:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 19:05	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 19:05	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:05	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 19:05	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 19:05	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:05	1
2-Butanone	ND		15		ug/L			02/13/18 19:05	1
2-Hexanone	ND		2.0		ug/L			02/13/18 19:05	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 19:05	1
Acetone	ND		2.0		ug/L			02/13/18 19:05	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 19:05	1
Benzene	ND	*	0.20		ug/L			02/13/18 19:05	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 19:05	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 19:05	1
Bromoform	ND		0.50		ug/L			02/13/18 19:05	1
Bromomethane	ND		1.0		ug/L			02/13/18 19:05	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 19:05	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 19:05	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 19:05	1
Chloroethane	ND		0.50		ug/L			02/13/18 19:05	1
Chloroform	ND		0.20		ug/L			02/13/18 19:05	1
Chloromethane	ND		0.30		ug/L			02/13/18 19:05	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:05	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 19:05	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 19:05	1
Dibromomethane	ND		0.20		ug/L			02/13/18 19:05	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 19:05	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 19:05	1
Methyl iodide	ND		0.50		ug/L			02/13/18 19:05	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 19:05	1
o-Xylene	ND		0.50		ug/L			02/13/18 19:05	1
Styrene	ND		0.50		ug/L			02/13/18 19:05	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 19:05	1
Toluene	ND		0.20		ug/L			02/13/18 19:05	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:05	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 19:05	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 19:05	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 19:05	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 19:05	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 19:05	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 19:05	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-03

Date Collected: 02/06/18 12:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		46 - 150		02/13/18 19:05	1
4-Bromofluorobenzene (Surr)	102		81 - 120		02/13/18 19:05	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 19:05	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 19:05	1
Trifluorotoluene (Surr)	98		74 - 118		02/13/18 19:05	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140		1.1		mg/L		02/09/18 08:59	02/12/18 16:42	1
Iron	1.5		0.30		mg/L		02/09/18 08:59	02/12/18 16:42	1
Magnesium	66		1.1		mg/L		02/09/18 08:59	02/12/18 16:42	1
Manganese	0.22		0.020		mg/L		02/09/18 08:59	02/12/18 16:42	1
Potassium	7.1		3.3		mg/L		02/09/18 08:59	02/12/18 16:42	1
Sodium	30		2.0		mg/L		02/09/18 08:59	02/12/18 16:42	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Arsenic	0.0059		0.0010		mg/L		02/09/18 09:13	02/12/18 16:41	1
Barium	0.061		0.0012		mg/L		02/09/18 09:13	02/12/18 16:41	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:41	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:41	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 16:41	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:41	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:41	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:41	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 22:36	1
Chloride	20		0.90		mg/L			02/08/18 22:36	1
Sulfate	21		1.2		mg/L			02/08/18 22:36	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Nitrate Nitrite as N	ND		0.15		mg/L			02/21/18 13:20	1
Total Organic Carbon	2.3		1.0		mg/L			02/20/18 13:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	610		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	610		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	640		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-04

Date Collected: 02/06/18 13:25

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 19:32	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 19:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 19:32	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 19:32	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:32	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 19:32	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 19:32	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:32	1
2-Butanone	ND		15		ug/L			02/13/18 19:32	1
2-Hexanone	ND		2.0		ug/L			02/13/18 19:32	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 19:32	1
Acetone	ND		2.0		ug/L			02/13/18 19:32	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 19:32	1
Benzene	ND	*	0.20		ug/L			02/13/18 19:32	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 19:32	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 19:32	1
Bromoform	ND		0.50		ug/L			02/13/18 19:32	1
Bromomethane	ND		1.0		ug/L			02/13/18 19:32	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 19:32	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 19:32	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 19:32	1
Chloroethane	ND		0.50		ug/L			02/13/18 19:32	1
Chloroform	ND		0.20		ug/L			02/13/18 19:32	1
Chloromethane	ND		0.30		ug/L			02/13/18 19:32	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:32	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 19:32	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 19:32	1
Dibromomethane	ND		0.20		ug/L			02/13/18 19:32	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 19:32	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 19:32	1
Methyl iodide	ND		0.50		ug/L			02/13/18 19:32	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 19:32	1
o-Xylene	ND		0.50		ug/L			02/13/18 19:32	1
Styrene	ND		0.50		ug/L			02/13/18 19:32	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 19:32	1
Toluene	ND		0.20		ug/L			02/13/18 19:32	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:32	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 19:32	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 19:32	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 19:32	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 19:32	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 19:32	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 19:32	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-04

Date Collected: 02/06/18 13:25

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		02/13/18 19:32	1
4-Bromofluorobenzene (Surr)	103		81 - 120		02/13/18 19:32	1
Dibromofluoromethane (Surr)	105		42 - 132		02/13/18 19:32	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 19:32	1
Trifluorotoluene (Surr)	98		74 - 118		02/13/18 19:32	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	58		1.1		mg/L		02/09/18 08:59	02/12/18 16:46	1
Iron	0.58		0.30		mg/L		02/09/18 08:59	02/12/18 16:46	1
Magnesium	30		1.1		mg/L		02/09/18 08:59	02/12/18 16:46	1
Manganese	0.72		0.020		mg/L		02/09/18 08:59	02/12/18 16:46	1
Potassium	6.1		3.3		mg/L		02/09/18 08:59	02/12/18 16:46	1
Sodium	42		2.0		mg/L		02/09/18 08:59	02/12/18 16:46	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Arsenic	0.0013		0.0010		mg/L		02/09/18 09:13	02/12/18 16:45	1
Barium	0.082		0.0012		mg/L		02/09/18 09:13	02/12/18 16:45	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:45	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:45	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 16:45	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:45	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:45	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:45	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 22:48	1
Chloride	22		0.90		mg/L			02/08/18 22:48	1
Sulfate	38		1.2		mg/L			02/08/18 22:48	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Nitrate Nitrite as N	ND		0.15		mg/L			02/21/18 13:21	1
Total Organic Carbon	5.4		1.0		mg/L			02/20/18 13:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	270		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	270		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	350		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	10		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-05

Date Collected: 02/06/18 14:50

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 19:58	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 19:58	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 19:58	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 19:58	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:58	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 19:58	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 19:58	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 19:58	1
2-Butanone	ND		15		ug/L			02/13/18 19:58	1
2-Hexanone	ND		2.0		ug/L			02/13/18 19:58	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 19:58	1
Acetone	2.0		2.0		ug/L			02/13/18 19:58	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 19:58	1
Benzene	ND	*	0.20		ug/L			02/13/18 19:58	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 19:58	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 19:58	1
Bromoform	ND		0.50		ug/L			02/13/18 19:58	1
Bromomethane	ND		1.0		ug/L			02/13/18 19:58	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 19:58	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 19:58	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 19:58	1
Chloroethane	ND		0.50		ug/L			02/13/18 19:58	1
Chloroform	ND		0.20		ug/L			02/13/18 19:58	1
Chloromethane	ND		0.30		ug/L			02/13/18 19:58	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:58	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 19:58	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 19:58	1
Dibromomethane	ND		0.20		ug/L			02/13/18 19:58	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 19:58	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 19:58	1
Methyl iodide	ND		0.50		ug/L			02/13/18 19:58	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 19:58	1
o-Xylene	ND		0.50		ug/L			02/13/18 19:58	1
Styrene	ND		0.50		ug/L			02/13/18 19:58	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 19:58	1
Toluene	ND		0.20		ug/L			02/13/18 19:58	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 19:58	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 19:58	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 19:58	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 19:58	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 19:58	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 19:58	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 19:58	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-05

Date Collected: 02/06/18 14:50

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-5

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		02/13/18 19:58	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 19:58	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 19:58	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 19:58	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 19:58	1

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-06

Date Collected: 02/06/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 20:25	1
1,1,1-Trichloroethane	0.74		0.20		ug/L			02/13/18 20:25	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 20:25	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 20:25	1
1,1-Dichloroethane	2.8		0.20		ug/L			02/13/18 20:25	1
1,1-Dichloroethene	1.7		0.10		ug/L			02/13/18 20:25	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 20:25	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 20:25	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 20:25	1
1,2-Dichlorobenzene	ND *		0.30		ug/L			02/13/18 20:25	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 20:25	1
1,2-Dichloropropane	ND *		0.20		ug/L			02/13/18 20:25	1
1,4-Dichlorobenzene	ND *		0.30		ug/L			02/13/18 20:25	1
2-Butanone	ND		15		ug/L			02/13/18 20:25	1
2-Hexanone	ND		2.0		ug/L			02/13/18 20:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 20:25	1
Acetone	3.2		2.0		ug/L			02/13/18 20:25	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 20:25	1
Benzene	ND *		0.20		ug/L			02/13/18 20:25	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 20:25	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 20:25	1
Bromoform	ND		0.50		ug/L			02/13/18 20:25	1
Bromomethane	ND		1.0		ug/L			02/13/18 20:25	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 20:25	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 20:25	1
Chlorobenzene	ND *		0.20		ug/L			02/13/18 20:25	1
Chloroethane	ND		0.50		ug/L			02/13/18 20:25	1
Chloroform	ND		0.20		ug/L			02/13/18 20:25	1
Chloromethane	ND		0.30		ug/L			02/13/18 20:25	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 20:25	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 20:25	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 20:25	1
Dibromomethane	ND		0.20		ug/L			02/13/18 20:25	1
Ethylbenzene	ND *		0.20		ug/L			02/13/18 20:25	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 20:25	1
Methyl iodide	ND		0.50		ug/L			02/13/18 20:25	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 20:25	1
o-Xylene	ND		0.50		ug/L			02/13/18 20:25	1
Styrene	ND		0.50		ug/L			02/13/18 20:25	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 20:25	1
Toluene	ND		0.20		ug/L			02/13/18 20:25	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 20:25	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 20:25	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 20:25	1
Trichloroethene	ND *		0.20		ug/L			02/13/18 20:25	1
Trichlorofluoromethane	61		0.50		ug/L			02/13/18 20:25	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 20:25	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-06

Date Collected: 02/06/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		46 - 150		02/13/18 20:25	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 20:25	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 20:25	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 20:25	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 20:25	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	4.2		0.020		ug/L	-		02/14/18 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		46 - 150					02/14/18 18:06	1
4-Bromofluorobenzene (Surr)	99		81 - 120					02/14/18 18:06	1
Dibromofluoromethane (Surr)	101		42 - 132					02/14/18 18:06	1
Toluene-d8 (Surr)	103		75 - 125					02/14/18 18:06	1
Trifluorotoluene (Surr)	103		74 - 118					02/14/18 18:06	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	220		1.1		mg/L		02/09/18 08:59	02/12/18 16:49	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 16:49	1
Magnesium	93		1.1		mg/L		02/09/18 08:59	02/12/18 16:49	1
Manganese	0.58		0.020		mg/L		02/09/18 08:59	02/12/18 16:49	1
Potassium	8.5		3.3		mg/L		02/09/18 08:59	02/12/18 16:49	1
Sodium	32		2.0		mg/L		02/09/18 08:59	02/12/18 16:49	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Arsenic	0.0021		0.0010		mg/L		02/09/18 09:13	02/12/18 16:49	1
Barium	0.051		0.0012		mg/L		02/09/18 09:13	02/12/18 16:49	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Chromium	0.00043		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Cobalt	0.0021		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:49	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:49	1
Nickel	0.020		0.0030		mg/L		02/09/18 09:13	02/12/18 16:49	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:49	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:49	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:49	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 14:45	1
Nitrate Nitrite as N	1.2		0.40		mg/L			02/08/18 14:45	1
Chloride	39		0.90		mg/L			02/08/18 14:45	1
Sulfate	130		6.0		mg/L			02/15/18 10:08	5
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-06

Date Collected: 02/06/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-6

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	18		2.0		mg/L			02/20/18 13:01	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	820		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	820		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	1100		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	32		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-07

Date Collected: 02/06/18 16:55

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 20:51	1
1,1,1-Trichloroethane	0.33		0.20		ug/L			02/13/18 20:51	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 20:51	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 20:51	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 20:51	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 20:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 20:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 20:51	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 20:51	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 20:51	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 20:51	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 20:51	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 20:51	1
2-Butanone	ND		15		ug/L			02/13/18 20:51	1
2-Hexanone	ND		2.0		ug/L			02/13/18 20:51	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 20:51	1
Acetone	ND		2.0		ug/L			02/13/18 20:51	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 20:51	1
Benzene	ND	*	0.20		ug/L			02/13/18 20:51	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 20:51	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 20:51	1
Bromoform	ND		0.50		ug/L			02/13/18 20:51	1
Bromomethane	ND		1.0		ug/L			02/13/18 20:51	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 20:51	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 20:51	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 20:51	1
Chloroethane	ND		0.50		ug/L			02/13/18 20:51	1
Chloroform	ND		0.20		ug/L			02/13/18 20:51	1
Chloromethane	ND		0.30		ug/L			02/13/18 20:51	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 20:51	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 20:51	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 20:51	1
Dibromomethane	ND		0.20		ug/L			02/13/18 20:51	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 20:51	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 20:51	1
Methyl iodide	ND		0.50		ug/L			02/13/18 20:51	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 20:51	1
o-Xylene	ND		0.50		ug/L			02/13/18 20:51	1
Styrene	ND		0.50		ug/L			02/13/18 20:51	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 20:51	1
Toluene	ND		0.20		ug/L			02/13/18 20:51	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 20:51	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 20:51	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 20:51	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 20:51	1
Trichlorofluoromethane	1.9		0.50		ug/L			02/13/18 20:51	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 20:51	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-07

Date Collected: 02/06/18 16:55

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		02/13/18 20:51	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 20:51	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 20:51	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 20:51	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 20:51	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	19		0.020		ug/L			02/14/18 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		02/14/18 18:33	1
4-Bromofluorobenzene (Surr)	100		81 - 120		02/14/18 18:33	1
Dibromofluoromethane (Surr)	102		42 - 132		02/14/18 18:33	1
Toluene-d8 (Surr)	102		75 - 125		02/14/18 18:33	1
Trifluorotoluene (Surr)	102		74 - 118		02/14/18 18:33	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-08

Date Collected: 02/07/18 10:20

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 21:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 21:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 21:18	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 21:18	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 21:18	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 21:18	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 21:18	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 21:18	1
2-Butanone	ND		15		ug/L			02/13/18 21:18	1
2-Hexanone	ND		2.0		ug/L			02/13/18 21:18	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 21:18	1
Acetone	ND		2.0		ug/L			02/13/18 21:18	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 21:18	1
Benzene	ND	*	0.20		ug/L			02/13/18 21:18	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 21:18	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 21:18	1
Bromoform	ND		0.50		ug/L			02/13/18 21:18	1
Bromomethane	ND		1.0		ug/L			02/13/18 21:18	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 21:18	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 21:18	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 21:18	1
Chloroethane	ND		0.50		ug/L			02/13/18 21:18	1
Chloroform	ND		0.20		ug/L			02/13/18 21:18	1
Chloromethane	ND		0.30		ug/L			02/13/18 21:18	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 21:18	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 21:18	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 21:18	1
Dibromomethane	ND		0.20		ug/L			02/13/18 21:18	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 21:18	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 21:18	1
Methyl iodide	ND		0.50		ug/L			02/13/18 21:18	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 21:18	1
o-Xylene	ND		0.50		ug/L			02/13/18 21:18	1
Styrene	ND		0.50		ug/L			02/13/18 21:18	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 21:18	1
Toluene	ND		0.20		ug/L			02/13/18 21:18	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 21:18	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 21:18	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 21:18	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 21:18	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 21:18	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 21:18	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 21:18	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-08

Date Collected: 02/07/18 10:20

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		02/13/18 21:18	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 21:18	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 21:18	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 21:18	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 21:18	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97		1.1		mg/L		02/09/18 08:59	02/12/18 16:52	1
Iron	1.5		0.30		mg/L		02/09/18 08:59	02/12/18 16:52	1
Magnesium	56		1.1		mg/L		02/09/18 08:59	02/12/18 16:52	1
Manganese	0.095		0.020		mg/L		02/09/18 08:59	02/12/18 16:52	1
Potassium	7.2		3.3		mg/L		02/09/18 08:59	02/12/18 16:52	1
Sodium	29		2.0		mg/L		02/09/18 08:59	02/12/18 16:52	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Arsenic	0.0051		0.0010		mg/L		02/09/18 09:13	02/12/18 16:53	1
Barium	0.044		0.0012		mg/L		02/09/18 09:13	02/12/18 16:53	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:53	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:53	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 16:53	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:53	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:53	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:53	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 23:00	1
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 23:00	1
Chloride	57		0.90		mg/L			02/08/18 23:00	1
Sulfate	42		1.2		mg/L			02/08/18 23:00	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Total Organic Carbon	2.0		1.0		mg/L			02/20/18 13:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	500		10		mg/L			02/12/18 09:52	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-09

Date Collected: 02/07/18 11:35

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 21:44	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 21:44	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 21:44	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 21:44	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 21:44	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 21:44	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 21:44	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 21:44	1
2-Butanone	ND		15		ug/L			02/13/18 21:44	1
2-Hexanone	ND		2.0		ug/L			02/13/18 21:44	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 21:44	1
Acetone	ND		2.0		ug/L			02/13/18 21:44	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 21:44	1
Benzene	ND	*	0.20		ug/L			02/13/18 21:44	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 21:44	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 21:44	1
Bromoform	ND		0.50		ug/L			02/13/18 21:44	1
Bromomethane	ND		1.0		ug/L			02/13/18 21:44	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 21:44	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 21:44	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 21:44	1
Chloroethane	ND		0.50		ug/L			02/13/18 21:44	1
Chloroform	ND		0.20		ug/L			02/13/18 21:44	1
Chloromethane	ND		0.30		ug/L			02/13/18 21:44	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 21:44	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 21:44	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 21:44	1
Dibromomethane	ND		0.20		ug/L			02/13/18 21:44	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 21:44	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 21:44	1
Methyl iodide	ND		0.50		ug/L			02/13/18 21:44	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 21:44	1
o-Xylene	ND		0.50		ug/L			02/13/18 21:44	1
Styrene	ND		0.50		ug/L			02/13/18 21:44	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 21:44	1
Toluene	ND		0.20		ug/L			02/13/18 21:44	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 21:44	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 21:44	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 21:44	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 21:44	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 21:44	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 21:44	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 21:44	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-09

Date Collected: 02/07/18 11:35

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		02/13/18 21:44	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 21:44	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 21:44	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 21:44	1
Trifluorotoluene (Surr)	98		74 - 118		02/13/18 21:44	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	30		1.1		mg/L		02/09/18 08:59	02/12/18 16:56	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 16:56	1
Magnesium	33		1.1		mg/L		02/09/18 08:59	02/12/18 16:56	1
Manganese	0.058		0.020		mg/L		02/09/18 08:59	02/12/18 16:56	1
Potassium	14		3.3		mg/L		02/09/18 08:59	02/12/18 16:56	1
Sodium	16		2.0		mg/L		02/09/18 08:59	02/12/18 16:56	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Arsenic	0.019		0.0010		mg/L		02/09/18 09:13	02/12/18 16:57	1
Barium	0.027		0.0012		mg/L		02/09/18 09:13	02/12/18 16:57	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 16:57	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 16:57	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 16:57	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 16:57	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 16:57	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 16:57	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 23:11	1
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 23:11	1
Chloride	41		0.90		mg/L			02/08/18 23:11	1
Sulfate	20		1.2		mg/L			02/08/18 23:11	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Total Organic Carbon	2.0		1.0		mg/L			02/15/18 18:57	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	190		5.0		mg/L			02/14/18 12:52	1
Bicarbonate Alkalinity as CaCO3	190		5.0		mg/L			02/14/18 12:52	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 12:52	1
Total Dissolved Solids	240		10		mg/L			02/13/18 13:29	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-10

Date Collected: 02/07/18 12:50

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 22:10	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 22:10	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 22:10	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 22:10	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 22:10	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 22:10	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 22:10	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 22:10	1
2-Butanone	ND		15		ug/L			02/13/18 22:10	1
2-Hexanone	ND		2.0		ug/L			02/13/18 22:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 22:10	1
Acetone	ND		2.0		ug/L			02/13/18 22:10	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 22:10	1
Benzene	ND	*	0.20		ug/L			02/13/18 22:10	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 22:10	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 22:10	1
Bromoform	ND		0.50		ug/L			02/13/18 22:10	1
Bromomethane	ND		1.0		ug/L			02/13/18 22:10	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 22:10	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 22:10	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 22:10	1
Chloroethane	ND		0.50		ug/L			02/13/18 22:10	1
Chloroform	ND		0.20		ug/L			02/13/18 22:10	1
Chloromethane	ND		0.30		ug/L			02/13/18 22:10	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 22:10	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 22:10	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 22:10	1
Dibromomethane	ND		0.20		ug/L			02/13/18 22:10	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 22:10	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 22:10	1
Methyl iodide	ND		0.50		ug/L			02/13/18 22:10	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 22:10	1
o-Xylene	ND		0.50		ug/L			02/13/18 22:10	1
Styrene	ND		0.50		ug/L			02/13/18 22:10	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 22:10	1
Toluene	ND		0.20		ug/L			02/13/18 22:10	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 22:10	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 22:10	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 22:10	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 22:10	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 22:10	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 22:10	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 22:10	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-10

Lab Sample ID: 580-74978-10

Date Collected: 02/07/18 12:50

Matrix: Water

Date Received: 02/08/18 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		46 - 150		02/13/18 22:10	1
4-Bromofluorobenzene (Surr)	102		81 - 120		02/13/18 22:10	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 22:10	1
Toluene-d8 (Surr)	102		75 - 125		02/13/18 22:10	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 22:10	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	50		1.1		mg/L		02/09/18 08:59	02/12/18 16:59	1
Iron	1.3		0.30		mg/L		02/09/18 08:59	02/12/18 16:59	1
Magnesium	27		1.1		mg/L		02/09/18 08:59	02/12/18 16:59	1
Manganese	0.32		0.020		mg/L		02/09/18 08:59	02/12/18 16:59	1
Potassium	6.7		3.3		mg/L		02/09/18 08:59	02/12/18 16:59	1
Sodium	26		2.0		mg/L		02/09/18 08:59	02/12/18 16:59	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Arsenic	0.0022		0.0010		mg/L		02/09/18 09:13	02/12/18 17:01	1
Barium	0.083		0.0012		mg/L		02/09/18 09:13	02/12/18 17:01	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 17:01	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 17:01	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 17:01	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 17:01	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 17:01	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 17:01	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 23:47	1
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 23:47	1
Chloride	14		0.90		mg/L			02/08/18 23:47	1
Sulfate	26		1.2		mg/L			02/08/18 23:47	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Total Organic Carbon	1.6		1.0		mg/L			02/15/18 18:57	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	240		5.0		mg/L			02/14/18 16:50	1
Bicarbonate Alkalinity as CaCO3	240		5.0		mg/L			02/14/18 16:50	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Total Dissolved Solids	280		10		mg/L			02/13/18 13:29	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-11

Date Collected: 02/07/18 14:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 22:37	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 22:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 22:37	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 22:37	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 22:37	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 22:37	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 22:37	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 22:37	1
2-Butanone	ND		15		ug/L			02/13/18 22:37	1
2-Hexanone	ND		2.0		ug/L			02/13/18 22:37	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 22:37	1
Acetone	ND		2.0		ug/L			02/13/18 22:37	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 22:37	1
Benzene	ND	*	0.20		ug/L			02/13/18 22:37	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 22:37	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 22:37	1
Bromoform	ND		0.50		ug/L			02/13/18 22:37	1
Bromomethane	ND		1.0		ug/L			02/13/18 22:37	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 22:37	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 22:37	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 22:37	1
Chloroethane	ND		0.50		ug/L			02/13/18 22:37	1
Chloroform	ND		0.20		ug/L			02/13/18 22:37	1
Chloromethane	ND		0.30		ug/L			02/13/18 22:37	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 22:37	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 22:37	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 22:37	1
Dibromomethane	ND		0.20		ug/L			02/13/18 22:37	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 22:37	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 22:37	1
Methyl iodide	ND		0.50		ug/L			02/13/18 22:37	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 22:37	1
o-Xylene	ND		0.50		ug/L			02/13/18 22:37	1
Styrene	ND		0.50		ug/L			02/13/18 22:37	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 22:37	1
Toluene	ND		0.20		ug/L			02/13/18 22:37	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 22:37	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 22:37	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 22:37	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 22:37	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 22:37	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 22:37	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 22:37	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-11

Lab Sample ID: 580-74978-11

Date Collected: 02/07/18 14:40

Matrix: Water

Date Received: 02/08/18 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		02/13/18 22:37	1
4-Bromofluorobenzene (Surr)	102		81 - 120		02/13/18 22:37	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 22:37	1
Toluene-d8 (Surr)	102		75 - 125		02/13/18 22:37	1
Trifluorotoluene (Surr)	98		74 - 118		02/13/18 22:37	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	76		1.1		mg/L		02/09/18 08:59	02/12/18 17:02	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 17:02	1
Magnesium	43		1.1		mg/L		02/09/18 08:59	02/12/18 17:02	1
Manganese	ND		0.020		mg/L		02/09/18 08:59	02/12/18 17:02	1
Potassium	5.2		3.3		mg/L		02/09/18 08:59	02/12/18 17:02	1
Sodium	28		2.0		mg/L		02/09/18 08:59	02/12/18 17:02	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Arsenic	0.0032		0.0010		mg/L		02/09/18 09:13	02/12/18 17:05	1
Barium	0.018		0.0012		mg/L		02/09/18 09:13	02/12/18 17:05	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Chromium	0.0042		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Copper	0.0048		0.0020		mg/L		02/09/18 09:13	02/12/18 17:05	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 17:05	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 17:05	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 17:05	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 17:05	1
Vanadium	0.0058		0.0040		mg/L		02/09/18 09:13	02/12/18 17:05	1
Zinc	0.0074		0.0070		mg/L		02/09/18 09:13	02/12/18 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 23:58	1
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 23:58	1
Chloride	68		0.90		mg/L			02/08/18 23:58	1
Sulfate	54		1.2		mg/L			02/08/18 23:58	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Total Organic Carbon	2.6		1.0		mg/L			02/15/18 18:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	270		5.0		mg/L			02/14/18 16:50	1
Bicarbonate Alkalinity as CaCO3	270		5.0		mg/L			02/14/18 16:50	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Total Dissolved Solids	430		10		mg/L			02/13/18 13:29	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-12

Date Collected: 02/07/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 23:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 23:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 23:03	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 23:03	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 23:03	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 23:03	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 23:03	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 23:03	1
2-Butanone	ND		15		ug/L			02/13/18 23:03	1
2-Hexanone	ND		2.0		ug/L			02/13/18 23:03	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 23:03	1
Acetone	2.1		2.0		ug/L			02/13/18 23:03	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 23:03	1
Benzene	ND	*	0.20		ug/L			02/13/18 23:03	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 23:03	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 23:03	1
Bromoform	ND		0.50		ug/L			02/13/18 23:03	1
Bromomethane	ND		1.0		ug/L			02/13/18 23:03	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 23:03	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 23:03	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 23:03	1
Chloroethane	ND		0.50		ug/L			02/13/18 23:03	1
Chloroform	ND		0.20		ug/L			02/13/18 23:03	1
Chloromethane	ND		0.30		ug/L			02/13/18 23:03	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 23:03	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 23:03	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 23:03	1
Dibromomethane	ND		0.20		ug/L			02/13/18 23:03	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 23:03	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 23:03	1
Methyl iodide	ND		0.50		ug/L			02/13/18 23:03	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 23:03	1
o-Xylene	ND		0.50		ug/L			02/13/18 23:03	1
Styrene	ND		0.50		ug/L			02/13/18 23:03	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 23:03	1
Toluene	ND		0.20		ug/L			02/13/18 23:03	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 23:03	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 23:03	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 23:03	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 23:03	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 23:03	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 23:03	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 23:03	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-12

Lab Sample ID: 580-74978-12

Date Collected: 02/07/18 15:40

Matrix: Water

Date Received: 02/08/18 11:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		02/13/18 23:03	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 23:03	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 23:03	1
Toluene-d8 (Surr)	101		75 - 125		02/13/18 23:03	1
Trifluorotoluene (Surr)	99		74 - 118		02/13/18 23:03	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79		1.1		mg/L		02/09/18 08:59	02/12/18 17:06	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 17:06	1
Magnesium	46		1.1		mg/L		02/09/18 08:59	02/12/18 17:06	1
Manganese	ND		0.020		mg/L		02/09/18 08:59	02/12/18 17:06	1
Potassium	5.3		3.3		mg/L		02/09/18 08:59	02/12/18 17:06	1
Sodium	31		2.0		mg/L		02/09/18 08:59	02/12/18 17:06	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Arsenic	0.0032		0.0010		mg/L		02/09/18 09:13	02/12/18 17:08	1
Barium	0.021		0.0012		mg/L		02/09/18 09:13	02/12/18 17:08	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Chromium	0.0014		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Copper	0.049		0.0020		mg/L		02/09/18 09:13	02/12/18 17:08	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 17:08	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 17:08	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 17:08	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 17:08	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 17:08	1
Zinc	0.083		0.0070		mg/L		02/09/18 09:13	02/12/18 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/09/18 00:10	1
Nitrate Nitrite as N	0.42		0.40		mg/L			02/09/18 00:10	1
Chloride	57		0.90		mg/L			02/09/18 00:10	1
Sulfate	44		1.2		mg/L			02/09/18 00:10	1
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1
Total Organic Carbon	2.4		1.0		mg/L			02/15/18 18:57	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			02/14/18 16:50	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			02/14/18 16:50	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			02/14/18 16:50	1
Total Dissolved Solids	460		10		mg/L			02/13/18 13:29	1
Chemical Oxygen Demand	ND		10		mg/L		02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: Trip Blank

Date Collected: 02/06/18 00:01

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 23:30	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 23:30	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 23:30	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 23:30	1
1,2-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 23:30	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 23:30	1
1,2-Dichloropropane	ND	*	0.20		ug/L			02/13/18 23:30	1
1,4-Dichlorobenzene	ND	*	0.30		ug/L			02/13/18 23:30	1
2-Butanone	ND		15		ug/L			02/13/18 23:30	1
2-Hexanone	ND		2.0		ug/L			02/13/18 23:30	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 23:30	1
Acetone	2.2		2.0		ug/L			02/13/18 23:30	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 23:30	1
Benzene	ND	*	0.20		ug/L			02/13/18 23:30	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 23:30	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 23:30	1
Bromoform	ND		0.50		ug/L			02/13/18 23:30	1
Bromomethane	ND		1.0		ug/L			02/13/18 23:30	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 23:30	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 23:30	1
Chlorobenzene	ND	*	0.20		ug/L			02/13/18 23:30	1
Chloroethane	ND		0.50		ug/L			02/13/18 23:30	1
Chloroform	ND		0.20		ug/L			02/13/18 23:30	1
Chloromethane	ND		0.30		ug/L			02/13/18 23:30	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 23:30	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 23:30	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 23:30	1
Dibromomethane	ND		0.20		ug/L			02/13/18 23:30	1
Ethylbenzene	ND	*	0.20		ug/L			02/13/18 23:30	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 23:30	1
Methyl iodide	ND		0.50		ug/L			02/13/18 23:30	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 23:30	1
o-Xylene	ND		0.50		ug/L			02/13/18 23:30	1
Styrene	ND		0.50		ug/L			02/13/18 23:30	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 23:30	1
Toluene	ND		0.20		ug/L			02/13/18 23:30	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 23:30	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 23:30	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 23:30	1
Trichloroethene	ND	*	0.20		ug/L			02/13/18 23:30	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 23:30	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 23:30	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 23:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: Trip Blank

Date Collected: 02/06/18 00:01

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-13

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		02/13/18 23:30	1
4-Bromofluorobenzene (Surr)	101		81 - 120		02/13/18 23:30	1
Dibromofluoromethane (Surr)	104		42 - 132		02/13/18 23:30	1
Toluene-d8 (Surr)	103		75 - 125		02/13/18 23:30	1
Trifluorotoluene (Surr)	100		74 - 118		02/13/18 23:30	1

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-267246/7

Matrix: Water

Analysis Batch: 267246

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,1,1-Trichloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,1,2-Trichloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,1-Dichloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,1-Dichloroethene	ND		0.10		ug/L			02/13/18 15:33	1
1,2,3-Trichloropropane	ND		0.20		ug/L			02/13/18 15:33	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			02/13/18 15:33	1
1,2-Dibromoethane	ND		0.10		ug/L			02/13/18 15:33	1
1,2-Dichlorobenzene	ND		0.30		ug/L			02/13/18 15:33	1
1,2-Dichloroethane	ND		0.20		ug/L			02/13/18 15:33	1
1,2-Dichloropropane	ND		0.20		ug/L			02/13/18 15:33	1
1,4-Dichlorobenzene	ND		0.30		ug/L			02/13/18 15:33	1
2-Butanone	ND		15		ug/L			02/13/18 15:33	1
2-Hexanone	ND		2.0		ug/L			02/13/18 15:33	1
4-Methyl-2-pentanone	ND		5.0		ug/L			02/13/18 15:33	1
Acetone	ND		2.0		ug/L			02/13/18 15:33	1
Acrylonitrile	ND		5.0		ug/L			02/13/18 15:33	1
Benzene	ND		0.20		ug/L			02/13/18 15:33	1
Bromochloromethane	ND		0.20		ug/L			02/13/18 15:33	1
Bromodichloromethane	ND		0.20		ug/L			02/13/18 15:33	1
Bromoform	ND		0.50		ug/L			02/13/18 15:33	1
Bromomethane	ND		1.0		ug/L			02/13/18 15:33	1
Carbon disulfide	ND		0.20		ug/L			02/13/18 15:33	1
Carbon tetrachloride	ND		0.20		ug/L			02/13/18 15:33	1
Chlorobenzene	ND		0.20		ug/L			02/13/18 15:33	1
Chloroethane	ND		0.50		ug/L			02/13/18 15:33	1
Chloroform	ND		0.20		ug/L			02/13/18 15:33	1
Chloromethane	ND		0.30		ug/L			02/13/18 15:33	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 15:33	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			02/13/18 15:33	1
Dibromochloromethane	ND		0.20		ug/L			02/13/18 15:33	1
Dibromomethane	ND		0.20		ug/L			02/13/18 15:33	1
Ethylbenzene	ND		0.20		ug/L			02/13/18 15:33	1
m,p-Xylene	ND		0.50		ug/L			02/13/18 15:33	1
Methyl iodide	ND		0.50		ug/L			02/13/18 15:33	1
Methylene Chloride	ND		0.50		ug/L			02/13/18 15:33	1
o-Xylene	ND		0.50		ug/L			02/13/18 15:33	1
Styrene	ND		0.50		ug/L			02/13/18 15:33	1
Tetrachloroethene	ND		0.50		ug/L			02/13/18 15:33	1
Toluene	ND		0.20		ug/L			02/13/18 15:33	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			02/13/18 15:33	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			02/13/18 15:33	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			02/13/18 15:33	1
Trichloroethene	ND		0.20		ug/L			02/13/18 15:33	1
Trichlorofluoromethane	ND		0.50		ug/L			02/13/18 15:33	1
Vinyl acetate	ND		1.0		ug/L			02/13/18 15:33	1
Vinyl chloride	ND		0.020		ug/L			02/13/18 15:33	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		02/13/18 15:33	1
4-Bromofluorobenzene (Surr)	102		81 - 120		02/13/18 15:33	1
Dibromofluoromethane (Surr)	103		42 - 132		02/13/18 15:33	1
Toluene-d8 (Surr)	102		75 - 125		02/13/18 15:33	1
Trifluorotoluene (Surr)	103		74 - 118		02/13/18 15:33	1

Lab Sample ID: LCS 580-267246/4
Matrix: Water
Analysis Batch: 267246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.24		ug/L		105	68 - 139
1,1,1-Trichloroethane	5.00	4.77		ug/L		95	56 - 150
1,1,2,2-Tetrachloroethane	5.00	5.69		ug/L		114	60 - 134
1,1,2-Trichloroethane	5.00	5.37		ug/L		107	62 - 137
1,1-Dichloroethane	5.00	5.23		ug/L		105	68 - 135
1,1-Dichloroethene	5.00	5.28		ug/L		106	64 - 125
1,2,3-Trichloropropane	5.00	5.38		ug/L		108	45 - 150
1,2-Dibromo-3-Chloropropane	5.00	5.19		ug/L		104	34 - 150
1,2-Dibromoethane	5.00	5.47		ug/L		109	56 - 146
1,2-Dichlorobenzene	5.00	5.31		ug/L		106	73 - 120
1,2-Dichloroethane	5.00	5.38		ug/L		108	63 - 150
1,2-Dichloropropane	5.00	5.40		ug/L		108	72 - 120
1,4-Dichlorobenzene	5.00	5.22		ug/L		104	77 - 120
2-Butanone	25.0	28.5		ug/L		114	30 - 150
2-Hexanone	25.0	27.2		ug/L		109	25 - 150
4-Methyl-2-pentanone	25.0	27.5		ug/L		110	36 - 150
Acetone	25.0	28.6		ug/L		114	20 - 138
Acrylonitrile	50.0	56.4		ug/L		113	55 - 134
Benzene	5.00	5.48		ug/L		110	73 - 120
Bromochloromethane	5.00	5.34		ug/L		107	71 - 131
Bromodichloromethane	5.00	5.45		ug/L		109	62 - 150
Bromoform	5.00	4.89		ug/L		98	51 - 137
Bromomethane	5.00	4.50		ug/L		90	61 - 135
Carbon disulfide	5.00	5.01		ug/L		100	65 - 128
Carbon tetrachloride	5.00	5.18		ug/L		104	54 - 150
Chlorobenzene	5.00	5.34		ug/L		107	74 - 114
Chloroethane	5.00	4.52		ug/L		90	58 - 130
Chloroform	5.00	5.24		ug/L		105	71 - 130
Chloromethane	5.00	4.00		ug/L		80	40 - 150
cis-1,2-Dichloroethene	5.00	5.35		ug/L		107	73 - 130
cis-1,3-Dichloropropene	5.00	5.28		ug/L		106	54 - 150
Dibromochloromethane	5.00	5.31		ug/L		106	46 - 150
Dibromomethane	5.00	5.37		ug/L		107	65 - 137
Ethylbenzene	5.00	5.49		ug/L		110	74 - 125
m,p-Xylene	5.00	5.42		ug/L		108	73 - 130
Methyl iodide	5.00	5.12		ug/L		102	47 - 145
Methylene Chloride	5.00	5.25		ug/L		105	58 - 134
o-Xylene	5.00	5.31		ug/L		106	80 - 139
Styrene	5.00	5.19		ug/L		104	68 - 136
Tetrachloroethene	5.00	5.06		ug/L		101	67 - 123
Toluene	5.00	5.25		ug/L		105	70 - 126
trans-1,2-Dichloroethene	5.00	5.25		ug/L		105	69 - 124
trans-1,3-Dichloropropene	5.00	5.11		ug/L		102	40 - 150

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-267246/4

Matrix: Water

Analysis Batch: 267246

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	5.31		ug/L		106	20 - 150
Trichloroethene	5.00	5.45		ug/L		109	72 - 123
Trichlorofluoromethane	5.00	5.00		ug/L		100	60 - 150
Vinyl acetate	12.5	14.1		ug/L		113	30 - 150
Vinyl chloride	5.00	4.16		ug/L		83	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		46 - 150
4-Bromofluorobenzene (Surr)	101		81 - 120
Dibromofluoromethane (Surr)	102		42 - 132
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	98		74 - 118

Lab Sample ID: LCSD 580-267246/5

Matrix: Water

Analysis Batch: 267246

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	6.19		ug/L		124	68 - 139	17	20
1,1,1-Trichloroethane	5.00	6.30		ug/L		126	56 - 150	28	29
1,1,2,2-Tetrachloroethane	5.00	6.31		ug/L		126	60 - 134	10	25
1,1,2-Trichloroethane	5.00	5.82		ug/L		116	62 - 137	8	30
1,1-Dichloroethane	5.00	6.09		ug/L		122	68 - 135	15	27
1,1-Dichloroethene	5.00	5.96		ug/L		119	64 - 125	12	28
1,2,3-Trichloropropane	5.00	6.00		ug/L		120	45 - 150	11	20
1,2-Dibromo-3-Chloropropane	5.00	5.76		ug/L		115	34 - 150	11	20
1,2-Dibromoethane	5.00	5.99		ug/L		120	56 - 146	9	20
1,2-Dichlorobenzene	5.00	6.08	*	ug/L		122	73 - 120	14	14
1,2-Dichloroethane	5.00	5.97		ug/L		119	63 - 150	10	29
1,2-Dichloropropane	5.00	6.11	*	ug/L		122	72 - 120	12	20
1,4-Dichlorobenzene	5.00	5.88	*	ug/L		118	77 - 120	12	11
2-Butanone	25.0	29.9		ug/L		119	30 - 150	5	35
2-Hexanone	25.0	28.8		ug/L		115	25 - 150	5	28
4-Methyl-2-pentanone	25.0	29.9		ug/L		120	36 - 150	8	34
Acetone	25.0	30.3		ug/L		121	20 - 138	6	35
Acrylonitrile	50.0	62.7		ug/L		125	55 - 134	10	35
Benzene	5.00	6.30	*	ug/L		126	73 - 120	14	20
Bromochloromethane	5.00	6.07		ug/L		121	71 - 131	13	20
Bromodichloromethane	5.00	6.10		ug/L		122	62 - 150	11	20
Bromoform	5.00	5.44		ug/L		109	51 - 137	11	20
Bromomethane	5.00	5.50		ug/L		110	61 - 135	20	31
Carbon disulfide	5.00	6.00		ug/L		120	65 - 128	18	32
Carbon tetrachloride	5.00	6.13		ug/L		123	54 - 150	17	30
Chlorobenzene	5.00	6.05	*	ug/L		121	74 - 114	12	12
Chloroethane	5.00	5.76		ug/L		115	58 - 130	24	35
Chloroform	5.00	6.07		ug/L		121	71 - 130	15	20
Chloromethane	5.00	5.10		ug/L		102	40 - 150	24	31
cis-1,2-Dichloroethene	5.00	6.26		ug/L		125	73 - 130	16	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-267246/5

Matrix: Water

Analysis Batch: 267246

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	5.96		ug/L		119	54 - 150	12	28
Dibromochloromethane	5.00	5.98		ug/L		120	46 - 150	12	20
Dibromomethane	5.00	6.05		ug/L		121	65 - 137	12	20
Ethylbenzene	5.00	6.28	*	ug/L		126	74 - 125	13	20
m,p-Xylene	5.00	6.19		ug/L		124	73 - 130	13	20
Methyl iodide	5.00	6.23		ug/L		125	47 - 145	19	35
Methylene Chloride	5.00	6.07		ug/L		121	58 - 134	15	29
o-Xylene	5.00	6.15		ug/L		123	80 - 139	15	20
Styrene	5.00	5.95		ug/L		119	68 - 136	14	20
Tetrachloroethene	5.00	5.72		ug/L		114	67 - 123	12	20
Toluene	5.00	5.99		ug/L		120	70 - 126	13	20
trans-1,2-Dichloroethene	5.00	6.13		ug/L		123	69 - 124	15	27
trans-1,3-Dichloropropene	5.00	5.59		ug/L		112	40 - 150	9	30
trans-1,4-Dichloro-2-butene	5.00	5.63		ug/L		113	20 - 150	6	20
Trichloroethene	5.00	6.18	*	ug/L		124	72 - 123	13	20
Trichlorofluoromethane	5.00	5.95		ug/L		119	60 - 150	17	31
Vinyl acetate	12.5	16.0		ug/L		128	30 - 150	12	35
Vinyl chloride	5.00	5.24		ug/L		105	59 - 140	23	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		46 - 150
4-Bromofluorobenzene (Surr)	101		81 - 120
Dibromofluoromethane (Surr)	102		42 - 132
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	98		74 - 118

Lab Sample ID: MB 580-267325/7

Matrix: Water

Analysis Batch: 267325

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			02/14/18 16:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		46 - 150		02/14/18 16:20	1
4-Bromofluorobenzene (Surr)	99		81 - 120		02/14/18 16:20	1
Dibromofluoromethane (Surr)	100		42 - 132		02/14/18 16:20	1
Toluene-d8 (Surr)	103		75 - 125		02/14/18 16:20	1
Trifluorotoluene (Surr)	105		74 - 118		02/14/18 16:20	1

Lab Sample ID: LCS 580-267325/4

Matrix: Water

Analysis Batch: 267325

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	5.00	5.46		ug/L		109	59 - 140

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-267325/4

Matrix: Water

Analysis Batch: 267325

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		46 - 150
4-Bromofluorobenzene (Surr)	98		81 - 120
Dibromofluoromethane (Surr)	99		42 - 132
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	101		74 - 118

Lab Sample ID: LCSD 580-267325/5

Matrix: Water

Analysis Batch: 267325

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	5.00	4.92		ug/L		98	59 - 140	10	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	95		46 - 150						
4-Bromofluorobenzene (Surr)	99		81 - 120						
Dibromofluoromethane (Surr)	99		42 - 132						
Toluene-d8 (Surr)	98		75 - 125						
Trifluorotoluene (Surr)	101		74 - 118						

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-267011/14-A

Matrix: Water

Analysis Batch: 267188

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 267011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		02/09/18 08:59	02/12/18 16:05	1
Iron	ND		0.30		mg/L		02/09/18 08:59	02/12/18 16:05	1
Magnesium	ND		1.1		mg/L		02/09/18 08:59	02/12/18 16:05	1
Manganese	ND		0.020		mg/L		02/09/18 08:59	02/12/18 16:05	1
Potassium	ND		3.3		mg/L		02/09/18 08:59	02/12/18 16:05	1
Sodium	ND		2.0		mg/L		02/09/18 08:59	02/12/18 16:05	1

Lab Sample ID: LCS 580-267011/15-A

Matrix: Water

Analysis Batch: 267188

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 267011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	20.0	21.2		mg/L		106	80 - 120		
Iron	22.0	23.4		mg/L		106	80 - 120		
Magnesium	20.0	21.2		mg/L		106	80 - 120		
Manganese	1.00	1.05		mg/L		105	80 - 120		
Potassium	20.0	20.7		mg/L		104	80 - 120		
Sodium	20.0	20.7		mg/L		104	80 - 120		

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-267011/16-A

Matrix: Water

Analysis Batch: 267188

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 267011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	18.8		mg/L		94	80 - 120	12	20
Iron	22.0	20.9		mg/L		95	80 - 120	11	20
Magnesium	20.0	19.0		mg/L		95	80 - 120	11	20
Manganese	1.00	0.939		mg/L		94	80 - 120	11	20
Potassium	20.0	18.4		mg/L		92	80 - 120	12	20
Sodium	20.0	18.3		mg/L		92	80 - 120	12	20

Lab Sample ID: 580-74978-1 MS

Matrix: Water

Analysis Batch: 267188

Client Sample ID: 020618-01

Prep Type: Dissolved

Prep Batch: 267011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	110		20.0	121	4	mg/L		46	75 - 125		
Iron	ND		22.0	20.5		mg/L		93	75 - 125		
Magnesium	74	F1	20.0	88.1	F1	mg/L		70	75 - 125		
Manganese	ND		1.00	0.931		mg/L		91	75 - 125		
Potassium	8.1		20.0	26.4		mg/L		91	75 - 125		
Sodium	39		20.0	56.5		mg/L		87	75 - 125		

Lab Sample ID: 580-74978-1 MSD

Matrix: Water

Analysis Batch: 267188

Client Sample ID: 020618-01

Prep Type: Dissolved

Prep Batch: 267011

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	110		20.0	128	4	mg/L		81	75 - 125	6	20
Iron	ND		22.0	21.3		mg/L		97	75 - 125	4	20
Magnesium	74	F1	20.0	92.5		mg/L		92	75 - 125	5	20
Manganese	ND		1.00	0.972		mg/L		96	75 - 125	4	20
Potassium	8.1		20.0	27.7		mg/L		98	75 - 125	5	20
Sodium	39		20.0	59.2		mg/L		101	75 - 125	5	20

Lab Sample ID: 580-74978-1 DU

Matrix: Water

Analysis Batch: 267188

Client Sample ID: 020618-01

Prep Type: Dissolved

Prep Batch: 267011

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	110		108		mg/L		3	20
Iron	ND		ND		mg/L		NC	20
Magnesium	74	F1	72.3		mg/L		2	20
Manganese	ND		ND		mg/L		NC	20
Potassium	8.1		7.94		mg/L		2	20
Sodium	39		38.0		mg/L		3	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-267014/14-A

Matrix: Water

Analysis Batch: 267187

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Arsenic	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 15:49	1
Barium	ND		0.0012		mg/L		02/09/18 09:13	02/12/18 15:49	1
Beryllium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Cadmium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Chromium	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Cobalt	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Copper	ND		0.0020		mg/L		02/09/18 09:13	02/12/18 15:49	1
Lead	ND		0.00080		mg/L		02/09/18 09:13	02/12/18 15:49	1
Nickel	ND		0.0030		mg/L		02/09/18 09:13	02/12/18 15:49	1
Selenium	ND		0.0080		mg/L		02/09/18 09:13	02/12/18 15:49	1
Silver	ND		0.00040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Thallium	ND		0.0010		mg/L		02/09/18 09:13	02/12/18 15:49	1
Vanadium	ND		0.0040		mg/L		02/09/18 09:13	02/12/18 15:49	1
Zinc	ND		0.0070		mg/L		02/09/18 09:13	02/12/18 15:49	1

Lab Sample ID: LCS 580-267014/15-A

Matrix: Water

Analysis Batch: 267187

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.79		mg/L		93	80 - 120
Arsenic	4.00	3.88		mg/L		97	80 - 120
Barium	4.00	3.68		mg/L		92	80 - 120
Beryllium	0.100	0.0988		mg/L		99	80 - 120
Cadmium	0.100	0.0962		mg/L		96	80 - 120
Chromium	0.400	0.389		mg/L		97	80 - 120
Cobalt	1.00	0.973		mg/L		97	80 - 120
Copper	0.500	0.502		mg/L		100	80 - 120
Lead	1.00	0.949		mg/L		95	80 - 120
Nickel	1.00	0.980		mg/L		98	80 - 120
Selenium	4.00	3.91		mg/L		98	80 - 120
Silver	0.600	0.585		mg/L		97	80 - 120
Thallium	4.00	3.62		mg/L		91	80 - 120
Vanadium	1.00	0.951		mg/L		95	80 - 120
Zinc	4.00	3.74		mg/L		94	80 - 120

Lab Sample ID: LCSD 580-267014/16-A

Matrix: Water

Analysis Batch: 267187

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.81		mg/L		94	80 - 120	1	20
Arsenic	4.00	3.90		mg/L		98	80 - 120	1	20
Barium	4.00	3.78		mg/L		95	80 - 120	3	20
Beryllium	0.100	0.103		mg/L		103	80 - 120	4	20
Cadmium	0.100	0.103		mg/L		103	80 - 120	7	20
Chromium	0.400	0.385		mg/L		96	80 - 120	1	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-267014/16-A

Matrix: Water

Analysis Batch: 267187

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	1.00	0.972		mg/L		97	80 - 120	0	20
Copper	0.500	0.499		mg/L		100	80 - 120	1	20
Lead	1.00	0.959		mg/L		96	80 - 120	1	20
Nickel	1.00	0.982		mg/L		98	80 - 120	0	20
Selenium	4.00	3.93		mg/L		98	80 - 120	1	20
Silver	0.600	0.599		mg/L		100	80 - 120	2	20
Thallium	4.00	3.62		mg/L		90	80 - 120	0	20
Vanadium	1.00	0.927		mg/L		93	80 - 120	2	20
Zinc	4.00	3.74		mg/L		94	80 - 120	0	20

Lab Sample ID: 580-74978-1 MS

Matrix: Water

Analysis Batch: 267187

Client Sample ID: 020618-01

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		3.00	2.99		mg/L		100	80 - 120		
Arsenic	0.0031		4.00	4.13		mg/L		103	80 - 120		
Barium	0.026		4.00	4.01		mg/L		100	80 - 120		
Beryllium	ND	F1	0.100	0.131	F1	mg/L		131	80 - 120		
Cadmium	ND		0.100	0.111		mg/L		111	80 - 120		
Chromium	ND		0.400	0.421		mg/L		105	80 - 120		
Cobalt	ND		1.00	1.03		mg/L		103	80 - 120		
Copper	ND		0.500	0.532		mg/L		106	80 - 120		
Lead	ND		1.00	1.02		mg/L		102	80 - 120		
Nickel	0.0042		1.00	1.05		mg/L		105	80 - 120		
Selenium	ND		4.00	4.18		mg/L		104	80 - 120		
Silver	ND		0.600	0.629		mg/L		105	80 - 120		
Thallium	ND		4.00	3.86		mg/L		97	80 - 120		
Vanadium	ND		1.00	0.998		mg/L		99	80 - 120		
Zinc	ND		4.00	3.97		mg/L		99	80 - 120		

Lab Sample ID: 580-74978-1 MSD

Matrix: Water

Analysis Batch: 267187

Client Sample ID: 020618-01

Prep Type: Total Recoverable

Prep Batch: 267014

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		3.00	3.00		mg/L		100	80 - 120	0	20
Arsenic	0.0031		4.00	4.10		mg/L		102	80 - 120	1	20
Barium	0.026		4.00	3.99		mg/L		99	80 - 120	0	20
Beryllium	ND	F1	0.100	0.115		mg/L		115	80 - 120	13	20
Cadmium	ND		0.100	0.104		mg/L		104	80 - 120	7	20
Chromium	ND		0.400	0.415		mg/L		104	80 - 120	2	20
Cobalt	ND		1.00	1.04		mg/L		103	80 - 120	0	20
Copper	ND		0.500	0.514		mg/L		103	80 - 120	3	20
Lead	ND		1.00	1.01		mg/L		101	80 - 120	1	20
Nickel	0.0042		1.00	1.03		mg/L		103	80 - 120	2	20
Selenium	ND		4.00	4.15		mg/L		104	80 - 120	1	20
Silver	ND		0.600	0.617		mg/L		103	80 - 120	2	20
Thallium	ND		4.00	3.86		mg/L		96	80 - 120	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-74978-1 MSD
Matrix: Water
Analysis Batch: 267187

Client Sample ID: 020618-01
Prep Type: Total Recoverable
Prep Batch: 267014

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	ND		1.00	0.991		mg/L		99	80 - 120	1	20
Zinc	ND		4.00	3.91		mg/L		98	80 - 120	1	20

Lab Sample ID: 580-74978-1 DU
Matrix: Water
Analysis Batch: 267187

Client Sample ID: 020618-01
Prep Type: Total Recoverable
Prep Batch: 267014

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/L		NC	20
Arsenic	0.0031		0.00307		mg/L		2	20
Barium	0.026		0.0268		mg/L		2	20
Beryllium	ND	F1	ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Cobalt	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Nickel	0.0042		0.00436		mg/L		4	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-267015/3
Matrix: Water
Analysis Batch: 267015

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 13:23	1

Lab Sample ID: LCS 580-267015/4
Matrix: Water
Analysis Batch: 267015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-267015/5
Matrix: Water
Analysis Batch: 267015

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.3		mg/L		103	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 580-267016/3
Matrix: Water
Analysis Batch: 267016

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			02/08/18 21:26	1

Lab Sample ID: LCS 580-267016/4
Matrix: Water
Analysis Batch: 267016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: MB 580-267038/3
Matrix: Water
Analysis Batch: 267038

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 21:26	1
Chloride	ND		0.90		mg/L			02/08/18 21:26	1
Sulfate	ND		1.2		mg/L			02/08/18 21:26	1

Lab Sample ID: LCS 580-267038/4
Matrix: Water
Analysis Batch: 267038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.07		mg/L		101	90 - 110
Chloride	50.0	52.2		mg/L		104	90 - 110
Sulfate	50.0	51.5		mg/L		103	90 - 110

Lab Sample ID: 580-74978-1 MS
Matrix: Water
Analysis Batch: 267038

Client Sample ID: 020618-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		5.00	4.87		mg/L		97	90 - 110
Chloride	67		50.0	112		mg/L		90	90 - 110
Sulfate	69		50.0	117		mg/L		95	90 - 110

Lab Sample ID: 580-74978-1 MSD
Matrix: Water
Analysis Batch: 267038

Client Sample ID: 020618-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		5.00	4.88		mg/L		98	90 - 110	0	15
Chloride	67		50.0	112		mg/L		90	90 - 110	0	15
Sulfate	69		50.0	117		mg/L		96	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 580-267041/3

Matrix: Water

Analysis Batch: 267041

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/08/18 13:23	1
Chloride	ND		0.90		mg/L			02/08/18 13:23	1
Sulfate	ND		1.2		mg/L			02/08/18 13:23	1

Lab Sample ID: LCS 580-267041/4

Matrix: Water

Analysis Batch: 267041

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.12		mg/L		102	90 - 110
Chloride	50.0	52.0		mg/L		104	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-267041/5

Matrix: Water

Analysis Batch: 267041

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	5.12		mg/L		102	90 - 110	0	15
Chloride	50.0	52.0		mg/L		104	90 - 110	0	15
Sulfate	50.0	51.2		mg/L		102	90 - 110	0	15

Lab Sample ID: MB 580-267380/3

Matrix: Water

Analysis Batch: 267380

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			02/14/18 12:22	1
Chloride	ND		0.90		mg/L			02/14/18 12:22	1
Sulfate	ND		1.2		mg/L			02/14/18 12:22	1

Lab Sample ID: LCS 580-267380/4

Matrix: Water

Analysis Batch: 267380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.15		mg/L		103	90 - 110
Chloride	50.0	51.8		mg/L		104	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 580-267648/1-A

Matrix: Water

Analysis Batch: 267717

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 267648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.50		mg/L		02/20/18 10:31	02/21/18 10:40	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 580-267648/2-A
Matrix: Water
Analysis Batch: 267717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.00	2.02		mg/L		101	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 580-267758/12
Matrix: Water
Analysis Batch: 267758

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.15		mg/L			02/21/18 13:02	1

Lab Sample ID: LCS 580-267758/13
Matrix: Water
Analysis Batch: 267758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.957		mg/L		96	90 - 110

Lab Sample ID: LCSD 580-267758/14
Matrix: Water
Analysis Batch: 267758

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.953		mg/L		95	90 - 110	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-267315/2
Matrix: Water
Analysis Batch: 267315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	108		mg/L		108	85 - 115

Lab Sample ID: 580-74978-1 DU
Matrix: Water
Analysis Batch: 267315

Client Sample ID: 020618-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	480		493		mg/L		3	17
Bicarbonate Alkalinity as CaCO3	480		493		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-267115/1
Matrix: Water
Analysis Batch: 267115

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L	-		02/12/18 09:52	1

Lab Sample ID: LCS 580-267115/2
Matrix: Water
Analysis Batch: 267115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	952		mg/L	-	95	80 - 120

Lab Sample ID: 580-74978-1 DU
Matrix: Water
Analysis Batch: 267115

Client Sample ID: 020618-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	670		676		mg/L	-	1	20

Lab Sample ID: MB 580-267239/1
Matrix: Water
Analysis Batch: 267239

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L	-		02/13/18 13:29	1

Lab Sample ID: LCS 580-267239/2
Matrix: Water
Analysis Batch: 267239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	962		mg/L	-	96	80 - 120

Lab Sample ID: 580-74978-11 DU
Matrix: Water
Analysis Batch: 267239

Client Sample ID: 020718-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	430		431		mg/L	-	0.2	20

Method: SM 5220D - COD

Lab Sample ID: MB 580-267198/3-A
Matrix: Water
Analysis Batch: 267201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267198

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L	-	02/12/18 11:35	02/12/18 11:35	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: SM 5220D - COD (Continued)

Lab Sample ID: LCS 580-267198/4-A

Matrix: Water

Analysis Batch: 267201

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 267198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	77.2		mg/L		103	80 - 120

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-267459/3

Matrix: Water

Analysis Batch: 267459

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			02/15/18 18:57	1

Lab Sample ID: LCS 580-267459/4

Matrix: Water

Analysis Batch: 267459

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.5		mg/L		105	85 - 115

Lab Sample ID: MB 580-267736/3

Matrix: Water

Analysis Batch: 267736

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			02/20/18 13:01	1

Lab Sample ID: LCS 580-267736/4

Matrix: Water

Analysis Batch: 267736

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.7		mg/L		107	85 - 115

Lab Sample ID: 580-74978-1 MS

Matrix: Water

Analysis Batch: 267736

Client Sample ID: 020618-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	3.2		10.0	14.0		mg/L		108	85 - 115

Lab Sample ID: 580-74978-1 MSD

Matrix: Water

Analysis Batch: 267736

Client Sample ID: 020618-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	3.2		10.0	13.6		mg/L		105	85 - 115	3	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 580-74978-1 DU

Matrix: Water

Analysis Batch: 267736

Client Sample ID: 020618-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	3.2		3.17		mg/L		0.9	20

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-01

Date Collected: 02/06/18 10:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 18:12	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	267325	02/14/18 17:13	T1W	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:14	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:01	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 21:50	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	353.2		5	267758	02/21/18 13:17	MMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267736	02/20/18 13:01	MP	TAL SEA

Client Sample ID: 020618-02

Date Collected: 02/06/18 11:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 18:39	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	267325	02/14/18 17:40	T1W	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:39	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:37	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 22:25	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	353.2		5	267758	02/21/18 13:18	MMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267736	02/20/18 13:01	MP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-03

Date Collected: 02/06/18 12:00

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 19:05	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:42	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:41	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 22:36	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	353.2		1	267758	02/21/18 13:20	MMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267736	02/20/18 13:01	MP	TAL SEA

Client Sample ID: 020618-04

Date Collected: 02/06/18 13:25

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 19:32	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:46	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:45	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 22:48	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	353.2		1	267758	02/21/18 13:21	MMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267736	02/20/18 13:01	MP	TAL SEA

Client Sample ID: 020618-05

Date Collected: 02/06/18 14:50

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 19:58	TL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020618-06

Date Collected: 02/06/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 20:25	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	267325	02/14/18 18:06	T1W	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:49	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:49	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267015	02/08/18 14:45	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267041	02/08/18 14:45	MMM	TAL SEA
Total/NA	Analysis	300.0		5	267380	02/15/18 10:08	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		2	267736	02/20/18 13:01	MP	TAL SEA

Client Sample ID: 020618-07

Date Collected: 02/06/18 16:55

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 20:51	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	267325	02/14/18 18:33	T1W	TAL SEA

Client Sample ID: 020718-08

Date Collected: 02/07/18 10:20

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 21:18	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:52	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:53	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267016	02/08/18 23:00	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 23:00	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267115	02/12/18 09:52	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-08

Date Collected: 02/07/18 10:20

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267736	02/20/18 13:01	MP	TAL SEA

Client Sample ID: 020718-09

Date Collected: 02/07/18 11:35

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 21:44	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:56	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 16:57	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267016	02/08/18 23:11	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 23:11	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 12:52	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267239	02/13/18 13:29	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267459	02/15/18 18:57	MP	TAL SEA

Client Sample ID: 020718-10

Date Collected: 02/07/18 12:50

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 22:10	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 16:59	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 17:01	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267016	02/08/18 23:47	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 23:47	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 16:50	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267239	02/13/18 13:29	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267459	02/15/18 18:57	MP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Client Sample ID: 020718-11

Date Collected: 02/07/18 14:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 22:37	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 17:02	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 17:05	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267016	02/08/18 23:58	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/08/18 23:58	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 16:50	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267239	02/13/18 13:29	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267459	02/15/18 18:57	MP	TAL SEA

Client Sample ID: 020718-12

Date Collected: 02/07/18 15:40

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 23:03	TL1	TAL SEA
Dissolved	Prep	3005A			267011	02/09/18 08:59	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	267188	02/12/18 17:06	HJM	TAL SEA
Total Recoverable	Prep	3005A			267014	02/09/18 09:13	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	267187	02/12/18 17:08	FCW	TAL SEA
Total/NA	Analysis	300.0		1	267016	02/09/18 00:10	MMM	TAL SEA
Total/NA	Analysis	300.0		1	267038	02/09/18 00:10	MMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			267648	02/20/18 10:31	EMM	TAL SEA
Total/NA	Analysis	350.1		1	267717	02/21/18 10:40	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	267315	02/14/18 16:50	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	267239	02/13/18 13:29	MP	TAL SEA
Total/NA	Prep	SM 5220			267198	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	267201	02/12/18 11:35	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	267459	02/15/18 18:57	MP	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 02/06/18 00:01

Date Received: 02/08/18 11:40

Lab Sample ID: 580-74978-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	267246	02/13/18 23:30	TL1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C553	02-17-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3005A	Water	Calcium
6010C	3005A	Water	Iron
6010C	3005A	Water	Magnesium
6010C	3005A	Water	Manganese
6010C	3005A	Water	Potassium
6010C	3005A	Water	Sodium
6020A	3005A	Water	Antimony
6020A	3005A	Water	Arsenic
6020A	3005A	Water	Barium
6020A	3005A	Water	Beryllium
6020A	3005A	Water	Cadmium
6020A	3005A	Water	Chromium
6020A	3005A	Water	Cobalt
6020A	3005A	Water	Copper
6020A	3005A	Water	Lead
6020A	3005A	Water	Nickel
6020A	3005A	Water	Selenium
6020A	3005A	Water	Silver
6020A	3005A	Water	Thallium
6020A	3005A	Water	Vanadium
6020A	3005A	Water	Zinc
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Sample Summary

Client: SCS Engineers

Project/Site: CSWF Island Co. Landfill, Washington

TestAmerica Job ID: 580-74978-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-74978-1	020618-01	Water	02/06/18 10:40	02/08/18 11:40
580-74978-2	020618-02	Water	02/06/18 11:00	02/08/18 11:40
580-74978-3	020618-03	Water	02/06/18 12:00	02/08/18 11:40
580-74978-4	020618-04	Water	02/06/18 13:25	02/08/18 11:40
580-74978-5	020618-05	Water	02/06/18 14:50	02/08/18 11:40
580-74978-6	020618-06	Water	02/06/18 15:40	02/08/18 11:40
580-74978-7	020618-07	Water	02/06/18 16:55	02/08/18 11:40
580-74978-8	020718-08	Water	02/07/18 10:20	02/08/18 11:40
580-74978-9	020718-09	Water	02/07/18 11:35	02/08/18 11:40
580-74978-10	020718-10	Water	02/07/18 12:50	02/08/18 11:40
580-74978-11	020718-11	Water	02/07/18 14:40	02/08/18 11:40
580-74978-12	020718-12	Water	02/07/18 15:40	02/08/18 11:40
580-74978-13	Trip Blank	Water	02/06/18 00:01	02/08/18 11:40

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

Loc: 580
74978

☐ Rush

☐ Short Hold

Chain of Custody Record

Client SCS Engineers			Client Contact Dan Venchiarutti / Sam Graber			Date 2/8/18			Chain of Custody Number 36703																
Address 2405 140th Ave NE, Suite 107			Telephone Number (Area Code)/Fax Number 425-289-5455			Lab Number			Page 1 of 1																
City Bellevue		State WA	Zip Code 98005		Sampler Sam G.		Lab Contact		Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt													
Project Name and Location (State) CSWF Island Co. Landfill, Washington					Billing Contact Dan V.		300-04641-230 300- 2320B 350.1 5220D 6020A-LL 6010C 5M 5310 8260C-LL 2540C																		
Contract/Purchase Order/Quote No.																									
Matrix					Containers & Preservatives																				
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)			Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH											
020618-01			2/6/18	1040	X				4	2	2	3				X	X	X	X	X	X	X	X		
020618-02				1100																					
020618-03				1200																					
020618-04				1325																					
020618-05				1450					2			3												X	
020618-06				1540					4	2	2	3				X	X	X	X	X	X	X	X	X	
020618-07				1655					2			3												X	
020718-08			2/7/18	1020					4	2	2	3				X	X	X	X	X	X	X	X	X	
020718-09				1135																					
020718-10				1250																					
020718-11				1440																					
020718-12				1540																					
Cooler ☐ Yes ☐ No Cooler Temp: _____			Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown						Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months						(A fee may be assessed if samples are retained longer than 1 month)										
Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard						QC Requirements (Specify)																			
1. Relinquished By Sign/Print [Signature] Sam Graber						Date 2/8/18		Time 1140		1. Received By Sign/Print [Signature] Francisco Luna, Jr.						Date 2/8/18		Time 1140							
2. Relinquished By Sign/Print						Date		Time		2. Received By Sign/Print						Date		Time							



580-74978 Chain of Custody

Therm. ID A2 Cor 5.1 Unc 60
Cooler Desc Lg Blue @ Lab 1350
Wet/Packs Packing Bubble

VARY - Return

Custody Seal: Yes Page 57 of 58

Therm. ID 47 Cor 2.4 Unc 3.3
Cooler Desc 250/6-1 @ Lab 1356
Wet/Packs Packing Sub 114

Custody Seal: Yes No ☒

Therm. ID A2 Cor 5.4 Unc 6.3
Cooler Desc 12/14 @Lab 1350
Wet/Packs Packing Public

Custody Seal: Yes/22/2018

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-74978-1

Login Number: 74978

List Source: TestAmerica Seattle

List Number: 1

Creator: Gall, Brandon A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

DATA VALIDATION REPORT – ISLAND COUNTY CSWF 2Q 2018

Project Details

Project No.	04207033.11	Site Name	Island County Coupeville SWF
Data Validator	Sam Graber	Data Level	Level II
Date	6/1/2018	DV Tier	Tier I
QA Document	CSWF Groundwater Sampling, Analysis, and Quality Assurance Project Plan (Revised September 2007)		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
580-76662-1	Samples arrived in good condition.	Test America
580-76727-1	Samples arrived in good condition.	Test America

Analytical Summary

Sample Group	Analyses						
	Metals	Ns, COD	VOCs	Ions/TDS	Alk	TOC	Herbicides
580-76662-1	X	X	X	X	X	X	-
580-76727-1	X	X	X	X	X	X	-

X = Analysis performed on at least one sample in sample group.

- = Analysis not performed on any sample in sample group.

Laboratory Quality Assurance Samples

Lab QA Samples	Results	Comments
Method Blank	Acceptable	See case narrative (580-76662-1, 580-76727-1)
LCS/LCSD	Acceptable	See case narrative (580-76662-1, 580-76727-1)
Duplicates	Acceptable	See case narrative (580-76662-1, 580-76727-1)
MS/MSD	Acceptable	See case narrative (580-76662-1, 580-76727-1)

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Field Replicates		See below.	See detailed results below.
Trip Blank	580-76662-1	N/A	No Detections.
Trip Blank	580-76727-1	N/A	No Detections.

Detailed Field Replicate Evaluation

Duplicate Evaluation							
Analyte	Units	N3D (0418-09)	N3D DUP (0418-11)	RPD (%)	S10S (0418-23)	S10S DUP (0418-24)	RPD (%)
1,1,1-Trichloroethane	ug/L	0.2 U	0.2 U	NA	0.37	0.37	0.0
Alkalinity	mg/L	250	250	0.0	380	380	0.0
Ammonia (as N)	mg/L	0.1 U	0.1 U	NA	0.12	0.1 U	18.2
Arsenic	mg/L	0.0079	0.0081	2.5	0.002	0.0021	4.9
Barium	mg/L	0.028	0.029	3.5	0.033	0.032	3.1
Bicarbonate Alkalinity as CaCO ₃	mg/L	250	250	0.0	380	380	0.0
Calcium	mg/L	71	71	0.0	130	120	8.0
Chloride	mg/L	38	38	0.0	54	53	1.9
Chromium	mg/L	0.0004 U	0.0004 U	NA	0.0035	0.0027	25.8
Magnesium	mg/L	26	26	0.0	75	73	2.7
Manganese	mg/L	0.031	0.03	3.3	0.02 U	0.02 U	NA
Nickel	mg/L	0.003 U	0.003 U	NA	0.0048	0.005	4.1
Nitrate Nitrite as N	mg/L	0.15 U	0.15 U	NA	40	40	0.0
Potassium	mg/L	5.8	5.8	0.0	6.4	6.2	3.2
Sodium	mg/L	20	20	0.0	27	26	3.8
Sulfate	mg/L	25	25	0.0	93	92	1.1
Total Dissolved Solids	mg/L	340	340	0.0	780	740	5.3
Total Organic Carbon	mg/L	1.2	1.2	0.0	2.2	2	9.5
Trichlorofluoromethane	ug/L	0.5 U	0.5 U	NA	3.9	0.5 U	154.5
Vanadium	mg/L	0.004 U	0.004 U	NA	0.005	0.0047	6.2

U = Reporting limit used in place of a non-detection for the given parameter to allow for calculation.

NA = Not Applicable

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
*	LCS or LCSD is outside acceptance limits. RPD of the LCS and LCSD exceed the control limits.	580-76662-1, 580-76727-1
F1	MS and/or MSD Recovery is outside acceptance limits.	580-76662-1, 580-76727-1
F2	MS/MSD RPD exceeds control limits.	580-76662-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	580-76727-1
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	580-76727-1

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-76662-1

Client Project/Site: Coupeville Solid Waste Facility Groundwa
Sampling Event: Coupeville Solid Waste Facility GW

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
4/30/2018 4:18:00 PM

Kayse Zalmai, Project Manager I
(253)922-2310
kayse.zalmai@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Job ID: 580-76662-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-76662-1

Receipt

The samples were received on 4/17/2018 3:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0° C and 4.6° C.

GC/MS VOA

Method(s) 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 580-271351 recovered outside control limits for the following analyte : Acetone. Since both LCS and LCSD recovered within the acceptance criteria, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-01

Date Collected: 04/16/18 11:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 22:35	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 22:35	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 22:35	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 22:35	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 22:35	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 22:35	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 22:35	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 22:35	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 22:35	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 22:35	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 22:35	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 22:35	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 22:35	1
2-Butanone	ND		10		ug/L			04/18/18 22:35	1
2-Hexanone	ND		3.0		ug/L			04/18/18 22:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 22:35	1
Acetone	ND	*	6.0		ug/L			04/18/18 22:35	1
Acrylonitrile	ND		10		ug/L			04/18/18 22:35	1
Benzene	ND		0.20		ug/L			04/18/18 22:35	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 22:35	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 22:35	1
Bromoform	ND		0.50		ug/L			04/18/18 22:35	1
Bromomethane	ND		0.50		ug/L			04/18/18 22:35	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 22:35	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 22:35	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 22:35	1
Chloroethane	ND		0.50		ug/L			04/18/18 22:35	1
Chloroform	ND		0.20		ug/L			04/18/18 22:35	1
Chloromethane	ND		0.50		ug/L			04/18/18 22:35	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 22:35	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 22:35	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 22:35	1
Dibromomethane	ND		0.20		ug/L			04/18/18 22:35	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 22:35	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 22:35	1
Methyl iodide	ND		0.50		ug/L			04/18/18 22:35	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 22:35	1
o-Xylene	ND		0.50		ug/L			04/18/18 22:35	1
Styrene	ND		0.50		ug/L			04/18/18 22:35	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 22:35	1
Toluene	ND		0.20		ug/L			04/18/18 22:35	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 22:35	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 22:35	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 22:35	1
Trichloroethene	ND		0.20		ug/L			04/18/18 22:35	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 22:35	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 22:35	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 22:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-01

Date Collected: 04/16/18 11:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		46 - 150		04/18/18 22:35	1
4-Bromofluorobenzene (Surr)	103		81 - 120		04/18/18 22:35	1
Dibromofluoromethane (Surr)	98		42 - 132		04/18/18 22:35	1
Toluene-d8 (Surr)	101		75 - 125		04/18/18 22:35	1
Trifluorotoluene (Surr)	101		74 - 118		04/18/18 22:35	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	67		1.1		mg/L		04/20/18 15:39	04/23/18 16:58	1
Calcium	69		1.1		mg/L		04/20/18 15:39	04/23/18 17:26	1
Iron	ND		0.30		mg/L		04/20/18 15:39	04/23/18 16:58	1
Iron	ND		0.30		mg/L		04/20/18 15:39	04/23/18 17:26	1
Magnesium	40		1.1		mg/L		04/20/18 15:39	04/23/18 16:58	1
Magnesium	44		1.1		mg/L		04/20/18 15:39	04/23/18 17:26	1
Manganese	0.26		0.020		mg/L		04/20/18 15:39	04/23/18 16:58	1
Manganese	0.28		0.020		mg/L		04/20/18 15:39	04/23/18 17:26	1
Potassium	6.1		3.3		mg/L		04/20/18 15:39	04/23/18 16:58	1
Potassium	6.3		3.3		mg/L		04/20/18 15:39	04/23/18 17:26	1
Sodium	24		2.0		mg/L		04/20/18 15:39	04/23/18 16:58	1
Sodium	25		2.0		mg/L		04/20/18 15:39	04/23/18 17:26	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Arsenic	0.0060		0.0010		mg/L		04/20/18 15:39	04/23/18 12:10	1
Barium	0.026		0.0012		mg/L		04/20/18 15:39	04/23/18 12:10	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Cadmium	ND	F2	0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Chromium	0.00071		0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:10	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:10	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:10	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:10	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:10	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:10	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 18:47	1
Nitrate Nitrite as N	ND	F1	0.40		mg/L			04/17/18 18:47	1
Chloride	35		0.90		mg/L			04/17/18 18:47	1
Sulfate	16	F1	1.2		mg/L			04/17/18 18:47	1
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 13:52	1
Total Organic Carbon	1.8		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	330		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	330		5.0		mg/L			04/24/18 11:53	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-01

Date Collected: 04/16/18 11:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-1

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	390		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-02

Date Collected: 04/16/18 12:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 23:02	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 23:02	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 23:02	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 23:02	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 23:02	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 23:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 23:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 23:02	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 23:02	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:02	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 23:02	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 23:02	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:02	1
2-Butanone	ND		10		ug/L			04/18/18 23:02	1
2-Hexanone	ND		3.0		ug/L			04/18/18 23:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 23:02	1
Acetone	ND	*	6.0		ug/L			04/18/18 23:02	1
Acrylonitrile	ND		10		ug/L			04/18/18 23:02	1
Benzene	ND		0.20		ug/L			04/18/18 23:02	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 23:02	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 23:02	1
Bromoform	ND		0.50		ug/L			04/18/18 23:02	1
Bromomethane	ND		0.50		ug/L			04/18/18 23:02	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 23:02	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 23:02	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 23:02	1
Chloroethane	ND		0.50		ug/L			04/18/18 23:02	1
Chloroform	ND		0.20		ug/L			04/18/18 23:02	1
Chloromethane	ND		0.50		ug/L			04/18/18 23:02	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:02	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:02	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 23:02	1
Dibromomethane	ND		0.20		ug/L			04/18/18 23:02	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 23:02	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 23:02	1
Methyl iodide	ND		0.50		ug/L			04/18/18 23:02	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 23:02	1
o-Xylene	ND		0.50		ug/L			04/18/18 23:02	1
Styrene	ND		0.50		ug/L			04/18/18 23:02	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 23:02	1
Toluene	ND		0.20		ug/L			04/18/18 23:02	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:02	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:02	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 23:02	1
Trichloroethene	ND		0.20		ug/L			04/18/18 23:02	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 23:02	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 23:02	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 23:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-02

Date Collected: 04/16/18 12:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		04/18/18 23:02	1
4-Bromofluorobenzene (Surr)	103		81 - 120		04/18/18 23:02	1
Dibromofluoromethane (Surr)	100		42 - 132		04/18/18 23:02	1
Toluene-d8 (Surr)	101		75 - 125		04/18/18 23:02	1
Trifluorotoluene (Surr)	101		74 - 118		04/18/18 23:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140		1.1		mg/L		04/20/18 15:39	04/23/18 17:30	1
Iron	1.7		0.30		mg/L		04/20/18 15:39	04/23/18 17:30	1
Magnesium	66		1.1		mg/L		04/20/18 15:39	04/23/18 17:30	1
Manganese	0.21		0.020		mg/L		04/20/18 15:39	04/23/18 17:30	1
Potassium	6.9		3.3		mg/L		04/20/18 15:39	04/23/18 17:30	1
Sodium	29		2.0		mg/L		04/20/18 15:39	04/23/18 17:30	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Arsenic	0.0057		0.0010		mg/L		04/20/18 15:39	04/23/18 12:36	1
Barium	0.057		0.0012		mg/L		04/20/18 15:39	04/23/18 12:36	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:36	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:36	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:36	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:36	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:36	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:36	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 19:22	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 19:22	1
Chloride	20		0.90		mg/L			04/17/18 19:22	1
Sulfate	22		1.2		mg/L			04/17/18 19:22	1
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 13:53	1
Total Organic Carbon	1.8		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	610		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	610		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	650		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-03

Date Collected: 04/16/18 13:26

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 23:29	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 23:29	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 23:29	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 23:29	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 23:29	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 23:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 23:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 23:29	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 23:29	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:29	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 23:29	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 23:29	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:29	1
2-Butanone	ND		10		ug/L			04/18/18 23:29	1
2-Hexanone	ND		3.0		ug/L			04/18/18 23:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 23:29	1
Acetone	ND	*	6.0		ug/L			04/18/18 23:29	1
Acrylonitrile	ND		10		ug/L			04/18/18 23:29	1
Benzene	ND		0.20		ug/L			04/18/18 23:29	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 23:29	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 23:29	1
Bromoform	ND		0.50		ug/L			04/18/18 23:29	1
Bromomethane	ND		0.50		ug/L			04/18/18 23:29	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 23:29	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 23:29	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 23:29	1
Chloroethane	ND		0.50		ug/L			04/18/18 23:29	1
Chloroform	ND		0.20		ug/L			04/18/18 23:29	1
Chloromethane	ND		0.50		ug/L			04/18/18 23:29	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:29	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:29	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 23:29	1
Dibromomethane	ND		0.20		ug/L			04/18/18 23:29	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 23:29	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 23:29	1
Methyl iodide	ND		0.50		ug/L			04/18/18 23:29	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 23:29	1
o-Xylene	ND		0.50		ug/L			04/18/18 23:29	1
Styrene	ND		0.50		ug/L			04/18/18 23:29	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 23:29	1
Toluene	ND		0.20		ug/L			04/18/18 23:29	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:29	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:29	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 23:29	1
Trichloroethene	ND		0.20		ug/L			04/18/18 23:29	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 23:29	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 23:29	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 23:29	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-03

Date Collected: 04/16/18 13:26

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		46 - 150		04/18/18 23:29	1
4-Bromofluorobenzene (Surr)	103		81 - 120		04/18/18 23:29	1
Dibromofluoromethane (Surr)	100		42 - 132		04/18/18 23:29	1
Toluene-d8 (Surr)	101		75 - 125		04/18/18 23:29	1
Trifluorotoluene (Surr)	100		74 - 118		04/18/18 23:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	51		1.1		mg/L		04/20/18 15:39	04/23/18 17:33	1
Iron	1.4		0.30		mg/L		04/20/18 15:39	04/23/18 17:33	1
Magnesium	26		1.1		mg/L		04/20/18 15:39	04/23/18 17:33	1
Manganese	0.35		0.020		mg/L		04/20/18 15:39	04/23/18 17:33	1
Potassium	6.3		3.3		mg/L		04/20/18 15:39	04/23/18 17:33	1
Sodium	25		2.0		mg/L		04/20/18 15:39	04/23/18 17:33	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Arsenic	0.0029		0.0010		mg/L		04/20/18 15:39	04/23/18 12:38	1
Barium	0.077		0.0012		mg/L		04/20/18 15:39	04/23/18 12:38	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:38	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:38	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:38	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:38	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:38	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:38	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 19:34	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 19:34	1
Chloride	14		0.90		mg/L			04/17/18 19:34	1
Sulfate	26		1.2		mg/L			04/17/18 19:34	1
Ammonia (as N)	0.21		0.10		mg/L		04/25/18 10:29	04/25/18 13:54	1
Total Organic Carbon	1.0		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	240		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	240		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	290		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-04

Date Collected: 04/16/18 15:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 23:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 23:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 23:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 23:55	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 23:55	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 23:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 23:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 23:55	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 23:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:55	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 23:55	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 23:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 23:55	1
2-Butanone	ND		10		ug/L			04/18/18 23:55	1
2-Hexanone	ND		3.0		ug/L			04/18/18 23:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 23:55	1
Acetone	ND	*	6.0		ug/L			04/18/18 23:55	1
Acrylonitrile	ND		10		ug/L			04/18/18 23:55	1
Benzene	ND		0.20		ug/L			04/18/18 23:55	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 23:55	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 23:55	1
Bromoform	ND		0.50		ug/L			04/18/18 23:55	1
Bromomethane	ND		0.50		ug/L			04/18/18 23:55	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 23:55	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 23:55	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 23:55	1
Chloroethane	ND		0.50		ug/L			04/18/18 23:55	1
Chloroform	ND		0.20		ug/L			04/18/18 23:55	1
Chloromethane	ND		0.50		ug/L			04/18/18 23:55	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:55	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 23:55	1
Dibromomethane	ND		0.20		ug/L			04/18/18 23:55	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 23:55	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 23:55	1
Methyl iodide	ND		0.50		ug/L			04/18/18 23:55	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 23:55	1
o-Xylene	ND		0.50		ug/L			04/18/18 23:55	1
Styrene	ND		0.50		ug/L			04/18/18 23:55	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 23:55	1
Toluene	ND		0.20		ug/L			04/18/18 23:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 23:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 23:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 23:55	1
Trichloroethene	ND		0.20		ug/L			04/18/18 23:55	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 23:55	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 23:55	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 23:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-04

Date Collected: 04/16/18 15:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		04/18/18 23:55	1
4-Bromofluorobenzene (Surr)	102		81 - 120		04/18/18 23:55	1
Dibromofluoromethane (Surr)	101		42 - 132		04/18/18 23:55	1
Toluene-d8 (Surr)	102		75 - 125		04/18/18 23:55	1
Trifluorotoluene (Surr)	101		74 - 118		04/18/18 23:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	61		1.1		mg/L		04/20/18 15:39	04/23/18 17:36	1
Iron	ND		0.30		mg/L		04/20/18 15:39	04/23/18 17:36	1
Magnesium	40		1.1		mg/L		04/20/18 15:39	04/23/18 17:36	1
Manganese	0.16		0.020		mg/L		04/20/18 15:39	04/23/18 17:36	1
Potassium	6.2		3.3		mg/L		04/20/18 15:39	04/23/18 17:36	1
Sodium	24		2.0		mg/L		04/20/18 15:39	04/23/18 17:36	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Arsenic	0.0063		0.0010		mg/L		04/20/18 15:39	04/23/18 12:41	1
Barium	0.023		0.0012		mg/L		04/20/18 15:39	04/23/18 12:41	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:41	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:41	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:41	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:41	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:41	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:41	1
Zinc	0.041		0.0070		mg/L		04/20/18 15:39	04/23/18 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 19:45	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 19:45	1
Chloride	23		0.90		mg/L			04/17/18 19:45	1
Sulfate	23		1.2		mg/L			04/17/18 19:45	1
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 13:57	1
Total Organic Carbon	1.3		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	310		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	310		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	360		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-05

Date Collected: 04/16/18 15:50

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/19/18 00:22	1
1,1,1-Trichloroethane	0.76		0.20		ug/L			04/19/18 00:22	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/19/18 00:22	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/19/18 00:22	1
1,1-Dichloroethane	2.7		0.20		ug/L			04/19/18 00:22	1
1,1-Dichloroethene	1.5		0.20		ug/L			04/19/18 00:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/19/18 00:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/19/18 00:22	1
1,2-Dibromoethane	ND		0.10		ug/L			04/19/18 00:22	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/19/18 00:22	1
1,2-Dichloroethane	ND		0.20		ug/L			04/19/18 00:22	1
1,2-Dichloropropane	ND		0.20		ug/L			04/19/18 00:22	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/19/18 00:22	1
2-Butanone	ND		10		ug/L			04/19/18 00:22	1
2-Hexanone	ND		3.0		ug/L			04/19/18 00:22	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/19/18 00:22	1
Acetone	ND *		6.0		ug/L			04/19/18 00:22	1
Acrylonitrile	ND		10		ug/L			04/19/18 00:22	1
Benzene	ND		0.20		ug/L			04/19/18 00:22	1
Bromochloromethane	ND		0.20		ug/L			04/19/18 00:22	1
Bromodichloromethane	ND		0.20		ug/L			04/19/18 00:22	1
Bromoform	ND		0.50		ug/L			04/19/18 00:22	1
Bromomethane	ND		0.50		ug/L			04/19/18 00:22	1
Carbon disulfide	ND		0.30		ug/L			04/19/18 00:22	1
Carbon tetrachloride	ND		0.20		ug/L			04/19/18 00:22	1
Chlorobenzene	ND		0.20		ug/L			04/19/18 00:22	1
Chloroethane	ND		0.50		ug/L			04/19/18 00:22	1
Chloroform	ND		0.20		ug/L			04/19/18 00:22	1
Chloromethane	ND		0.50		ug/L			04/19/18 00:22	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/19/18 00:22	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/19/18 00:22	1
Dibromochloromethane	ND		0.20		ug/L			04/19/18 00:22	1
Dibromomethane	ND		0.20		ug/L			04/19/18 00:22	1
Ethylbenzene	ND		0.20		ug/L			04/19/18 00:22	1
m,p-Xylene	ND		0.50		ug/L			04/19/18 00:22	1
Methyl iodide	ND		0.50		ug/L			04/19/18 00:22	1
Methylene Chloride	ND		5.0		ug/L			04/19/18 00:22	1
o-Xylene	ND		0.50		ug/L			04/19/18 00:22	1
Styrene	ND		0.50		ug/L			04/19/18 00:22	1
Tetrachloroethene	ND		0.50		ug/L			04/19/18 00:22	1
Toluene	ND		0.20		ug/L			04/19/18 00:22	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/19/18 00:22	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/19/18 00:22	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/19/18 00:22	1
Trichloroethene	ND		0.20		ug/L			04/19/18 00:22	1
Trichlorofluoromethane	60		0.50		ug/L			04/19/18 00:22	1
Vinyl acetate	ND		1.0		ug/L			04/19/18 00:22	1
Vinyl chloride	3.5		0.020		ug/L			04/19/18 00:22	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-05

Date Collected: 04/16/18 15:50

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/19/18 00:22	1
4-Bromofluorobenzene (Surr)	101		81 - 120		04/19/18 00:22	1
Dibromofluoromethane (Surr)	100		42 - 132		04/19/18 00:22	1
Toluene-d8 (Surr)	102		75 - 125		04/19/18 00:22	1
Trifluorotoluene (Surr)	99		74 - 118		04/19/18 00:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	230		1.1		mg/L		04/20/18 15:39	04/23/18 17:40	1
Iron	0.30		0.30		mg/L		04/20/18 15:39	04/23/18 17:40	1
Magnesium	95		1.1		mg/L		04/20/18 15:39	04/23/18 17:40	1
Manganese	0.63		0.020		mg/L		04/20/18 15:39	04/23/18 17:40	1
Potassium	8.7		3.3		mg/L		04/20/18 15:39	04/23/18 17:40	1
Sodium	32		2.0		mg/L		04/20/18 15:39	04/23/18 17:40	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Arsenic	0.0017		0.0010		mg/L		04/20/18 15:39	04/23/18 12:44	1
Barium	0.049		0.0012		mg/L		04/20/18 15:39	04/23/18 12:44	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Cobalt	0.0021		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:44	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:44	1
Nickel	0.021		0.0030		mg/L		04/20/18 15:39	04/23/18 12:44	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:44	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:44	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:44	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 19:57	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 19:57	1
Chloride	38		0.90		mg/L			04/17/18 19:57	1
Sulfate	130		1.2		mg/L			04/17/18 19:57	1
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 13:59	1
Total Organic Carbon	13		2.0		mg/L			04/27/18 20:45	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	810		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	810		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	1100		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	34		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-06

Date Collected: 04/16/18 17:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/19/18 00:48	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/19/18 00:48	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/19/18 00:48	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/19/18 00:48	1
1,1-Dichloroethane	ND		0.20		ug/L			04/19/18 00:48	1
1,1-Dichloroethene	ND		0.20		ug/L			04/19/18 00:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/19/18 00:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/19/18 00:48	1
1,2-Dibromoethane	ND		0.10		ug/L			04/19/18 00:48	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/19/18 00:48	1
1,2-Dichloroethane	ND		0.20		ug/L			04/19/18 00:48	1
1,2-Dichloropropane	ND		0.20		ug/L			04/19/18 00:48	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/19/18 00:48	1
2-Butanone	ND		10		ug/L			04/19/18 00:48	1
2-Hexanone	ND		3.0		ug/L			04/19/18 00:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/19/18 00:48	1
Acetone	ND *		6.0		ug/L			04/19/18 00:48	1
Acrylonitrile	ND		10		ug/L			04/19/18 00:48	1
Benzene	ND		0.20		ug/L			04/19/18 00:48	1
Bromochloromethane	ND		0.20		ug/L			04/19/18 00:48	1
Bromodichloromethane	ND		0.20		ug/L			04/19/18 00:48	1
Bromoform	ND		0.50		ug/L			04/19/18 00:48	1
Bromomethane	ND		0.50		ug/L			04/19/18 00:48	1
Carbon disulfide	ND		0.30		ug/L			04/19/18 00:48	1
Carbon tetrachloride	ND		0.20		ug/L			04/19/18 00:48	1
Chlorobenzene	ND		0.20		ug/L			04/19/18 00:48	1
Chloroethane	ND		0.50		ug/L			04/19/18 00:48	1
Chloroform	ND		0.20		ug/L			04/19/18 00:48	1
Chloromethane	ND		0.50		ug/L			04/19/18 00:48	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/19/18 00:48	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/19/18 00:48	1
Dibromochloromethane	ND		0.20		ug/L			04/19/18 00:48	1
Dibromomethane	ND		0.20		ug/L			04/19/18 00:48	1
Ethylbenzene	ND		0.20		ug/L			04/19/18 00:48	1
m,p-Xylene	ND		0.50		ug/L			04/19/18 00:48	1
Methyl iodide	ND		0.50		ug/L			04/19/18 00:48	1
Methylene Chloride	ND		5.0		ug/L			04/19/18 00:48	1
o-Xylene	ND		0.50		ug/L			04/19/18 00:48	1
Styrene	ND		0.50		ug/L			04/19/18 00:48	1
Tetrachloroethene	ND		0.50		ug/L			04/19/18 00:48	1
Toluene	ND		0.20		ug/L			04/19/18 00:48	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/19/18 00:48	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/19/18 00:48	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/19/18 00:48	1
Trichloroethene	ND		0.20		ug/L			04/19/18 00:48	1
Trichlorofluoromethane	ND		0.50		ug/L			04/19/18 00:48	1
Vinyl acetate	ND		1.0		ug/L			04/19/18 00:48	1
Vinyl chloride	0.051		0.020		ug/L			04/19/18 00:48	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-06

Date Collected: 04/16/18 17:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		46 - 150		04/19/18 00:48	1
4-Bromofluorobenzene (Surr)	102		81 - 120		04/19/18 00:48	1
Dibromofluoromethane (Surr)	101		42 - 132		04/19/18 00:48	1
Toluene-d8 (Surr)	102		75 - 125		04/19/18 00:48	1
Trifluorotoluene (Surr)	101		74 - 118		04/19/18 00:48	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	56		1.1		mg/L		04/20/18 15:39	04/23/18 17:43	1
Iron	0.63		0.30		mg/L		04/20/18 15:39	04/23/18 17:43	1
Magnesium	28		1.1		mg/L		04/20/18 15:39	04/23/18 17:43	1
Manganese	0.69		0.020		mg/L		04/20/18 15:39	04/23/18 17:43	1
Potassium	5.9		3.3		mg/L		04/20/18 15:39	04/23/18 17:43	1
Sodium	38		2.0		mg/L		04/20/18 15:39	04/23/18 17:43	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Arsenic	0.0013		0.0010		mg/L		04/20/18 15:39	04/23/18 12:46	1
Barium	0.082		0.0012		mg/L		04/20/18 15:39	04/23/18 12:46	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:46	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:46	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:46	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:46	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:46	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:46	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 20:32	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 20:32	1
Chloride	22		0.90		mg/L			04/17/18 20:32	1
Sulfate	37		1.2		mg/L			04/17/18 20:32	1
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 14:00	1
Total Organic Carbon	4.0		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	270		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	270		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	350		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	23		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: Trip Blank

Date Collected: 04/16/18 00:01

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 22:09	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 22:09	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 22:09	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 22:09	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 22:09	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 22:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 22:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 22:09	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 22:09	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 22:09	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 22:09	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 22:09	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 22:09	1
2-Butanone	ND		10		ug/L			04/18/18 22:09	1
2-Hexanone	ND		3.0		ug/L			04/18/18 22:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 22:09	1
Acetone	ND	*	6.0		ug/L			04/18/18 22:09	1
Acrylonitrile	ND		10		ug/L			04/18/18 22:09	1
Benzene	ND		0.20		ug/L			04/18/18 22:09	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 22:09	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 22:09	1
Bromoform	ND		0.50		ug/L			04/18/18 22:09	1
Bromomethane	ND		0.50		ug/L			04/18/18 22:09	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 22:09	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 22:09	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 22:09	1
Chloroethane	ND		0.50		ug/L			04/18/18 22:09	1
Chloroform	ND		0.20		ug/L			04/18/18 22:09	1
Chloromethane	ND		0.50		ug/L			04/18/18 22:09	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 22:09	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 22:09	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 22:09	1
Dibromomethane	ND		0.20		ug/L			04/18/18 22:09	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 22:09	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 22:09	1
Methyl iodide	ND		0.50		ug/L			04/18/18 22:09	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 22:09	1
o-Xylene	ND		0.50		ug/L			04/18/18 22:09	1
Styrene	ND		0.50		ug/L			04/18/18 22:09	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 22:09	1
Toluene	ND		0.20		ug/L			04/18/18 22:09	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 22:09	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 22:09	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 22:09	1
Trichloroethene	ND		0.20		ug/L			04/18/18 22:09	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 22:09	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 22:09	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 22:09	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: Trip Blank

Date Collected: 04/16/18 00:01

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-7

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	99		46 - 150		04/18/18 22:09	1
4-Bromofluorobenzene (Surr)	103		81 - 120		04/18/18 22:09	1
Dibromofluoromethane (Surr)	98		42 - 132		04/18/18 22:09	1
Toluene-d8 (Surr)	102		75 - 125		04/18/18 22:09	1
Trifluorotoluene (Surr)	103		74 - 118		04/18/18 22:09	1

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-271351/16

Matrix: Water

Analysis Batch: 271351

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/18/18 20:49	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/18/18 20:49	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/18/18 20:49	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/18/18 20:49	1
1,1-Dichloroethane	ND		0.20		ug/L			04/18/18 20:49	1
1,1-Dichloroethene	ND		0.20		ug/L			04/18/18 20:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/18/18 20:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/18/18 20:49	1
1,2-Dibromoethane	ND		0.10		ug/L			04/18/18 20:49	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/18/18 20:49	1
1,2-Dichloroethane	ND		0.20		ug/L			04/18/18 20:49	1
1,2-Dichloropropane	ND		0.20		ug/L			04/18/18 20:49	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/18/18 20:49	1
2-Butanone	ND		10		ug/L			04/18/18 20:49	1
2-Hexanone	ND		3.0		ug/L			04/18/18 20:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/18/18 20:49	1
Acetone	ND		6.0		ug/L			04/18/18 20:49	1
Acrylonitrile	ND		10		ug/L			04/18/18 20:49	1
Benzene	ND		0.20		ug/L			04/18/18 20:49	1
Bromochloromethane	ND		0.20		ug/L			04/18/18 20:49	1
Bromodichloromethane	ND		0.20		ug/L			04/18/18 20:49	1
Bromoform	ND		0.50		ug/L			04/18/18 20:49	1
Bromomethane	ND		0.50		ug/L			04/18/18 20:49	1
Carbon disulfide	ND		0.30		ug/L			04/18/18 20:49	1
Carbon tetrachloride	ND		0.20		ug/L			04/18/18 20:49	1
Chlorobenzene	ND		0.20		ug/L			04/18/18 20:49	1
Chloroethane	ND		0.50		ug/L			04/18/18 20:49	1
Chloroform	ND		0.20		ug/L			04/18/18 20:49	1
Chloromethane	ND		0.50		ug/L			04/18/18 20:49	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 20:49	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 20:49	1
Dibromochloromethane	ND		0.20		ug/L			04/18/18 20:49	1
Dibromomethane	ND		0.20		ug/L			04/18/18 20:49	1
Ethylbenzene	ND		0.20		ug/L			04/18/18 20:49	1
m,p-Xylene	ND		0.50		ug/L			04/18/18 20:49	1
Methyl iodide	ND		0.50		ug/L			04/18/18 20:49	1
Methylene Chloride	ND		5.0		ug/L			04/18/18 20:49	1
o-Xylene	ND		0.50		ug/L			04/18/18 20:49	1
Styrene	ND		0.50		ug/L			04/18/18 20:49	1
Tetrachloroethene	ND		0.50		ug/L			04/18/18 20:49	1
Toluene	ND		0.20		ug/L			04/18/18 20:49	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/18/18 20:49	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/18/18 20:49	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/18/18 20:49	1
Trichloroethene	ND		0.20		ug/L			04/18/18 20:49	1
Trichlorofluoromethane	ND		0.50		ug/L			04/18/18 20:49	1
Vinyl acetate	ND		1.0		ug/L			04/18/18 20:49	1
Vinyl chloride	ND		0.020		ug/L			04/18/18 20:49	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		46 - 150		04/18/18 20:49	1
4-Bromofluorobenzene (Surr)	104		81 - 120		04/18/18 20:49	1
Dibromofluoromethane (Surr)	98		42 - 132		04/18/18 20:49	1
Toluene-d8 (Surr)	101		75 - 125		04/18/18 20:49	1
Trifluorotoluene (Surr)	101		74 - 118		04/18/18 20:49	1

Lab Sample ID: LCS 580-271351/17

Matrix: Water

Analysis Batch: 271351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.85		ug/L		117	68 - 139
1,1,1-Trichloroethane	5.00	5.66		ug/L		113	56 - 150
1,1,2,2-Tetrachloroethane	5.00	5.81		ug/L		116	60 - 134
1,1,2-Trichloroethane	5.00	5.55		ug/L		111	62 - 137
1,1-Dichloroethane	5.00	5.66		ug/L		113	68 - 135
1,1-Dichloroethene	5.00	5.70		ug/L		114	64 - 125
1,2,3-Trichloropropane	5.00	5.61		ug/L		112	45 - 150
1,2-Dibromo-3-Chloropropane	5.00	5.28		ug/L		106	34 - 150
1,2-Dibromoethane	5.00	5.53		ug/L		111	56 - 146
1,2-Dichlorobenzene	5.00	5.56		ug/L		111	73 - 120
1,2-Dichloroethane	5.00	5.27		ug/L		105	63 - 150
1,2-Dichloropropane	5.00	5.52		ug/L		110	72 - 120
1,4-Dichlorobenzene	5.00	5.54		ug/L		111	77 - 120
2-Butanone	25.0	23.0		ug/L		92	30 - 150
2-Hexanone	25.0	27.5		ug/L		110	25 - 150
4-Methyl-2-pentanone	25.0	28.0		ug/L		112	36 - 150
Acetone	25.0	15.9		ug/L		63	20 - 138
Acrylonitrile	50.0	45.0		ug/L		90	55 - 134
Benzene	5.00	5.54		ug/L		111	73 - 120
Bromochloromethane	5.00	5.50		ug/L		110	71 - 131
Bromodichloromethane	5.00	5.40		ug/L		108	62 - 150
Bromoform	5.00	5.14		ug/L		103	51 - 137
Bromomethane	5.00	5.16		ug/L		103	61 - 135
Carbon disulfide	5.00	5.71		ug/L		114	65 - 128
Carbon tetrachloride	5.00	5.73		ug/L		115	54 - 150
Chlorobenzene	5.00	5.61		ug/L		112	74 - 114
Chloroethane	5.00	4.94		ug/L		99	58 - 130
Chloroform	5.00	5.64		ug/L		113	71 - 130
Chloromethane	5.00	4.96		ug/L		99	40 - 150
cis-1,2-Dichloroethene	5.00	5.61		ug/L		112	73 - 130
cis-1,3-Dichloropropene	5.00	5.76		ug/L		115	54 - 150
Dibromochloromethane	5.00	5.35		ug/L		107	46 - 150
Dibromomethane	5.00	5.40		ug/L		108	65 - 137
Ethylbenzene	5.00	5.65		ug/L		113	74 - 125
m,p-Xylene	5.00	5.48		ug/L		110	73 - 130
Methyl iodide	5.00	5.68		ug/L		114	47 - 145
Methylene Chloride	5.00	5.49		ug/L		110	58 - 134
o-Xylene	5.00	5.32		ug/L		106	80 - 139
Styrene	5.00	5.24		ug/L		105	68 - 136
Tetrachloroethene	5.00	5.61		ug/L		112	67 - 123
Toluene	5.00	5.51		ug/L		110	70 - 126
trans-1,2-Dichloroethene	5.00	5.73		ug/L		115	69 - 124
trans-1,3-Dichloropropene	5.00	5.42		ug/L		108	40 - 150

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-271351/17

Matrix: Water

Analysis Batch: 271351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	5.00		ug/L		100	20 - 150
Trichloroethene	5.00	5.74		ug/L		115	72 - 123
Trichlorofluoromethane	5.00	5.75		ug/L		115	60 - 150
Vinyl acetate	12.5	13.6		ug/L		109	30 - 150
Vinyl chloride	5.00	5.08		ug/L		102	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		46 - 150
4-Bromofluorobenzene (Surr)	103		81 - 120
Dibromofluoromethane (Surr)	99		42 - 132
Toluene-d8 (Surr)	100		75 - 125
Trifluorotoluene (Surr)	101		74 - 118

Lab Sample ID: LCSD 580-271351/18

Matrix: Water

Analysis Batch: 271351

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.39		ug/L		108	68 - 139	8	20
1,1,1-Trichloroethane	5.00	5.22		ug/L		104	56 - 150	8	29
1,1,2,2-Tetrachloroethane	5.00	5.58		ug/L		112	60 - 134	4	25
1,1,2-Trichloroethane	5.00	5.37		ug/L		107	62 - 137	3	30
1,1-Dichloroethane	5.00	5.37		ug/L		107	68 - 135	5	27
1,1-Dichloroethene	5.00	5.25		ug/L		105	64 - 125	8	28
1,2,3-Trichloropropane	5.00	5.34		ug/L		107	45 - 150	5	20
1,2-Dibromo-3-Chloropropane	5.00	5.12		ug/L		102	34 - 150	3	20
1,2-Dibromoethane	5.00	5.37		ug/L		107	56 - 146	3	20
1,2-Dichlorobenzene	5.00	5.26		ug/L		105	73 - 120	5	14
1,2-Dichloroethane	5.00	5.23		ug/L		105	63 - 150	1	29
1,2-Dichloropropane	5.00	5.39		ug/L		108	72 - 120	2	20
1,4-Dichlorobenzene	5.00	5.28		ug/L		106	77 - 120	5	11
2-Butanone	25.0	27.8		ug/L		111	30 - 150	19	35
2-Hexanone	25.0	26.7		ug/L		107	25 - 150	3	28
4-Methyl-2-pentanone	25.0	27.0		ug/L		108	36 - 150	4	34
Acetone	25.0	27.7 *		ug/L		111	20 - 138	54	35
Acrylonitrile	50.0	56.6		ug/L		113	55 - 134	23	35
Benzene	5.00	5.27		ug/L		105	73 - 120	5	20
Bromochloromethane	5.00	5.36		ug/L		107	71 - 131	3	20
Bromodichloromethane	5.00	5.42		ug/L		108	62 - 150	0	20
Bromoform	5.00	4.86		ug/L		97	51 - 137	6	20
Bromomethane	5.00	4.61		ug/L		92	61 - 135	11	31
Carbon disulfide	5.00	5.38		ug/L		108	65 - 128	6	32
Carbon tetrachloride	5.00	5.29		ug/L		106	54 - 150	8	30
Chlorobenzene	5.00	5.30		ug/L		106	74 - 114	6	12
Chloroethane	5.00	4.38		ug/L		88	58 - 130	12	35
Chloroform	5.00	5.37		ug/L		107	71 - 130	5	20
Chloromethane	5.00	4.32		ug/L		86	40 - 150	14	31
cis-1,2-Dichloroethene	5.00	5.36		ug/L		107	73 - 130	5	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-271351/18

Matrix: Water

Analysis Batch: 271351

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	5.46		ug/L		109	54 - 150	5	28
Dibromochloromethane	5.00	5.11		ug/L		102	46 - 150	5	20
Dibromomethane	5.00	5.39		ug/L		108	65 - 137	0	20
Ethylbenzene	5.00	5.25		ug/L		105	74 - 125	7	20
m,p-Xylene	5.00	5.10		ug/L		102	73 - 130	7	20
Methyl iodide	5.00	5.20		ug/L		104	47 - 145	9	35
Methylene Chloride	5.00	5.37		ug/L		107	58 - 134	2	29
o-Xylene	5.00	4.91		ug/L		98	80 - 139	8	20
Styrene	5.00	4.92		ug/L		98	68 - 136	6	20
Tetrachloroethene	5.00	5.21		ug/L		104	67 - 123	7	20
Toluene	5.00	5.16		ug/L		103	70 - 126	7	20
trans-1,2-Dichloroethene	5.00	5.28		ug/L		106	69 - 124	8	27
trans-1,3-Dichloropropene	5.00	5.23		ug/L		105	40 - 150	4	30
trans-1,4-Dichloro-2-butene	5.00	4.98		ug/L		100	20 - 150	1	20
Trichloroethene	5.00	5.44		ug/L		109	72 - 123	6	20
Trichlorofluoromethane	5.00	5.41		ug/L		108	60 - 150	6	31
Vinyl acetate	12.5	14.5		ug/L		116	30 - 150	6	35
Vinyl chloride	5.00	4.26		ug/L		85	59 - 140	17	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		46 - 150
4-Bromofluorobenzene (Surr)	101		81 - 120
Dibromofluoromethane (Surr)	99		42 - 132
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	101		74 - 118

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-271923/18-A

Matrix: Water

Analysis Batch: 272086

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		04/20/18 15:39	04/23/18 16:48	1
Iron	ND		0.30		mg/L		04/20/18 15:39	04/23/18 16:48	1
Magnesium	ND		1.1		mg/L		04/20/18 15:39	04/23/18 16:48	1
Manganese	ND		0.020		mg/L		04/20/18 15:39	04/23/18 16:48	1
Potassium	ND		3.3		mg/L		04/20/18 15:39	04/23/18 16:48	1
Sodium	ND		2.0		mg/L		04/20/18 15:39	04/23/18 16:48	1

Lab Sample ID: LCS 580-271923/19-A

Matrix: Water

Analysis Batch: 272086

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	20.0	19.4		mg/L		97	80 - 120
Iron	22.0	20.9		mg/L		95	80 - 120
Magnesium	20.0	18.9		mg/L		94	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 580-271923/19-A
Matrix: Water
Analysis Batch: 272086

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 271923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.00	0.968		mg/L		97	80 - 120
Potassium	20.0	18.4		mg/L		92	80 - 120
Sodium	20.0	18.2		mg/L		91	80 - 120

Lab Sample ID: LCSD 580-271923/20-A
Matrix: Water
Analysis Batch: 272086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 271923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	20.0	19.7		mg/L		99	80 - 120	2	20
Iron	22.0	21.0		mg/L		96	80 - 120	0	20
Magnesium	20.0	19.0		mg/L		95	80 - 120	1	20
Manganese	1.00	0.984		mg/L		98	80 - 120	2	20
Potassium	20.0	18.8		mg/L		94	80 - 120	2	20
Sodium	20.0	18.5		mg/L		93	80 - 120	2	20

Lab Sample ID: 580-76662-1 MS
Matrix: Water
Analysis Batch: 272086

Client Sample ID: 0418-01
Prep Type: Dissolved
Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	67		20.0	87.5		mg/L		104	75 - 125
Iron	ND		22.0	21.5		mg/L		98	75 - 125
Magnesium	40		20.0	62.0		mg/L		109	75 - 125
Manganese	0.26		1.00	1.23		mg/L		97	75 - 125
Potassium	6.1		20.0	25.5		mg/L		97	75 - 125
Sodium	24		20.0	44.1		mg/L		102	75 - 125

Lab Sample ID: 580-76662-1 MSD
Matrix: Water
Analysis Batch: 272086

Client Sample ID: 0418-01
Prep Type: Dissolved
Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	67		20.0	86.2		mg/L		98	75 - 125	1	20
Iron	ND		22.0	20.9		mg/L		95	75 - 125	3	20
Magnesium	40		20.0	60.6		mg/L		101	75 - 125	2	20
Manganese	0.26		1.00	1.22		mg/L		96	75 - 125	1	20
Potassium	6.1		20.0	25.0		mg/L		95	75 - 125	2	20
Sodium	24		20.0	43.2		mg/L		97	75 - 125	2	20

Lab Sample ID: 580-76662-1 DU
Matrix: Water
Analysis Batch: 272086

Client Sample ID: 0418-01
Prep Type: Dissolved
Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	67		68.0		mg/L		2	20
Iron	ND		ND		mg/L		NC	20
Magnesium	40		42.7		mg/L		6	20
Manganese	0.26		0.266		mg/L		2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-76662-1 DU

Matrix: Water

Analysis Batch: 272086

Client Sample ID: 0418-01

Prep Type: Dissolved

Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Potassium	6.1		6.15		mg/L		1	20
Sodium	24		24.7		mg/L		4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-271923/18-A

Matrix: Water

Analysis Batch: 272097

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Arsenic	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:02	1
Barium	ND		0.0012		mg/L		04/20/18 15:39	04/23/18 12:02	1
Beryllium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Cadmium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Chromium	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Cobalt	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Copper	ND		0.0020		mg/L		04/20/18 15:39	04/23/18 12:02	1
Lead	ND		0.00080		mg/L		04/20/18 15:39	04/23/18 12:02	1
Nickel	ND		0.0030		mg/L		04/20/18 15:39	04/23/18 12:02	1
Selenium	ND		0.0080		mg/L		04/20/18 15:39	04/23/18 12:02	1
Silver	ND		0.00040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Thallium	ND		0.0010		mg/L		04/20/18 15:39	04/23/18 12:02	1
Vanadium	ND		0.0040		mg/L		04/20/18 15:39	04/23/18 12:02	1
Zinc	ND		0.0070		mg/L		04/20/18 15:39	04/23/18 12:02	1

Lab Sample ID: LCS 580-271923/19-A

Matrix: Water

Analysis Batch: 272097

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.89		mg/L		96	80 - 120
Arsenic	4.00	4.08		mg/L		102	80 - 120
Barium	4.00	3.96		mg/L		99	80 - 120
Beryllium	0.100	0.0971		mg/L		97	80 - 120
Cadmium	0.100	0.0983		mg/L		98	80 - 120
Chromium	0.400	0.400		mg/L		100	80 - 120
Cobalt	1.00	0.993		mg/L		99	80 - 120
Copper	0.500	0.516		mg/L		103	80 - 120
Lead	1.00	0.980		mg/L		98	80 - 120
Nickel	1.00	1.01		mg/L		101	80 - 120
Selenium	4.00	3.82		mg/L		96	80 - 120
Silver	0.600	0.609		mg/L		101	80 - 120
Thallium	4.00	3.75		mg/L		94	80 - 120
Vanadium	1.00	0.989		mg/L		99	80 - 120
Zinc	4.00	3.97		mg/L		99	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-271923/20-A

Matrix: Water

Analysis Batch: 272097

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.82		mg/L		94	80 - 120	3	20
Arsenic	4.00	3.90		mg/L		97	80 - 120	4	20
Barium	4.00	3.87		mg/L		97	80 - 120	2	20
Beryllium	0.100	0.0942		mg/L		94	80 - 120	3	20
Cadmium	0.100	0.0954		mg/L		95	80 - 120	3	20
Chromium	0.400	0.396		mg/L		99	80 - 120	1	20
Cobalt	1.00	0.964		mg/L		96	80 - 120	3	20
Copper	0.500	0.494		mg/L		99	80 - 120	4	20
Lead	1.00	0.957		mg/L		96	80 - 120	2	20
Nickel	1.00	0.970		mg/L		97	80 - 120	4	20
Selenium	4.00	3.85		mg/L		96	80 - 120	1	20
Silver	0.600	0.594		mg/L		99	80 - 120	2	20
Thallium	4.00	3.67		mg/L		92	80 - 120	2	20
Vanadium	1.00	0.987		mg/L		99	80 - 120	0	20
Zinc	4.00	3.83		mg/L		96	80 - 120	4	20

Lab Sample ID: 580-76662-1 MS

Matrix: Water

Analysis Batch: 272097

Client Sample ID: 0418-01

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		3.00	2.78		mg/L		93	80 - 120		
Arsenic	0.0060		4.00	3.90		mg/L		97	80 - 120		
Barium	0.026		4.00	3.82		mg/L		95	80 - 120		
Beryllium	ND		0.100	0.0912		mg/L		91	80 - 120		
Cadmium	ND	F2	0.100	0.0894		mg/L		89	80 - 120		
Chromium	0.00071		0.400	0.397		mg/L		99	80 - 120		
Cobalt	ND		1.00	0.967		mg/L		97	80 - 120		
Copper	ND		0.500	0.497		mg/L		99	80 - 120		
Lead	ND		1.00	0.950		mg/L		95	80 - 120		
Nickel	ND		1.00	0.973		mg/L		97	80 - 120		
Selenium	ND		4.00	3.79		mg/L		95	80 - 120		
Silver	ND		0.600	0.582		mg/L		97	80 - 120		
Thallium	ND		4.00	3.61		mg/L		90	80 - 120		
Vanadium	ND		1.00	0.952		mg/L		95	80 - 120		
Zinc	ND		4.00	3.77		mg/L		94	80 - 120		

Lab Sample ID: 580-76662-1 MSD

Matrix: Water

Analysis Batch: 272097

Client Sample ID: 0418-01

Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		3.00	3.03		mg/L		101	80 - 120	9	20
Arsenic	0.0060		4.00	4.18		mg/L		104	80 - 120	7	20
Barium	0.026		4.00	4.06		mg/L		101	80 - 120	6	20
Beryllium	ND		0.100	0.0992		mg/L		99	80 - 120	8	20
Cadmium	ND	F2	0.100	0.112	F2	mg/L		112	80 - 120	23	20
Chromium	0.00071		0.400	0.428		mg/L		107	80 - 120	7	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-76662-1 MSD

Matrix: Water

Analysis Batch: 272097

Client Sample ID: 0418-01
Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	ND		1.00	1.04		mg/L		104	80 - 120	7	20
Copper	ND		0.500	0.533		mg/L		106	80 - 120	7	20
Lead	ND		1.00	1.01		mg/L		101	80 - 120	6	20
Nickel	ND		1.00	1.04		mg/L		104	80 - 120	7	20
Selenium	ND		4.00	4.07		mg/L		102	80 - 120	7	20
Silver	ND		0.600	0.634		mg/L		106	80 - 120	9	20
Thallium	ND		4.00	3.85		mg/L		96	80 - 120	6	20
Vanadium	ND		1.00	1.04		mg/L		104	80 - 120	9	20
Zinc	ND		4.00	4.08		mg/L		102	80 - 120	8	20

Lab Sample ID: 580-76662-1 DU

Matrix: Water

Analysis Batch: 272097

Client Sample ID: 0418-01
Prep Type: Total Recoverable

Prep Batch: 271923

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/L		NC	20
Arsenic	0.0060		0.00598		mg/L		1	20
Barium	0.026		0.0259		mg/L		2	20
Beryllium	ND		ND		mg/L		NC	20
Cadmium	ND	F2	ND		mg/L		NC	20
Chromium	0.00071		0.000731		mg/L		3	20
Cobalt	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Nickel	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-271640/3

Matrix: Water

Analysis Batch: 271640

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/17/18 18:12	1
Chloride	ND		0.90		mg/L			04/17/18 18:12	1
Sulfate	ND		1.2		mg/L			04/17/18 18:12	1

Lab Sample ID: LCS 580-271640/4

Matrix: Water

Analysis Batch: 271640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	4.69		mg/L		94	90 - 110
Chloride	50.0	51.9		mg/L		104	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-271640/4

Matrix: Water

Analysis Batch: 271640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	51.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 580-271640/5

Matrix: Water

Analysis Batch: 271640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	4.62		mg/L		92	90 - 110	2	15
Chloride	50.0	51.9		mg/L		104	90 - 110	0	15
Sulfate	50.0	51.1		mg/L		102	90 - 110	0	15

Lab Sample ID: 580-76662-1 MS

Matrix: Water

Analysis Batch: 271640

Client Sample ID: 0418-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		5.00	4.49		mg/L		90	90 - 110
Chloride	35		50.0	86.4		mg/L		103	90 - 110
Sulfate	16 F1		50.0	71.3 F1		mg/L		111	90 - 110

Lab Sample ID: 580-76662-1 MSD

Matrix: Water

Analysis Batch: 271640

Client Sample ID: 0418-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		5.00	4.54		mg/L		91	90 - 110	1	15
Chloride	35		50.0	86.4		mg/L		103	90 - 110	0	15
Sulfate	16 F1		50.0	71.4 F1		mg/L		111	90 - 110	0	15

Lab Sample ID: MB 580-271641/3

Matrix: Water

Analysis Batch: 271641

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			04/17/18 18:12	1

Lab Sample ID: LCS 580-271641/4

Matrix: Water

Analysis Batch: 271641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCSD 580-271641/5

Matrix: Water

Analysis Batch: 271641

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.4		mg/L		104	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-76662-1 MS

Matrix: Water

Analysis Batch: 271641

Client Sample ID: 0418-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	ND	F1	10.0	9.28		mg/L		90	90 - 110

Lab Sample ID: 580-76662-1 MSD

Matrix: Water

Analysis Batch: 271641

Client Sample ID: 0418-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	8.10	F1	mg/L		79	90 - 110	14	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 490-510614/1-A

Matrix: Water

Analysis Batch: 510685

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510614

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.10		mg/L		04/25/18 10:29	04/25/18 13:42	1

Lab Sample ID: LCS 490-510614/2-A

Matrix: Water

Analysis Batch: 510685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.28		mg/L		106	90 - 110

Lab Sample ID: 580-76662-4 MS

Matrix: Water

Analysis Batch: 510685

Client Sample ID: 0418-04

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	ND		5.00	5.18		mg/L		102	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-272077/2

Matrix: Water

Analysis Batch: 272077

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	115		mg/L		115	85 - 115

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-272064/1

Matrix: Water

Analysis Batch: 272064

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/23/18 14:56	1

Lab Sample ID: LCS 580-272064/2

Matrix: Water

Analysis Batch: 272064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	954		mg/L		95	80 - 120

Method: SM 5220D - COD

Lab Sample ID: MB 580-272150/3-A

Matrix: Water

Analysis Batch: 272154

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 272150

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		04/24/18 10:30	04/24/18 10:30	1

Lab Sample ID: LCS 580-272150/4-A

Matrix: Water

Analysis Batch: 272154

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 272150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	76.3		mg/L		102	80 - 120

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-272588/20

Matrix: Water

Analysis Batch: 272588

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			04/27/18 20:45	1

Lab Sample ID: MB 580-272588/3

Matrix: Water

Analysis Batch: 272588

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			04/27/18 20:45	1

Lab Sample ID: LCS 580-272588/21

Matrix: Water

Analysis Batch: 272588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.39		mg/L		94	85 - 115

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 580-272588/4

Matrix: Water

Analysis Batch: 272588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.19		mg/L		92	85 - 115

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-01

Date Collected: 04/16/18 11:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/18/18 22:35	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 16:58	HJM	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 17:26	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:10	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 18:47	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 18:47	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 13:52	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-02

Date Collected: 04/16/18 12:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/18/18 23:02	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 17:30	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:36	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 19:22	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 19:22	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 13:53	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-03

Date Collected: 04/16/18 13:26

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/18/18 23:29	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 17:33	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:38	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 19:34	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 19:34	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 13:54	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-04

Date Collected: 04/16/18 15:00

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/18/18 23:55	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 17:36	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:41	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 19:45	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 19:45	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 13:57	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-05

Date Collected: 04/16/18 15:50

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/19/18 00:22	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Client Sample ID: 0418-05

Date Collected: 04/16/18 15:50

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1	272086	04/23/18 17:40	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:44	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 19:57	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 19:57	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 13:59	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		2	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-06

Date Collected: 04/16/18 17:10

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/19/18 00:48	T1W	TAL SEA
Dissolved	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272086	04/23/18 17:43	HJM	TAL SEA
Total Recoverable	Prep	3005A			271923	04/20/18 15:39	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272097	04/23/18 12:46	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271640	04/17/18 20:32	EMM	TAL SEA
Total/NA	Analysis	300.0		1	271641	04/17/18 20:32	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510614	04/25/18 10:29	RSB	TAL NSH
Total/NA	Analysis	350.1		1	510685	04/25/18 14:00	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272150	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272154	04/24/18 10:30	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 04/16/18 00:01

Date Received: 04/17/18 15:15

Lab Sample ID: 580-76662-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271351	04/18/18 22:09	T1W	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76662-1

Laboratory: TestAmerica Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	10-31-18
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	06-30-18
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-18 *
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18 *
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-18 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Seattle

Accreditation/Certification Summary

Client: SCS Engineers

TestAmerica Job ID: 580-76662-1

Project/Site: Coupeville Solid Waste Facility Groundwa

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-19

Sample Summary

Client: SCS Engineers

TestAmerica Job ID: 580-76662-1

Project/Site: Coupeville Solid Waste Facility Groundwa

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76662-1	0418-01	Water	04/16/18 11:00	04/17/18 15:15
580-76662-2	0418-02	Water	04/16/18 12:10	04/17/18 15:15
580-76662-3	0418-03	Water	04/16/18 13:26	04/17/18 15:15
580-76662-4	0418-04	Water	04/16/18 15:00	04/17/18 15:15
580-76662-5	0418-05	Water	04/16/18 15:50	04/17/18 15:15
580-76662-6	0418-06	Water	04/16/18 17:10	04/17/18 15:15
580-76662-7	Trip Blank	Water	04/16/18 00:01	04/17/18 15:15

Client SCS Engineers		Client Contact Dan Vanchurutti		Date 4/17/18	Chain of Custody Number 38246
Address 2405 140th Ave NE Suite 107		Telephone Number (Area Code)/Fax Number 425-289-5455		Lab Number 76662	Page 1 of 1
City Bellave	State WA	Zip Code 98005	Sampler Sam G.	Lab Contact Cathy Gumble	

Project Name and Location (State) CSUF, Washington	Billing Contact	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
Contract/Purchase Order/Quote No.			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives															
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH										
0418-01	4/16/18	1100	X				2	2	2	3					X	X	X	X	X	X	X	X
0418-02		1210																				
0418-03		1326																				
0418-04		1500																				
0418-05		1550																				
0418-06		1710																				
Trip blank		-								6												

Therm. ID: 385 Cor: 1.0 ° Unc: 0.9 °	Therm. ID: A2 Cor: 4.6 ° Unc: 4.8 °
Cooler Desc: 1kg Blue	Cooler Desc: 1kg Blue
Packing: Box FedEx: Box	Packing: Box FedEx: Box
Cust. Seal: Yes ☒ No ☒ Lab Cour: X	Cust. Seal: Yes ☒ No ☒ Lab Cour: X
☒ Wet Packs/Dry Ice/None Other: c	☒ Wet Packs/Dry Ice/None Other: c



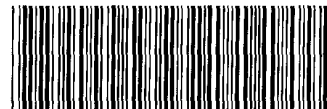
Cooler ☐ Yes ☐ No Cooler Temp: _____	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown	Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard	QC Requirements (Specify)

1. Relinquished By Sign/Print Sam Gumble	Date 4/17/18	Time 830	1. Received By Sign/Print Francisco Luna, Jr.	Date 4/17/18	Time 1515
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments

COOLER RECEIPT FORM



580-76662 Chain of Custody

Cooler Received/Opened On 4/19/2018 @ 0935

Time Samples Removed From Cooler 17:00 Time Samples Placed In Storage 17:31 (2 Hour Window)

1. Tracking # 1451 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 31470368 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? 1 (Front) YES YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES YES NO NA

6. Were custody papers inside cooler? 2.2 YES YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) 2.2

7. Were custody seals on containers: YES NO and Intact YES NO NA NA

Were these signed and dated correctly? YES NO NA NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES YES NO NA

12. Did all container labels and tags agree with custody papers? YES YES NO NA

13a. Were VOA vials received? YES NO NA NA

b. Was there any observable headspace present in any VOA vial? YES NO NA NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES NO NA NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA NA

16. Was residual chlorine present? YES NO NA NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES YES NO NA

18. Did you sign the custody papers in the appropriate place? YES YES NO NA

19. Were correct containers used for the analysis requested? YES YES NO NA

20. Was sufficient amount of sample sent in each container? YES YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) 2.2

I certify that I attached a label with the unique LIMS number to each container (initial) 2.2

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO NA NA

TestAmerica Seattle

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

580-76662

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler: Lab PIM: Zalmat Kayse 1	
Client Contact: Shipping/Receiving		Phone: E-Mail: kayse.zalmat@testamericainc.com	
Company: TestAmerica Laboratories, Inc		State of Origin: Washington	
Address: 2960 Foster Creighton Drive,		Page: 1 of 1	
City: Nashville		Job #: 580-76662-1	
State: TN, 37204		Preservation Codes:	
Phone: 615-726-0177(Tel) 615-726-3404(Fax)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - NaOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - PH 4-5 Z - other (specify)	
Email:		Other:	
Project Name: Coupeville Solid Waste Facility Groundwa		Total Number of Containers	
Site: Island County-CSWF-Q1 & Q3		Special Instructions/Note:	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=soil, A=air)	Field Filled Sample (Yes or No)	350, 1/Disill, Ammonia Ammonia	Analysis Requested	Preservation Code
0418-01 (580-76662-1)	4/16/18	11:00 Pacific		Water	X	X		
0418-02 (580-76662-2)	4/16/18	12:10 Pacific		Water	X	X		
0418-03 (580-76662-3)	4/16/18	13:26 Pacific		Water	X	X		
0418-04 (580-76662-4)	4/16/18	15:00 Pacific		Water	X	X		
0418-05 (580-76662-5)	4/16/18	15:50 Pacific		Water	X	X		
0418-06 (580-76662-6)	4/16/18	17:10 Pacific		Water	X	X		

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	
Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Deliverable Requested: I, II, III, IV, Other (specify)	Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months
Special Instructions/QC Requirements:	
Empty Kit Relinquished by:	Time: Date:
Relinquished by: B. Allen	Time: Date: 4/18/18 1550
Relinquished by:	Time: Date:
Relinquished by:	Time: Date:
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 3.4

Received by: *Shawn Allen* Date/Time: 4/19/18 09:35 Company: *TestAmerica*

Received by: Date/Time: Company:

Received by: Date/Time: Company:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-76662-1

Login Number: 76662

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-76727-1

Client Project/Site: Coupeville Solid Waste Facility Groundwa
Sampling Event: Coupeville Solid Waste Facility GW
Revision: 1

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
5/11/2018 3:25:11 PM

Kayse Zalmai, Project Manager I
(253)922-2310
kayse.zalmai@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Job ID: 580-76727-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-76727-1

Receipt

The samples were received on 4/19/2018 2:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 8 coolers at receipt time were 1.4° C, 1.6° C, 2.2° C, 2.8° C, 3.8° C, 4.9° C, 5.5° C and 5.8° C.

Receipt Exceptions

The following sample was activated by the client on 05/07/2017 for 8260 LL Arsenic: 0418-27 (580-76727-21).

GC/MS VOA

Method(s) 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 580-271868 recovered outside control limits for the following analytes: Chlorobenzene.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-271969 was outside criteria for the following analyte(s): 2-Butanone and 2-Hexanone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-271868 was outside criteria for the following analyte(s): 2-Butanone and 2-Hexanone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The following volatile samples were analyzed with significant headspace in the sample container(s): 0418-19 (580-76727-13) and 0418-23 (580-76727-17). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method(s) 350.1: The method blank for preparation batch 490-510987 and analytical batch 490-511245 contained ammonia above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-07

Date Collected: 04/17/18 10:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 18:02	1
1,1,1-Trichloroethane	0.29		0.20		ug/L			04/20/18 18:02	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 18:02	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 18:02	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 18:02	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 18:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 18:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 18:02	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 18:02	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:02	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 18:02	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 18:02	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:02	1
2-Butanone	ND		10		ug/L			04/20/18 18:02	1
2-Hexanone	ND		3.0		ug/L			04/20/18 18:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 18:02	1
Acetone	ND		6.0		ug/L			04/20/18 18:02	1
Acrylonitrile	ND		10		ug/L			04/20/18 18:02	1
Benzene	ND		0.20		ug/L			04/20/18 18:02	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 18:02	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 18:02	1
Bromoform	ND		0.50		ug/L			04/20/18 18:02	1
Bromomethane	ND		0.50		ug/L			04/20/18 18:02	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 18:02	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 18:02	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 18:02	1
Chloroethane	ND		0.50		ug/L			04/20/18 18:02	1
Chloroform	ND		0.20		ug/L			04/20/18 18:02	1
Chloromethane	ND		0.50		ug/L			04/20/18 18:02	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:02	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:02	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 18:02	1
Dibromomethane	ND		0.20		ug/L			04/20/18 18:02	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 18:02	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 18:02	1
Methyl iodide	ND		0.50		ug/L			04/20/18 18:02	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 18:02	1
o-Xylene	ND		0.50		ug/L			04/20/18 18:02	1
Styrene	ND		0.50		ug/L			04/20/18 18:02	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 18:02	1
Toluene	ND		0.20		ug/L			04/20/18 18:02	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:02	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:02	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 18:02	1
Trichloroethene	ND		0.20		ug/L			04/20/18 18:02	1
Trichlorofluoromethane	1.8		0.50		ug/L			04/20/18 18:02	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 18:02	1
Vinyl chloride	21		0.020		ug/L			04/20/18 18:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-07

Date Collected: 04/17/18 10:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		46 - 150		04/20/18 18:02	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 18:02	1
Dibromofluoromethane (Surr)	98		42 - 132		04/20/18 18:02	1
Toluene-d8 (Surr)	104		75 - 125		04/20/18 18:02	1
Trifluorotoluene (Surr)	101		74 - 118		04/20/18 18:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	200		1.1		mg/L		04/23/18 15:38	04/24/18 12:49	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 12:49	1
Magnesium	94		1.1		mg/L		04/23/18 15:38	04/24/18 12:49	1
Manganese	0.060		0.020		mg/L		04/23/18 15:38	04/24/18 12:49	1
Potassium	8.5		3.3		mg/L		04/23/18 15:38	04/24/18 12:49	1
Sodium	36		2.0		mg/L		04/23/18 15:38	04/24/18 12:49	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Arsenic	0.0018		0.0010		mg/L		04/23/18 13:57	04/24/18 11:59	1
Barium	0.044		0.0012		mg/L		04/23/18 13:57	04/24/18 11:59	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Copper	0.0020		0.0020		mg/L		04/23/18 13:57	04/24/18 11:59	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 11:59	1
Nickel	0.0068		0.0030		mg/L		04/23/18 13:57	04/24/18 11:59	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 11:59	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 11:59	1
Vanadium	0.0060		0.0040		mg/L		04/23/18 13:57	04/24/18 11:59	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 12:16	1
Chloride	30		0.90		mg/L			04/21/18 12:16	1
Sulfate	77		1.2		mg/L			04/21/18 12:16	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 14:17	1
Nitrate Nitrite as N	5.0		1.5		mg/L			04/25/18 14:28	10
Total Organic Carbon	2.2		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	800		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	800		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	940		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND	F1	10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-08

Date Collected: 04/17/18 10:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 18:29	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 18:29	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 18:29	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 18:29	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 18:29	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 18:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 18:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 18:29	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 18:29	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:29	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 18:29	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 18:29	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:29	1
2-Butanone	ND		10		ug/L			04/20/18 18:29	1
2-Hexanone	ND		3.0		ug/L			04/20/18 18:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 18:29	1
Acetone	ND		6.0		ug/L			04/20/18 18:29	1
Acrylonitrile	ND		10		ug/L			04/20/18 18:29	1
Benzene	ND		0.20		ug/L			04/20/18 18:29	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 18:29	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 18:29	1
Bromoform	ND		0.50		ug/L			04/20/18 18:29	1
Bromomethane	ND		0.50		ug/L			04/20/18 18:29	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 18:29	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 18:29	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 18:29	1
Chloroethane	ND		0.50		ug/L			04/20/18 18:29	1
Chloroform	ND		0.20		ug/L			04/20/18 18:29	1
Chloromethane	ND		0.50		ug/L			04/20/18 18:29	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:29	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:29	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 18:29	1
Dibromomethane	ND		0.20		ug/L			04/20/18 18:29	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 18:29	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 18:29	1
Methyl iodide	ND		0.50		ug/L			04/20/18 18:29	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 18:29	1
o-Xylene	ND		0.50		ug/L			04/20/18 18:29	1
Styrene	ND		0.50		ug/L			04/20/18 18:29	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 18:29	1
Toluene	ND		0.20		ug/L			04/20/18 18:29	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:29	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:29	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 18:29	1
Trichloroethene	ND		0.20		ug/L			04/20/18 18:29	1
Trichlorofluoromethane	1.7		0.50		ug/L			04/20/18 18:29	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 18:29	1
Vinyl chloride	0.088		0.020		ug/L			04/20/18 18:29	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-08

Date Collected: 04/17/18 10:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/20/18 18:29	1
4-Bromofluorobenzene (Surr)	98		81 - 120		04/20/18 18:29	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 18:29	1
Toluene-d8 (Surr)	104		75 - 125		04/20/18 18:29	1
Trifluorotoluene (Surr)	104		74 - 118		04/20/18 18:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160		1.1		mg/L		04/23/18 15:38	04/24/18 13:14	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:14	1
Magnesium	64		1.1		mg/L		04/23/18 15:38	04/24/18 13:14	1
Manganese	0.41		0.020		mg/L		04/23/18 15:38	04/24/18 13:14	1
Potassium	7.0		3.3		mg/L		04/23/18 15:38	04/24/18 13:14	1
Sodium	30		2.0		mg/L		04/23/18 15:38	04/24/18 13:14	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Arsenic	0.0013		0.0010		mg/L		04/23/18 13:57	04/24/18 12:02	1
Barium	0.053		0.0012		mg/L		04/23/18 13:57	04/24/18 12:02	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Cobalt	0.00090		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:02	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:02	1
Nickel	0.0045		0.0030		mg/L		04/23/18 13:57	04/24/18 12:02	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:02	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:02	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:02	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 12:28	1
Chloride	22		0.90		mg/L			04/21/18 12:28	1
Sulfate	69		1.2		mg/L			04/21/18 12:28	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 14:18	1
Nitrate Nitrite as N	8.7		1.5		mg/L			04/25/18 14:32	10
Total Organic Carbon	1.9		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	590		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	590		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	750		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-09

Date Collected: 04/17/18 12:16

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 18:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 18:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 18:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 18:55	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 18:55	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 18:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 18:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 18:55	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 18:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:55	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 18:55	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 18:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 18:55	1
2-Butanone	ND		10		ug/L			04/20/18 18:55	1
2-Hexanone	ND		3.0		ug/L			04/20/18 18:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 18:55	1
Acetone	ND		6.0		ug/L			04/20/18 18:55	1
Acrylonitrile	ND		10		ug/L			04/20/18 18:55	1
Benzene	ND		0.20		ug/L			04/20/18 18:55	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 18:55	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 18:55	1
Bromoform	ND		0.50		ug/L			04/20/18 18:55	1
Bromomethane	ND		0.50		ug/L			04/20/18 18:55	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 18:55	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 18:55	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 18:55	1
Chloroethane	ND		0.50		ug/L			04/20/18 18:55	1
Chloroform	ND		0.20		ug/L			04/20/18 18:55	1
Chloromethane	ND		0.50		ug/L			04/20/18 18:55	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:55	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 18:55	1
Dibromomethane	ND		0.20		ug/L			04/20/18 18:55	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 18:55	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 18:55	1
Methyl iodide	ND		0.50		ug/L			04/20/18 18:55	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 18:55	1
o-Xylene	ND		0.50		ug/L			04/20/18 18:55	1
Styrene	ND		0.50		ug/L			04/20/18 18:55	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 18:55	1
Toluene	ND		0.20		ug/L			04/20/18 18:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 18:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 18:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 18:55	1
Trichloroethene	ND		0.20		ug/L			04/20/18 18:55	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 18:55	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 18:55	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 18:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-09

Date Collected: 04/17/18 12:16

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/20/18 18:55	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 18:55	1
Dibromofluoromethane (Surr)	98		42 - 132		04/20/18 18:55	1
Toluene-d8 (Surr)	105		75 - 125		04/20/18 18:55	1
Trifluorotoluene (Surr)	104		74 - 118		04/20/18 18:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	71		1.1		mg/L		04/23/18 15:38	04/24/18 13:17	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:17	1
Magnesium	26		1.1		mg/L		04/23/18 15:38	04/24/18 13:17	1
Manganese	0.031		0.020		mg/L		04/23/18 15:38	04/24/18 13:17	1
Potassium	5.8		3.3		mg/L		04/23/18 15:38	04/24/18 13:17	1
Sodium	20		2.0		mg/L		04/23/18 15:38	04/24/18 13:17	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Arsenic	0.0079		0.0010		mg/L		04/23/18 13:57	04/24/18 12:06	1
Barium	0.028		0.0012		mg/L		04/23/18 13:57	04/24/18 12:06	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:06	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:06	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:06	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:06	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:06	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:06	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 12:39	1
Chloride	38		0.90		mg/L			04/21/18 12:39	1
Sulfate	25		1.2		mg/L			04/21/18 12:39	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 14:19	1
Nitrate Nitrite as N	ND		0.15		mg/L			04/25/18 14:33	1
Total Organic Carbon	1.2		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	250		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	250		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	340		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-10

Date Collected: 04/17/18 12:20

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 19:22	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 19:22	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 19:22	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 19:22	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 19:22	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 19:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 19:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 19:22	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 19:22	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 19:22	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 19:22	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 19:22	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 19:22	1
2-Butanone	ND		10		ug/L			04/20/18 19:22	1
2-Hexanone	ND		3.0		ug/L			04/20/18 19:22	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 19:22	1
Acetone	ND		6.0		ug/L			04/20/18 19:22	1
Acrylonitrile	ND		10		ug/L			04/20/18 19:22	1
Benzene	ND		0.20		ug/L			04/20/18 19:22	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 19:22	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 19:22	1
Bromoform	ND		0.50		ug/L			04/20/18 19:22	1
Bromomethane	ND		0.50		ug/L			04/20/18 19:22	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 19:22	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 19:22	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 19:22	1
Chloroethane	ND		0.50		ug/L			04/20/18 19:22	1
Chloroform	ND		0.20		ug/L			04/20/18 19:22	1
Chloromethane	ND		0.50		ug/L			04/20/18 19:22	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 19:22	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 19:22	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 19:22	1
Dibromomethane	ND		0.20		ug/L			04/20/18 19:22	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 19:22	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 19:22	1
Methyl iodide	ND		0.50		ug/L			04/20/18 19:22	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 19:22	1
o-Xylene	ND		0.50		ug/L			04/20/18 19:22	1
Styrene	ND		0.50		ug/L			04/20/18 19:22	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 19:22	1
Toluene	ND		0.20		ug/L			04/20/18 19:22	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 19:22	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 19:22	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 19:22	1
Trichloroethene	ND		0.20		ug/L			04/20/18 19:22	1
Trichlorofluoromethane	0.89		0.50		ug/L			04/20/18 19:22	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 19:22	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 19:22	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-10

Date Collected: 04/17/18 12:20

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/20/18 19:22	1
4-Bromofluorobenzene (Surr)	98		81 - 120		04/20/18 19:22	1
Dibromofluoromethane (Surr)	98		42 - 132		04/20/18 19:22	1
Toluene-d8 (Surr)	105		75 - 125		04/20/18 19:22	1
Trifluorotoluene (Surr)	104		74 - 118		04/20/18 19:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130		1.1		mg/L		04/23/18 15:38	04/24/18 13:21	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:21	1
Magnesium	46		1.1		mg/L		04/23/18 15:38	04/24/18 13:21	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:21	1
Potassium	5.7		3.3		mg/L		04/23/18 15:38	04/24/18 13:21	1
Sodium	26		2.0		mg/L		04/23/18 15:38	04/24/18 13:21	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Arsenic	0.0024		0.0010		mg/L		04/23/18 13:57	04/24/18 12:10	1
Barium	0.033		0.0012		mg/L		04/23/18 13:57	04/24/18 12:10	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Chromium	0.0098		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:10	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:10	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:10	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:10	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:10	1
Vanadium	0.0055		0.0040		mg/L		04/23/18 13:57	04/24/18 12:10	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 12:51	1
Chloride	39		0.90		mg/L			04/21/18 12:51	1
Sulfate	47		1.2		mg/L			04/21/18 12:51	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 13:48	1
Nitrate Nitrite as N	6.1		1.5		mg/L			04/25/18 14:35	10
Total Organic Carbon	1.5		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	440		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	440		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	590		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-11

Date Collected: 04/17/18 12:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 19:48	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 19:48	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 19:48	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 19:48	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 19:48	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 19:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 19:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 19:48	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 19:48	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 19:48	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 19:48	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 19:48	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 19:48	1
2-Butanone	ND		10		ug/L			04/20/18 19:48	1
2-Hexanone	ND		3.0		ug/L			04/20/18 19:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 19:48	1
Acetone	ND		6.0		ug/L			04/20/18 19:48	1
Acrylonitrile	ND		10		ug/L			04/20/18 19:48	1
Benzene	ND		0.20		ug/L			04/20/18 19:48	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 19:48	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 19:48	1
Bromoform	ND		0.50		ug/L			04/20/18 19:48	1
Bromomethane	ND		0.50		ug/L			04/20/18 19:48	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 19:48	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 19:48	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 19:48	1
Chloroethane	ND		0.50		ug/L			04/20/18 19:48	1
Chloroform	ND		0.20		ug/L			04/20/18 19:48	1
Chloromethane	ND		0.50		ug/L			04/20/18 19:48	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 19:48	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 19:48	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 19:48	1
Dibromomethane	ND		0.20		ug/L			04/20/18 19:48	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 19:48	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 19:48	1
Methyl iodide	ND		0.50		ug/L			04/20/18 19:48	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 19:48	1
o-Xylene	ND		0.50		ug/L			04/20/18 19:48	1
Styrene	ND		0.50		ug/L			04/20/18 19:48	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 19:48	1
Toluene	ND		0.20		ug/L			04/20/18 19:48	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 19:48	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 19:48	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 19:48	1
Trichloroethene	ND		0.20		ug/L			04/20/18 19:48	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 19:48	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 19:48	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 19:48	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-11

Date Collected: 04/17/18 12:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		46 - 150		04/20/18 19:48	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 19:48	1
Dibromofluoromethane (Surr)	100		42 - 132		04/20/18 19:48	1
Toluene-d8 (Surr)	106		75 - 125		04/20/18 19:48	1
Trifluorotoluene (Surr)	104		74 - 118		04/20/18 19:48	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	71		1.1		mg/L		04/23/18 15:38	04/24/18 13:24	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:24	1
Magnesium	26		1.1		mg/L		04/23/18 15:38	04/24/18 13:24	1
Manganese	0.030		0.020		mg/L		04/23/18 15:38	04/24/18 13:24	1
Potassium	5.8		3.3		mg/L		04/23/18 15:38	04/24/18 13:24	1
Sodium	20		2.0		mg/L		04/23/18 15:38	04/24/18 13:24	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Arsenic	0.0081		0.0010		mg/L		04/23/18 13:57	04/24/18 12:14	1
Barium	0.029		0.0012		mg/L		04/23/18 13:57	04/24/18 12:14	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:14	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:14	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:14	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:14	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:14	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:14	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 13:14	1
Chloride	38		0.90		mg/L			04/21/18 13:14	1
Sulfate	25		1.2		mg/L			04/21/18 13:14	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 13:49	1
Nitrate Nitrite as N	ND		0.15		mg/L			04/25/18 14:36	1
Total Organic Carbon	1.2		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	250		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	250		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	340		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-12

Date Collected: 04/17/18 13:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 20:15	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 20:15	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 20:15	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 20:15	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 20:15	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 20:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 20:15	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 20:15	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 20:15	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 20:15	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 20:15	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 20:15	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 20:15	1
2-Butanone	ND		10		ug/L			04/20/18 20:15	1
2-Hexanone	ND		3.0		ug/L			04/20/18 20:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 20:15	1
Acetone	ND		6.0		ug/L			04/20/18 20:15	1
Acrylonitrile	ND		10		ug/L			04/20/18 20:15	1
Benzene	ND		0.20		ug/L			04/20/18 20:15	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 20:15	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 20:15	1
Bromoform	ND		0.50		ug/L			04/20/18 20:15	1
Bromomethane	ND		0.50		ug/L			04/20/18 20:15	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 20:15	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 20:15	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 20:15	1
Chloroethane	ND		0.50		ug/L			04/20/18 20:15	1
Chloroform	ND		0.20		ug/L			04/20/18 20:15	1
Chloromethane	ND		0.50		ug/L			04/20/18 20:15	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 20:15	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 20:15	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 20:15	1
Dibromomethane	ND		0.20		ug/L			04/20/18 20:15	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 20:15	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 20:15	1
Methyl iodide	ND		0.50		ug/L			04/20/18 20:15	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 20:15	1
o-Xylene	ND		0.50		ug/L			04/20/18 20:15	1
Styrene	ND		0.50		ug/L			04/20/18 20:15	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 20:15	1
Toluene	ND		0.20		ug/L			04/20/18 20:15	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 20:15	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 20:15	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 20:15	1
Trichloroethene	ND		0.20		ug/L			04/20/18 20:15	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 20:15	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 20:15	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 20:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-12

Date Collected: 04/17/18 13:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		46 - 150		04/20/18 20:15	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 20:15	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 20:15	1
Toluene-d8 (Surr)	107		75 - 125		04/20/18 20:15	1
Trifluorotoluene (Surr)	106		74 - 118		04/20/18 20:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		04/23/18 15:38	04/24/18 13:27	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:27	1
Magnesium	73		1.1		mg/L		04/23/18 15:38	04/24/18 13:27	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:27	1
Potassium	8.1		3.3		mg/L		04/23/18 15:38	04/24/18 13:27	1
Sodium	39		2.0		mg/L		04/23/18 15:38	04/24/18 13:27	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Arsenic	0.0030		0.0010		mg/L		04/23/18 13:57	04/24/18 12:18	1
Barium	0.027		0.0012		mg/L		04/23/18 13:57	04/24/18 12:18	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:18	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:18	1
Nickel	0.0041		0.0030		mg/L		04/23/18 13:57	04/24/18 12:18	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:18	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:18	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:18	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 13:26	1
Chloride	67		0.90		mg/L			04/21/18 13:26	1
Sulfate	69		1.2		mg/L			04/21/18 13:26	1
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 13:51	1
Nitrate Nitrite as N	3.4		1.5		mg/L			04/25/18 14:39	10
Total Organic Carbon	2.2		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	470		5.0		mg/L			04/24/18 11:53	1
Bicarbonate Alkalinity as CaCO3	470		5.0		mg/L			04/24/18 11:53	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/24/18 11:53	1
Total Dissolved Solids	660		10		mg/L			04/23/18 14:56	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-13

Date Collected: 04/17/18 13:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 20:41	1
1,1,1-Trichloroethane	0.51		0.20		ug/L			04/20/18 20:41	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 20:41	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 20:41	1
1,1-Dichloroethane	0.52		0.20		ug/L			04/20/18 20:41	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 20:41	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 20:41	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 20:41	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 20:41	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 20:41	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 20:41	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 20:41	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 20:41	1
2-Butanone	ND		10		ug/L			04/20/18 20:41	1
2-Hexanone	ND		3.0		ug/L			04/20/18 20:41	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 20:41	1
Acetone	ND		6.0		ug/L			04/20/18 20:41	1
Acrylonitrile	ND		10		ug/L			04/20/18 20:41	1
Benzene	ND		0.20		ug/L			04/20/18 20:41	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 20:41	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 20:41	1
Bromoform	ND		0.50		ug/L			04/20/18 20:41	1
Bromomethane	ND		0.50		ug/L			04/20/18 20:41	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 20:41	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 20:41	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 20:41	1
Chloroethane	ND		0.50		ug/L			04/20/18 20:41	1
Chloroform	ND		0.20		ug/L			04/20/18 20:41	1
Chloromethane	ND		0.50		ug/L			04/20/18 20:41	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 20:41	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 20:41	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 20:41	1
Dibromomethane	ND		0.20		ug/L			04/20/18 20:41	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 20:41	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 20:41	1
Methyl iodide	ND		0.50		ug/L			04/20/18 20:41	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 20:41	1
o-Xylene	ND		0.50		ug/L			04/20/18 20:41	1
Styrene	ND		0.50		ug/L			04/20/18 20:41	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 20:41	1
Toluene	ND		0.20		ug/L			04/20/18 20:41	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 20:41	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 20:41	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 20:41	1
Trichloroethene	ND		0.20		ug/L			04/20/18 20:41	1
Trichlorofluoromethane	3.1		0.50		ug/L			04/20/18 20:41	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 20:41	1
Vinyl chloride	0.22		0.020		ug/L			04/20/18 20:41	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-13

Date Collected: 04/17/18 13:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		46 - 150		04/20/18 20:41	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/20/18 20:41	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 20:41	1
Toluene-d8 (Surr)	108		75 - 125		04/20/18 20:41	1
Trifluorotoluene (Surr)	110		74 - 118		04/20/18 20:41	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170		1.1		mg/L		04/23/18 15:38	04/24/18 13:31	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:31	1
Magnesium	89		1.1		mg/L		04/23/18 15:38	04/24/18 13:31	1
Manganese	0.045		0.020		mg/L		04/23/18 15:38	04/24/18 13:31	1
Potassium	9.4		3.3		mg/L		04/23/18 15:38	04/24/18 13:31	1
Sodium	30		2.0		mg/L		04/23/18 15:38	04/24/18 13:31	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Arsenic	0.0012		0.0010		mg/L		04/23/18 13:57	04/24/18 12:22	1
Barium	0.052		0.0012		mg/L		04/23/18 13:57	04/24/18 12:22	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:22	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:22	1
Nickel	0.0091		0.0030		mg/L		04/23/18 13:57	04/24/18 12:22	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:22	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:22	1
Vanadium	0.0042		0.0040		mg/L		04/23/18 13:57	04/24/18 12:22	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 13:49	1
Chloride	22		0.90		mg/L			04/21/18 13:49	1
Sulfate	110		6.0		mg/L			04/25/18 20:20	5
Ammonia (as N)	0.11		0.10		mg/L		04/26/18 10:53	04/26/18 13:52	1
Nitrate Nitrite as N	6.1		1.5		mg/L			04/25/18 14:40	10
Total Organic Carbon	2.5		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	700		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	700		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	880		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-14

Date Collected: 04/17/18 15:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 21:08	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 21:08	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 21:08	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 21:08	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 21:08	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 21:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 21:08	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 21:08	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 21:08	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 21:08	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 21:08	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 21:08	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 21:08	1
2-Butanone	ND		10		ug/L			04/20/18 21:08	1
2-Hexanone	ND		3.0		ug/L			04/20/18 21:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 21:08	1
Acetone	ND		6.0		ug/L			04/20/18 21:08	1
Acrylonitrile	ND		10		ug/L			04/20/18 21:08	1
Benzene	ND		0.20		ug/L			04/20/18 21:08	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 21:08	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 21:08	1
Bromoform	ND		0.50		ug/L			04/20/18 21:08	1
Bromomethane	ND		0.50		ug/L			04/20/18 21:08	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 21:08	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 21:08	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 21:08	1
Chloroethane	ND		0.50		ug/L			04/20/18 21:08	1
Chloroform	ND		0.20		ug/L			04/20/18 21:08	1
Chloromethane	ND		0.50		ug/L			04/20/18 21:08	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 21:08	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 21:08	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 21:08	1
Dibromomethane	ND		0.20		ug/L			04/20/18 21:08	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 21:08	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 21:08	1
Methyl iodide	ND		0.50		ug/L			04/20/18 21:08	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 21:08	1
o-Xylene	ND		0.50		ug/L			04/20/18 21:08	1
Styrene	ND		0.50		ug/L			04/20/18 21:08	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 21:08	1
Toluene	ND		0.20		ug/L			04/20/18 21:08	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 21:08	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 21:08	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 21:08	1
Trichloroethene	ND		0.20		ug/L			04/20/18 21:08	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 21:08	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 21:08	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 21:08	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-14

Date Collected: 04/17/18 15:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		46 - 150		04/20/18 21:08	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 21:08	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 21:08	1
Toluene-d8 (Surr)	108		75 - 125		04/20/18 21:08	1
Trifluorotoluene (Surr)	105		74 - 118		04/20/18 21:08	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		04/23/18 15:38	04/24/18 13:34	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:34	1
Magnesium	34		1.1		mg/L		04/23/18 15:38	04/24/18 13:34	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:34	1
Potassium	5.2		3.3		mg/L		04/23/18 15:38	04/24/18 13:34	1
Sodium	17		2.0		mg/L		04/23/18 15:38	04/24/18 13:34	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Arsenic	0.0024		0.0010		mg/L		04/23/18 13:57	04/24/18 12:26	1
Barium	0.031		0.0012		mg/L		04/23/18 13:57	04/24/18 12:26	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Chromium	0.0036		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Copper	0.0029		0.0020		mg/L		04/23/18 13:57	04/24/18 12:26	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:26	1
Nickel	0.0045		0.0030		mg/L		04/23/18 13:57	04/24/18 12:26	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:26	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:26	1
Vanadium	0.0052		0.0040		mg/L		04/23/18 13:57	04/24/18 12:26	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 14:25	1
Chloride	19		0.90		mg/L			04/21/18 14:25	1
Sulfate	70		1.2		mg/L			04/21/18 14:25	1
Ammonia (as N)	0.13		0.10		mg/L		04/26/18 10:53	04/26/18 13:53	1
Nitrate Nitrite as N	5.3		1.5		mg/L			04/25/18 14:42	10
Total Organic Carbon	1.4		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	430		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-15

Date Collected: 04/17/18 15:05

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 21:34	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 21:34	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 21:34	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 21:34	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 21:34	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 21:34	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 21:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 21:34	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 21:34	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 21:34	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 21:34	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 21:34	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 21:34	1
2-Butanone	ND		10		ug/L			04/20/18 21:34	1
2-Hexanone	ND		3.0		ug/L			04/20/18 21:34	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 21:34	1
Acetone	ND		6.0		ug/L			04/20/18 21:34	1
Acrylonitrile	ND		10		ug/L			04/20/18 21:34	1
Benzene	ND		0.20		ug/L			04/20/18 21:34	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 21:34	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 21:34	1
Bromoform	ND		0.50		ug/L			04/20/18 21:34	1
Bromomethane	ND		0.50		ug/L			04/20/18 21:34	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 21:34	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 21:34	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 21:34	1
Chloroethane	ND		0.50		ug/L			04/20/18 21:34	1
Chloroform	ND		0.20		ug/L			04/20/18 21:34	1
Chloromethane	ND		0.50		ug/L			04/20/18 21:34	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 21:34	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 21:34	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 21:34	1
Dibromomethane	ND		0.20		ug/L			04/20/18 21:34	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 21:34	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 21:34	1
Methyl iodide	ND		0.50		ug/L			04/20/18 21:34	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 21:34	1
o-Xylene	ND		0.50		ug/L			04/20/18 21:34	1
Styrene	ND		0.50		ug/L			04/20/18 21:34	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 21:34	1
Toluene	ND		0.20		ug/L			04/20/18 21:34	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 21:34	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 21:34	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 21:34	1
Trichloroethene	ND		0.20		ug/L			04/20/18 21:34	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 21:34	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 21:34	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 21:34	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-15

Date Collected: 04/17/18 15:05

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		46 - 150		04/20/18 21:34	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 21:34	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 21:34	1
Toluene-d8 (Surr)	107		75 - 125		04/20/18 21:34	1
Trifluorotoluene (Surr)	106		74 - 118		04/20/18 21:34	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	61		1.1		mg/L		04/23/18 15:38	04/24/18 13:37	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:37	1
Magnesium	34		1.1		mg/L		04/23/18 15:38	04/24/18 13:37	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:37	1
Potassium	5.7		3.3		mg/L		04/23/18 15:38	04/24/18 13:37	1
Sodium	24		2.0		mg/L		04/23/18 15:38	04/24/18 13:37	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Arsenic	0.0078		0.0010		mg/L		04/23/18 13:57	04/24/18 12:30	1
Barium	0.019		0.0012		mg/L		04/23/18 13:57	04/24/18 12:30	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Chromium	0.00062		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:30	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:30	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:30	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:30	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:30	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:30	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 15:00	1
Chloride	38		0.90		mg/L			04/21/18 15:00	1
Sulfate	38		1.2		mg/L			04/21/18 15:00	1
Ammonia (as N)	0.15		0.10		mg/L		04/26/18 14:55	04/27/18 13:00	1
Nitrate Nitrite as N	ND		0.15		mg/L			04/25/18 14:45	1
Total Organic Carbon	1.2		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	260		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	260		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	360		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-16

Date Collected: 04/17/18 16:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 22:01	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 22:01	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 22:01	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 22:01	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 22:01	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 22:01	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 22:01	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 22:01	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 22:01	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 22:01	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 22:01	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 22:01	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 22:01	1
2-Butanone	ND		10		ug/L			04/20/18 22:01	1
2-Hexanone	ND		3.0		ug/L			04/20/18 22:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 22:01	1
Acetone	ND		6.0		ug/L			04/20/18 22:01	1
Acrylonitrile	ND		10		ug/L			04/20/18 22:01	1
Benzene	ND		0.20		ug/L			04/20/18 22:01	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 22:01	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 22:01	1
Bromoform	ND		0.50		ug/L			04/20/18 22:01	1
Bromomethane	ND		0.50		ug/L			04/20/18 22:01	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 22:01	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 22:01	1
Chlorobenzene	ND *		0.20		ug/L			04/20/18 22:01	1
Chloroethane	ND		0.50		ug/L			04/20/18 22:01	1
Chloroform	ND		0.20		ug/L			04/20/18 22:01	1
Chloromethane	ND		0.50		ug/L			04/20/18 22:01	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 22:01	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 22:01	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 22:01	1
Dibromomethane	ND		0.20		ug/L			04/20/18 22:01	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 22:01	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 22:01	1
Methyl iodide	ND		0.50		ug/L			04/20/18 22:01	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 22:01	1
o-Xylene	ND		0.50		ug/L			04/20/18 22:01	1
Styrene	ND		0.50		ug/L			04/20/18 22:01	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 22:01	1
Toluene	ND		0.20		ug/L			04/20/18 22:01	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 22:01	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 22:01	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 22:01	1
Trichloroethene	ND		0.20		ug/L			04/20/18 22:01	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 22:01	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 22:01	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 22:01	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-16

Date Collected: 04/17/18 16:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		46 - 150		04/20/18 22:01	1
4-Bromofluorobenzene (Surr)	99		81 - 120		04/20/18 22:01	1
Dibromofluoromethane (Surr)	99		42 - 132		04/20/18 22:01	1
Toluene-d8 (Surr)	108		75 - 125		04/20/18 22:01	1
Trifluorotoluene (Surr)	106		74 - 118		04/20/18 22:01	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150		1.1		mg/L		04/23/18 15:38	04/24/18 13:41	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:41	1
Magnesium	58		1.1		mg/L		04/23/18 15:38	04/24/18 13:41	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:41	1
Potassium	6.2		3.3		mg/L		04/23/18 15:38	04/24/18 13:41	1
Sodium	30		2.0		mg/L		04/23/18 15:38	04/24/18 13:41	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Arsenic	0.0024		0.0010		mg/L		04/23/18 13:57	04/24/18 12:49	1
Barium	0.046		0.0012		mg/L		04/23/18 13:57	04/24/18 12:49	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Chromium	0.0047		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:49	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:49	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:49	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:49	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:49	1
Vanadium	0.0057		0.0040		mg/L		04/23/18 13:57	04/24/18 12:49	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 15:23	1
Chloride	46		0.90		mg/L			04/21/18 15:23	1
Sulfate	46		1.2		mg/L			04/21/18 15:23	1
Ammonia (as N)	0.18		0.10		mg/L		04/26/18 14:55	04/27/18 13:01	1
Nitrate Nitrite as N	1.9		1.5		mg/L			04/25/18 14:46	10
Total Organic Carbon	1.6		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	530		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	530		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	670		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-17

Date Collected: 04/17/18 16:36

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 12:58	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 12:58	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 12:58	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 12:58	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 12:58	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 12:58	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 12:58	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 12:58	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 12:58	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:58	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 12:58	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 12:58	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:58	1
2-Butanone	ND		10		ug/L			04/21/18 12:58	1
2-Hexanone	ND		3.0		ug/L			04/21/18 12:58	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 12:58	1
Acetone	ND		6.0		ug/L			04/21/18 12:58	1
Acrylonitrile	ND		10		ug/L			04/21/18 12:58	1
Benzene	ND		0.20		ug/L			04/21/18 12:58	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 12:58	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 12:58	1
Bromoform	ND		0.50		ug/L			04/21/18 12:58	1
Bromomethane	ND		0.50		ug/L			04/21/18 12:58	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 12:58	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 12:58	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 12:58	1
Chloroethane	ND		0.50		ug/L			04/21/18 12:58	1
Chloroform	ND		0.20		ug/L			04/21/18 12:58	1
Chloromethane	ND		0.50		ug/L			04/21/18 12:58	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:58	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:58	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 12:58	1
Dibromomethane	ND		0.20		ug/L			04/21/18 12:58	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 12:58	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 12:58	1
Methyl iodide	ND		0.50		ug/L			04/21/18 12:58	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 12:58	1
o-Xylene	ND		0.50		ug/L			04/21/18 12:58	1
Styrene	ND		0.50		ug/L			04/21/18 12:58	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 12:58	1
Toluene	ND		0.20		ug/L			04/21/18 12:58	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:58	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:58	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 12:58	1
Trichloroethene	ND		0.20		ug/L			04/21/18 12:58	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 12:58	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 12:58	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 12:58	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-17

Date Collected: 04/17/18 16:36

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		04/21/18 12:58	1
4-Bromofluorobenzene (Surr)	97		81 - 120		04/21/18 12:58	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 12:58	1
Toluene-d8 (Surr)	109		75 - 125		04/21/18 12:58	1
Trifluorotoluene (Surr)	110		74 - 118		04/21/18 12:58	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	41		1.1		mg/L		04/23/18 15:38	04/24/18 13:51	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:51	1
Magnesium	28		1.1		mg/L		04/23/18 15:38	04/24/18 13:51	1
Manganese	0.070		0.020		mg/L		04/23/18 15:38	04/24/18 13:51	1
Potassium	10		3.3		mg/L		04/23/18 15:38	04/24/18 13:51	1
Sodium	31		2.0		mg/L		04/23/18 15:38	04/24/18 13:51	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Arsenic	0.014		0.0010		mg/L		04/23/18 13:57	04/24/18 12:53	1
Barium	0.033		0.0012		mg/L		04/23/18 13:57	04/24/18 12:53	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Chromium	0.00050		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:53	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:53	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 12:53	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:53	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:53	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 12:53	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 15:46	1
Chloride	32		0.90		mg/L			04/21/18 15:46	1
Sulfate	13		1.2		mg/L			04/21/18 15:46	1
Ammonia (as N)	0.10		0.10		mg/L		04/27/18 12:04	04/30/18 14:21	1
Nitrate Nitrite as N	ND		0.15		mg/L			04/25/18 14:47	1
Total Organic Carbon	3.3		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	220		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	220		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	280		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-18

Date Collected: 04/17/18 17:57

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-12

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	12		1.5		mg/L			04/25/18 14:49	10

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-19

Date Collected: 04/17/18 17:55

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 13:25	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 13:25	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 13:25	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 13:25	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 13:25	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 13:25	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 13:25	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 13:25	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 13:25	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 13:25	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 13:25	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 13:25	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 13:25	1
2-Butanone	ND		10		ug/L			04/21/18 13:25	1
2-Hexanone	ND		3.0		ug/L			04/21/18 13:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 13:25	1
Acetone	ND		6.0		ug/L			04/21/18 13:25	1
Acrylonitrile	ND		10		ug/L			04/21/18 13:25	1
Benzene	ND		0.20		ug/L			04/21/18 13:25	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 13:25	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 13:25	1
Bromoform	ND		0.50		ug/L			04/21/18 13:25	1
Bromomethane	ND		0.50		ug/L			04/21/18 13:25	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 13:25	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 13:25	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 13:25	1
Chloroethane	ND		0.50		ug/L			04/21/18 13:25	1
Chloroform	ND		0.20		ug/L			04/21/18 13:25	1
Chloromethane	ND		0.50		ug/L			04/21/18 13:25	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 13:25	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 13:25	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 13:25	1
Dibromomethane	ND		0.20		ug/L			04/21/18 13:25	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 13:25	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 13:25	1
Methyl iodide	ND		0.50		ug/L			04/21/18 13:25	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 13:25	1
o-Xylene	ND		0.50		ug/L			04/21/18 13:25	1
Styrene	ND		0.50		ug/L			04/21/18 13:25	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 13:25	1
Toluene	ND		0.20		ug/L			04/21/18 13:25	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 13:25	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 13:25	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 13:25	1
Trichloroethene	ND		0.20		ug/L			04/21/18 13:25	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 13:25	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 13:25	1
Vinyl chloride	0.21		0.020		ug/L			04/21/18 13:25	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-19

Date Collected: 04/17/18 17:55

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-13

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/21/18 13:25	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 13:25	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 13:25	1
Toluene-d8 (Surr)	112		75 - 125		04/21/18 13:25	1
Trifluorotoluene (Surr)	113		74 - 118		04/21/18 13:25	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170		1.1		mg/L		04/23/18 15:38	04/24/18 13:54	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:54	1
Magnesium	110		1.1		mg/L		04/23/18 15:38	04/24/18 13:54	1
Manganese	0.044		0.020		mg/L		04/23/18 15:38	04/24/18 13:54	1
Potassium	8.5		3.3		mg/L		04/23/18 15:38	04/24/18 13:54	1
Sodium	42		2.0		mg/L		04/23/18 15:38	04/24/18 13:54	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Arsenic	0.0043		0.0010		mg/L		04/23/18 13:57	04/24/18 12:57	1
Barium	0.046		0.0012		mg/L		04/23/18 13:57	04/24/18 12:57	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Cobalt	0.00060		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 12:57	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 12:57	1
Nickel	0.0051		0.0030		mg/L		04/23/18 13:57	04/24/18 12:57	1
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 12:57	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 12:57	1
Vanadium	0.0060		0.0040		mg/L		04/23/18 13:57	04/24/18 12:57	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			04/21/18 16:57	5
Nitrate Nitrite as N	ND		0.40		mg/L			04/19/18 17:31	1
Chloride	69		4.5		mg/L			04/21/18 16:57	5
Sulfate	76		6.0		mg/L			04/21/18 16:57	5
Ammonia (as N)	0.13		0.10		mg/L		04/27/18 12:04	04/30/18 14:22	1
Total Organic Carbon	2.5		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	810		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	810		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	970		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-20

Date Collected: 04/17/18 18:45

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 13:51	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 13:51	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 13:51	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 13:51	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 13:51	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 13:51	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 13:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 13:51	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 13:51	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 13:51	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 13:51	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 13:51	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 13:51	1
2-Butanone	ND		10		ug/L			04/21/18 13:51	1
2-Hexanone	ND		3.0		ug/L			04/21/18 13:51	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 13:51	1
Acetone	ND		6.0		ug/L			04/21/18 13:51	1
Acrylonitrile	ND		10		ug/L			04/21/18 13:51	1
Benzene	ND		0.20		ug/L			04/21/18 13:51	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 13:51	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 13:51	1
Bromoform	ND		0.50		ug/L			04/21/18 13:51	1
Bromomethane	ND		0.50		ug/L			04/21/18 13:51	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 13:51	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 13:51	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 13:51	1
Chloroethane	ND		0.50		ug/L			04/21/18 13:51	1
Chloroform	ND		0.20		ug/L			04/21/18 13:51	1
Chloromethane	ND		0.50		ug/L			04/21/18 13:51	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 13:51	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 13:51	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 13:51	1
Dibromomethane	ND		0.20		ug/L			04/21/18 13:51	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 13:51	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 13:51	1
Methyl iodide	ND		0.50		ug/L			04/21/18 13:51	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 13:51	1
o-Xylene	ND		0.50		ug/L			04/21/18 13:51	1
Styrene	ND		0.50		ug/L			04/21/18 13:51	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 13:51	1
Toluene	ND		0.20		ug/L			04/21/18 13:51	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 13:51	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 13:51	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 13:51	1
Trichloroethene	ND		0.20		ug/L			04/21/18 13:51	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 13:51	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 13:51	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 13:51	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-20

Date Collected: 04/17/18 18:45

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-14

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/21/18 13:51	1
4-Bromofluorobenzene (Surr)	97		81 - 120		04/21/18 13:51	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 13:51	1
Toluene-d8 (Surr)	109		75 - 125		04/21/18 13:51	1
Trifluorotoluene (Surr)	109		74 - 118		04/21/18 13:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	80		1.1		mg/L		04/23/18 15:38	04/24/18 13:57	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 13:57	1
Magnesium	45		1.1		mg/L		04/23/18 15:38	04/24/18 13:57	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 13:57	1
Potassium	5.2		3.3		mg/L		04/23/18 15:38	04/24/18 13:57	1
Sodium	30		2.0		mg/L		04/23/18 15:38	04/24/18 13:57	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Arsenic	0.0033		0.0010		mg/L		04/24/18 16:05	04/25/18 12:07	1
Barium	0.022		0.0012		mg/L		04/24/18 16:05	04/25/18 12:07	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Chromium	0.0015		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Copper	0.049		0.0020		mg/L		04/24/18 16:05	04/25/18 12:07	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:07	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 12:07	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:07	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:07	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:07	1
Zinc	0.050		0.0070		mg/L		04/24/18 16:05	04/25/18 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			04/21/18 17:08	5
Nitrate Nitrite as N	ND		0.40		mg/L			04/19/18 17:43	1
Chloride	53		4.5		mg/L			04/21/18 17:08	5
Sulfate	46		6.0		mg/L			04/21/18 17:08	5
Ammonia (as N)	ND		0.10		mg/L		04/27/18 12:04	04/30/18 14:23	1
Total Organic Carbon	2.2		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	430		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-21

Date Collected: 04/18/18 09:42

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 14:18	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 14:18	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 14:18	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 14:18	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 14:18	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 14:18	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 14:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 14:18	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 14:18	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 14:18	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 14:18	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 14:18	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 14:18	1
2-Butanone	ND		10		ug/L			04/21/18 14:18	1
2-Hexanone	ND		3.0		ug/L			04/21/18 14:18	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 14:18	1
Acetone	ND		6.0		ug/L			04/21/18 14:18	1
Acrylonitrile	ND		10		ug/L			04/21/18 14:18	1
Benzene	ND		0.20		ug/L			04/21/18 14:18	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 14:18	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 14:18	1
Bromoform	ND		0.50		ug/L			04/21/18 14:18	1
Bromomethane	ND		0.50		ug/L			04/21/18 14:18	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 14:18	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 14:18	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 14:18	1
Chloroethane	ND		0.50		ug/L			04/21/18 14:18	1
Chloroform	ND		0.20		ug/L			04/21/18 14:18	1
Chloromethane	ND		0.50		ug/L			04/21/18 14:18	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 14:18	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 14:18	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 14:18	1
Dibromomethane	ND		0.20		ug/L			04/21/18 14:18	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 14:18	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 14:18	1
Methyl iodide	ND		0.50		ug/L			04/21/18 14:18	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 14:18	1
o-Xylene	ND		0.50		ug/L			04/21/18 14:18	1
Styrene	ND		0.50		ug/L			04/21/18 14:18	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 14:18	1
Toluene	ND		0.20		ug/L			04/21/18 14:18	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 14:18	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 14:18	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 14:18	1
Trichloroethene	ND		0.20		ug/L			04/21/18 14:18	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 14:18	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 14:18	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 14:18	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-21

Date Collected: 04/18/18 09:42

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-15

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		46 - 150		04/21/18 14:18	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 14:18	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 14:18	1
Toluene-d8 (Surr)	110		75 - 125		04/21/18 14:18	1
Trifluorotoluene (Surr)	111		74 - 118		04/21/18 14:18	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77		1.1		mg/L		04/23/18 15:38	04/24/18 14:01	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 14:01	1
Magnesium	50		1.1		mg/L		04/23/18 15:38	04/24/18 14:01	1
Manganese	0.19		0.020		mg/L		04/23/18 15:38	04/24/18 14:01	1
Potassium	6.2		3.3		mg/L		04/23/18 15:38	04/24/18 14:01	1
Sodium	32		2.0		mg/L		04/23/18 15:38	04/24/18 14:01	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Arsenic	0.0052		0.0010		mg/L		04/24/18 16:05	04/25/18 12:11	1
Barium	0.032		0.0012		mg/L		04/24/18 16:05	04/25/18 12:11	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Chromium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:11	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:11	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 12:11	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:11	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:11	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:11	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			04/21/18 17:20	5
Nitrate Nitrite as N	ND		0.40		mg/L			04/19/18 17:54	1
Chloride	53		4.5		mg/L			04/21/18 17:20	5
Sulfate	28		6.0		mg/L			04/21/18 17:20	5
Ammonia (as N)	ND		0.10		mg/L		04/27/18 12:04	04/30/18 14:27	1
Total Organic Carbon	2.3		1.0		mg/L			04/27/18 20:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	350		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	350		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	470		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	16		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-22

Date Collected: 04/18/18 09:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-16

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 14:44	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 14:44	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 14:44	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 14:44	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 14:44	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 14:44	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 14:44	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 14:44	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 14:44	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 14:44	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 14:44	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 14:44	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 14:44	1
2-Butanone	ND		10		ug/L			04/21/18 14:44	1
2-Hexanone	ND		3.0		ug/L			04/21/18 14:44	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 14:44	1
Acetone	ND		6.0		ug/L			04/21/18 14:44	1
Acrylonitrile	ND		10		ug/L			04/21/18 14:44	1
Benzene	ND		0.20		ug/L			04/21/18 14:44	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 14:44	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 14:44	1
Bromoform	ND		0.50		ug/L			04/21/18 14:44	1
Bromomethane	ND		0.50		ug/L			04/21/18 14:44	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 14:44	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 14:44	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 14:44	1
Chloroethane	ND		0.50		ug/L			04/21/18 14:44	1
Chloroform	ND		0.20		ug/L			04/21/18 14:44	1
Chloromethane	ND		0.50		ug/L			04/21/18 14:44	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 14:44	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 14:44	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 14:44	1
Dibromomethane	ND		0.20		ug/L			04/21/18 14:44	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 14:44	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 14:44	1
Methyl iodide	ND		0.50		ug/L			04/21/18 14:44	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 14:44	1
o-Xylene	ND		0.50		ug/L			04/21/18 14:44	1
Styrene	ND		0.50		ug/L			04/21/18 14:44	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 14:44	1
Toluene	ND		0.20		ug/L			04/21/18 14:44	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 14:44	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 14:44	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 14:44	1
Trichloroethene	ND		0.20		ug/L			04/21/18 14:44	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 14:44	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 14:44	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 14:44	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-22

Date Collected: 04/18/18 09:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-16

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		04/21/18 14:44	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 14:44	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 14:44	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 14:44	1
Trifluorotoluene (Surr)	111		74 - 118		04/21/18 14:44	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75		1.1		mg/L		04/23/18 15:38	04/24/18 14:04	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 14:04	1
Magnesium	51		1.1		mg/L		04/23/18 15:38	04/24/18 14:04	1
Manganese	0.16		0.020		mg/L		04/23/18 15:38	04/24/18 14:04	1
Potassium	7.0		3.3		mg/L		04/23/18 15:38	04/24/18 14:04	1
Sodium	34		2.0		mg/L		04/23/18 15:38	04/24/18 14:04	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Arsenic	0.0073		0.0010		mg/L		04/24/18 16:05	04/25/18 12:15	1
Barium	0.041		0.0012		mg/L		04/24/18 16:05	04/25/18 12:15	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Chromium	0.00054		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:15	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:15	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 12:15	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:15	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:15	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:15	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			04/21/18 17:32	5
Nitrate Nitrite as N	ND		0.40		mg/L			04/19/18 18:06	1
Chloride	70		4.5		mg/L			04/21/18 17:32	5
Sulfate	33		6.0		mg/L			04/21/18 17:32	5
Ammonia (as N)	0.14		0.10		mg/L		04/27/18 12:04	04/30/18 14:28	1
Total Organic Carbon	2.5		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	350		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	350		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	500		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-23

Date Collected: 04/18/18 11:25

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 15:10	1
1,1,1-Trichloroethane	0.37		0.20		ug/L			04/21/18 15:10	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 15:10	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 15:10	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 15:10	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 15:10	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 15:10	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 15:10	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 15:10	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 15:10	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 15:10	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 15:10	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 15:10	1
2-Butanone	ND		10		ug/L			04/21/18 15:10	1
2-Hexanone	ND		3.0		ug/L			04/21/18 15:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 15:10	1
Acetone	ND		6.0		ug/L			04/21/18 15:10	1
Acrylonitrile	ND		10		ug/L			04/21/18 15:10	1
Benzene	ND		0.20		ug/L			04/21/18 15:10	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 15:10	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 15:10	1
Bromoform	ND		0.50		ug/L			04/21/18 15:10	1
Bromomethane	ND		0.50		ug/L			04/21/18 15:10	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 15:10	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 15:10	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 15:10	1
Chloroethane	ND		0.50		ug/L			04/21/18 15:10	1
Chloroform	ND		0.20		ug/L			04/21/18 15:10	1
Chloromethane	ND		0.50		ug/L			04/21/18 15:10	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 15:10	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 15:10	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 15:10	1
Dibromomethane	ND		0.20		ug/L			04/21/18 15:10	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 15:10	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 15:10	1
Methyl iodide	ND		0.50		ug/L			04/21/18 15:10	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 15:10	1
o-Xylene	ND		0.50		ug/L			04/21/18 15:10	1
Styrene	ND		0.50		ug/L			04/21/18 15:10	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 15:10	1
Toluene	ND		0.20		ug/L			04/21/18 15:10	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 15:10	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 15:10	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 15:10	1
Trichloroethene	ND		0.20		ug/L			04/21/18 15:10	1
Trichlorofluoromethane	3.9		0.50		ug/L			04/21/18 15:10	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 15:10	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 15:10	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-23

Date Collected: 04/18/18 11:25

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-17

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		46 - 150		04/21/18 15:10	1
4-Bromofluorobenzene (Surr)	97		81 - 120		04/21/18 15:10	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 15:10	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 15:10	1
Trifluorotoluene (Surr)	110		74 - 118		04/21/18 15:10	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130		1.1		mg/L		04/23/18 15:38	04/24/18 14:07	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 14:07	1
Magnesium	75		1.1		mg/L		04/23/18 15:38	04/24/18 14:07	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 14:07	1
Potassium	6.4		3.3		mg/L		04/23/18 15:38	04/24/18 14:07	1
Sodium	27		2.0		mg/L		04/23/18 15:38	04/24/18 14:07	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Arsenic	0.0020		0.0010		mg/L		04/24/18 16:05	04/25/18 12:19	1
Barium	0.033		0.0012		mg/L		04/24/18 16:05	04/25/18 12:19	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Chromium	0.0035		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:19	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:19	1
Nickel	0.0048		0.0030		mg/L		04/24/18 16:05	04/25/18 12:19	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:19	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:19	1
Vanadium	0.0050		0.0040		mg/L		04/24/18 16:05	04/25/18 12:19	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/26/18 20:29	1
Nitrate Nitrite as N	40		4.0		mg/L			04/19/18 18:29	10
Chloride	54		4.5		mg/L			04/25/18 20:31	5
Sulfate	93		6.0		mg/L			04/25/18 20:31	5
Ammonia (as N)	0.12		0.10		mg/L		04/27/18 12:04	04/30/18 14:29	1
Total Organic Carbon	2.2		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	780		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-24

Date Collected: 04/18/18 11:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-18

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 15:37	1
1,1,1-Trichloroethane	0.37		0.20		ug/L			04/21/18 15:37	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 15:37	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 15:37	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 15:37	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 15:37	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 15:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 15:37	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 15:37	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 15:37	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 15:37	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 15:37	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 15:37	1
2-Butanone	ND		10		ug/L			04/21/18 15:37	1
2-Hexanone	ND		3.0		ug/L			04/21/18 15:37	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 15:37	1
Acetone	ND		6.0		ug/L			04/21/18 15:37	1
Acrylonitrile	ND		10		ug/L			04/21/18 15:37	1
Benzene	ND		0.20		ug/L			04/21/18 15:37	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 15:37	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 15:37	1
Bromoform	ND		0.50		ug/L			04/21/18 15:37	1
Bromomethane	ND		0.50		ug/L			04/21/18 15:37	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 15:37	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 15:37	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 15:37	1
Chloroethane	ND		0.50		ug/L			04/21/18 15:37	1
Chloroform	ND		0.20		ug/L			04/21/18 15:37	1
Chloromethane	ND		0.50		ug/L			04/21/18 15:37	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 15:37	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 15:37	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 15:37	1
Dibromomethane	ND		0.20		ug/L			04/21/18 15:37	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 15:37	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 15:37	1
Methyl iodide	ND		0.50		ug/L			04/21/18 15:37	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 15:37	1
o-Xylene	ND		0.50		ug/L			04/21/18 15:37	1
Styrene	ND		0.50		ug/L			04/21/18 15:37	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 15:37	1
Toluene	ND		0.20		ug/L			04/21/18 15:37	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 15:37	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 15:37	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 15:37	1
Trichloroethene	ND		0.20		ug/L			04/21/18 15:37	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 15:37	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 15:37	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 15:37	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-24

Date Collected: 04/18/18 11:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-18

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		04/21/18 15:37	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 15:37	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 15:37	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 15:37	1
Trifluorotoluene (Surr)	113		74 - 118		04/21/18 15:37	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120		1.1		mg/L		04/23/18 15:38	04/24/18 14:11	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 14:11	1
Magnesium	73		1.1		mg/L		04/23/18 15:38	04/24/18 14:11	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 14:11	1
Potassium	6.2		3.3		mg/L		04/23/18 15:38	04/24/18 14:11	1
Sodium	26		2.0		mg/L		04/23/18 15:38	04/24/18 14:11	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Arsenic	0.0021		0.0010		mg/L		04/24/18 16:05	04/25/18 12:23	1
Barium	0.032		0.0012		mg/L		04/24/18 16:05	04/25/18 12:23	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Chromium	0.0027		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:23	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:23	1
Nickel	0.0050		0.0030		mg/L		04/24/18 16:05	04/25/18 12:23	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:23	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:23	1
Vanadium	0.0047		0.0040		mg/L		04/24/18 16:05	04/25/18 12:23	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/26/18 20:41	1
Nitrate Nitrite as N	40		4.0		mg/L			04/19/18 20:38	10
Chloride	53		4.5		mg/L			04/25/18 20:43	5
Sulfate	92		6.0		mg/L			04/25/18 20:43	5
Ammonia (as N)	ND		0.10		mg/L		04/27/18 12:04	04/30/18 14:30	1
Total Organic Carbon	2.0		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	740		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-25

Date Collected: 04/18/18 12:50

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-19

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 16:03	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 16:03	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 16:03	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 16:03	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 16:03	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 16:03	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 16:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 16:03	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 16:03	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:03	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 16:03	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 16:03	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:03	1
2-Butanone	ND		10		ug/L			04/21/18 16:03	1
2-Hexanone	ND		3.0		ug/L			04/21/18 16:03	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 16:03	1
Acetone	ND		6.0		ug/L			04/21/18 16:03	1
Acrylonitrile	ND		10		ug/L			04/21/18 16:03	1
Benzene	ND		0.20		ug/L			04/21/18 16:03	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 16:03	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 16:03	1
Bromoform	ND		0.50		ug/L			04/21/18 16:03	1
Bromomethane	ND		0.50		ug/L			04/21/18 16:03	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 16:03	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 16:03	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 16:03	1
Chloroethane	ND		0.50		ug/L			04/21/18 16:03	1
Chloroform	ND		0.20		ug/L			04/21/18 16:03	1
Chloromethane	ND		0.50		ug/L			04/21/18 16:03	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:03	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:03	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 16:03	1
Dibromomethane	ND		0.20		ug/L			04/21/18 16:03	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 16:03	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 16:03	1
Methyl iodide	ND		0.50		ug/L			04/21/18 16:03	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 16:03	1
o-Xylene	ND		0.50		ug/L			04/21/18 16:03	1
Styrene	ND		0.50		ug/L			04/21/18 16:03	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 16:03	1
Toluene	ND		0.20		ug/L			04/21/18 16:03	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:03	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:03	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 16:03	1
Trichloroethene	ND		0.20		ug/L			04/21/18 16:03	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 16:03	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 16:03	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 16:03	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-25

Date Collected: 04/18/18 12:50

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-19

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		46 - 150		04/21/18 16:03	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 16:03	1
Dibromofluoromethane (Surr)	98		42 - 132		04/21/18 16:03	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 16:03	1
Trifluorotoluene (Surr)	110		74 - 118		04/21/18 16:03	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120		1.1		mg/L		04/23/18 15:38	04/24/18 14:14	1
Iron	0.38		0.30		mg/L		04/23/18 15:38	04/24/18 14:14	1
Magnesium	97		1.1		mg/L		04/23/18 15:38	04/24/18 14:14	1
Manganese	0.29		0.020		mg/L		04/23/18 15:38	04/24/18 14:14	1
Potassium	9.4		3.3		mg/L		04/23/18 15:38	04/24/18 14:14	1
Sodium	45		2.0		mg/L		04/23/18 15:38	04/24/18 14:14	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Arsenic	0.0049		0.0010		mg/L		04/24/18 16:05	04/25/18 12:27	1
Barium	0.10		0.0012		mg/L		04/24/18 16:05	04/25/18 12:27	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Chromium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:27	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:27	1
Nickel	0.0084		0.0030		mg/L		04/24/18 16:05	04/25/18 12:27	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:27	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:27	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:27	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	F1	0.20		mg/L			04/21/18 10:19	1
Nitrate Nitrite as N	ND	F1	0.40		mg/L			04/20/18 10:42	1
Chloride	120		4.5		mg/L			04/21/18 10:31	5
Sulfate	150		6.0		mg/L			04/21/18 10:31	5
Ammonia (as N)	ND		0.10		mg/L		04/27/18 12:04	04/30/18 14:31	1
Total Organic Carbon	3.8		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	480		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	480		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	880		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	10		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-26

Date Collected: 04/18/18 11:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-20

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 16:30	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 16:30	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 16:30	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 16:30	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 16:30	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 16:30	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 16:30	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 16:30	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 16:30	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:30	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 16:30	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 16:30	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:30	1
2-Butanone	ND		10		ug/L			04/21/18 16:30	1
2-Hexanone	ND		3.0		ug/L			04/21/18 16:30	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 16:30	1
Acetone	ND		6.0		ug/L			04/21/18 16:30	1
Acrylonitrile	ND		10		ug/L			04/21/18 16:30	1
Benzene	ND		0.20		ug/L			04/21/18 16:30	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 16:30	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 16:30	1
Bromoform	ND		0.50		ug/L			04/21/18 16:30	1
Bromomethane	ND		0.50		ug/L			04/21/18 16:30	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 16:30	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 16:30	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 16:30	1
Chloroethane	ND		0.50		ug/L			04/21/18 16:30	1
Chloroform	ND		0.20		ug/L			04/21/18 16:30	1
Chloromethane	ND		0.50		ug/L			04/21/18 16:30	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:30	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:30	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 16:30	1
Dibromomethane	ND		0.20		ug/L			04/21/18 16:30	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 16:30	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 16:30	1
Methyl iodide	ND		0.50		ug/L			04/21/18 16:30	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 16:30	1
o-Xylene	ND		0.50		ug/L			04/21/18 16:30	1
Styrene	ND		0.50		ug/L			04/21/18 16:30	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 16:30	1
Toluene	ND		0.20		ug/L			04/21/18 16:30	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:30	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:30	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 16:30	1
Trichloroethene	ND		0.20		ug/L			04/21/18 16:30	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 16:30	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 16:30	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 16:30	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-26

Date Collected: 04/18/18 11:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-20

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		04/21/18 16:30	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 16:30	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 16:30	1
Toluene-d8 (Surr)	112		75 - 125		04/21/18 16:30	1
Trifluorotoluene (Surr)	111		74 - 118		04/21/18 16:30	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		04/24/18 16:05	04/25/18 15:54	1
Iron	ND		0.30		mg/L		04/24/18 16:05	04/25/18 15:54	1
Magnesium	91		1.1		mg/L		04/24/18 16:05	04/25/18 15:54	1
Manganese	0.19		0.020		mg/L		04/24/18 16:05	04/25/18 15:54	1
Potassium	9.5		3.3		mg/L		04/24/18 16:05	04/25/18 15:54	1
Sodium	47		2.0		mg/L		04/24/18 16:05	04/25/18 15:54	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Arsenic	0.0032		0.0010		mg/L		04/24/18 16:05	04/25/18 12:31	1
Barium	0.084		0.0012		mg/L		04/24/18 16:05	04/25/18 12:31	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Chromium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:31	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:31	1
Nickel	0.0086		0.0030		mg/L		04/24/18 16:05	04/25/18 12:31	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:31	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:31	1
Vanadium	0.0041		0.0040		mg/L		04/24/18 16:05	04/25/18 12:31	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			04/21/18 17:43	5
Nitrate Nitrite as N	ND	F1	0.40		mg/L			04/19/18 19:51	1
Chloride	100		4.5		mg/L			04/21/18 17:43	5
Sulfate	68		6.0		mg/L			04/21/18 17:43	5
Ammonia (as N)	0.15		0.10		mg/L		04/26/18 14:55	04/27/18 13:02	1
Total Organic Carbon	2.9		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	560		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	560		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	780		10		mg/L			04/25/18 16:25	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-27

Date Collected: 04/18/18 13:31

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-21

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 16:57	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 16:57	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 16:57	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 16:57	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 16:57	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 16:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 16:57	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 16:57	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 16:57	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:57	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 16:57	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 16:57	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 16:57	1
2-Butanone	ND		10		ug/L			04/21/18 16:57	1
2-Hexanone	ND		3.0		ug/L			04/21/18 16:57	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 16:57	1
Acetone	ND		6.0		ug/L			04/21/18 16:57	1
Acrylonitrile	ND		10		ug/L			04/21/18 16:57	1
Benzene	ND		0.20		ug/L			04/21/18 16:57	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 16:57	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 16:57	1
Bromoform	ND		0.50		ug/L			04/21/18 16:57	1
Bromomethane	ND		0.50		ug/L			04/21/18 16:57	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 16:57	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 16:57	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 16:57	1
Chloroethane	ND		0.50		ug/L			04/21/18 16:57	1
Chloroform	ND		0.20		ug/L			04/21/18 16:57	1
Chloromethane	ND		0.50		ug/L			04/21/18 16:57	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:57	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:57	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 16:57	1
Dibromomethane	ND		0.20		ug/L			04/21/18 16:57	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 16:57	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 16:57	1
Methyl iodide	ND		0.50		ug/L			04/21/18 16:57	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 16:57	1
o-Xylene	ND		0.50		ug/L			04/21/18 16:57	1
Styrene	ND		0.50		ug/L			04/21/18 16:57	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 16:57	1
Toluene	ND		0.20		ug/L			04/21/18 16:57	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 16:57	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 16:57	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 16:57	1
Trichloroethene	ND		0.20		ug/L			04/21/18 16:57	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 16:57	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 16:57	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 16:57	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-27

Date Collected: 04/18/18 13:31

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-21

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		46 - 150		04/21/18 16:57	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 16:57	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 16:57	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 16:57	1
Trifluorotoluene (Surr)	110		74 - 118		04/21/18 16:57	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	29		1.1		mg/L		04/24/18 16:05	04/25/18 15:58	1
Iron	ND		0.30		mg/L		04/24/18 16:05	04/25/18 15:58	1
Magnesium	33		1.1		mg/L		04/24/18 16:05	04/25/18 15:58	1
Manganese	0.053		0.020		mg/L		04/24/18 16:05	04/25/18 15:58	1
Potassium	14		3.3		mg/L		04/24/18 16:05	04/25/18 15:58	1
Sodium	17		2.0		mg/L		04/24/18 16:05	04/25/18 15:58	1
Arsenic	ND		0.060		mg/L		04/24/18 16:05	04/25/18 15:58	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Arsenic	0.018		0.0010		mg/L		04/24/18 16:05	04/25/18 12:35	1
Barium	0.028		0.0012		mg/L		04/24/18 16:05	04/25/18 12:35	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Chromium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:35	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:35	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 12:35	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:35	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:35	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:35	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:35	1

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018		0.0010		mg/L		05/08/18 09:56	05/09/18 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 11:06	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/20/18 11:29	1
Chloride	41		0.90		mg/L			04/21/18 11:06	1
Sulfate	21		1.2		mg/L			04/21/18 11:06	1
Ammonia (as N)	0.19		0.10		mg/L		04/26/18 14:55	04/27/18 13:03	1
Total Organic Carbon	1.5		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	190		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	190		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-27

Date Collected: 04/18/18 13:31

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-21

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10		mg/L			04/25/18 16:25	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-28

Date Collected: 04/18/18 14:14

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 17:23	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 17:23	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 17:23	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 17:23	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 17:23	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 17:23	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 17:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 17:23	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 17:23	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 17:23	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 17:23	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 17:23	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 17:23	1
2-Butanone	ND		10		ug/L			04/21/18 17:23	1
2-Hexanone	ND		3.0		ug/L			04/21/18 17:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 17:23	1
Acetone	ND		6.0		ug/L			04/21/18 17:23	1
Acrylonitrile	ND		10		ug/L			04/21/18 17:23	1
Benzene	ND		0.20		ug/L			04/21/18 17:23	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 17:23	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 17:23	1
Bromoform	ND		0.50		ug/L			04/21/18 17:23	1
Bromomethane	ND		0.50		ug/L			04/21/18 17:23	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 17:23	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 17:23	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 17:23	1
Chloroethane	ND		0.50		ug/L			04/21/18 17:23	1
Chloroform	ND		0.20		ug/L			04/21/18 17:23	1
Chloromethane	ND		0.50		ug/L			04/21/18 17:23	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 17:23	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 17:23	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 17:23	1
Dibromomethane	ND		0.20		ug/L			04/21/18 17:23	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 17:23	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 17:23	1
Methyl iodide	ND		0.50		ug/L			04/21/18 17:23	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 17:23	1
o-Xylene	ND		0.50		ug/L			04/21/18 17:23	1
Styrene	ND		0.50		ug/L			04/21/18 17:23	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 17:23	1
Toluene	ND		0.20		ug/L			04/21/18 17:23	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 17:23	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 17:23	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 17:23	1
Trichloroethene	ND		0.20		ug/L			04/21/18 17:23	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 17:23	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 17:23	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 17:23	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-28

Date Collected: 04/18/18 14:14

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-22

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		46 - 150		04/21/18 17:23	1
4-Bromofluorobenzene (Surr)	96		81 - 120		04/21/18 17:23	1
Dibromofluoromethane (Surr)	97		42 - 132		04/21/18 17:23	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 17:23	1
Trifluorotoluene (Surr)	110		74 - 118		04/21/18 17:23	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91		1.1		mg/L		04/24/18 16:05	04/25/18 16:01	1
Iron	1.4		0.30		mg/L		04/24/18 16:05	04/25/18 16:01	1
Magnesium	54		1.1		mg/L		04/24/18 16:05	04/25/18 16:01	1
Manganese	0.088		0.020		mg/L		04/24/18 16:05	04/25/18 16:01	1
Potassium	6.8		3.3		mg/L		04/24/18 16:05	04/25/18 16:01	1
Sodium	30		2.0		mg/L		04/24/18 16:05	04/25/18 16:01	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Arsenic	0.0051		0.0010		mg/L		04/24/18 16:05	04/25/18 12:38	1
Barium	0.046		0.0012		mg/L		04/24/18 16:05	04/25/18 12:38	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Chromium	0.00096		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 12:38	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 12:38	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 12:38	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 12:38	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 12:38	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 12:38	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 11:29	1
Nitrate Nitrite as N	ND		0.40		mg/L			04/20/18 11:53	1
Chloride	60		0.90		mg/L			04/21/18 11:29	1
Sulfate	44		1.2		mg/L			04/21/18 11:29	1
Ammonia (as N)	0.31		0.10		mg/L		04/26/18 14:55	04/27/18 13:05	1
Total Organic Carbon	1.5		1.0		mg/L			04/30/18 22:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			04/28/18 15:10	1
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L			04/28/18 15:10	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			04/28/18 15:10	1
Total Dissolved Solids	500		10		mg/L			04/24/18 11:45	1
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: Trip Blank

Date Collected: 04/18/18 00:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-23

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 12:31	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 12:31	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 12:31	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 12:31	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 12:31	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 12:31	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 12:31	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 12:31	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 12:31	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:31	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 12:31	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 12:31	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:31	1
2-Butanone	ND		10		ug/L			04/21/18 12:31	1
2-Hexanone	ND		3.0		ug/L			04/21/18 12:31	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 12:31	1
Acetone	ND		6.0		ug/L			04/21/18 12:31	1
Acrylonitrile	ND		10		ug/L			04/21/18 12:31	1
Benzene	ND		0.20		ug/L			04/21/18 12:31	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 12:31	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 12:31	1
Bromoform	ND		0.50		ug/L			04/21/18 12:31	1
Bromomethane	ND		0.50		ug/L			04/21/18 12:31	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 12:31	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 12:31	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 12:31	1
Chloroethane	ND		0.50		ug/L			04/21/18 12:31	1
Chloroform	ND		0.20		ug/L			04/21/18 12:31	1
Chloromethane	ND		0.50		ug/L			04/21/18 12:31	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:31	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:31	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 12:31	1
Dibromomethane	ND		0.20		ug/L			04/21/18 12:31	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 12:31	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 12:31	1
Methyl iodide	ND		0.50		ug/L			04/21/18 12:31	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 12:31	1
o-Xylene	ND		0.50		ug/L			04/21/18 12:31	1
Styrene	ND		0.50		ug/L			04/21/18 12:31	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 12:31	1
Toluene	ND		0.20		ug/L			04/21/18 12:31	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:31	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:31	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 12:31	1
Trichloroethene	ND		0.20		ug/L			04/21/18 12:31	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 12:31	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 12:31	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 12:31	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: Trip Blank

Date Collected: 04/18/18 00:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-23

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		46 - 150		04/21/18 12:31	1
4-Bromofluorobenzene (Surr)	95		81 - 120		04/21/18 12:31	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 12:31	1
Toluene-d8 (Surr)	111		75 - 125		04/21/18 12:31	1
Trifluorotoluene (Surr)	114		74 - 118		04/21/18 12:31	1

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-271868/7

Matrix: Water

Analysis Batch: 271868

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/20/18 12:36	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/20/18 12:36	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/20/18 12:36	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/20/18 12:36	1
1,1-Dichloroethane	ND		0.20		ug/L			04/20/18 12:36	1
1,1-Dichloroethene	ND		0.20		ug/L			04/20/18 12:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/20/18 12:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/20/18 12:36	1
1,2-Dibromoethane	ND		0.10		ug/L			04/20/18 12:36	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/20/18 12:36	1
1,2-Dichloroethane	ND		0.20		ug/L			04/20/18 12:36	1
1,2-Dichloropropane	ND		0.20		ug/L			04/20/18 12:36	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/20/18 12:36	1
2-Butanone	ND		10		ug/L			04/20/18 12:36	1
2-Hexanone	ND		3.0		ug/L			04/20/18 12:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/20/18 12:36	1
Acetone	ND		6.0		ug/L			04/20/18 12:36	1
Acrylonitrile	ND		10		ug/L			04/20/18 12:36	1
Benzene	ND		0.20		ug/L			04/20/18 12:36	1
Bromochloromethane	ND		0.20		ug/L			04/20/18 12:36	1
Bromodichloromethane	ND		0.20		ug/L			04/20/18 12:36	1
Bromoform	ND		0.50		ug/L			04/20/18 12:36	1
Bromomethane	ND		0.50		ug/L			04/20/18 12:36	1
Carbon disulfide	ND		0.30		ug/L			04/20/18 12:36	1
Carbon tetrachloride	ND		0.20		ug/L			04/20/18 12:36	1
Chlorobenzene	ND		0.20		ug/L			04/20/18 12:36	1
Chloroethane	ND		0.50		ug/L			04/20/18 12:36	1
Chloroform	ND		0.20		ug/L			04/20/18 12:36	1
Chloromethane	ND		0.50		ug/L			04/20/18 12:36	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 12:36	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 12:36	1
Dibromochloromethane	ND		0.20		ug/L			04/20/18 12:36	1
Dibromomethane	ND		0.20		ug/L			04/20/18 12:36	1
Ethylbenzene	ND		0.20		ug/L			04/20/18 12:36	1
m,p-Xylene	ND		0.50		ug/L			04/20/18 12:36	1
Methyl iodide	ND		0.50		ug/L			04/20/18 12:36	1
Methylene Chloride	ND		5.0		ug/L			04/20/18 12:36	1
o-Xylene	ND		0.50		ug/L			04/20/18 12:36	1
Styrene	ND		0.50		ug/L			04/20/18 12:36	1
Tetrachloroethene	ND		0.50		ug/L			04/20/18 12:36	1
Toluene	ND		0.20		ug/L			04/20/18 12:36	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/20/18 12:36	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/20/18 12:36	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/20/18 12:36	1
Trichloroethene	ND		0.20		ug/L			04/20/18 12:36	1
Trichlorofluoromethane	ND		0.50		ug/L			04/20/18 12:36	1
Vinyl acetate	ND		1.0		ug/L			04/20/18 12:36	1
Vinyl chloride	ND		0.020		ug/L			04/20/18 12:36	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		46 - 150		04/20/18 12:36	1
4-Bromofluorobenzene (Surr)	98		81 - 120		04/20/18 12:36	1
Dibromofluoromethane (Surr)	97		42 - 132		04/20/18 12:36	1
Toluene-d8 (Surr)	105		75 - 125		04/20/18 12:36	1
Trifluorotoluene (Surr)	105		74 - 118		04/20/18 12:36	1

Lab Sample ID: LCS 580-271868/4

Matrix: Water

Analysis Batch: 271868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.10		ug/L		102	68 - 139
1,1,1-Trichloroethane	5.00	4.85		ug/L		97	56 - 150
1,1,2,2-Tetrachloroethane	5.00	5.50		ug/L		110	60 - 134
1,1,2-Trichloroethane	5.00	5.12		ug/L		102	62 - 137
1,1-Dichloroethane	5.00	4.95		ug/L		99	68 - 135
1,1-Dichloroethene	5.00	4.85		ug/L		97	64 - 125
1,2,3-Trichloropropane	5.00	5.06		ug/L		101	45 - 150
1,2-Dibromo-3-Chloropropane	5.00	4.70		ug/L		94	34 - 150
1,2-Dibromoethane	5.00	5.12		ug/L		102	56 - 146
1,2-Dichlorobenzene	5.00	4.86		ug/L		97	73 - 120
1,2-Dichloroethane	5.00	4.90		ug/L		98	63 - 150
1,2-Dichloropropane	5.00	5.07		ug/L		101	72 - 120
1,4-Dichlorobenzene	5.00	5.00		ug/L		100	77 - 120
2-Butanone	25.0	22.9		ug/L		92	30 - 150
2-Hexanone	25.0	26.1		ug/L		104	25 - 150
4-Methyl-2-pentanone	25.0	25.6		ug/L		102	36 - 150
Acetone	25.0	16.3		ug/L		65	20 - 138
Acrylonitrile	50.0	48.7		ug/L		97	55 - 134
Benzene	5.00	4.93		ug/L		99	73 - 120
Bromochloromethane	5.00	4.81		ug/L		96	71 - 131
Bromodichloromethane	5.00	5.20		ug/L		104	62 - 150
Bromoform	5.00	4.61		ug/L		92	51 - 137
Bromomethane	5.00	5.00		ug/L		100	61 - 135
Carbon disulfide	5.00	4.98		ug/L		100	65 - 128
Carbon tetrachloride	5.00	4.92		ug/L		98	54 - 150
Chlorobenzene	5.00	5.03		ug/L		101	74 - 114
Chloroethane	5.00	4.78		ug/L		96	58 - 130
Chloroform	5.00	5.01		ug/L		100	71 - 130
Chloromethane	5.00	4.82		ug/L		96	40 - 150
cis-1,2-Dichloroethene	5.00	4.89		ug/L		98	73 - 130
cis-1,3-Dichloropropene	5.00	5.25		ug/L		105	54 - 150
Dibromochloromethane	5.00	4.94		ug/L		99	46 - 150
Dibromomethane	5.00	4.85		ug/L		97	65 - 137
Ethylbenzene	5.00	5.01		ug/L		100	74 - 125
m,p-Xylene	5.00	4.87		ug/L		97	73 - 130
Methyl iodide	5.00	4.68		ug/L		94	47 - 145
Methylene Chloride	5.00	4.85	J	ug/L		97	58 - 134
o-Xylene	5.00	4.70		ug/L		94	80 - 139
Styrene	5.00	4.64		ug/L		93	68 - 136
Tetrachloroethene	5.00	4.83		ug/L		97	67 - 123
Toluene	5.00	4.98		ug/L		100	70 - 126
trans-1,2-Dichloroethene	5.00	4.73		ug/L		95	69 - 124
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	40 - 150

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-271868/4

Matrix: Water

Analysis Batch: 271868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	4.79		ug/L		96	20 - 150
Trichloroethene	5.00	4.84		ug/L		97	72 - 123
Trichlorofluoromethane	5.00	5.11		ug/L		102	60 - 150
Vinyl acetate	12.5	13.5		ug/L		108	30 - 150
Vinyl chloride	5.00	4.81		ug/L		96	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		46 - 150
4-Bromofluorobenzene (Surr)	101		81 - 120
Dibromofluoromethane (Surr)	96		42 - 132
Toluene-d8 (Surr)	99		75 - 125
Trifluorotoluene (Surr)	97		74 - 118

Lab Sample ID: LCSD 580-271868/5

Matrix: Water

Analysis Batch: 271868

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.90		ug/L		118	68 - 139	15	20
1,1,1-Trichloroethane	5.00	5.60		ug/L		112	56 - 150	14	29
1,1,2,2-Tetrachloroethane	5.00	6.12		ug/L		122	60 - 134	11	25
1,1,2-Trichloroethane	5.00	5.68		ug/L		114	62 - 137	10	30
1,1-Dichloroethane	5.00	5.77		ug/L		115	68 - 135	15	27
1,1-Dichloroethene	5.00	5.63		ug/L		113	64 - 125	15	28
1,2,3-Trichloropropane	5.00	5.64		ug/L		113	45 - 150	11	20
1,2-Dibromo-3-Chloropropane	5.00	5.10		ug/L		102	34 - 150	8	20
1,2-Dibromoethane	5.00	5.62		ug/L		112	56 - 146	9	20
1,2-Dichlorobenzene	5.00	5.49		ug/L		110	73 - 120	12	14
1,2-Dichloroethane	5.00	5.58		ug/L		112	63 - 150	13	29
1,2-Dichloropropane	5.00	5.63		ug/L		113	72 - 120	10	20
1,4-Dichlorobenzene	5.00	5.60		ug/L		112	77 - 120	11	11
2-Butanone	25.0	27.1		ug/L		109	30 - 150	17	35
2-Hexanone	25.0	28.4		ug/L		114	25 - 150	9	28
4-Methyl-2-pentanone	25.0	29.1		ug/L		117	36 - 150	13	34
Acetone	25.0	22.8		ug/L		91	20 - 138	33	35
Acrylonitrile	50.0	59.1		ug/L		118	55 - 134	19	35
Benzene	5.00	5.56		ug/L		111	73 - 120	12	20
Bromochloromethane	5.00	5.60		ug/L		112	71 - 131	15	20
Bromodichloromethane	5.00	5.66		ug/L		113	62 - 150	8	20
Bromoform	5.00	5.15		ug/L		103	51 - 137	11	20
Bromomethane	5.00	5.65		ug/L		113	61 - 135	12	31
Carbon disulfide	5.00	5.82		ug/L		116	65 - 128	16	32
Carbon tetrachloride	5.00	5.65		ug/L		113	54 - 150	14	30
Chlorobenzene	5.00	5.72	*	ug/L		114	74 - 114	13	12
Chloroethane	5.00	5.46		ug/L		109	58 - 130	13	35
Chloroform	5.00	5.78		ug/L		116	71 - 130	14	20
Chloromethane	5.00	5.50		ug/L		110	40 - 150	13	31
cis-1,2-Dichloroethene	5.00	5.66		ug/L		113	73 - 130	15	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-271868/5

Matrix: Water

Analysis Batch: 271868

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	5.92		ug/L		118	54 - 150	12	28
Dibromochloromethane	5.00	5.49		ug/L		110	46 - 150	11	20
Dibromomethane	5.00	5.51		ug/L		110	65 - 137	13	20
Ethylbenzene	5.00	5.70		ug/L		114	74 - 125	13	20
m,p-Xylene	5.00	5.50		ug/L		110	73 - 130	12	20
Methyl iodide	5.00	5.66		ug/L		113	47 - 145	19	35
Methylene Chloride	5.00	5.73		ug/L		115	58 - 134	17	29
o-Xylene	5.00	5.43		ug/L		109	80 - 139	14	20
Styrene	5.00	5.16		ug/L		103	68 - 136	11	20
Tetrachloroethene	5.00	5.52		ug/L		110	67 - 123	13	20
Toluene	5.00	5.69		ug/L		114	70 - 126	13	20
trans-1,2-Dichloroethene	5.00	5.54		ug/L		111	69 - 124	16	27
trans-1,3-Dichloropropene	5.00	5.53		ug/L		111	40 - 150	9	30
trans-1,4-Dichloro-2-butene	5.00	5.33		ug/L		107	20 - 150	11	20
Trichloroethene	5.00	5.58		ug/L		112	72 - 123	14	20
Trichlorofluoromethane	5.00	5.93		ug/L		119	60 - 150	15	31
Vinyl acetate	12.5	14.4		ug/L		115	30 - 150	7	35
Vinyl chloride	5.00	5.57		ug/L		111	59 - 140	15	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		46 - 150
4-Bromofluorobenzene (Surr)	100		81 - 120
Dibromofluoromethane (Surr)	97		42 - 132
Toluene-d8 (Surr)	100		75 - 125
Trifluorotoluene (Surr)	100		74 - 118

Lab Sample ID: MB 580-271969/7

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			04/21/18 12:05	1
1,1,1-Trichloroethane	ND		0.20		ug/L			04/21/18 12:05	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			04/21/18 12:05	1
1,1,2-Trichloroethane	ND		0.20		ug/L			04/21/18 12:05	1
1,1-Dichloroethane	ND		0.20		ug/L			04/21/18 12:05	1
1,1-Dichloroethene	ND		0.20		ug/L			04/21/18 12:05	1
1,2,3-Trichloropropane	ND		0.20		ug/L			04/21/18 12:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			04/21/18 12:05	1
1,2-Dibromoethane	ND		0.10		ug/L			04/21/18 12:05	1
1,2-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:05	1
1,2-Dichloroethane	ND		0.20		ug/L			04/21/18 12:05	1
1,2-Dichloropropane	ND		0.20		ug/L			04/21/18 12:05	1
1,4-Dichlorobenzene	ND		0.30		ug/L			04/21/18 12:05	1
2-Butanone	ND		10		ug/L			04/21/18 12:05	1
2-Hexanone	ND		3.0		ug/L			04/21/18 12:05	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/21/18 12:05	1
Acetone	ND		6.0		ug/L			04/21/18 12:05	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-271969/7

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		10		ug/L			04/21/18 12:05	1
Benzene	ND		0.20		ug/L			04/21/18 12:05	1
Bromochloromethane	ND		0.20		ug/L			04/21/18 12:05	1
Bromodichloromethane	ND		0.20		ug/L			04/21/18 12:05	1
Bromoform	ND		0.50		ug/L			04/21/18 12:05	1
Bromomethane	ND		0.50		ug/L			04/21/18 12:05	1
Carbon disulfide	ND		0.30		ug/L			04/21/18 12:05	1
Carbon tetrachloride	ND		0.20		ug/L			04/21/18 12:05	1
Chlorobenzene	ND		0.20		ug/L			04/21/18 12:05	1
Chloroethane	ND		0.50		ug/L			04/21/18 12:05	1
Chloroform	ND		0.20		ug/L			04/21/18 12:05	1
Chloromethane	ND		0.50		ug/L			04/21/18 12:05	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:05	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:05	1
Dibromochloromethane	ND		0.20		ug/L			04/21/18 12:05	1
Dibromomethane	ND		0.20		ug/L			04/21/18 12:05	1
Ethylbenzene	ND		0.20		ug/L			04/21/18 12:05	1
m,p-Xylene	ND		0.50		ug/L			04/21/18 12:05	1
Methyl iodide	ND		0.50		ug/L			04/21/18 12:05	1
Methylene Chloride	ND		5.0		ug/L			04/21/18 12:05	1
o-Xylene	ND		0.50		ug/L			04/21/18 12:05	1
Styrene	ND		0.50		ug/L			04/21/18 12:05	1
Tetrachloroethene	ND		0.50		ug/L			04/21/18 12:05	1
Toluene	ND		0.20		ug/L			04/21/18 12:05	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			04/21/18 12:05	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			04/21/18 12:05	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			04/21/18 12:05	1
Trichloroethene	ND		0.20		ug/L			04/21/18 12:05	1
Trichlorofluoromethane	ND		0.50		ug/L			04/21/18 12:05	1
Vinyl acetate	ND		1.0		ug/L			04/21/18 12:05	1
Vinyl chloride	ND		0.020		ug/L			04/21/18 12:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		46 - 150		04/21/18 12:05	1
4-Bromofluorobenzene (Surr)	97		81 - 120		04/21/18 12:05	1
Dibromofluoromethane (Surr)	96		42 - 132		04/21/18 12:05	1
Toluene-d8 (Surr)	109		75 - 125		04/21/18 12:05	1
Trifluorotoluene (Surr)	114		74 - 118		04/21/18 12:05	1

Lab Sample ID: LCS 580-271969/4

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.69		ug/L		114	68 - 139
1,1,1-Trichloroethane	5.00	4.99		ug/L		100	56 - 150
1,1,2,2-Tetrachloroethane	5.00	6.42		ug/L		128	60 - 134
1,1,2-Trichloroethane	5.00	5.81		ug/L		116	62 - 137

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-271969/4

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	5.00	5.17		ug/L		103	68 - 135
1,1-Dichloroethene	5.00	4.99		ug/L		100	64 - 125
1,2,3-Trichloropropane	5.00	5.79		ug/L		116	45 - 150
1,2-Dibromo-3-Chloropropane	5.00	5.00		ug/L		100	34 - 150
1,2-Dibromoethane	5.00	5.73		ug/L		115	56 - 146
1,2-Dichlorobenzene	5.00	5.47		ug/L		109	73 - 120
1,2-Dichloroethane	5.00	5.17		ug/L		103	63 - 150
1,2-Dichloropropane	5.00	5.26		ug/L		105	72 - 120
1,4-Dichlorobenzene	5.00	5.73		ug/L		115	77 - 120
2-Butanone	25.0	27.3		ug/L		109	30 - 150
2-Hexanone	25.0	30.0		ug/L		120	25 - 150
4-Methyl-2-pentanone	25.0	29.9		ug/L		119	36 - 150
Acetone	25.0	31.0		ug/L		124	20 - 138
Acrylonitrile	50.0	55.1		ug/L		110	55 - 134
Benzene	5.00	5.08		ug/L		102	73 - 120
Bromochloromethane	5.00	5.04		ug/L		101	71 - 131
Bromodichloromethane	5.00	5.28		ug/L		106	62 - 150
Bromoform	5.00	5.21		ug/L		104	51 - 137
Bromomethane	5.00	5.46		ug/L		109	61 - 135
Carbon disulfide	5.00	5.14		ug/L		103	65 - 128
Carbon tetrachloride	5.00	5.08		ug/L		102	54 - 150
Chlorobenzene	5.00	5.67		ug/L		113	74 - 114
Chloroethane	5.00	5.19		ug/L		104	58 - 130
Chloroform	5.00	5.24		ug/L		105	71 - 130
Chloromethane	5.00	5.47		ug/L		109	40 - 150
cis-1,2-Dichloroethene	5.00	5.05		ug/L		101	73 - 130
cis-1,3-Dichloropropene	5.00	5.75		ug/L		115	54 - 150
Dibromochloromethane	5.00	5.50		ug/L		110	46 - 150
Dibromomethane	5.00	4.98		ug/L		100	65 - 137
Ethylbenzene	5.00	5.56		ug/L		111	74 - 125
m,p-Xylene	5.00	5.41		ug/L		108	73 - 130
Methyl iodide	5.00	4.87		ug/L		97	47 - 145
Methylene Chloride	5.00	5.00		ug/L		100	58 - 134
o-Xylene	5.00	5.30		ug/L		106	80 - 139
Styrene	5.00	5.12		ug/L		102	68 - 136
Tetrachloroethene	5.00	5.30		ug/L		106	67 - 123
Toluene	5.00	5.63		ug/L		113	70 - 126
trans-1,2-Dichloroethene	5.00	4.79		ug/L		96	69 - 124
trans-1,3-Dichloropropene	5.00	5.54		ug/L		111	40 - 150
trans-1,4-Dichloro-2-butene	5.00	5.52		ug/L		110	20 - 150
Trichloroethene	5.00	4.92		ug/L		98	72 - 123
Trichlorofluoromethane	5.00	5.27		ug/L		105	60 - 150
Vinyl acetate	12.5	14.5		ug/L		116	30 - 150
Vinyl chloride	5.00	5.46		ug/L		109	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		46 - 150
4-Bromofluorobenzene (Surr)	99		81 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-271969/4

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	95		42 - 132
Toluene-d8 (Surr)	104		75 - 125
Trifluorotoluene (Surr)	101		74 - 118

Lab Sample ID: LCSD 580-271969/5

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.68		ug/L		114	68 - 139	0	20
1,1,1-Trichloroethane	5.00	5.04		ug/L		101	56 - 150	1	29
1,1,2,2-Tetrachloroethane	5.00	6.55		ug/L		131	60 - 134	2	25
1,1,2-Trichloroethane	5.00	5.79		ug/L		116	62 - 137	0	30
1,1-Dichloroethane	5.00	5.14		ug/L		103	68 - 135	1	27
1,1-Dichloroethene	5.00	4.95		ug/L		99	64 - 125	1	28
1,2,3-Trichloropropane	5.00	5.93		ug/L		119	45 - 150	2	20
1,2-Dibromo-3-Chloropropane	5.00	5.35		ug/L		107	34 - 150	7	20
1,2-Dibromoethane	5.00	5.67		ug/L		113	56 - 146	1	20
1,2-Dichlorobenzene	5.00	5.53		ug/L		111	73 - 120	1	14
1,2-Dichloroethane	5.00	5.22		ug/L		104	63 - 150	1	29
1,2-Dichloropropane	5.00	5.23		ug/L		105	72 - 120	1	20
1,4-Dichlorobenzene	5.00	5.64		ug/L		113	77 - 120	2	11
2-Butanone	25.0	27.9		ug/L		112	30 - 150	2	35
2-Hexanone	25.0	29.6		ug/L		118	25 - 150	1	28
4-Methyl-2-pentanone	25.0	30.0		ug/L		120	36 - 150	0	34
Acetone	25.0	31.9		ug/L		127	20 - 138	3	35
Acrylonitrile	50.0	57.2		ug/L		114	55 - 134	4	35
Benzene	5.00	5.02		ug/L		100	73 - 120	1	20
Bromochloromethane	5.00	5.06		ug/L		101	71 - 131	0	20
Bromodichloromethane	5.00	5.27		ug/L		105	62 - 150	0	20
Bromoform	5.00	5.19		ug/L		104	51 - 137	0	20
Bromomethane	5.00	5.68		ug/L		114	61 - 135	4	31
Carbon disulfide	5.00	5.11		ug/L		102	65 - 128	1	32
Carbon tetrachloride	5.00	5.08		ug/L		102	54 - 150	0	30
Chlorobenzene	5.00	5.55		ug/L		111	74 - 114	2	12
Chloroethane	5.00	5.52		ug/L		110	58 - 130	6	35
Chloroform	5.00	5.18		ug/L		104	71 - 130	1	20
Chloromethane	5.00	5.72		ug/L		114	40 - 150	4	31
cis-1,2-Dichloroethene	5.00	5.04		ug/L		101	73 - 130	0	20
cis-1,3-Dichloropropene	5.00	5.84		ug/L		117	54 - 150	2	28
Dibromochloromethane	5.00	5.51		ug/L		110	46 - 150	0	20
Dibromomethane	5.00	5.06		ug/L		101	65 - 137	1	20
Ethylbenzene	5.00	5.45		ug/L		109	74 - 125	2	20
m,p-Xylene	5.00	5.26		ug/L		105	73 - 130	3	20
Methyl iodide	5.00	4.90		ug/L		98	47 - 145	1	35
Methylene Chloride	5.00	5.11		ug/L		102	58 - 134	2	29
o-Xylene	5.00	5.21		ug/L		104	80 - 139	2	20
Styrene	5.00	5.00		ug/L		100	68 - 136	2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-271969/5

Matrix: Water

Analysis Batch: 271969

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	5.00	5.22		ug/L		104	67 - 123	2	20
Toluene	5.00	5.55		ug/L		111	70 - 126	2	20
trans-1,2-Dichloroethene	5.00	4.78		ug/L		96	69 - 124	0	27
trans-1,3-Dichloropropene	5.00	5.61		ug/L		112	40 - 150	1	30
trans-1,4-Dichloro-2-butene	5.00	5.71		ug/L		114	20 - 150	3	20
Trichloroethene	5.00	4.90		ug/L		98	72 - 123	0	20
Trichlorofluoromethane	5.00	5.18		ug/L		104	60 - 150	2	31
Vinyl acetate	12.5	15.4		ug/L		123	30 - 150	6	35
Vinyl chloride	5.00	5.56		ug/L		111	59 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		46 - 150
4-Bromofluorobenzene (Surr)	97		81 - 120
Dibromofluoromethane (Surr)	94		42 - 132
Toluene-d8 (Surr)	103		75 - 125
Trifluorotoluene (Surr)	104		74 - 118

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-272072/22-A

Matrix: Water

Analysis Batch: 272134

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 272072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		04/23/18 15:38	04/24/18 12:39	1
Iron	ND		0.30		mg/L		04/23/18 15:38	04/24/18 12:39	1
Magnesium	ND		1.1		mg/L		04/23/18 15:38	04/24/18 12:39	1
Manganese	ND		0.020		mg/L		04/23/18 15:38	04/24/18 12:39	1
Potassium	ND		3.3		mg/L		04/23/18 15:38	04/24/18 12:39	1
Sodium	ND		2.0		mg/L		04/23/18 15:38	04/24/18 12:39	1

Lab Sample ID: LCS 580-272072/23-A

Matrix: Water

Analysis Batch: 272134

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 272072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	20.0	19.4		mg/L		97	80 - 120
Iron	22.0	20.2		mg/L		92	80 - 120
Magnesium	20.0	18.3		mg/L		91	80 - 120
Manganese	1.00	0.926		mg/L		93	80 - 120
Potassium	20.0	17.9		mg/L		89	80 - 120
Sodium	20.0	17.9		mg/L		89	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-272072/24-A

Matrix: Water

Analysis Batch: 272134

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 272072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	20.1		mg/L		100	80 - 120	3	20
Iron	22.0	21.2		mg/L		96	80 - 120	5	20
Magnesium	20.0	19.2		mg/L		96	80 - 120	5	20
Manganese	1.00	0.975		mg/L		98	80 - 120	5	20
Potassium	20.0	18.8		mg/L		94	80 - 120	5	20
Sodium	20.0	18.7		mg/L		93	80 - 120	4	20

Lab Sample ID: MB 580-272161/21-A

Matrix: Water

Analysis Batch: 272284

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		04/24/18 16:05	04/25/18 15:12	1
Iron	ND		0.30		mg/L		04/24/18 16:05	04/25/18 15:12	1
Magnesium	ND		1.1		mg/L		04/24/18 16:05	04/25/18 15:12	1
Manganese	ND		0.020		mg/L		04/24/18 16:05	04/25/18 15:12	1
Potassium	ND		3.3		mg/L		04/24/18 16:05	04/25/18 15:12	1
Sodium	ND		2.0		mg/L		04/24/18 16:05	04/25/18 15:12	1
Arsenic	ND		0.060		mg/L		04/24/18 16:05	04/25/18 15:12	1

Lab Sample ID: LCS 580-272161/22-A

Matrix: Water

Analysis Batch: 272284

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	18.7		mg/L		94	80 - 120		
Iron	22.0	21.5		mg/L		98	80 - 120		
Magnesium	20.0	19.2		mg/L		96	80 - 120		
Manganese	1.00	0.964		mg/L		96	80 - 120		
Potassium	20.0	18.5		mg/L		92	80 - 120		
Sodium	20.0	20.1		mg/L		101	80 - 120		
Arsenic	4.00	3.72		mg/L		93	80 - 120		

Lab Sample ID: LCSD 580-272161/23-A

Matrix: Water

Analysis Batch: 272284

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	19.0		mg/L		95	80 - 120	1	20
Iron	22.0	21.7		mg/L		99	80 - 120	1	20
Magnesium	20.0	19.5		mg/L		97	80 - 120	1	20
Manganese	1.00	0.973		mg/L		97	80 - 120	1	20
Potassium	20.0	18.5		mg/L		93	80 - 120	0	20
Sodium	20.0	19.9		mg/L		100	80 - 120	1	20
Arsenic	4.00	3.81		mg/L		95	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-76727-1 MS

Matrix: Water

Analysis Batch: 272134

Client Sample ID: 0418-07

Prep Type: Dissolved

Prep Batch: 272072

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	200		20.0	218	4	mg/L		111	75 - 125
Iron	ND		22.0	20.9		mg/L		95	75 - 125
Magnesium	94		20.0	114	4	mg/L		96	75 - 125
Manganese	0.060		1.00	1.01		mg/L		95	75 - 125
Potassium	8.5		20.0	28.2		mg/L		98	75 - 125
Sodium	36		20.0	55.2		mg/L		98	75 - 125

Lab Sample ID: 580-76727-1 MSD

Matrix: Water

Analysis Batch: 272134

Client Sample ID: 0418-07

Prep Type: Dissolved

Prep Batch: 272072

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	200		20.0	208	4	mg/L		63	75 - 125	5	20
Iron	ND		22.0	20.4		mg/L		93	75 - 125	2	20
Magnesium	94		20.0	110	4	mg/L		79	75 - 125	3	20
Manganese	0.060		1.00	0.978		mg/L		92	75 - 125	3	20
Potassium	8.5		20.0	27.1		mg/L		93	75 - 125	4	20
Sodium	36		20.0	53.2		mg/L		88	75 - 125	4	20

Lab Sample ID: 580-76727-1 DU

Matrix: Water

Analysis Batch: 272134

Client Sample ID: 0418-07

Prep Type: Dissolved

Prep Batch: 272072

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	200		202		mg/L		3	20
Iron	ND		ND		mg/L		NC	20
Magnesium	94		95.3		mg/L		0.9	20
Manganese	0.060		0.0609		mg/L		1	20
Potassium	8.5		8.66		mg/L		2	20
Sodium	36		36.3		mg/L		2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-272049/22-A

Matrix: Water

Analysis Batch: 272130

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 272049

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Arsenic	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 11:12	1
Barium	ND		0.0012		mg/L		04/23/18 13:57	04/24/18 11:12	1
Beryllium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Cadmium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Chromium	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Cobalt	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Copper	ND		0.0020		mg/L		04/23/18 13:57	04/24/18 11:12	1
Lead	ND		0.00080		mg/L		04/23/18 13:57	04/24/18 11:12	1
Nickel	ND		0.0030		mg/L		04/23/18 13:57	04/24/18 11:12	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-272049/22-A

Matrix: Water

Analysis Batch: 272130

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 272049

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.0080		mg/L		04/23/18 13:57	04/24/18 11:12	1
Silver	ND		0.00040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Thallium	ND		0.0010		mg/L		04/23/18 13:57	04/24/18 11:12	1
Vanadium	ND		0.0040		mg/L		04/23/18 13:57	04/24/18 11:12	1
Zinc	ND		0.0070		mg/L		04/23/18 13:57	04/24/18 11:12	1

Lab Sample ID: LCS 580-272049/23-A

Matrix: Water

Analysis Batch: 272130

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 272049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.87		mg/L		96	80 - 120
Arsenic	4.00	4.02		mg/L		100	80 - 120
Barium	4.00	3.83		mg/L		96	80 - 120
Beryllium	0.100	0.102		mg/L		102	80 - 120
Cadmium	0.100	0.103		mg/L		103	80 - 120
Chromium	0.400	0.387		mg/L		97	80 - 120
Cobalt	1.00	0.977		mg/L		98	80 - 120
Copper	0.500	0.485		mg/L		97	80 - 120
Lead	1.00	1.01		mg/L		101	80 - 120
Nickel	1.00	0.980		mg/L		98	80 - 120
Selenium	4.00	3.93		mg/L		98	80 - 120
Silver	0.600	0.599		mg/L		100	80 - 120
Thallium	4.00	3.77		mg/L		94	80 - 120
Vanadium	1.00	0.948		mg/L		95	80 - 120
Zinc	4.00	3.82		mg/L		96	80 - 120

Lab Sample ID: LCSD 580-272049/24-A

Matrix: Water

Analysis Batch: 272130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 272049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.93		mg/L		98	80 - 120	2	20
Arsenic	4.00	3.98		mg/L		99	80 - 120	1	20
Barium	4.00	3.93		mg/L		98	80 - 120	2	20
Beryllium	0.100	0.0957		mg/L		96	80 - 120	6	20
Cadmium	0.100	0.100		mg/L		100	80 - 120	3	20
Chromium	0.400	0.378		mg/L		94	80 - 120	2	20
Cobalt	1.00	0.964		mg/L		96	80 - 120	1	20
Copper	0.500	0.483		mg/L		97	80 - 120	1	20
Lead	1.00	1.00		mg/L		100	80 - 120	0	20
Nickel	1.00	0.976		mg/L		98	80 - 120	0	20
Selenium	4.00	3.83		mg/L		96	80 - 120	2	20
Silver	0.600	0.596		mg/L		99	80 - 120	0	20
Thallium	4.00	3.83		mg/L		96	80 - 120	2	20
Vanadium	1.00	0.945		mg/L		94	80 - 120	0	20
Zinc	4.00	3.83		mg/L		96	80 - 120	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-272161/21-A

Matrix: Water

Analysis Batch: 272242

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Arsenic	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 11:17	1
Barium	ND		0.0012		mg/L		04/24/18 16:05	04/25/18 11:17	1
Beryllium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Cadmium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Chromium	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Cobalt	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Copper	ND		0.0020		mg/L		04/24/18 16:05	04/25/18 11:17	1
Lead	ND		0.00080		mg/L		04/24/18 16:05	04/25/18 11:17	1
Nickel	ND		0.0030		mg/L		04/24/18 16:05	04/25/18 11:17	1
Selenium	ND		0.0080		mg/L		04/24/18 16:05	04/25/18 11:17	1
Silver	ND		0.00040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Thallium	ND		0.0010		mg/L		04/24/18 16:05	04/25/18 11:17	1
Vanadium	ND		0.0040		mg/L		04/24/18 16:05	04/25/18 11:17	1
Zinc	ND		0.0070		mg/L		04/24/18 16:05	04/25/18 11:17	1

Lab Sample ID: LCS 580-272161/22-A

Matrix: Water

Analysis Batch: 272242

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.81		mg/L		94	80 - 120
Arsenic	4.00	3.77		mg/L		94	80 - 120
Barium	4.00	3.84		mg/L		96	80 - 120
Beryllium	0.100	0.0956		mg/L		96	80 - 120
Cadmium	0.100	0.0966		mg/L		97	80 - 120
Chromium	0.400	0.400		mg/L		100	80 - 120
Cobalt	1.00	0.980		mg/L		98	80 - 120
Copper	0.500	0.503		mg/L		101	80 - 120
Lead	1.00	1.01		mg/L		101	80 - 120
Nickel	1.00	0.983		mg/L		98	80 - 120
Selenium	4.00	3.79		mg/L		95	80 - 120
Silver	0.600	0.589		mg/L		98	80 - 120
Thallium	4.00	3.81		mg/L		95	80 - 120
Vanadium	1.00	0.985		mg/L		98	80 - 120
Zinc	4.00	3.81		mg/L		95	80 - 120

Lab Sample ID: LCSD 580-272161/23-A

Matrix: Water

Analysis Batch: 272242

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.90		mg/L		97	80 - 120	3	20
Arsenic	4.00	3.76		mg/L		94	80 - 120	0	20
Barium	4.00	3.95		mg/L		99	80 - 120	3	20
Beryllium	0.100	0.0909		mg/L		91	80 - 120	5	20
Cadmium	0.100	0.101		mg/L		101	80 - 120	4	20
Chromium	0.400	0.397		mg/L		99	80 - 120	1	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-272161/23-A

Matrix: Water

Analysis Batch: 272242

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 272161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	1.00	0.963		mg/L		96	80 - 120	2	20
Copper	0.500	0.495		mg/L		99	80 - 120	2	20
Lead	1.00	1.04		mg/L		104	80 - 120	3	20
Nickel	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	3.78		mg/L		94	80 - 120	0	20
Silver	0.600	0.598		mg/L		100	80 - 120	1	20
Thallium	4.00	3.91		mg/L		98	80 - 120	3	20
Vanadium	1.00	0.964		mg/L		96	80 - 120	2	20
Zinc	4.00	3.75		mg/L		94	80 - 120	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-273217/21-A

Matrix: Water

Analysis Batch: 273571

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 273217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		05/08/18 09:56	05/09/18 11:01	1

Lab Sample ID: LCS 580-273217/22-A

Matrix: Water

Analysis Batch: 273571

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 273217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.09		mg/L		102	80 - 120		

Lab Sample ID: LCSD 580-273217/23-A

Matrix: Water

Analysis Batch: 273571

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 273217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.00	4.11		mg/L		103	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-271990/10

Matrix: Water

Analysis Batch: 271990

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			04/19/18 18:53	1

Lab Sample ID: LCS 580-271990/11

Matrix: Water

Analysis Batch: 271990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.5		mg/L		105	90 - 110		

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-271990/12

Matrix: Water

Analysis Batch: 271990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.5		mg/L		105	90 - 110	0	15

Lab Sample ID: 580-76727-20 MS

Matrix: Water

Analysis Batch: 271990

Client Sample ID: 0418-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	6.69	F1	mg/L		66	90 - 110		

Lab Sample ID: 580-76727-20 MSD

Matrix: Water

Analysis Batch: 271990

Client Sample ID: 0418-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	6.70	F1	mg/L		66	90 - 110	0	15

Lab Sample ID: MB 580-272031/3

Matrix: Water

Analysis Batch: 272031

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			04/20/18 10:07	1

Lab Sample ID: LCS 580-272031/4

Matrix: Water

Analysis Batch: 272031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.4		mg/L		104	90 - 110		

Lab Sample ID: LCSD 580-272031/5

Matrix: Water

Analysis Batch: 272031

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.5		mg/L		105	90 - 110	0	15

Lab Sample ID: 580-76727-19 MS

Matrix: Water

Analysis Batch: 272031

Client Sample ID: 0418-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	6.72	F1	mg/L		66	90 - 110		

Lab Sample ID: 580-76727-19 MSD

Matrix: Water

Analysis Batch: 272031

Client Sample ID: 0418-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	6.71	F1	mg/L		66	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Lab Sample ID: MB 580-272078/3

Matrix: Water

Analysis Batch: 272078

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/21/18 09:44	1
Chloride	ND		0.90		mg/L			04/21/18 09:44	1
Sulfate	ND		1.2		mg/L			04/21/18 09:44	1

Lab Sample ID: LCS 580-272078/4

Matrix: Water

Analysis Batch: 272078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.06		mg/L		101	90 - 110
Chloride	50.0	51.8		mg/L		104	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: LCSD 580-272078/5

Matrix: Water

Analysis Batch: 272078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	4.90		mg/L		98	90 - 110	3	15
Chloride	50.0	51.7		mg/L		103	90 - 110	0	15
Sulfate	50.0	50.8		mg/L		102	90 - 110	0	15

Lab Sample ID: 580-76727-8 MS

Matrix: Water

Analysis Batch: 272078

Client Sample ID: 0418-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		5.00	4.73		mg/L		95	90 - 110
Chloride	19		50.0	71.7		mg/L		105	90 - 110
Sulfate	70		50.0	118		mg/L		96	90 - 110

Lab Sample ID: 580-76727-8 MSD

Matrix: Water

Analysis Batch: 272078

Client Sample ID: 0418-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		5.00	4.85		mg/L		97	90 - 110	3	15
Chloride	19		50.0	71.7		mg/L		105	90 - 110	0	15
Sulfate	70		50.0	118		mg/L		96	90 - 110	0	15

Lab Sample ID: 580-76727-19 MS

Matrix: Water

Analysis Batch: 272078

Client Sample ID: 0418-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND	F1	5.00	4.27	F1	mg/L		85	90 - 110
Chloride	120	F1	50.0	154	F1	mg/L		71	90 - 110
Sulfate	140	F1	50.0	178	F1	mg/L		77	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-76727-19 MSD

Matrix: Water

Analysis Batch: 272078

Client Sample ID: 0418-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND	F1	5.00	4.25	F1	mg/L		85	90 - 110	1	15
Chloride	120	F1	50.0	154	F1	mg/L		71	90 - 110	0	15
Sulfate	140	F1	50.0	178	F1	mg/L		77	90 - 110	0	15

Lab Sample ID: MB 580-272381/3

Matrix: Water

Analysis Batch: 272381

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/25/18 12:09	1
Chloride	ND		0.90		mg/L			04/25/18 12:09	1
Sulfate	ND		1.2		mg/L			04/25/18 12:09	1

Lab Sample ID: LCS 580-272381/4

Matrix: Water

Analysis Batch: 272381

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	4.98		mg/L		100	90 - 110
Chloride	50.0	51.8		mg/L		104	90 - 110
Sulfate	50.0	51.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 580-272381/5

Matrix: Water

Analysis Batch: 272381

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	5.00		mg/L		100	90 - 110	1	15
Chloride	50.0	52.2		mg/L		104	90 - 110	1	15
Sulfate	50.0	51.5		mg/L		103	90 - 110	1	15

Lab Sample ID: MB 580-272450/3

Matrix: Water

Analysis Batch: 272450

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/26/18 15:13	1
Chloride	ND		0.90		mg/L			04/26/18 15:13	1
Sulfate	ND		1.2		mg/L			04/26/18 15:13	1

Lab Sample ID: LCS 580-272450/4

Matrix: Water

Analysis Batch: 272450

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	4.64		mg/L		93	90 - 110
Chloride	50.0	52.0		mg/L		104	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-272450/5

Matrix: Water

Analysis Batch: 272450

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	4.63		mg/L		93	90 - 110	0	15
Chloride	50.0	52.1		mg/L		104	90 - 110	0	15
Sulfate	50.0	51.4		mg/L		103	90 - 110	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 490-510889/1-A

Matrix: Water

Analysis Batch: 510983

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 13:57	1

Lab Sample ID: LCS 490-510889/2-A

Matrix: Water

Analysis Batch: 510983

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.37		mg/L		107	90 - 110

Lab Sample ID: 580-76727-3 MS

Matrix: Water

Analysis Batch: 510983

Client Sample ID: 0418-09

Prep Type: Total/NA

Prep Batch: 510889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	ND		5.00	5.01		mg/L		100	90 - 110

Lab Sample ID: MB 490-510894/1-A

Matrix: Water

Analysis Batch: 510983

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.10		mg/L		04/26/18 10:53	04/26/18 13:45	1

Lab Sample ID: LCS 490-510894/2-A

Matrix: Water

Analysis Batch: 510983

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.43		mg/L		109	90 - 110

Lab Sample ID: 580-76727-8 MS

Matrix: Water

Analysis Batch: 510983

Client Sample ID: 0418-14

Prep Type: Total/NA

Prep Batch: 510894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.13		5.00	5.14		mg/L		100	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 490-510987/1-A

Matrix: Water

Analysis Batch: 511245

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.10		mg/L		04/26/18 14:55	04/27/18 12:42	1

Lab Sample ID: LCS 490-510987/2-A

Matrix: Water

Analysis Batch: 511245

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.47		mg/L		109	90 - 110

Lab Sample ID: 580-76727-21 MS

Matrix: Water

Analysis Batch: 511245

Client Sample ID: 0418-27

Prep Type: Total/NA

Prep Batch: 510987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.19		5.00	5.08		mg/L		98	90 - 110

Lab Sample ID: MB 490-511239/1-A

Matrix: Water

Analysis Batch: 511743

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 511239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.10		mg/L		04/27/18 12:04	04/30/18 14:11	1

Lab Sample ID: LCS 490-511239/2-A

Matrix: Water

Analysis Batch: 511743

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 511239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	5.00	5.27		mg/L		105	90 - 110

Lab Sample ID: 580-76727-14 MS

Matrix: Water

Analysis Batch: 511743

Client Sample ID: 0418-20

Prep Type: Total/NA

Prep Batch: 511239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	ND		5.00	5.19		mg/L		102	90 - 110

Lab Sample ID: 580-76727-19 MS

Matrix: Water

Analysis Batch: 511743

Client Sample ID: 0418-25

Prep Type: Total/NA

Prep Batch: 511239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	ND		5.00	4.85		mg/L		97	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 580-272271/12

Matrix: Water

Analysis Batch: 272271

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.15		mg/L			04/25/18 14:24	1

Lab Sample ID: LCS 580-272271/13

Matrix: Water

Analysis Batch: 272271

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.985		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-272271/14

Matrix: Water

Analysis Batch: 272271

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.985		mg/L		99	90 - 110	0	20

Lab Sample ID: 580-76727-1 MS

Matrix: Water

Analysis Batch: 272271

Client Sample ID: 0418-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.0		0.500	5.68	4	mg/L		136	90 - 110

Lab Sample ID: 580-76727-1 MSD

Matrix: Water

Analysis Batch: 272271

Client Sample ID: 0418-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	5.0		0.500	5.71	4	mg/L		142	90 - 110	1	20

Lab Sample ID: 580-76727-8 MS

Matrix: Water

Analysis Batch: 272271

Client Sample ID: 0418-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.3		0.500	5.79	4	mg/L		108	90 - 110

Lab Sample ID: 580-76727-8 MSD

Matrix: Water

Analysis Batch: 272271

Client Sample ID: 0418-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	5.3		0.500	5.83	4	mg/L		116	90 - 110	1	20

Lab Sample ID: 580-76727-1 DU

Matrix: Water

Analysis Batch: 272271

Client Sample ID: 0418-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate Nitrite as N	5.0		5.32		mg/L		6	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-272077/2

Matrix: Water

Analysis Batch: 272077

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	115		mg/L		115	85 - 115

Lab Sample ID: LCS 580-272513/2

Matrix: Water

Analysis Batch: 272513

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	102		mg/L		102	85 - 115

Lab Sample ID: 580-76727-7 DU

Matrix: Water

Analysis Batch: 272513

Client Sample ID: 0418-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	700		723		mg/L		3	17
Bicarbonate Alkalinity as CaCO3	700		723		mg/L		3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-272064/1

Matrix: Water

Analysis Batch: 272064

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/23/18 14:56	1

Lab Sample ID: LCS 580-272064/2

Matrix: Water

Analysis Batch: 272064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	954		mg/L		95	80 - 120

Lab Sample ID: MB 580-272116/1

Matrix: Water

Analysis Batch: 272116

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/24/18 11:45	1

Lab Sample ID: LCS 580-272116/2

Matrix: Water

Analysis Batch: 272116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	932		mg/L		93	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 580-76727-7 DU

Matrix: Water

Analysis Batch: 272116

Client Sample ID: 0418-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	880		877		mg/L		0.3	20

Lab Sample ID: 580-76727-14 DU

Matrix: Water

Analysis Batch: 272116

Client Sample ID: 0418-20

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	430		464		mg/L		7	20

Lab Sample ID: MB 580-272286/1

Matrix: Water

Analysis Batch: 272286

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			04/25/18 16:25	1

Lab Sample ID: LCS 580-272286/2

Matrix: Water

Analysis Batch: 272286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	932		mg/L		93	80 - 120

Lab Sample ID: 580-76727-20 DU

Matrix: Water

Analysis Batch: 272286

Client Sample ID: 0418-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	780		790		mg/L		1	20

Method: SM 5220D - COD

Lab Sample ID: MB 580-272538/3-A

Matrix: Water

Analysis Batch: 272540

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 272538

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		04/27/18 11:00	04/27/18 11:00	1

Lab Sample ID: LCS 580-272538/4-A

Matrix: Water

Analysis Batch: 272540

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 272538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	81.0		mg/L		108	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: SM 5220D - COD (Continued)

Lab Sample ID: MB 580-272854/3-A
Matrix: Water
Analysis Batch: 272857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272854

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		05/02/18 11:40	05/02/18 11:40	1

Lab Sample ID: LCS 580-272854/4-A
Matrix: Water
Analysis Batch: 272857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	81.3		mg/L		108	80 - 120

Lab Sample ID: 580-76727-1 MS
Matrix: Water
Analysis Batch: 272857

Client Sample ID: 0418-07
Prep Type: Total/NA
Prep Batch: 272854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND	F1	25.0	35.3	F1	mg/L		141	75 - 125

Lab Sample ID: 580-76727-1 DU
Matrix: Water
Analysis Batch: 272857

Client Sample ID: 0418-07
Prep Type: Total/NA
Prep Batch: 272854

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND	F1	ND		mg/L		NC	20

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-272588/20
Matrix: Water
Analysis Batch: 272588

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			04/27/18 20:45	1

Lab Sample ID: LCS 580-272588/21
Matrix: Water
Analysis Batch: 272588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.39		mg/L		94	85 - 115

Lab Sample ID: MB 580-272729/21
Matrix: Water
Analysis Batch: 272729

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			04/30/18 22:32	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 580-272729/3

Matrix: Water

Analysis Batch: 272729

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			04/30/18 22:32	1

Lab Sample ID: LCS 580-272729/22

Matrix: Water

Analysis Batch: 272729

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.09		mg/L		91	85 - 115

Lab Sample ID: LCS 580-272729/4

Matrix: Water

Analysis Batch: 272729

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	8.79		mg/L		88	85 - 115

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-07

Date Collected: 04/17/18 10:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 18:02	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 12:49	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 11:59	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 12:16	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510889	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 14:17	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:28	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-08

Date Collected: 04/17/18 10:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 18:29	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:14	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:02	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 12:28	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510889	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 14:18	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:32	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-09

Date Collected: 04/17/18 12:16

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 18:55	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-09

Date Collected: 04/17/18 12:16

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1	272134	04/24/18 13:17	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:06	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 12:39	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510889	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 14:19	GRM	TAL NSH
Total/NA	Analysis	353.2		1	272271	04/25/18 14:33	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-10

Date Collected: 04/17/18 12:20

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 19:22	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:21	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:10	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 12:51	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510894	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 13:48	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:35	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-11

Date Collected: 04/17/18 12:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 19:48	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:24	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-11

Date Collected: 04/17/18 12:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:14	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 13:14	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510894	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 13:49	GRM	TAL NSH
Total/NA	Analysis	353.2		1	272271	04/25/18 14:36	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-12

Date Collected: 04/17/18 13:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 20:15	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:27	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:18	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 13:26	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510894	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 13:51	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:39	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272077	04/24/18 11:53	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272064	04/23/18 14:56	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-13

Date Collected: 04/17/18 13:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 20:41	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:31	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:22	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 13:49	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-13

Date Collected: 04/17/18 13:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	272381	04/25/18 20:20	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510894	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 13:52	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:40	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-14

Date Collected: 04/17/18 15:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 21:08	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:34	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:26	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 14:25	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510894	04/26/18 10:53	LDT	TAL NSH
Total/NA	Analysis	350.1		1	510983	04/26/18 13:53	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:42	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-15

Date Collected: 04/17/18 15:05

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 21:34	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:37	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:30	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 15:00	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510987	04/26/18 14:55	LDT	TAL NSH

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-15

Date Collected: 04/17/18 15:05

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	511245	04/27/18 13:00	GRM	TAL NSH
Total/NA	Analysis	353.2		1	272271	04/25/18 14:45	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-16

Date Collected: 04/17/18 16:30

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271868	04/20/18 22:01	P1P	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:41	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:49	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 15:23	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510987	04/26/18 14:55	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511245	04/27/18 13:01	GRM	TAL NSH
Total/NA	Analysis	353.2		10	272271	04/25/18 14:46	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-17

Date Collected: 04/17/18 16:36

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 12:58	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:51	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:53	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 15:46	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:21	GRM	TAL NSH
Total/NA	Analysis	353.2		1	272271	04/25/18 14:47	HJM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-17

Date Collected: 04/17/18 16:36

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-18

Date Collected: 04/17/18 17:57

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		10	272271	04/25/18 14:49	HJM	TAL SEA

Client Sample ID: 0418-19

Date Collected: 04/17/18 17:55

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 13:25	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:54	HJM	TAL SEA
Total Recoverable	Prep	3005A			272049	04/23/18 13:57	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272130	04/24/18 12:57	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271990	04/19/18 17:31	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272078	04/21/18 16:57	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:22	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-20

Date Collected: 04/17/18 18:45

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 13:51	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 13:57	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-20

Date Collected: 04/17/18 18:45

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:07	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271990	04/19/18 17:43	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272078	04/21/18 17:08	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:23	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-21

Date Collected: 04/18/18 09:42

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 14:18	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 14:01	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:11	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271990	04/19/18 17:54	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272078	04/21/18 17:20	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:27	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272588	04/27/18 20:45	MP	TAL SEA

Client Sample ID: 0418-22

Date Collected: 04/18/18 09:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 14:44	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 14:04	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:15	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271990	04/19/18 18:06	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-22

Date Collected: 04/18/18 09:52

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	272078	04/21/18 17:32	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:28	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-23

Date Collected: 04/18/18 11:25

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 15:10	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 14:07	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:19	FCW	TAL SEA
Total/NA	Analysis	300.0		10	271990	04/19/18 18:29	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272381	04/25/18 20:31	EMM	TAL SEA
Total/NA	Analysis	300.0		1	272450	04/26/18 20:29	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:29	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272538	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272540	04/27/18 11:00	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-24

Date Collected: 04/18/18 11:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 15:37	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 14:11	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:23	FCW	TAL SEA
Total/NA	Analysis	300.0		10	271990	04/19/18 20:38	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272381	04/25/18 20:43	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-24

Date Collected: 04/18/18 11:40

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	272450	04/26/18 20:41	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:30	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-25

Date Collected: 04/18/18 12:50

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 16:03	CJ	TAL SEA
Dissolved	Prep	3005A			272072	04/23/18 15:38	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272134	04/24/18 14:14	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:27	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272031	04/20/18 10:42	EMM	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 10:19	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272078	04/21/18 10:31	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			511239	04/27/18 12:04	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511743	04/30/18 14:31	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-26

Date Collected: 04/18/18 11:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 16:30	CJ	TAL SEA
Dissolved	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272284	04/25/18 15:54	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:31	FCW	TAL SEA
Total/NA	Analysis	300.0		1	271990	04/19/18 19:51	EMM	TAL SEA
Total/NA	Analysis	300.0		5	272078	04/21/18 17:43	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-26

Date Collected: 04/18/18 11:35

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Ammonia			510987	04/26/18 14:55	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511245	04/27/18 13:02	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272286	04/25/18 16:25	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-27

Date Collected: 04/18/18 13:31

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 16:57	CJ	TAL SEA
Dissolved	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272284	04/25/18 15:58	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:35	FCW	TAL SEA
Dissolved	Prep	3005A			273217	05/08/18 09:56	ASJ	TAL SEA
Dissolved	Analysis	6020B		1	273571	05/09/18 11:12	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272031	04/20/18 11:29	EMM	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 11:06	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			510987	04/26/18 14:55	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511245	04/27/18 13:03	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272286	04/25/18 16:25	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: 0418-28

Date Collected: 04/18/18 14:14

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 17:23	CJ	TAL SEA
Dissolved	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Dissolved	Analysis	6010C		1	272284	04/25/18 16:01	HJM	TAL SEA
Total Recoverable	Prep	3005A			272161	04/24/18 16:05	ASJ	TAL SEA
Total Recoverable	Analysis	6020A		1	272242	04/25/18 12:38	FCW	TAL SEA
Total/NA	Analysis	300.0		1	272031	04/20/18 11:53	EMM	TAL SEA
Total/NA	Analysis	300.0		1	272078	04/21/18 11:29	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Client Sample ID: 0418-28

Date Collected: 04/18/18 14:14

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Ammonia			510987	04/26/18 14:55	LDT	TAL NSH
Total/NA	Analysis	350.1		1	511245	04/27/18 13:05	GRM	TAL NSH
Total/NA	Analysis	SM 2320B		1	272513	04/28/18 15:10	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	272116	04/24/18 11:45	MP	TAL SEA
Total/NA	Prep	SM 5220			272854	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5220D		1	272857	05/02/18 11:40	MP	TAL SEA
Total/NA	Analysis	SM 5310B		1	272729	04/30/18 22:32	MP	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 04/18/18 00:00

Date Received: 04/19/18 14:20

Lab Sample ID: 580-76727-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	271969	04/21/18 12:31	CJ	TAL SEA

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C553	02-17-19
The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:				
Analysis Method	Prep Method	Matrix	Analyte	
6010C	3005A	Water	Arsenic	
6010C	3005A	Water	Calcium	
6010C	3005A	Water	Iron	
6010C	3005A	Water	Magnesium	
6010C	3005A	Water	Manganese	
6010C	3005A	Water	Potassium	
6010C	3005A	Water	Sodium	
6020A	3005A	Water	Antimony	
6020A	3005A	Water	Arsenic	
6020A	3005A	Water	Barium	
6020A	3005A	Water	Beryllium	
6020A	3005A	Water	Cadmium	
6020A	3005A	Water	Chromium	
6020A	3005A	Water	Cobalt	
6020A	3005A	Water	Copper	
6020A	3005A	Water	Lead	
6020A	3005A	Water	Nickel	
6020A	3005A	Water	Selenium	
6020A	3005A	Water	Silver	
6020A	3005A	Water	Thallium	
6020A	3005A	Water	Vanadium	
6020A	3005A	Water	Zinc	
SM 2320B		Water	Hydroxide Alkalinity as CaCO3	

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2L A)	06-30-18
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-18 *
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (VW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Seattle

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility Groundwa

TestAmerica Job ID: 580-76727-1

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-18 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Seattle

Sample Summary

Client: SCS Engineers

TestAmerica Job ID: 580-76727-1

Project/Site: Coupeville Solid Waste Facility Groundwa

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76727-1	0418-07	Water	04/17/18 10:40	04/19/18 14:20
580-76727-2	0418-08	Water	04/17/18 10:52	04/19/18 14:20
580-76727-3	0418-09	Water	04/17/18 12:16	04/19/18 14:20
580-76727-4	0418-10	Water	04/17/18 12:20	04/19/18 14:20
580-76727-5	0418-11	Water	04/17/18 12:40	04/19/18 14:20
580-76727-6	0418-12	Water	04/17/18 13:35	04/19/18 14:20
580-76727-7	0418-13	Water	04/17/18 13:30	04/19/18 14:20
580-76727-8	0418-14	Water	04/17/18 15:00	04/19/18 14:20
580-76727-9	0418-15	Water	04/17/18 15:05	04/19/18 14:20
580-76727-10	0418-16	Water	04/17/18 16:30	04/19/18 14:20
580-76727-11	0418-17	Water	04/17/18 16:36	04/19/18 14:20
580-76727-12	0418-18	Water	04/17/18 17:57	04/19/18 14:20
580-76727-13	0418-19	Water	04/17/18 17:55	04/19/18 14:20
580-76727-14	0418-20	Water	04/17/18 18:45	04/19/18 14:20
580-76727-15	0418-21	Water	04/18/18 09:42	04/19/18 14:20
580-76727-16	0418-22	Water	04/18/18 09:52	04/19/18 14:20
580-76727-17	0418-23	Water	04/18/18 11:25	04/19/18 14:20
580-76727-18	0418-24	Water	04/18/18 11:40	04/19/18 14:20
580-76727-19	0418-25	Water	04/18/18 12:50	04/19/18 14:20
580-76727-20	0418-26	Water	04/18/18 11:35	04/19/18 14:20
580-76727-21	0418-27	Water	04/18/18 13:31	04/19/18 14:20
580-76727-22	0418-28	Water	04/18/18 14:14	04/19/18 14:20
580-76727-23	Trip Blank	Water	04/18/18 00:00	04/19/18 14:20

Loc: 580
76727

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

**Chain of
Custody Record**

Client SCS Engineers		Client Contact Dan Venchiarutti		Date 4/19/18	Chain of Custody Number 38248
Address 2405 140th Ave NE Suite 107		Telephone Number (Area Code)/Fax Number (425) 289-5455		Lab Number	Page 2 of 2

City Bellevue	State WA	Zip Code 98005	Sampler Sam G.	Lab Contact Cathy Gamble	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
Project Name and Location (State) CSWF, Washington			Billing Contact			

Contract/Purchase Order/Quote No.			Matrix				Containers & Preservatives						Special Instructions/Conditions of Receipt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	300.0-220	300-48	2320B	6020A-LL	6010C	350.1	SM5310	5226D	8260C	2540C	Dissolve Ac																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

Cooler ☐ Yes ☐ No Cooler Temp: _____	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown	Sample Disposal ☐ Return To Client ☒ Disposal By Lab	☐ Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other <u>Standard</u>	QC Requirements (Specify)

1. Relinquished By Sign/Print <i>Sam Graber</i>	Date 4/19/18	Time 1420	1. Received By Sign/Print <i>Francisco Luna, Jr</i>	Date 4/19/18	Time 1420
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments	

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

580-76727 Chain of Custody

TAL-8274-580 (0210)

Client SCS Engineers		Client Contact Dan Venchiarutti		Date 4/19/18	Chain of Custody Number 38247
Address 2405 140th Ave NE Suite 107		Telephone Number (Area Code)/Fax Number (425) 289-5455		Lab Number	Page 1 of 2

City Bellevue	State WA	Zip Code 98005	Sampler Sam G.	Lab Contact Cathy Gamble	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
Project Name and Location (State) CSWF, Washington			Billing Contact			
Contract/Purchase Order/Quote No.						

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives															
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	300.0-280	300-4PHR	2320B	6020A-LL	6010C	350.1	SM 5310-100-A	5220D	8260C-LL	2540C
0418-07	4/17/18	1040	X				2	2	2	3			X	X	X	X	X	X	X	X	X	X
0418-08		1052																				
0418-09		1216																				
0418-10		1220																				
0418-11		1240																				
0418-12		1335																				
0418-13		1330																				
0418-14		1500																				
0418-15		1505																				
0418-16		1630																				
0418-17		1636																				
0418-18		1757	X				1	1					X									

Cooler ☐ Yes ☐ No Cooler Temp: _____	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown	Sample Disposal ☐ Return To Client ☒ Disposal By Lab	Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard	QC Requirements (Specify)

1. Relinquished By Sign/Print Sam Graber	Date 4/19/18	Time 1420	1. Received By Sign/Print Francisco Lunn, Jr	Date 4/19/18	Time 1420
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments

TB 104 Cooler Cor 3.6 Unc 2.6
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 104 Cooler Cor 2.8 Unc 2.6
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 17 Cooler Cor 1.4 Unc 1.6
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 17 Cooler Cor 1.6 Unc 1.8
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 17 Cooler Cor 2.2 Unc 2.4
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 17 Cooler Cor 4.4 Unc 3.1
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 12 Cooler Cor 5.8 Unc 6.0
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

TB 12 Cooler Cor 5.5 Unc 5.7
Cooler Dsc 1.4 Blot @Lab
Wet/Packs Packing Bobbie
Custody Seal Yes ☒ No

COOLER RECEIPT FORM



580-76727 Chain of Custody

Cooler Received/Opened On 4/24/2018 @ 0940

Time Samples Removed From Cooler 15:44 Time Samples Placed In Storage 16:02 (2 Hour Window)

1. Tracking # 1852 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470366 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 0.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) 2.2

I certify that I attached a label with the unique LIMS number to each container (initial) 2.2

21. Were there Non-Conformance issues at login? YES...NO...# _____ Was a NCM generated? YES...NO...# _____

Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

580-76727

stAmerica

Client Information (Sub Contract Lab)						Lab PIV: Zalmat, Kayse 1		o: 4784.1	
Client Contact: Shipping/Receiving						Phone:		E-Mail: kayse.zalmat@testamericalab.com	
Company: TestAmerica Laboratories, Inc.						Address: 2960 Foster Creighton Drive,		State of Origin: Washington	
						City: Nashville		Page 1 of 3	
						State, Zip: TN, 37204		Job #: 580-76727-1	
						Phone: 615-726-0177(Tel) 615-726-3404(Fax)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
						Email:			
Project Name: Coupeville Solid Waste Facility Groundwa						PO #:			
Site: Island County-CSWF-Q1 & Q3						WO #:			
Due Date Requested: 5/1/2018						TAT Requested (days):			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No) 350.1/Distill Ammonia	Total Number of Containers	Special Instructions/Note:	
0418-07 (580-76727-1)		4/17/18	10:40 Pacific	Water	Water	X	1		
0418-08 (580-76727-2)		4/17/18	10:52 Pacific	Water	Water	X	1		
0418-09 (580-76727-3)		4/17/18	12:16 Pacific	Water	Water	X	1		
0418-10 (580-76727-4)		4/17/18	12:20 Pacific	Water	Water	X	1		
0418-11 (580-76727-5)		4/17/18	12:40 Pacific	Water	Water	X	1		
0418-12 (580-76727-6)		4/17/18	13:35 Pacific	Water	Water	X	1		
0418-13 (580-76727-7)		4/17/18	13:30 Pacific	Water	Water	X	1		
0418-14 (580-76727-8)		4/17/18	15:00 Pacific	Water	Water	X	1		
0418-15 (580-76727-9)		4/17/18	15:05 Pacific	Water	Water	X	1		
Note: Since laboratory accreditation is subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.									
Possible Hazard Identification ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:									
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:									
Relinquished by: Tom Blumley									
Relinquished by:									
Relinquished by:									
Custody Seal Intact: Δ Yes Δ No									
Date: 4/23/18									
Time: 08:00									
Method of Shipment:									
Received by: Janyvier Jordan									
Date/Time: 04/24/18 08:40									
Company: TA-NAS									
Cooler Temperature(s) °C and Other Remarks: 0.3									

TestAmerica Seattle

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Loc: 580
76727

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Lab Pkt: Zalmi Kayse 1		Carrier Tracking No(s): 580-54784.2		COC No: 580-54784.2	
Client Contact: Shipping/Receiving		E-Mail: kayse.zalmi@testamericainc.com		State of Origin: Washington		Page: Page 2 of 3	
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Washington		Job #: 580-76727-1		Preservation Codes:	
Address: 2960 Foster Creighton Drive, ,		Due Date Requested: 5/1/2018		Analysis Requested		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: Nashville		TAT Requested (days):		Field Filtered Sample (Yes or No)		Total Number of Containers	
State, Zip: TN, 37204		PO #:		350.1/Disill. Ammonia Ammonia			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)		WO #:		Perform MS/MSD (Yes or No)			
Email:		Project #:		Field Filtered Sample (Yes or No)			
Coupeville Solid Waste Facility Groundwa		58009563		Preservation Code:			
Site: Island County-CSWF-Q1 & Q3		SSOW#:					

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (w=water, s=solid, o=water, b=BT-Tissue, A=Air)	Field Filtered Sample (Yes or No)	350.1/Disill. Ammonia Ammonia	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
0418-16 (580-76727-10)	4/17/18	16:30 Pacific	Water	Water	X	X	X		1	
0418-17 (580-76727-11)	4/17/18	16:36 Pacific	Water	Water	X	X	X		1	
0418-19 (580-76727-13)	4/17/18	17:55 Pacific	Water	Water	X	X	X		1	
0418-20 (580-76727-14)	4/17/18	18:45 Pacific	Water	Water	X	X	X		1	
0418-21 (580-76727-15)	4/18/18	09:42 Pacific	Water	Water	X	X	X		1	
0418-22 (580-76727-16)	4/18/18	09:52 Pacific	Water	Water	X	X	X		1	
0418-23 (580-76727-17)	4/18/18	11:25 Pacific	Water	Water	X	X	X		1	
0418-24 (580-76727-18)	4/18/18	11:40 Pacific	Water	Water	X	X	X		1	
0418-25 (580-76727-19)	4/18/18	12:50 Pacific	Water	Water	X	X	X		1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed	Deliverable Requested: I, II, III, IV, Other (specify)	Return To Client	Archive For Months
Primary Deliverable Rank: 2		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by:	Date: 4/23/18	Received by:	Date/Time: 04/24/18 08:49
Relinquished by:		Received by:	Date/Time:
Relinquished by:		Received by:	Date/Time:
Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 6.8	
Δ Yes Δ No			

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-76727-1

Login Number: 76727

List Source: TestAmerica Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

DATA VALIDATION REPORT – ISLAND COUNTY CSWF 3Q 2018

Project Details

Project No.	04207033.11	Site Name	Island County Coupeville SWF
Data Validator	Sam Graber	Data Level	Level II
Date	10/2/2018	DV Tier	Tier I
QA Document	CSWF Groundwater Sampling, Analysis, and Quality Assurance Project Plan (Revised September 2007)		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
580-78785-1	Samples arrived in good condition. Due to lab error, specific analyte concentrations (VOCs, TOC, COD, and metals) were reported under the wrong sample ID's. Results for sample 0718-08 were reported for sample 0718-09 and vice versa. SCS corrected this before reporting.	Test America

Analytical Summary

Sample Group	Analyses						
	Metals	Ns, COD	VOCs	Ions/TDS	Alk	TOC	Herbicides
580-78785-1	X	X	X	X	X	X	-

X = Analysis performed on at least one sample in sample group.

- = Analysis not performed on any sample in sample group.

Laboratory Quality Assurance Samples

Lab QA Samples	Results	Comments
Method Blank	Acceptable	No comments.
LCS/LCSD	Acceptable	See case narrative (580-78785-1)
Duplicates	Acceptable	No comments.
MS/MSD	Acceptable	See case narrative (580-78785-1)

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Field Replicates		See below.	See detailed results below.
Trip Blank	580-78785-1	N/A	No Detections.

Detailed Field Replicate Evaluation

Analyte	Units	N2D (0718-03)	N2D DUP (0718-04)	RPD (%)
Alkalinity	mg/L	470	480	2.11
Arsenic	mg/L	0.0032	0.0031	3.17
Barium	mg/L	0.025	0.026	3.92
Bicarbonate Alkalinity as CaCO ₃	mg/L	470	480	2.11
Calcium	mg/L	110	110	0.00
Chemical Oxygen Demand	mg/L	10	10 U	0.00
Chloride	mg/L	68	67	1.48
Magnesium	mg/L	75	76	1.32
Nickel	mg/L	0.0042	0.0042	0.00
Nitrate as N	mg/L	3.2	2.9	9.84
Nitrate Nitrite as N	mg/L	3.2	2.9	9.84
Potassium	mg/L	8.3	8.5	2.38
Sodium	mg/L	40	41	2.47
Sulfate	mg/L	71	69	2.86
Total Dissolved Solids	mg/L	660	620	6.25
Total Organic Carbon	mg/L	2.3	2.4	4.26
Vinyl chloride	ug/L	0.026	0.038	37.50

U = Reporting limit used in place of a non-detection for the given parameter to allow for calculation.

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
*	LCS or LCSD is outside acceptance limits. RPD of the LCS and LCSD exceed the control limits.	580-78785-1
F1	MS and/or MSD Recovery is outside acceptance limits.	580-78785-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	580-78785-1

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-78785-1

Client Project/Site: Coupeville Solid Waste Facility

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
7/26/2018 1:30:58 PM

Kayse Zalmai, Project Manager I
(253)922-2310
kayse.zalmai@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Job ID: 580-78785-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-78785-1

Receipt

The samples were received on 7/12/2018 11:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.4° C, 4.7° C and 5.5° C.

GC/MS VOA

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-278952 was flagged as outside criteria for the following analyte(s): 2-Butanone. After rounding to significant figures the analyte passes criteria.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-278952 recovered outside control limits for the following analytes: cis-1,2-Dichloroethene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 0718-08 (580-78785-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-01

Date Collected: 07/10/18 11:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 19:24	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 19:24	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 19:24	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 19:24	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 19:24	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 19:24	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 19:24	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 19:24	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 19:24	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 19:24	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 19:24	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 19:24	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 19:24	1
2-Butanone	ND		10		ug/L			07/13/18 19:24	1
2-Hexanone	ND		3.0		ug/L			07/13/18 19:24	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 19:24	1
Acetone	ND		6.0		ug/L			07/13/18 19:24	1
Acrylonitrile	ND		10		ug/L			07/13/18 19:24	1
Benzene	ND		0.20		ug/L			07/13/18 19:24	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 19:24	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 19:24	1
Bromoform	ND		0.50		ug/L			07/13/18 19:24	1
Bromomethane	ND		0.50		ug/L			07/13/18 19:24	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 19:24	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 19:24	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 19:24	1
Chloroethane	ND		0.50		ug/L			07/13/18 19:24	1
Chloroform	ND		0.20		ug/L			07/13/18 19:24	1
Chloromethane	ND		0.50		ug/L			07/13/18 19:24	1
cis-1,2-Dichloroethene	ND	*	0.20		ug/L			07/13/18 19:24	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 19:24	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 19:24	1
Dibromomethane	ND		0.20		ug/L			07/13/18 19:24	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 19:24	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 19:24	1
Methyl iodide	ND		0.50		ug/L			07/13/18 19:24	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 19:24	1
o-Xylene	ND		0.50		ug/L			07/13/18 19:24	1
Styrene	ND		0.50		ug/L			07/13/18 19:24	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 19:24	1
Toluene	ND		0.20		ug/L			07/13/18 19:24	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 19:24	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 19:24	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 19:24	1
Trichloroethene	ND		0.20		ug/L			07/13/18 19:24	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 19:24	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 19:24	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 19:24	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-01

Date Collected: 07/10/18 11:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-1

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		07/13/18 19:24	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/13/18 19:24	1
Dibromofluoromethane (Surr)	96		80 - 120		07/13/18 19:24	1
Toluene-d8 (Surr)	100		75 - 125		07/13/18 19:24	1
Trifluorotoluene (Surr)	100		80 - 120		07/13/18 19:24	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-02

Date Collected: 07/10/18 12:00

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 19:50	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 19:50	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 19:50	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 19:50	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 19:50	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 19:50	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 19:50	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 19:50	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 19:50	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 19:50	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 19:50	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 19:50	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 19:50	1
2-Butanone	ND		10		ug/L			07/13/18 19:50	1
2-Hexanone	ND		3.0		ug/L			07/13/18 19:50	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 19:50	1
Acetone	ND		6.0		ug/L			07/13/18 19:50	1
Acrylonitrile	ND		10		ug/L			07/13/18 19:50	1
Benzene	ND		0.20		ug/L			07/13/18 19:50	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 19:50	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 19:50	1
Bromoform	ND		0.50		ug/L			07/13/18 19:50	1
Bromomethane	ND		0.50		ug/L			07/13/18 19:50	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 19:50	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 19:50	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 19:50	1
Chloroethane	ND		0.50		ug/L			07/13/18 19:50	1
Chloroform	ND		0.20		ug/L			07/13/18 19:50	1
Chloromethane	ND		0.50		ug/L			07/13/18 19:50	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 19:50	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 19:50	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 19:50	1
Dibromomethane	ND		0.20		ug/L			07/13/18 19:50	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 19:50	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 19:50	1
Methyl iodide	ND		0.50		ug/L			07/13/18 19:50	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 19:50	1
o-Xylene	ND		0.50		ug/L			07/13/18 19:50	1
Styrene	ND		0.50		ug/L			07/13/18 19:50	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 19:50	1
Toluene	ND		0.20		ug/L			07/13/18 19:50	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 19:50	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 19:50	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 19:50	1
Trichloroethene	ND		0.20		ug/L			07/13/18 19:50	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 19:50	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 19:50	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 19:50	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-02

Date Collected: 07/10/18 12:00

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		07/13/18 19:50	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/13/18 19:50	1
Dibromofluoromethane (Surr)	94		80 - 120		07/13/18 19:50	1
Toluene-d8 (Surr)	102		75 - 125		07/13/18 19:50	1
Trifluorotoluene (Surr)	100		80 - 120		07/13/18 19:50	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140		1.1		mg/L		07/13/18 11:55	07/17/18 13:51	1
Iron	1.4		0.30		mg/L		07/13/18 11:55	07/17/18 13:51	1
Magnesium	68		1.1		mg/L		07/13/18 11:55	07/17/18 13:51	1
Manganese	0.22		0.020		mg/L		07/13/18 11:55	07/17/18 13:51	1
Potassium	7.3		3.3		mg/L		07/13/18 11:55	07/17/18 13:51	1
Sodium	31		2.0		mg/L		07/13/18 11:55	07/17/18 13:51	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Arsenic	0.0061		0.0010		mg/L		07/13/18 11:55	07/16/18 12:57	1
Barium	0.059		0.0012		mg/L		07/13/18 11:55	07/16/18 12:57	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 12:57	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 12:57	1
Nickel	ND		0.0030		mg/L		07/13/18 11:55	07/16/18 12:57	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 12:57	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 12:57	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 12:57	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 19:17	1
Chloride	21		0.90		mg/L			07/12/18 19:17	1
Sulfate	22		1.2		mg/L			07/12/18 19:17	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Nitrate as N	ND		0.15		mg/L			07/25/18 16:24	1
Nitrate Nitrite as N	ND		0.15		mg/L			07/25/18 16:24	1
Nitrite as N	ND		0.15		mg/L			07/25/18 16:24	1
Total Organic Carbon	1.7		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	640		5.0		mg/L			07/17/18 15:00	1
Bicarbonate Alkalinity as CaCO3	640		5.0		mg/L			07/17/18 15:00	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Total Dissolved Solids	600		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	13		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-03

Date Collected: 07/10/18 13:30

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 20:16	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 20:16	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 20:16	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 20:16	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 20:16	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 20:16	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 20:16	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 20:16	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 20:16	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 20:16	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 20:16	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 20:16	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 20:16	1
2-Butanone	ND		10		ug/L			07/13/18 20:16	1
2-Hexanone	ND		3.0		ug/L			07/13/18 20:16	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 20:16	1
Acetone	ND		6.0		ug/L			07/13/18 20:16	1
Acrylonitrile	ND		10		ug/L			07/13/18 20:16	1
Benzene	ND		0.20		ug/L			07/13/18 20:16	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 20:16	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 20:16	1
Bromoform	ND		0.50		ug/L			07/13/18 20:16	1
Bromomethane	ND		0.50		ug/L			07/13/18 20:16	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 20:16	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 20:16	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 20:16	1
Chloroethane	ND		0.50		ug/L			07/13/18 20:16	1
Chloroform	ND		0.20		ug/L			07/13/18 20:16	1
Chloromethane	ND		0.50		ug/L			07/13/18 20:16	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 20:16	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 20:16	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 20:16	1
Dibromomethane	ND		0.20		ug/L			07/13/18 20:16	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 20:16	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 20:16	1
Methyl iodide	ND		0.50		ug/L			07/13/18 20:16	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 20:16	1
o-Xylene	ND		0.50		ug/L			07/13/18 20:16	1
Styrene	ND		0.50		ug/L			07/13/18 20:16	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 20:16	1
Toluene	ND		0.20		ug/L			07/13/18 20:16	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 20:16	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 20:16	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 20:16	1
Trichloroethene	ND		0.20		ug/L			07/13/18 20:16	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 20:16	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 20:16	1
Vinyl chloride	0.026		0.020		ug/L			07/13/18 20:16	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-03

Date Collected: 07/10/18 13:30

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		07/13/18 20:16	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/13/18 20:16	1
Dibromofluoromethane (Surr)	96		80 - 120		07/13/18 20:16	1
Toluene-d8 (Surr)	101		75 - 125		07/13/18 20:16	1
Trifluorotoluene (Surr)	103		80 - 120		07/13/18 20:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		07/13/18 11:55	07/17/18 14:19	1
Iron	ND		0.30		mg/L		07/13/18 11:55	07/17/18 14:19	1
Magnesium	75		1.1		mg/L		07/13/18 11:55	07/17/18 14:19	1
Manganese	ND		0.020		mg/L		07/13/18 11:55	07/17/18 14:19	1
Potassium	8.3		3.3		mg/L		07/13/18 11:55	07/17/18 14:19	1
Sodium	40		2.0		mg/L		07/13/18 11:55	07/17/18 14:19	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Arsenic	0.0032		0.0010		mg/L		07/13/18 11:55	07/16/18 13:02	1
Barium	0.025		0.0012		mg/L		07/13/18 11:55	07/16/18 13:02	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 13:02	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 13:02	1
Nickel	0.0042		0.0030		mg/L		07/13/18 11:55	07/16/18 13:02	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 13:02	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 13:02	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 13:02	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 19:29	1
Chloride	68		0.90		mg/L			07/12/18 19:29	1
Sulfate	71		1.2		mg/L			07/12/18 19:29	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Nitrate as N	3.2		0.30		mg/L			07/25/18 16:25	2
Nitrate Nitrite as N	3.2		0.30		mg/L			07/25/18 16:25	2
Nitrite as N	ND		0.30		mg/L			07/25/18 16:25	2
Total Organic Carbon	2.3		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	470		5.0		mg/L			07/17/18 15:00	1
Bicarbonate Alkalinity as CaCO3	470		5.0		mg/L			07/17/18 15:00	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Total Dissolved Solids	660		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	10		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-04

Date Collected: 07/10/18 13:45

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 20:43	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 20:43	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 20:43	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 20:43	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 20:43	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 20:43	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 20:43	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 20:43	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 20:43	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 20:43	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 20:43	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 20:43	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 20:43	1
2-Butanone	ND		10		ug/L			07/13/18 20:43	1
2-Hexanone	ND		3.0		ug/L			07/13/18 20:43	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 20:43	1
Acetone	ND		6.0		ug/L			07/13/18 20:43	1
Acrylonitrile	ND		10		ug/L			07/13/18 20:43	1
Benzene	ND		0.20		ug/L			07/13/18 20:43	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 20:43	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 20:43	1
Bromoform	ND		0.50		ug/L			07/13/18 20:43	1
Bromomethane	ND		0.50		ug/L			07/13/18 20:43	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 20:43	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 20:43	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 20:43	1
Chloroethane	ND		0.50		ug/L			07/13/18 20:43	1
Chloroform	ND		0.20		ug/L			07/13/18 20:43	1
Chloromethane	ND		0.50		ug/L			07/13/18 20:43	1
cis-1,2-Dichloroethene	ND	*	0.20		ug/L			07/13/18 20:43	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 20:43	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 20:43	1
Dibromomethane	ND		0.20		ug/L			07/13/18 20:43	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 20:43	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 20:43	1
Methyl iodide	ND		0.50		ug/L			07/13/18 20:43	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 20:43	1
o-Xylene	ND		0.50		ug/L			07/13/18 20:43	1
Styrene	ND		0.50		ug/L			07/13/18 20:43	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 20:43	1
Toluene	ND		0.20		ug/L			07/13/18 20:43	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 20:43	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 20:43	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 20:43	1
Trichloroethene	ND		0.20		ug/L			07/13/18 20:43	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 20:43	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 20:43	1
Vinyl chloride	0.038		0.020		ug/L			07/13/18 20:43	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-04

Date Collected: 07/10/18 13:45

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		07/13/18 20:43	1
4-Bromofluorobenzene (Surr)	98		80 - 120		07/13/18 20:43	1
Dibromofluoromethane (Surr)	95		80 - 120		07/13/18 20:43	1
Toluene-d8 (Surr)	101		75 - 125		07/13/18 20:43	1
Trifluorotoluene (Surr)	103		80 - 120		07/13/18 20:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		07/13/18 11:55	07/17/18 14:23	1
Iron	ND		0.30		mg/L		07/13/18 11:55	07/17/18 14:23	1
Magnesium	76		1.1		mg/L		07/13/18 11:55	07/17/18 14:23	1
Manganese	ND		0.020		mg/L		07/13/18 11:55	07/17/18 14:23	1
Potassium	8.5		3.3		mg/L		07/13/18 11:55	07/17/18 14:23	1
Sodium	41		2.0		mg/L		07/13/18 11:55	07/17/18 14:23	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Arsenic	0.0031		0.0010		mg/L		07/13/18 11:55	07/16/18 13:06	1
Barium	0.026		0.0012		mg/L		07/13/18 11:55	07/16/18 13:06	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 13:06	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 13:06	1
Nickel	0.0042		0.0030		mg/L		07/13/18 11:55	07/16/18 13:06	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 13:06	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 13:06	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 13:06	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 19:41	1
Chloride	67		0.90		mg/L			07/12/18 19:41	1
Sulfate	69		1.2		mg/L			07/12/18 19:41	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Nitrate as N	2.9		0.30		mg/L			07/25/18 16:26	2
Nitrate Nitrite as N	2.9		0.30		mg/L			07/25/18 16:26	2
Nitrite as N	ND		0.30		mg/L			07/25/18 16:26	2
Total Organic Carbon	2.4		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	480		5.0		mg/L			07/17/18 15:00	1
Bicarbonate Alkalinity as CaCO3	480		5.0		mg/L			07/17/18 15:00	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Total Dissolved Solids	620		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	ND		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-05

Date Collected: 07/10/18 15:10

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 21:09	1
1,1,1-Trichloroethane	0.36		0.20		ug/L			07/13/18 21:09	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 21:09	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 21:09	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 21:09	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 21:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 21:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 21:09	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 21:09	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 21:09	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 21:09	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 21:09	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 21:09	1
2-Butanone	ND		10		ug/L			07/13/18 21:09	1
2-Hexanone	ND		3.0		ug/L			07/13/18 21:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 21:09	1
Acetone	ND		6.0		ug/L			07/13/18 21:09	1
Acrylonitrile	ND		10		ug/L			07/13/18 21:09	1
Benzene	ND		0.20		ug/L			07/13/18 21:09	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 21:09	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 21:09	1
Bromoform	ND		0.50		ug/L			07/13/18 21:09	1
Bromomethane	ND		0.50		ug/L			07/13/18 21:09	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 21:09	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 21:09	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 21:09	1
Chloroethane	ND		0.50		ug/L			07/13/18 21:09	1
Chloroform	ND		0.20		ug/L			07/13/18 21:09	1
Chloromethane	ND		0.50		ug/L			07/13/18 21:09	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 21:09	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 21:09	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 21:09	1
Dibromomethane	ND		0.20		ug/L			07/13/18 21:09	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 21:09	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 21:09	1
Methyl iodide	ND		0.50		ug/L			07/13/18 21:09	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 21:09	1
o-Xylene	ND		0.50		ug/L			07/13/18 21:09	1
Styrene	ND		0.50		ug/L			07/13/18 21:09	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 21:09	1
Toluene	ND		0.20		ug/L			07/13/18 21:09	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 21:09	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 21:09	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 21:09	1
Trichloroethene	ND		0.20		ug/L			07/13/18 21:09	1
Trichlorofluoromethane	1.9		0.50		ug/L			07/13/18 21:09	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 21:09	1
Vinyl chloride	19		0.020		ug/L			07/13/18 21:09	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-05

Date Collected: 07/10/18 15:10

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-5

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		07/13/18 21:09	1
4-Bromofluorobenzene (Surr)	100		80 - 120		07/13/18 21:09	1
Dibromofluoromethane (Surr)	96		80 - 120		07/13/18 21:09	1
Toluene-d8 (Surr)	102		75 - 125		07/13/18 21:09	1
Trifluorotoluene (Surr)	102		80 - 120		07/13/18 21:09	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-06

Date Collected: 07/10/18 16:03

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 21:36	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 21:36	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 21:36	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 21:36	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 21:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 21:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 21:36	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 21:36	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 21:36	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 21:36	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 21:36	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 21:36	1
2-Butanone	ND		10		ug/L			07/13/18 21:36	1
2-Hexanone	ND		3.0		ug/L			07/13/18 21:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 21:36	1
Acetone	ND		6.0		ug/L			07/13/18 21:36	1
Acrylonitrile	ND		10		ug/L			07/13/18 21:36	1
Benzene	ND		0.20		ug/L			07/13/18 21:36	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 21:36	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 21:36	1
Bromoform	ND		0.50		ug/L			07/13/18 21:36	1
Bromomethane	ND		0.50		ug/L			07/13/18 21:36	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 21:36	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 21:36	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 21:36	1
Chloroethane	ND		0.50		ug/L			07/13/18 21:36	1
Chloroform	ND		0.20		ug/L			07/13/18 21:36	1
Chloromethane	ND		0.50		ug/L			07/13/18 21:36	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 21:36	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 21:36	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 21:36	1
Dibromomethane	ND		0.20		ug/L			07/13/18 21:36	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 21:36	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 21:36	1
Methyl iodide	ND		0.50		ug/L			07/13/18 21:36	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 21:36	1
o-Xylene	ND		0.50		ug/L			07/13/18 21:36	1
Styrene	ND		0.50		ug/L			07/13/18 21:36	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 21:36	1
Toluene	ND		0.20		ug/L			07/13/18 21:36	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 21:36	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 21:36	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 21:36	1
Trichloroethene	ND		0.20		ug/L			07/13/18 21:36	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 21:36	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 21:36	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 21:36	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-06

Date Collected: 07/10/18 16:03

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		07/13/18 21:36	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/13/18 21:36	1
Dibromofluoromethane (Surr)	97		80 - 120		07/13/18 21:36	1
Toluene-d8 (Surr)	103		75 - 125		07/13/18 21:36	1
Trifluorotoluene (Surr)	103		80 - 120		07/13/18 21:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	51		1.1		mg/L		07/13/18 11:55	07/17/18 14:26	1
Iron	1.4		0.30		mg/L		07/13/18 11:55	07/17/18 14:26	1
Magnesium	27		1.1		mg/L		07/13/18 11:55	07/17/18 14:26	1
Manganese	0.33		0.020		mg/L		07/13/18 11:55	07/17/18 14:26	1
Potassium	6.4		3.3		mg/L		07/13/18 11:55	07/17/18 14:26	1
Sodium	26		2.0		mg/L		07/13/18 11:55	07/17/18 14:26	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Arsenic	0.0030		0.0010		mg/L		07/13/18 11:55	07/16/18 13:10	1
Barium	0.075		0.0012		mg/L		07/13/18 11:55	07/16/18 13:10	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 13:10	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 13:10	1
Nickel	ND		0.0030		mg/L		07/13/18 11:55	07/16/18 13:10	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 13:10	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 13:10	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 13:10	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 19:53	1
Chloride	14		0.90		mg/L			07/12/18 19:53	1
Sulfate	27		1.2		mg/L			07/12/18 19:53	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Nitrate as N	ND		0.15		mg/L			07/25/18 16:27	1
Nitrate Nitrite as N	ND		0.15		mg/L			07/25/18 16:27	1
Nitrite as N	ND		0.15		mg/L			07/25/18 16:27	1
Total Organic Carbon	1.3		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	240		5.0		mg/L			07/17/18 15:00	1
Bicarbonate Alkalinity as CaCO3	240		5.0		mg/L			07/17/18 15:00	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/17/18 15:00	1
Total Dissolved Solids	310		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	ND		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-07

Date Collected: 07/10/18 17:15

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 22:02	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 22:02	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 22:02	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 22:02	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 22:02	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 22:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 22:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 22:02	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 22:02	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:02	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 22:02	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 22:02	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:02	1
2-Butanone	ND		10		ug/L			07/13/18 22:02	1
2-Hexanone	ND		3.0		ug/L			07/13/18 22:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 22:02	1
Acetone	ND		6.0		ug/L			07/13/18 22:02	1
Acrylonitrile	ND		10		ug/L			07/13/18 22:02	1
Benzene	ND		0.20		ug/L			07/13/18 22:02	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 22:02	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 22:02	1
Bromoform	ND		0.50		ug/L			07/13/18 22:02	1
Bromomethane	ND		0.50		ug/L			07/13/18 22:02	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 22:02	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 22:02	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 22:02	1
Chloroethane	ND		0.50		ug/L			07/13/18 22:02	1
Chloroform	ND		0.20		ug/L			07/13/18 22:02	1
Chloromethane	ND		0.50		ug/L			07/13/18 22:02	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 22:02	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:02	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 22:02	1
Dibromomethane	ND		0.20		ug/L			07/13/18 22:02	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 22:02	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 22:02	1
Methyl iodide	ND		0.50		ug/L			07/13/18 22:02	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 22:02	1
o-Xylene	ND		0.50		ug/L			07/13/18 22:02	1
Styrene	ND		0.50		ug/L			07/13/18 22:02	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 22:02	1
Toluene	ND		0.20		ug/L			07/13/18 22:02	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 22:02	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:02	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 22:02	1
Trichloroethene	ND		0.20		ug/L			07/13/18 22:02	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 22:02	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 22:02	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 22:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-07

Date Collected: 07/10/18 17:15

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/13/18 22:02	1
4-Bromofluorobenzene (Surr)	98		80 - 120		07/13/18 22:02	1
Dibromofluoromethane (Surr)	97		80 - 120		07/13/18 22:02	1
Toluene-d8 (Surr)	100		75 - 125		07/13/18 22:02	1
Trifluorotoluene (Surr)	98		80 - 120		07/13/18 22:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	61		1.1		mg/L		07/13/18 13:52	07/16/18 13:02	1
Iron	0.32		0.30		mg/L		07/13/18 13:52	07/16/18 13:02	1
Magnesium	31		1.1		mg/L		07/13/18 13:52	07/16/18 13:02	1
Manganese	0.73		0.020		mg/L		07/13/18 13:52	07/16/18 13:02	1
Potassium	6.4		3.3		mg/L		07/13/18 13:52	07/16/18 13:02	1
Sodium	42		2.0		mg/L		07/13/18 13:52	07/16/18 13:02	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Arsenic	0.0012		0.0010		mg/L		07/13/18 11:55	07/16/18 13:14	1
Barium	0.075		0.0012		mg/L		07/13/18 11:55	07/16/18 13:14	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 13:14	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 13:14	1
Nickel	ND		0.0030		mg/L		07/13/18 11:55	07/16/18 13:14	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 13:14	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 13:14	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 13:14	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 16:45	1
Nitrate Nitrite as N	ND		0.40		mg/L			07/12/18 16:45	1
Chloride	22		0.90		mg/L			07/12/18 16:45	1
Sulfate	36		1.2		mg/L			07/12/18 16:45	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Total Organic Carbon	3.6		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	280		5.0		mg/L			07/18/18 10:51	1
Bicarbonate Alkalinity as CaCO3	280		5.0		mg/L			07/18/18 10:51	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Total Dissolved Solids	350		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	19		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-08

Date Collected: 07/10/18 18:50

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 22:29	1
1,1,1-Trichloroethane	0.80		0.20		ug/L			07/13/18 22:29	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 22:29	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 22:29	1
1,1-Dichloroethane	2.8		0.20		ug/L			07/13/18 22:29	1
1,1-Dichloroethene	1.8		0.20		ug/L			07/13/18 22:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 22:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 22:29	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 22:29	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:29	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 22:29	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 22:29	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:29	1
2-Butanone	ND		10		ug/L			07/13/18 22:29	1
2-Hexanone	ND		3.0		ug/L			07/13/18 22:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 22:29	1
Acetone	ND		6.0		ug/L			07/13/18 22:29	1
Acrylonitrile	ND		10		ug/L			07/13/18 22:29	1
Benzene	ND		0.20		ug/L			07/13/18 22:29	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 22:29	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 22:29	1
Bromoform	ND		0.50		ug/L			07/13/18 22:29	1
Bromomethane	ND		0.50		ug/L			07/13/18 22:29	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 22:29	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 22:29	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 22:29	1
Chloroethane	ND		0.50		ug/L			07/13/18 22:29	1
Chloroform	ND		0.20		ug/L			07/13/18 22:29	1
Chloromethane	ND		0.50		ug/L			07/13/18 22:29	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 22:29	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:29	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 22:29	1
Dibromomethane	ND		0.20		ug/L			07/13/18 22:29	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 22:29	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 22:29	1
Methyl iodide	ND		0.50		ug/L			07/13/18 22:29	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 22:29	1
o-Xylene	ND		0.50		ug/L			07/13/18 22:29	1
Styrene	ND		0.50		ug/L			07/13/18 22:29	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 22:29	1
Toluene	ND		0.20		ug/L			07/13/18 22:29	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 22:29	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:29	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 22:29	1
Trichloroethene	ND		0.20		ug/L			07/13/18 22:29	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 22:29	1
Vinyl chloride	3.7		0.020		ug/L			07/13/18 22:29	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-08

Date Collected: 07/10/18 18:50

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/13/18 22:29	1
4-Bromofluorobenzene (Surr)	100		80 - 120		07/13/18 22:29	1
Dibromofluoromethane (Surr)	96		80 - 120		07/13/18 22:29	1
Toluene-d8 (Surr)	100		75 - 125		07/13/18 22:29	1
Trifluorotoluene (Surr)	100		80 - 120		07/13/18 22:29	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	56		5.0		ug/L			07/16/18 15:22	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/16/18 15:22	10
4-Bromofluorobenzene (Surr)	99		80 - 120		07/16/18 15:22	10
Dibromofluoromethane (Surr)	96		80 - 120		07/16/18 15:22	10
Toluene-d8 (Surr)	101		75 - 125		07/16/18 15:22	10
Trifluorotoluene (Surr)	105		80 - 120		07/16/18 15:22	10

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250		1.1		mg/L		07/13/18 13:52	07/16/18 13:05	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 13:05	1
Magnesium	110		1.1		mg/L		07/13/18 13:52	07/16/18 13:05	1
Manganese	0.69		0.020		mg/L		07/13/18 13:52	07/16/18 13:05	1
Potassium	9.7		3.3		mg/L		07/13/18 13:52	07/16/18 13:05	1
Sodium	36		2.0		mg/L		07/13/18 13:52	07/16/18 13:05	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Arsenic	0.0022		0.0010		mg/L		07/13/18 11:55	07/16/18 13:18	1
Barium	0.052		0.0012		mg/L		07/13/18 11:55	07/16/18 13:18	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Cobalt	0.0022		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 13:18	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 13:18	1
Nickel	0.023		0.0030		mg/L		07/13/18 11:55	07/16/18 13:18	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 13:18	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 13:18	1
Vanadium	0.0042		0.0040		mg/L		07/13/18 11:55	07/16/18 13:18	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 16:57	1
Nitrate Nitrite as N	ND		0.40		mg/L			07/12/18 16:57	1
Chloride	67		0.90		mg/L			07/12/18 16:57	1
Sulfate	54		1.2		mg/L			07/12/18 16:57	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-08

Date Collected: 07/10/18 18:50

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-8

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	14		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	280		5.0		mg/L			07/18/18 10:51	1
Bicarbonate Alkalinity as CaCO3	280		5.0		mg/L			07/18/18 10:51	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Total Dissolved Solids	470		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	45		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-09

Date Collected: 07/11/18 09:40

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 22:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 22:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 22:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 22:55	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 22:55	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 22:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 22:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 22:55	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 22:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:55	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 22:55	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 22:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 22:55	1
2-Butanone	ND		10		ug/L			07/13/18 22:55	1
2-Hexanone	ND		3.0		ug/L			07/13/18 22:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 22:55	1
Acetone	ND		6.0		ug/L			07/13/18 22:55	1
Acrylonitrile	ND		10		ug/L			07/13/18 22:55	1
Benzene	ND		0.20		ug/L			07/13/18 22:55	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 22:55	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 22:55	1
Bromoform	ND		0.50		ug/L			07/13/18 22:55	1
Bromomethane	ND		0.50		ug/L			07/13/18 22:55	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 22:55	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 22:55	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 22:55	1
Chloroethane	ND		0.50		ug/L			07/13/18 22:55	1
Chloroform	ND		0.20		ug/L			07/13/18 22:55	1
Chloromethane	ND		0.50		ug/L			07/13/18 22:55	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 22:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:55	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 22:55	1
Dibromomethane	ND		0.20		ug/L			07/13/18 22:55	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 22:55	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 22:55	1
Methyl iodide	ND		0.50		ug/L			07/13/18 22:55	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 22:55	1
o-Xylene	ND		0.50		ug/L			07/13/18 22:55	1
Styrene	ND		0.50		ug/L			07/13/18 22:55	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 22:55	1
Toluene	ND		0.20		ug/L			07/13/18 22:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 22:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 22:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 22:55	1
Trichloroethene	ND		0.20		ug/L			07/13/18 22:55	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 22:55	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 22:55	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 22:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-09

Date Collected: 07/11/18 09:40

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		07/13/18 22:55	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/13/18 22:55	1
Dibromofluoromethane (Surr)	98		80 - 120		07/13/18 22:55	1
Toluene-d8 (Surr)	99		75 - 125		07/13/18 22:55	1
Trifluorotoluene (Surr)	95		80 - 120		07/13/18 22:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	84		1.1		mg/L		07/13/18 13:52	07/16/18 13:08	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 13:08	1
Magnesium	47		1.1		mg/L		07/13/18 13:52	07/16/18 13:08	1
Manganese	ND		0.020		mg/L		07/13/18 13:52	07/16/18 13:08	1
Potassium	5.8		3.3		mg/L		07/13/18 13:52	07/16/18 13:08	1
Sodium	30		2.0		mg/L		07/13/18 13:52	07/16/18 13:08	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Arsenic	0.0035		0.0010		mg/L		07/13/18 14:20	07/16/18 18:56	1
Barium	0.019		0.0012		mg/L		07/13/18 14:20	07/16/18 18:56	1
Beryllium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Cadmium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Chromium	0.0029		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Cobalt	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Copper	0.0022		0.0020		mg/L		07/13/18 14:20	07/16/18 18:56	1
Lead	ND		0.00080		mg/L		07/13/18 14:20	07/16/18 18:56	1
Nickel	ND		0.0030		mg/L		07/13/18 14:20	07/16/18 18:56	1
Selenium	ND		0.0080		mg/L		07/13/18 14:20	07/16/18 18:56	1
Silver	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Thallium	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 18:56	1
Vanadium	0.0068		0.0040		mg/L		07/13/18 14:20	07/16/18 18:56	1
Zinc	ND		0.0070		mg/L		07/13/18 14:20	07/16/18 18:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	F1	0.20		mg/L			07/12/18 17:09	1
Nitrate Nitrite as N	ND	F1	0.40		mg/L			07/12/18 17:09	1
Chloride	42		0.90		mg/L			07/12/18 17:09	1
Sulfate	150		6.0		mg/L			07/13/18 11:53	5
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Total Organic Carbon	2.1		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	810		5.0		mg/L			07/18/18 10:51	1
Bicarbonate Alkalinity as CaCO3	810		5.0		mg/L			07/18/18 10:51	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/18/18 10:51	1
Total Dissolved Solids	910		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	ND		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-10

Date Collected: 07/11/18 10:55

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 23:22	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 23:22	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 23:22	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 23:22	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 23:22	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 23:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 23:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 23:22	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 23:22	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 23:22	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 23:22	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 23:22	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 23:22	1
2-Butanone	ND		10		ug/L			07/13/18 23:22	1
2-Hexanone	ND		3.0		ug/L			07/13/18 23:22	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 23:22	1
Acetone	ND		6.0		ug/L			07/13/18 23:22	1
Acrylonitrile	ND		10		ug/L			07/13/18 23:22	1
Benzene	ND		0.20		ug/L			07/13/18 23:22	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 23:22	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 23:22	1
Bromoform	ND		0.50		ug/L			07/13/18 23:22	1
Bromomethane	ND		0.50		ug/L			07/13/18 23:22	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 23:22	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 23:22	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 23:22	1
Chloroethane	ND		0.50		ug/L			07/13/18 23:22	1
Chloroform	ND		0.20		ug/L			07/13/18 23:22	1
Chloromethane	ND		0.50		ug/L			07/13/18 23:22	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 23:22	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 23:22	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 23:22	1
Dibromomethane	ND		0.20		ug/L			07/13/18 23:22	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 23:22	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 23:22	1
Methyl iodide	ND		0.50		ug/L			07/13/18 23:22	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 23:22	1
o-Xylene	ND		0.50		ug/L			07/13/18 23:22	1
Styrene	ND		0.50		ug/L			07/13/18 23:22	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 23:22	1
Toluene	ND		0.20		ug/L			07/13/18 23:22	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 23:22	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 23:22	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 23:22	1
Trichloroethene	ND		0.20		ug/L			07/13/18 23:22	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 23:22	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 23:22	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 23:22	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-10

Date Collected: 07/11/18 10:55

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		07/13/18 23:22	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/13/18 23:22	1
Dibromofluoromethane (Surr)	97		80 - 120		07/13/18 23:22	1
Toluene-d8 (Surr)	101		75 - 125		07/13/18 23:22	1
Trifluorotoluene (Surr)	99		80 - 120		07/13/18 23:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		07/13/18 13:52	07/16/18 12:34	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 12:34	1
Magnesium	59		1.1		mg/L		07/13/18 13:52	07/16/18 12:34	1
Manganese	0.091		0.020		mg/L		07/13/18 13:52	07/16/18 12:34	1
Potassium	7.7		3.3		mg/L		07/13/18 13:52	07/16/18 12:34	1
Sodium	30		2.0		mg/L		07/13/18 13:52	07/16/18 12:34	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Arsenic	0.0054		0.0010		mg/L		07/13/18 14:20	07/16/18 19:00	1
Barium	0.045		0.0012		mg/L		07/13/18 14:20	07/16/18 19:00	1
Beryllium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Cadmium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Chromium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Cobalt	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Copper	ND		0.0020		mg/L		07/13/18 14:20	07/16/18 19:00	1
Lead	ND		0.00080		mg/L		07/13/18 14:20	07/16/18 19:00	1
Nickel	ND		0.0030		mg/L		07/13/18 14:20	07/16/18 19:00	1
Selenium	ND		0.0080		mg/L		07/13/18 14:20	07/16/18 19:00	1
Silver	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Thallium	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 19:00	1
Vanadium	ND		0.0040		mg/L		07/13/18 14:20	07/16/18 19:00	1
Zinc	ND		0.0070		mg/L		07/13/18 14:20	07/16/18 19:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 17:44	1
Nitrate Nitrite as N	ND		0.40		mg/L			07/12/18 17:44	1
Chloride	61		0.90		mg/L			07/12/18 17:44	1
Sulfate	45		1.2		mg/L			07/12/18 17:44	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Total Organic Carbon	1.7		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			07/21/18 16:46	1
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L			07/21/18 16:46	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Total Dissolved Solids	550		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	15		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-11

Date Collected: 07/11/18 12:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 23:48	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 23:48	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 23:48	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 23:48	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 23:48	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 23:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 23:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 23:48	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 23:48	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 23:48	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 23:48	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 23:48	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 23:48	1
2-Butanone	ND		10		ug/L			07/13/18 23:48	1
2-Hexanone	ND		3.0		ug/L			07/13/18 23:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 23:48	1
Acetone	ND		6.0		ug/L			07/13/18 23:48	1
Acrylonitrile	ND		10		ug/L			07/13/18 23:48	1
Benzene	ND		0.20		ug/L			07/13/18 23:48	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 23:48	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 23:48	1
Bromoform	ND		0.50		ug/L			07/13/18 23:48	1
Bromomethane	ND		0.50		ug/L			07/13/18 23:48	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 23:48	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 23:48	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 23:48	1
Chloroethane	ND		0.50		ug/L			07/13/18 23:48	1
Chloroform	ND		0.20		ug/L			07/13/18 23:48	1
Chloromethane	ND		0.50		ug/L			07/13/18 23:48	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/13/18 23:48	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 23:48	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 23:48	1
Dibromomethane	ND		0.20		ug/L			07/13/18 23:48	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 23:48	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 23:48	1
Methyl iodide	ND		0.50		ug/L			07/13/18 23:48	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 23:48	1
o-Xylene	ND		0.50		ug/L			07/13/18 23:48	1
Styrene	ND		0.50		ug/L			07/13/18 23:48	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 23:48	1
Toluene	ND		0.20		ug/L			07/13/18 23:48	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 23:48	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 23:48	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 23:48	1
Trichloroethene	ND		0.20		ug/L			07/13/18 23:48	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 23:48	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 23:48	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 23:48	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-11

Date Collected: 07/11/18 12:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/13/18 23:48	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/13/18 23:48	1
Dibromofluoromethane (Surr)	96		80 - 120		07/13/18 23:48	1
Toluene-d8 (Surr)	101		75 - 125		07/13/18 23:48	1
Trifluorotoluene (Surr)	102		80 - 120		07/13/18 23:48	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33		1.1		mg/L		07/13/18 13:52	07/16/18 13:12	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 13:12	1
Magnesium	36		1.1		mg/L		07/13/18 13:52	07/16/18 13:12	1
Manganese	0.055		0.020		mg/L		07/13/18 13:52	07/16/18 13:12	1
Potassium	16		3.3		mg/L		07/13/18 13:52	07/16/18 13:12	1
Sodium	17		2.0		mg/L		07/13/18 13:52	07/16/18 13:12	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Arsenic	0.020		0.0010		mg/L		07/13/18 14:20	07/16/18 19:04	1
Barium	0.028		0.0012		mg/L		07/13/18 14:20	07/16/18 19:04	1
Beryllium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Cadmium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Chromium	0.00070		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Cobalt	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Copper	ND		0.0020		mg/L		07/13/18 14:20	07/16/18 19:04	1
Lead	ND		0.00080		mg/L		07/13/18 14:20	07/16/18 19:04	1
Nickel	ND		0.0030		mg/L		07/13/18 14:20	07/16/18 19:04	1
Selenium	ND		0.0080		mg/L		07/13/18 14:20	07/16/18 19:04	1
Silver	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Thallium	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 19:04	1
Vanadium	ND		0.0040		mg/L		07/13/18 14:20	07/16/18 19:04	1
Zinc	ND		0.0070		mg/L		07/13/18 14:20	07/16/18 19:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 17:56	1
Nitrate Nitrite as N	ND		0.40		mg/L			07/12/18 17:56	1
Chloride	42		0.90		mg/L			07/12/18 17:56	1
Sulfate	21		1.2		mg/L			07/12/18 17:56	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Total Organic Carbon	1.5		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	190		5.0		mg/L			07/21/18 16:46	1
Bicarbonate Alkalinity as CaCO3	190		5.0		mg/L			07/21/18 16:46	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Total Dissolved Solids	250		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	12		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-12

Date Collected: 07/11/18 13:35

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/14/18 00:15	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/14/18 00:15	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/14/18 00:15	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/14/18 00:15	1
1,1-Dichloroethane	ND		0.20		ug/L			07/14/18 00:15	1
1,1-Dichloroethene	ND		0.20		ug/L			07/14/18 00:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/14/18 00:15	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/14/18 00:15	1
1,2-Dibromoethane	ND		0.10		ug/L			07/14/18 00:15	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/14/18 00:15	1
1,2-Dichloroethane	ND		0.20		ug/L			07/14/18 00:15	1
1,2-Dichloropropane	ND		0.20		ug/L			07/14/18 00:15	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/14/18 00:15	1
2-Butanone	ND		10		ug/L			07/14/18 00:15	1
2-Hexanone	ND		3.0		ug/L			07/14/18 00:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/14/18 00:15	1
Acetone	ND		6.0		ug/L			07/14/18 00:15	1
Acrylonitrile	ND		10		ug/L			07/14/18 00:15	1
Benzene	ND		0.20		ug/L			07/14/18 00:15	1
Bromochloromethane	ND		0.20		ug/L			07/14/18 00:15	1
Bromodichloromethane	ND		0.20		ug/L			07/14/18 00:15	1
Bromoform	ND		0.50		ug/L			07/14/18 00:15	1
Bromomethane	ND		0.50		ug/L			07/14/18 00:15	1
Carbon disulfide	ND		0.30		ug/L			07/14/18 00:15	1
Carbon tetrachloride	ND		0.20		ug/L			07/14/18 00:15	1
Chlorobenzene	ND		0.20		ug/L			07/14/18 00:15	1
Chloroethane	ND		0.50		ug/L			07/14/18 00:15	1
Chloroform	ND		0.20		ug/L			07/14/18 00:15	1
Chloromethane	ND		0.50		ug/L			07/14/18 00:15	1
cis-1,2-Dichloroethene	ND *		0.20		ug/L			07/14/18 00:15	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/14/18 00:15	1
Dibromochloromethane	ND		0.20		ug/L			07/14/18 00:15	1
Dibromomethane	ND		0.20		ug/L			07/14/18 00:15	1
Ethylbenzene	ND		0.20		ug/L			07/14/18 00:15	1
m,p-Xylene	ND		0.50		ug/L			07/14/18 00:15	1
Methyl iodide	ND		0.50		ug/L			07/14/18 00:15	1
Methylene Chloride	ND		5.0		ug/L			07/14/18 00:15	1
o-Xylene	ND		0.50		ug/L			07/14/18 00:15	1
Styrene	ND		0.50		ug/L			07/14/18 00:15	1
Tetrachloroethene	ND		0.50		ug/L			07/14/18 00:15	1
Toluene	ND		0.20		ug/L			07/14/18 00:15	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/14/18 00:15	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/14/18 00:15	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/14/18 00:15	1
Trichloroethene	ND		0.20		ug/L			07/14/18 00:15	1
Trichlorofluoromethane	ND		0.50		ug/L			07/14/18 00:15	1
Vinyl acetate	ND		1.0		ug/L			07/14/18 00:15	1
Vinyl chloride	ND		0.020		ug/L			07/14/18 00:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-12

Date Collected: 07/11/18 13:35

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-12

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		07/14/18 00:15	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/14/18 00:15	1
Dibromofluoromethane (Surr)	98		80 - 120		07/14/18 00:15	1
Toluene-d8 (Surr)	99		75 - 125		07/14/18 00:15	1
Trifluorotoluene (Surr)	98		80 - 120		07/14/18 00:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	89		1.1		mg/L		07/13/18 13:52	07/16/18 13:15	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 13:15	1
Magnesium	52		1.1		mg/L		07/13/18 13:52	07/16/18 13:15	1
Manganese	ND		0.020		mg/L		07/13/18 13:52	07/16/18 13:15	1
Potassium	6.0		3.3		mg/L		07/13/18 13:52	07/16/18 13:15	1
Sodium	35		2.0		mg/L		07/13/18 13:52	07/16/18 13:15	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Arsenic	0.0033		0.0010		mg/L		07/13/18 14:20	07/16/18 19:08	1
Barium	0.021		0.0012		mg/L		07/13/18 14:20	07/16/18 19:08	1
Beryllium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Cadmium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Chromium	0.0014		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Cobalt	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Copper	0.048		0.0020		mg/L		07/13/18 14:20	07/16/18 19:08	1
Lead	ND		0.00080		mg/L		07/13/18 14:20	07/16/18 19:08	1
Nickel	ND		0.0030		mg/L		07/13/18 14:20	07/16/18 19:08	1
Selenium	ND		0.0080		mg/L		07/13/18 14:20	07/16/18 19:08	1
Silver	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Thallium	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 19:08	1
Vanadium	ND		0.0040		mg/L		07/13/18 14:20	07/16/18 19:08	1
Zinc	0.074		0.0070		mg/L		07/13/18 14:20	07/16/18 19:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 18:07	1
Nitrate Nitrite as N	1.5		0.40		mg/L			07/12/18 18:07	1
Chloride	57		0.90		mg/L			07/12/18 18:07	1
Sulfate	46		1.2		mg/L			07/12/18 18:07	1
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1
Total Organic Carbon	2.0		1.0		mg/L			07/17/18 03:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			07/21/18 16:46	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			07/21/18 16:46	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			07/21/18 16:46	1
Total Dissolved Solids	460		10		mg/L			07/15/18 11:04	1
Chemical Oxygen Demand	ND		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: Trip Blank

Date Collected: 07/11/18 00:01

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 18:57	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 18:57	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 18:57	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 18:57	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 18:57	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 18:57	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 18:57	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 18:57	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 18:57	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 18:57	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 18:57	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 18:57	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 18:57	1
2-Butanone	ND		10		ug/L			07/13/18 18:57	1
2-Hexanone	ND		3.0		ug/L			07/13/18 18:57	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 18:57	1
Acetone	ND		6.0		ug/L			07/13/18 18:57	1
Acrylonitrile	ND		10		ug/L			07/13/18 18:57	1
Benzene	ND		0.20		ug/L			07/13/18 18:57	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 18:57	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 18:57	1
Bromoform	ND		0.50		ug/L			07/13/18 18:57	1
Bromomethane	ND		0.50		ug/L			07/13/18 18:57	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 18:57	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 18:57	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 18:57	1
Chloroethane	ND		0.50		ug/L			07/13/18 18:57	1
Chloroform	ND		0.20		ug/L			07/13/18 18:57	1
Chloromethane	ND		0.50		ug/L			07/13/18 18:57	1
cis-1,2-Dichloroethene	ND	*	0.20		ug/L			07/13/18 18:57	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 18:57	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 18:57	1
Dibromomethane	ND		0.20		ug/L			07/13/18 18:57	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 18:57	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 18:57	1
Methyl iodide	ND		0.50		ug/L			07/13/18 18:57	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 18:57	1
o-Xylene	ND		0.50		ug/L			07/13/18 18:57	1
Styrene	ND		0.50		ug/L			07/13/18 18:57	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 18:57	1
Toluene	ND		0.20		ug/L			07/13/18 18:57	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 18:57	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 18:57	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 18:57	1
Trichloroethene	ND		0.20		ug/L			07/13/18 18:57	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 18:57	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 18:57	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 18:57	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-78785-13

Date Collected: 07/11/18 00:01

Matrix: Water

Date Received: 07/12/18 11:05

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		07/13/18 18:57	1
4-Bromofluorobenzene (Surr)	100		80 - 120		07/13/18 18:57	1
Dibromofluoromethane (Surr)	92		80 - 120		07/13/18 18:57	1
Toluene-d8 (Surr)	105		75 - 125		07/13/18 18:57	1
Trifluorotoluene (Surr)	104		80 - 120		07/13/18 18:57	1

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-278952/7

Matrix: Water

Analysis Batch: 278952

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			07/13/18 15:19	1
1,1,1-Trichloroethane	ND		0.20		ug/L			07/13/18 15:19	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			07/13/18 15:19	1
1,1,2-Trichloroethane	ND		0.20		ug/L			07/13/18 15:19	1
1,1-Dichloroethane	ND		0.20		ug/L			07/13/18 15:19	1
1,1-Dichloroethene	ND		0.20		ug/L			07/13/18 15:19	1
1,2,3-Trichloropropane	ND		0.20		ug/L			07/13/18 15:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			07/13/18 15:19	1
1,2-Dibromoethane	ND		0.10		ug/L			07/13/18 15:19	1
1,2-Dichlorobenzene	ND		0.30		ug/L			07/13/18 15:19	1
1,2-Dichloroethane	ND		0.20		ug/L			07/13/18 15:19	1
1,2-Dichloropropane	ND		0.20		ug/L			07/13/18 15:19	1
1,4-Dichlorobenzene	ND		0.30		ug/L			07/13/18 15:19	1
2-Butanone	ND		10		ug/L			07/13/18 15:19	1
2-Hexanone	ND		3.0		ug/L			07/13/18 15:19	1
4-Methyl-2-pentanone	ND		5.0		ug/L			07/13/18 15:19	1
Acetone	ND		6.0		ug/L			07/13/18 15:19	1
Acrylonitrile	ND		10		ug/L			07/13/18 15:19	1
Benzene	ND		0.20		ug/L			07/13/18 15:19	1
Bromochloromethane	ND		0.20		ug/L			07/13/18 15:19	1
Bromodichloromethane	ND		0.20		ug/L			07/13/18 15:19	1
Bromoform	ND		0.50		ug/L			07/13/18 15:19	1
Bromomethane	ND		0.50		ug/L			07/13/18 15:19	1
Carbon disulfide	ND		0.30		ug/L			07/13/18 15:19	1
Carbon tetrachloride	ND		0.20		ug/L			07/13/18 15:19	1
Chlorobenzene	ND		0.20		ug/L			07/13/18 15:19	1
Chloroethane	ND		0.50		ug/L			07/13/18 15:19	1
Chloroform	ND		0.20		ug/L			07/13/18 15:19	1
Chloromethane	ND		0.50		ug/L			07/13/18 15:19	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 15:19	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 15:19	1
Dibromochloromethane	ND		0.20		ug/L			07/13/18 15:19	1
Dibromomethane	ND		0.20		ug/L			07/13/18 15:19	1
Ethylbenzene	ND		0.20		ug/L			07/13/18 15:19	1
m,p-Xylene	ND		0.50		ug/L			07/13/18 15:19	1
Methyl iodide	ND		0.50		ug/L			07/13/18 15:19	1
Methylene Chloride	ND		5.0		ug/L			07/13/18 15:19	1
o-Xylene	ND		0.50		ug/L			07/13/18 15:19	1
Styrene	ND		0.50		ug/L			07/13/18 15:19	1
Tetrachloroethene	ND		0.50		ug/L			07/13/18 15:19	1
Toluene	ND		0.20		ug/L			07/13/18 15:19	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			07/13/18 15:19	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			07/13/18 15:19	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			07/13/18 15:19	1
Trichloroethene	ND		0.20		ug/L			07/13/18 15:19	1
Trichlorofluoromethane	ND		0.50		ug/L			07/13/18 15:19	1
Vinyl acetate	ND		1.0		ug/L			07/13/18 15:19	1
Vinyl chloride	ND		0.020		ug/L			07/13/18 15:19	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/13/18 15:19	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/13/18 15:19	1
Dibromofluoromethane (Surr)	103		80 - 120		07/13/18 15:19	1
Toluene-d8 (Surr)	101		75 - 125		07/13/18 15:19	1
Trifluorotoluene (Surr)	102		80 - 120		07/13/18 15:19	1

Lab Sample ID: LCS 580-278952/4

Matrix: Water

Analysis Batch: 278952

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.94		ug/L		119	79 - 139
1,1,1-Trichloroethane	5.00	5.98		ug/L		120	74 - 137
1,1,2,2-Tetrachloroethane	5.00	5.97		ug/L		119	69 - 147
1,1,2-Trichloroethane	5.00	5.65		ug/L		113	80 - 127
1,1-Dichloroethane	5.00	6.15		ug/L		123	80 - 135
1,1-Dichloroethene	5.00	5.96		ug/L		119	71 - 134
1,2,3-Trichloropropane	5.00	5.65		ug/L		113	80 - 127
1,2-Dibromo-3-Chloropropane	5.00	5.80		ug/L		116	69 - 130
1,2-Dibromoethane	5.00	5.60		ug/L		112	80 - 126
1,2-Dichlorobenzene	5.00	5.93		ug/L		119	80 - 129
1,2-Dichloroethane	5.00	5.70		ug/L		114	80 - 130
1,2-Dichloropropane	5.00	5.48		ug/L		110	80 - 130
1,4-Dichlorobenzene	5.00	5.74		ug/L		115	80 - 129
2-Butanone	25.0	19.0		ug/L		76	64 - 144
2-Hexanone	25.0	32.1		ug/L		129	77 - 144
4-Methyl-2-pentanone	25.0	31.1		ug/L		124	78 - 137
Acetone	25.0	17.9		ug/L		72	43 - 150
Acrylonitrile	50.0	46.7		ug/L		93	67 - 148
Benzene	5.00	5.88		ug/L		118	73 - 133
Bromochloromethane	5.00	5.92		ug/L		118	79 - 131
Bromodichloromethane	5.00	5.47		ug/L		109	80 - 131
Bromoform	5.00	5.65		ug/L		113	69 - 125
Bromomethane	5.00	5.72		ug/L		114	61 - 141
Carbon disulfide	5.00	6.02		ug/L		120	65 - 138
Carbon tetrachloride	5.00	5.95		ug/L		119	71 - 140
Chlorobenzene	5.00	5.61		ug/L		112	80 - 129
Chloroethane	5.00	6.07		ug/L		121	58 - 150
Chloroform	5.00	6.04		ug/L		121	80 - 130
Chloromethane	5.00	6.04		ug/L		121	61 - 143
cis-1,2-Dichloroethene	5.00	6.19		ug/L		124	79 - 130
cis-1,3-Dichloropropene	5.00	5.48		ug/L		110	79 - 132
Dibromochloromethane	5.00	5.58		ug/L		112	76 - 131
Dibromomethane	5.00	5.54		ug/L		111	76 - 129
Ethylbenzene	5.00	6.11		ug/L		122	74 - 138
m,p-Xylene	5.00	5.81		ug/L		116	73 - 130
Methyl iodide	5.00	5.91		ug/L		118	76 - 133
Methylene Chloride	5.00	6.09		ug/L		122	75 - 134
o-Xylene	5.00	6.08		ug/L		122	80 - 139
Styrene	5.00	5.56		ug/L		111	74 - 136
Tetrachloroethene	5.00	5.74		ug/L		115	75 - 131
Toluene	5.00	5.91		ug/L		118	80 - 126
trans-1,2-Dichloroethene	5.00	5.94		ug/L		119	75 - 133
trans-1,3-Dichloropropene	5.00	5.31		ug/L		106	78 - 128

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-278952/4

Matrix: Water

Analysis Batch: 278952

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	5.30		ug/L		106	20 - 150
Trichloroethene	5.00	5.58		ug/L		112	72 - 136
Trichlorofluoromethane	5.00	6.18		ug/L		124	60 - 139
Vinyl acetate	12.5	15.1		ug/L		121	22 - 150
Vinyl chloride	5.00	5.97		ug/L		119	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	99		75 - 125
Trifluorotoluene (Surr)	100		80 - 120

Lab Sample ID: LCSD 580-278952/5

Matrix: Water

Analysis Batch: 278952

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	6.18		ug/L		124	79 - 139	4	20
1,1,1-Trichloroethane	5.00	6.44		ug/L		129	74 - 137	7	20
1,1,2,2-Tetrachloroethane	5.00	5.74		ug/L		115	69 - 147	4	16
1,1,2-Trichloroethane	5.00	5.31		ug/L		106	80 - 127	6	19
1,1-Dichloroethane	5.00	6.55		ug/L		131	80 - 135	6	20
1,1-Dichloroethene	5.00	6.38		ug/L		128	71 - 134	7	28
1,2,3-Trichloropropane	5.00	5.62		ug/L		112	80 - 127	1	20
1,2-Dibromo-3-Chloropropane	5.00	5.27		ug/L		105	69 - 130	9	20
1,2-Dibromoethane	5.00	5.08		ug/L		102	80 - 126	10	20
1,2-Dichlorobenzene	5.00	5.90		ug/L		118	80 - 129	1	14
1,2-Dichloroethane	5.00	5.47		ug/L		109	80 - 130	4	15
1,2-Dichloropropane	5.00	5.39		ug/L		108	80 - 130	2	20
1,4-Dichlorobenzene	5.00	5.81		ug/L		116	80 - 129	1	11
2-Butanone	25.0	22.4		ug/L		89	64 - 144	16	29
2-Hexanone	25.0	30.4		ug/L		122	77 - 144	6	21
4-Methyl-2-pentanone	25.0	30.1		ug/L		120	78 - 137	3	19
Acetone	25.0	18.2		ug/L		73	43 - 150	2	35
Acrylonitrile	50.0	52.9		ug/L		106	67 - 148	12	23
Benzene	5.00	5.94		ug/L		119	73 - 133	1	20
Bromochloromethane	5.00	6.05		ug/L		121	79 - 131	2	20
Bromodichloromethane	5.00	5.16		ug/L		103	80 - 131	6	20
Bromoform	5.00	5.40		ug/L		108	69 - 125	5	20
Bromomethane	5.00	6.16		ug/L		123	61 - 141	7	31
Carbon disulfide	5.00	6.44		ug/L		129	65 - 138	7	23
Carbon tetrachloride	5.00	6.31		ug/L		126	71 - 140	6	21
Chlorobenzene	5.00	5.58		ug/L		112	80 - 129	1	12
Chloroethane	5.00	6.38		ug/L		128	58 - 150	5	35
Chloroform	5.00	6.32		ug/L		126	80 - 130	5	20
Chloromethane	5.00	6.33		ug/L		127	61 - 143	5	31
cis-1,2-Dichloroethene	5.00	6.59	*	ug/L		132	79 - 130	6	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-278952/5

Matrix: Water

Analysis Batch: 278952

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	5.27		ug/L		105	79 - 132	4	22
Dibromochloromethane	5.00	5.39		ug/L		108	76 - 131	3	20
Dibromomethane	5.00	5.21		ug/L		104	76 - 129	6	20
Ethylbenzene	5.00	6.34		ug/L		127	74 - 138	4	20
m,p-Xylene	5.00	5.95		ug/L		119	73 - 130	2	20
Methyl iodide	5.00	6.29		ug/L		126	76 - 133	6	15
Methylene Chloride	5.00	6.39		ug/L		128	75 - 134	5	29
o-Xylene	5.00	6.36		ug/L		127	80 - 139	4	20
Styrene	5.00	5.57		ug/L		111	74 - 136	0	20
Tetrachloroethene	5.00	5.59		ug/L		112	75 - 131	3	20
Toluene	5.00	5.91		ug/L		118	80 - 126	0	20
trans-1,2-Dichloroethene	5.00	6.43		ug/L		129	75 - 133	8	27
trans-1,3-Dichloropropene	5.00	4.94		ug/L		99	78 - 128	7	21
trans-1,4-Dichloro-2-butene	5.00	4.89		ug/L		98	20 - 150	8	20
Trichloroethene	5.00	5.42		ug/L		108	72 - 136	3	20
Trichlorofluoromethane	5.00	6.72		ug/L		134	60 - 139	8	31
Vinyl acetate	12.5	15.1		ug/L		120	22 - 150	0	35
Vinyl chloride	5.00	6.35		ug/L		127	59 - 140	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
Toluene-d8 (Surr)	100		75 - 125
Trifluorotoluene (Surr)	102		80 - 120

Lab Sample ID: MB 580-279116/7

Matrix: Water

Analysis Batch: 279116

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.50		ug/L			07/16/18 13:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		07/16/18 13:10	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/16/18 13:10	1
Dibromofluoromethane (Surr)	103		80 - 120		07/16/18 13:10	1
Toluene-d8 (Surr)	103		75 - 125		07/16/18 13:10	1
Trifluorotoluene (Surr)	100		80 - 120		07/16/18 13:10	1

Lab Sample ID: LCS 580-279116/4

Matrix: Water

Analysis Batch: 279116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	5.00	5.68		ug/L		114	60 - 139

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-279116/4

Matrix: Water

Analysis Batch: 279116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	94		80 - 120
Toluene-d8 (Surr)	100		75 - 125
Trifluorotoluene (Surr)	100		80 - 120

Lab Sample ID: LCSD 580-279116/5

Matrix: Water

Analysis Batch: 279116

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	5.00	5.82		ug/L		116	60 - 139	2	31
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	102		80 - 120						
Dibromofluoromethane (Surr)	101		80 - 120						
Toluene-d8 (Surr)	101		75 - 125						
Trifluorotoluene (Surr)	100		80 - 120						

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-278941/22-A

Matrix: Water

Analysis Batch: 279312

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		07/13/18 11:55	07/17/18 13:42	1
Iron	ND		0.30		mg/L		07/13/18 11:55	07/17/18 13:42	1
Magnesium	ND		1.1		mg/L		07/13/18 11:55	07/17/18 13:42	1
Manganese	ND		0.020		mg/L		07/13/18 11:55	07/17/18 13:42	1
Potassium	ND		3.3		mg/L		07/13/18 11:55	07/17/18 13:42	1
Sodium	ND		2.0		mg/L		07/13/18 11:55	07/17/18 13:42	1

Lab Sample ID: LCS 580-278941/23-A

Matrix: Water

Analysis Batch: 279312

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	20.0	20.1		mg/L		100	80 - 120		
Iron	22.0	22.2		mg/L		101	80 - 120		
Magnesium	20.0	19.9		mg/L		99	80 - 120		
Manganese	1.00	0.999		mg/L		100	80 - 120		
Potassium	20.0	19.4		mg/L		97	80 - 120		
Sodium	20.0	19.4		mg/L		97	80 - 120		

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 580-278941/24-A

Matrix: Water

Analysis Batch: 279312

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	21.0		mg/L		105	80 - 120	5	20
Iron	22.0	23.1		mg/L		105	80 - 120	4	20
Magnesium	20.0	21.0		mg/L		105	80 - 120	6	20
Manganese	1.00	1.05		mg/L		105	80 - 120	5	20
Potassium	20.0	20.3		mg/L		102	80 - 120	5	20
Sodium	20.0	20.5		mg/L		103	80 - 120	5	20

Lab Sample ID: LCS 580-278972/11-A

Matrix: Water

Analysis Batch: 279140

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 278972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	22.4		mg/L		112	80 - 120		
Iron	22.0	25.1		mg/L		114	80 - 120		
Magnesium	20.0	21.9		mg/L		109	80 - 120		
Manganese	1.00	1.12		mg/L		112	80 - 120		
Potassium	20.0	21.5		mg/L		107	80 - 120		
Sodium	20.0	21.2		mg/L		106	80 - 120		

Lab Sample ID: LCSD 580-278972/12-A

Matrix: Water

Analysis Batch: 279140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 278972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	22.3		mg/L		112	80 - 120	0	20
Iron	22.0	25.7		mg/L		117	80 - 120	2	20
Magnesium	20.0	22.4		mg/L		112	80 - 120	2	20
Manganese	1.00	1.13		mg/L		113	80 - 120	1	20
Potassium	20.0	21.7		mg/L		109	80 - 120	1	20
Sodium	20.0	21.7		mg/L		109	80 - 120	2	20

Lab Sample ID: 580-78785-2 MS

Matrix: Water

Analysis Batch: 279312

Client Sample ID: 0718-02

Prep Type: Dissolved

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	140		20.0	166	4	mg/L		109	75 - 125		
Iron	1.4		22.0	24.2		mg/L		104	75 - 125		
Magnesium	68		20.0	89.5		mg/L		106	75 - 125		
Manganese	0.22		1.00	1.23		mg/L		102	75 - 125		
Potassium	7.3		20.0	28.0		mg/L		103	75 - 125		
Sodium	31		20.0	52.1		mg/L		105	75 - 125		

Lab Sample ID: 580-78785-2 MSD

Matrix: Water

Analysis Batch: 279312

Client Sample ID: 0718-02

Prep Type: Dissolved

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	140		20.0	168	4	mg/L		121	75 - 125	1	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-78785-2 MSD

Matrix: Water

Analysis Batch: 279312

Client Sample ID: 0718-02

Prep Type: Dissolved

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	1.4		22.0	24.1		mg/L		103	75 - 125	1	20
Magnesium	68		20.0	89.6		mg/L		106	75 - 125	0	20
Manganese	0.22		1.00	1.25		mg/L		103	75 - 125	1	20
Potassium	7.3		20.0	28.3		mg/L		105	75 - 125	1	20
Sodium	31		20.0	52.2		mg/L		106	75 - 125	0	20

Lab Sample ID: 580-78785-2 DU

Matrix: Water

Analysis Batch: 279312

Client Sample ID: 0718-02

Prep Type: Dissolved

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	140		147		mg/L		2	20
Iron	1.4		1.40		mg/L		1	20
Magnesium	68		69.9		mg/L		2	20
Manganese	0.22		0.222		mg/L		2	20
Potassium	7.3		7.49		mg/L		2	20
Sodium	31		31.7		mg/L		2	20

Lab Sample ID: MB 580-278889/7-B

Matrix: Water

Analysis Batch: 279140

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 278972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		07/13/18 13:52	07/16/18 12:24	1
Iron	ND		0.30		mg/L		07/13/18 13:52	07/16/18 12:24	1
Magnesium	ND		1.1		mg/L		07/13/18 13:52	07/16/18 12:24	1
Manganese	ND		0.020		mg/L		07/13/18 13:52	07/16/18 12:24	1
Potassium	ND		3.3		mg/L		07/13/18 13:52	07/16/18 12:24	1
Sodium	ND		2.0		mg/L		07/13/18 13:52	07/16/18 12:24	1

Lab Sample ID: 580-78785-10 MS

Matrix: Water

Analysis Batch: 279140

Client Sample ID: 0718-10

Prep Type: Dissolved

Prep Batch: 278972

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	110		20.0	118	4	mg/L		64	75 - 125
Iron	ND		22.0	23.2		mg/L		105	75 - 125
Magnesium	59		20.0	75.4		mg/L		82	75 - 125
Manganese	0.091		1.00	1.11		mg/L		102	75 - 125
Potassium	7.7		20.0	27.2		mg/L		98	75 - 125
Sodium	30		20.0	48.5		mg/L		90	75 - 125

Lab Sample ID: 580-78785-10 MSD

Matrix: Water

Analysis Batch: 279140

Client Sample ID: 0718-10

Prep Type: Dissolved

Prep Batch: 278972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	110		20.0	125	4	mg/L		99	75 - 125	6	20
Iron	ND		22.0	24.7		mg/L		112	75 - 125	6	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-78785-10 MSD

Matrix: Water

Analysis Batch: 279140

Client Sample ID: 0718-10

Prep Type: Dissolved

Prep Batch: 278972

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	59		20.0	80.4		mg/L		107	75 - 125	6	20
Manganese	0.091		1.00	1.18		mg/L		109	75 - 125	6	20
Potassium	7.7		20.0	29.1		mg/L		107	75 - 125	7	20
Sodium	30		20.0	51.8		mg/L		107	75 - 125	7	20

Lab Sample ID: 580-78785-10 DU

Matrix: Water

Analysis Batch: 279140

Client Sample ID: 0718-10

Prep Type: Dissolved

Prep Batch: 278972

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	110		101		mg/L		4	20
Iron	ND		ND		mg/L		NC	20
Magnesium	59		58.0		mg/L		2	20
Manganese	0.091		0.0878		mg/L		3	20
Potassium	7.7		7.45		mg/L		3	20
Sodium	30		29.7		mg/L		3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-278941/22-A

Matrix: Water

Analysis Batch: 279156

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Arsenic	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 12:03	1
Barium	ND		0.0012		mg/L		07/13/18 11:55	07/16/18 12:03	1
Beryllium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Cadmium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Chromium	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Cobalt	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Copper	ND		0.0020		mg/L		07/13/18 11:55	07/16/18 12:03	1
Lead	ND		0.00080		mg/L		07/13/18 11:55	07/16/18 12:03	1
Nickel	ND		0.0030		mg/L		07/13/18 11:55	07/16/18 12:03	1
Selenium	ND		0.0080		mg/L		07/13/18 11:55	07/16/18 12:03	1
Silver	ND		0.00040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Thallium	ND		0.0010		mg/L		07/13/18 11:55	07/16/18 12:03	1
Vanadium	ND		0.0040		mg/L		07/13/18 11:55	07/16/18 12:03	1
Zinc	ND		0.0070		mg/L		07/13/18 11:55	07/16/18 12:03	1

Lab Sample ID: LCS 580-278941/23-A

Matrix: Water

Analysis Batch: 279156

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.86		mg/L		95	80 - 120
Arsenic	4.00	3.90		mg/L		97	80 - 120
Barium	4.00	3.88		mg/L		97	80 - 120
Beryllium	0.100	0.0941		mg/L		94	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-278941/23-A
Matrix: Water
Analysis Batch: 279156

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 278941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.100	0.100		mg/L		100	80 - 120
Chromium	0.400	0.390		mg/L		98	80 - 120
Cobalt	1.00	0.966		mg/L		97	80 - 120
Copper	0.500	0.499		mg/L		100	80 - 120
Lead	1.00	0.959		mg/L		96	80 - 120
Nickel	1.00	0.973		mg/L		97	80 - 120
Selenium	4.00	3.87		mg/L		97	80 - 120
Silver	0.600	0.610		mg/L		102	80 - 120
Thallium	4.00	3.66		mg/L		91	80 - 120
Vanadium	1.00	0.973		mg/L		97	80 - 120
Zinc	4.00	3.84		mg/L		96	80 - 120

Lab Sample ID: LCSD 580-278941/24-A
Matrix: Water
Analysis Batch: 279156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 278941

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	3.00	2.80		mg/L		93	80 - 120	2	20
Arsenic	4.00	3.84		mg/L		96	80 - 120	2	20
Barium	4.00	3.73		mg/L		93	80 - 120	4	20
Beryllium	0.100	0.0973		mg/L		97	80 - 120	3	20
Cadmium	0.100	0.0977		mg/L		98	80 - 120	2	20
Chromium	0.400	0.386		mg/L		97	80 - 120	1	20
Cobalt	1.00	0.948		mg/L		95	80 - 120	2	20
Copper	0.500	0.486		mg/L		97	80 - 120	3	20
Lead	1.00	0.945		mg/L		95	80 - 120	1	20
Nickel	1.00	0.967		mg/L		97	80 - 120	1	20
Selenium	4.00	3.78		mg/L		95	80 - 120	2	20
Silver	0.600	0.595		mg/L		99	80 - 120	2	20
Thallium	4.00	3.60		mg/L		90	80 - 120	1	20
Vanadium	1.00	0.949		mg/L		95	80 - 120	3	20
Zinc	4.00	3.78		mg/L		94	80 - 120	2	20

Lab Sample ID: 580-78785-D-2-C MS
Matrix: Water
Analysis Batch: 279156

Client Sample ID: 580-78785-D-2-C MS
Prep Type: Total Recoverable
Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.000236		3.00	3.11		mg/L		104	80 - 120
Arsenic	0.00531		4.00	4.15		mg/L		104	80 - 120
Barium	0.0590		4.00	4.21		mg/L		104	80 - 120
Beryllium	-0.0000129		0.100	0.102		mg/L		102	80 - 120
Cadmium	-0.000137		0.100	0.103		mg/L		103	80 - 120
Chromium	0.000442		0.400	0.415		mg/L		104	80 - 120
Cobalt	0.0000660		1.00	1.04		mg/L		104	80 - 120
Copper	0.000263		0.500	0.519		mg/L		104	80 - 120
Lead	0.0000180		1.00	1.03		mg/L		103	80 - 120
Nickel	0.000722		1.00	1.05		mg/L		105	80 - 120
Selenium	0.000803		4.00	4.17		mg/L		104	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-78785-D-2-C MS

Matrix: Water

Analysis Batch: 279156

Client Sample ID: 580-78785-D-2-C MS

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	-0.00000368		0.600	0.648		mg/L		108	80 - 120
Thallium	0.0000556		4.00	4.00		mg/L		100	80 - 120
Vanadium	0.000697		1.00	1.03		mg/L		103	80 - 120
Zinc	0.000398		4.00	4.13		mg/L		103	80 - 120

Lab Sample ID: 580-78785-D-2-D MSD

Matrix: Water

Analysis Batch: 279156

Client Sample ID: 580-78785-D-2-D MSD

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.000236		3.00	3.05		mg/L		102	80 - 120	2	20
Arsenic	0.00531		4.00	4.11		mg/L		103	80 - 120	1	20
Barium	0.0590		4.00	4.11		mg/L		101	80 - 120	2	20
Beryllium	-0.0000129		0.100	0.103		mg/L		103	80 - 120	1	20
Cadmium	-0.000137		0.100	0.100		mg/L		100	80 - 120	3	20
Chromium	0.000442		0.400	0.407		mg/L		102	80 - 120	2	20
Cobalt	0.0000660		1.00	1.03		mg/L		103	80 - 120	1	20
Copper	0.000263		0.500	0.516		mg/L		103	80 - 120	1	20
Lead	0.0000180		1.00	1.03		mg/L		103	80 - 120	1	20
Nickel	0.000722		1.00	1.05		mg/L		105	80 - 120	1	20
Selenium	0.000803		4.00	4.14		mg/L		104	80 - 120	1	20
Silver	-0.00000368		0.600	0.637		mg/L		106	80 - 120	2	20
Thallium	0.0000556		4.00	3.93		mg/L		98	80 - 120	2	20
Vanadium	0.000697		1.00	1.02		mg/L		102	80 - 120	1	20
Zinc	0.000398		4.00	4.04		mg/L		101	80 - 120	2	20

Lab Sample ID: 580-78785-D-2-B DU

Matrix: Water

Analysis Batch: 279156

Client Sample ID: 580-78785-D-2-B DU

Prep Type: Total Recoverable

Prep Batch: 278941

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.000236		ND		mg/L		NC	20
Arsenic	0.00531		0.00559		mg/L		5	20
Barium	0.0590		0.0601		mg/L		2	20
Beryllium	-0.0000129		ND		mg/L		NC	20
Cadmium	-0.000137		ND		mg/L		NC	20
Chromium	0.000442		ND		mg/L		NC	20
Cobalt	0.0000660		ND		mg/L		NC	20
Copper	0.000263		ND		mg/L		NC	20
Lead	0.0000180		ND		mg/L		NC	20
Nickel	0.000722		ND		mg/L		NC	20
Selenium	0.000803		ND		mg/L		NC	20
Silver	-0.00000368		ND		mg/L		NC	20
Thallium	0.0000556		ND		mg/L		NC	20
Vanadium	0.000697		ND		mg/L		NC	20
Zinc	0.000398		ND		mg/L		NC	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-278973/20-A

Matrix: Water

Analysis Batch: 279209

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 278973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Arsenic	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 18:05	1
Barium	ND		0.0012		mg/L		07/13/18 14:20	07/16/18 18:05	1
Beryllium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Cadmium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Chromium	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Cobalt	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Copper	ND		0.0020		mg/L		07/13/18 14:20	07/16/18 18:05	1
Lead	ND		0.00080		mg/L		07/13/18 14:20	07/16/18 18:05	1
Nickel	ND		0.0030		mg/L		07/13/18 14:20	07/16/18 18:05	1
Selenium	ND		0.0080		mg/L		07/13/18 14:20	07/16/18 18:05	1
Silver	ND		0.00040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Thallium	ND		0.0010		mg/L		07/13/18 14:20	07/16/18 18:05	1
Vanadium	ND		0.0040		mg/L		07/13/18 14:20	07/16/18 18:05	1
Zinc	ND		0.0070		mg/L		07/13/18 14:20	07/16/18 18:05	1

Lab Sample ID: LCS 580-278973/21-A

Matrix: Water

Analysis Batch: 279209

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 278973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.80		mg/L		93	80 - 120
Arsenic	4.00	3.89		mg/L		97	80 - 120
Barium	4.00	3.82		mg/L		96	80 - 120
Beryllium	0.100	0.0885		mg/L		89	80 - 120
Cadmium	0.100	0.101		mg/L		101	80 - 120
Chromium	0.400	0.383		mg/L		96	80 - 120
Cobalt	1.00	0.964		mg/L		96	80 - 120
Copper	0.500	0.492		mg/L		98	80 - 120
Lead	1.00	0.963		mg/L		96	80 - 120
Nickel	1.00	0.981		mg/L		98	80 - 120
Selenium	4.00	3.89		mg/L		97	80 - 120
Silver	0.600	0.607		mg/L		101	80 - 120
Thallium	4.00	3.67		mg/L		92	80 - 120
Vanadium	1.00	0.943		mg/L		94	80 - 120
Zinc	4.00	3.80		mg/L		95	80 - 120

Lab Sample ID: LCSD 580-278973/22-A

Matrix: Water

Analysis Batch: 279209

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 278973

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.81		mg/L		94	80 - 120	0	20
Arsenic	4.00	3.95		mg/L		99	80 - 120	1	20
Barium	4.00	3.86		mg/L		96	80 - 120	1	20
Beryllium	0.100	0.0908		mg/L		91	80 - 120	3	20
Cadmium	0.100	0.0904		mg/L		90	80 - 120	11	20
Chromium	0.400	0.381		mg/L		95	80 - 120	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-278973/22-A

Matrix: Water

Analysis Batch: 279209

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 278973

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	1.00	0.954		mg/L		95	80 - 120	1	20
Copper	0.500	0.489		mg/L		98	80 - 120	0	20
Lead	1.00	0.986		mg/L		99	80 - 120	2	20
Nickel	1.00	0.949		mg/L		95	80 - 120	3	20
Selenium	4.00	3.87		mg/L		97	80 - 120	0	20
Silver	0.600	0.604		mg/L		101	80 - 120	0	20
Thallium	4.00	3.71		mg/L		93	80 - 120	1	20
Vanadium	1.00	0.957		mg/L		96	80 - 120	2	20
Zinc	4.00	3.82		mg/L		96	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-278929/11

Matrix: Water

Analysis Batch: 278929

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/12/18 18:19	1
Chloride	ND		0.90		mg/L			07/12/18 18:19	1
Sulfate	ND		1.2		mg/L			07/12/18 18:19	1

Lab Sample ID: LCS 580-278929/12

Matrix: Water

Analysis Batch: 278929

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.29		mg/L		106	90 - 110
Chloride	50.0	51.4		mg/L		103	90 - 110
Sulfate	50.0	50.6		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-278929/15

Matrix: Water

Analysis Batch: 278929

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	5.25		mg/L		105	90 - 110	1	15
Chloride	50.0	50.6		mg/L		101	90 - 110	2	15
Sulfate	50.0	49.7		mg/L		99	90 - 110	2	15

Lab Sample ID: 580-78785-9 MS

Matrix: Water

Analysis Batch: 278929

Client Sample ID: 0718-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND	F1	5.00	6.76	F1	mg/L		135	90 - 110
Chloride	42		50.0	87.4		mg/L		91	90 - 110
Sulfate	140	F1	50.0	179	F1	mg/L		72	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-78785-9 MSD

Matrix: Water

Analysis Batch: 278929

Client Sample ID: 0718-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND	F1	5.00	6.84	F1	mg/L		137	90 - 110	1	15
Chloride	42		50.0	87.9		mg/L		92	90 - 110	1	15
Sulfate	140	F1	50.0	180	F1	mg/L		75	90 - 110	1	15

Lab Sample ID: MB 580-278930/11

Matrix: Water

Analysis Batch: 278930

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			07/12/18 18:19	1

Lab Sample ID: LCS 580-278930/12

Matrix: Water

Analysis Batch: 278930

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-278930/15

Matrix: Water

Analysis Batch: 278930

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	9.92		mg/L		99	90 - 110	2	15

Lab Sample ID: 580-78785-9 MS

Matrix: Water

Analysis Batch: 278930

Client Sample ID: 0718-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	ND	F1	10.0	6.33	F1	mg/L		63	90 - 110

Lab Sample ID: 580-78785-9 MSD

Matrix: Water

Analysis Batch: 278930

Client Sample ID: 0718-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	F1	10.0	6.34	F1	mg/L		63	90 - 110	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 580-279031/1-A

Matrix: Water

Analysis Batch: 279114

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 279031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.50		mg/L		07/14/18 12:23	07/16/18 12:26	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 580-279031/2-A
Matrix: Water
Analysis Batch: 279114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.00	2.09		mg/L		105	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 580-280051/16
Matrix: Water
Analysis Batch: 280051

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.15		mg/L			07/25/18 15:53	1
Nitrate Nitrite as N	ND		0.15		mg/L			07/25/18 15:53	1
Nitrite as N	ND		0.15		mg/L			07/25/18 15:53	1

Lab Sample ID: LCS 580-280051/17
Matrix: Water
Analysis Batch: 280051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.931		mg/L		93	90 - 110
Nitrite as N	1.00	0.954		mg/L		95	90 - 110

Lab Sample ID: LCSD 580-280051/18
Matrix: Water
Analysis Batch: 280051

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.936		mg/L		94	90 - 110	1	20
Nitrite as N	1.00	0.963		mg/L		96	90 - 110	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-279342/2
Matrix: Water
Analysis Batch: 279342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	108		mg/L		108	85 - 115

Lab Sample ID: LCS 580-279706/2
Matrix: Water
Analysis Batch: 279706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	95.5		mg/L		96	85 - 115

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-279057/1
Matrix: Water
Analysis Batch: 279057

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			07/15/18 11:04	1

Lab Sample ID: LCS 580-279057/2
Matrix: Water
Analysis Batch: 279057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	958		mg/L		96	80 - 120

Method: SM 5220D - COD

Lab Sample ID: MB 580-279202/3-A
Matrix: Water
Analysis Batch: 279208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279202

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		07/17/18 16:00	07/17/18 16:00	1

Lab Sample ID: LCS 580-279202/4-A
Matrix: Water
Analysis Batch: 279208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	78.4		mg/L		105	80 - 120

Lab Sample ID: 580-78785-2 MS
Matrix: Water
Analysis Batch: 279208

Client Sample ID: 0718-02
Prep Type: Total/NA
Prep Batch: 279202

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	13		25.0	36.2		mg/L		94	75 - 125

Lab Sample ID: 580-78785-2 DU
Matrix: Water
Analysis Batch: 279208

Client Sample ID: 0718-02
Prep Type: Total/NA
Prep Batch: 279202

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	13		11.2		mg/L		12	20

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-279237/3
Matrix: Water
Analysis Batch: 279237

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			07/17/18 03:12	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 580-279237/4

Matrix: Water

Analysis Batch: 279237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.29		mg/L		93	85 - 115

Lab Sample ID: 580-78785-2 MS

Matrix: Water

Analysis Batch: 279237

Client Sample ID: 0718-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.7		10.0	10.5		mg/L		88	85 - 115

Lab Sample ID: 580-78785-2 MSD

Matrix: Water

Analysis Batch: 279237

Client Sample ID: 0718-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.7		10.0	10.7		mg/L		90	85 - 115	1	20

Lab Sample ID: 580-78785-2 DU

Matrix: Water

Analysis Batch: 279237

Client Sample ID: 0718-02

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.7		1.64		mg/L		2	20

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-01

Date Collected: 07/10/18 11:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 19:24	CJ	TAL SEA

Client Sample ID: 0718-02

Date Collected: 07/10/18 12:00

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 19:50	CJ	TAL SEA
Dissolved	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279312	07/17/18 13:51	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 12:57	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 19:17	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	353.2		1	280051	07/25/18 16:24	ASJ	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/17/18 15:00	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

Client Sample ID: 0718-03

Date Collected: 07/10/18 13:30

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 20:16	CJ	TAL SEA
Dissolved	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279312	07/17/18 14:19	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 13:02	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 19:29	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	353.2		2	280051	07/25/18 16:25	ASJ	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/17/18 15:00	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-04

Date Collected: 07/10/18 13:45

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 20:43	CJ	TAL SEA
Dissolved	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279312	07/17/18 14:23	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 13:06	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 19:41	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	353.2		2	280051	07/25/18 16:26	ASJ	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/17/18 15:00	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

Client Sample ID: 0718-05

Date Collected: 07/10/18 15:10

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 21:09	CJ	TAL SEA

Client Sample ID: 0718-06

Date Collected: 07/10/18 16:03

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 21:36	CJ	TAL SEA
Dissolved	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279312	07/17/18 14:26	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 13:10	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 19:53	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	353.2		1	280051	07/25/18 16:27	ASJ	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/17/18 15:00	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-07

Date Collected: 07/10/18 17:15

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 22:02	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 13:02	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 13:14	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 16:45	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 16:45	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/18/18 10:51	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

Client Sample ID: 0718-08

Date Collected: 07/10/18 18:50

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 22:29	CJ	TAL SEA
Total/NA	Analysis	8260C	DL	10	279116	07/16/18 15:22	HDK	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 13:05	SPP	TAL SEA
Total Recoverable	Prep	3005A			278941	07/13/18 11:55	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279156	07/16/18 13:18	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 16:57	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 16:57	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/18/18 10:51	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-09

Date Collected: 07/11/18 09:40

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 22:55	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 13:08	SPP	TAL SEA
Total Recoverable	Prep	3005A			278973	07/13/18 14:20	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279209	07/16/18 18:56	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 17:09	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 17:09	EMM	TAL SEA
Total/NA	Analysis	300.0		5	278929	07/13/18 11:53	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279342	07/18/18 10:51	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

Client Sample ID: 0718-10

Date Collected: 07/11/18 10:55

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 23:22	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 12:34	SPP	TAL SEA
Total Recoverable	Prep	3005A			278973	07/13/18 14:20	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279209	07/16/18 19:00	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 17:44	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 17:44	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279706	07/21/18 16:46	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: 0718-11

Date Collected: 07/11/18 12:05

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 23:48	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 13:12	SPP	TAL SEA
Total Recoverable	Prep	3005A			278973	07/13/18 14:20	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279209	07/16/18 19:04	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 17:56	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 17:56	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279706	07/21/18 16:46	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

Client Sample ID: 0718-12

Date Collected: 07/11/18 13:35

Date Received: 07/12/18 11:05

Lab Sample ID: 580-78785-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/14/18 00:15	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			278889	07/12/18 16:03	T1H	TAL SEA
Dissolved	Prep	3005A			278972	07/13/18 13:52	CJB	TAL SEA
Dissolved	Analysis	6010C		1	279140	07/16/18 13:15	SPP	TAL SEA
Total Recoverable	Prep	3005A			278973	07/13/18 14:20	CJB	TAL SEA
Total Recoverable	Analysis	6020A		1	279209	07/16/18 19:08	FCW	TAL SEA
Total/NA	Analysis	300.0		1	278929	07/12/18 18:07	EMM	TAL SEA
Total/NA	Analysis	300.0		1	278930	07/12/18 18:07	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			279031	07/14/18 12:23	EMM	TAL SEA
Total/NA	Analysis	350.1		1	279114	07/16/18 12:26	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	279706	07/21/18 16:46	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	279057	07/15/18 11:04	R1K	TAL SEA
Total/NA	Prep	SM 5220			279202	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5220D		1	279208	07/17/18 16:00	ASJ	TAL SEA
Total/NA	Analysis	SM 5310B		1	279237	07/17/18 03:12	ASJ	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-78785-13

Date Collected: 07/11/18 00:01

Matrix: Water

Date Received: 07/12/18 11:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	278952	07/13/18 18:57	CJ	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Laboratory: TestAmerica Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

Sample Summary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility

TestAmerica Job ID: 580-78785-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-78785-1	0718-01	Water	07/10/18 11:05	07/12/18 11:05
580-78785-2	0718-02	Water	07/10/18 12:00	07/12/18 11:05
580-78785-3	0718-03	Water	07/10/18 13:30	07/12/18 11:05
580-78785-4	0718-04	Water	07/10/18 13:45	07/12/18 11:05
580-78785-5	0718-05	Water	07/10/18 15:10	07/12/18 11:05
580-78785-6	0718-06	Water	07/10/18 16:03	07/12/18 11:05
580-78785-7	0718-07	Water	07/10/18 17:15	07/12/18 11:05
580-78785-8	0718-08	Water	07/10/18 18:50	07/12/18 11:05
580-78785-9	0718-09	Water	07/11/18 09:40	07/12/18 11:05
580-78785-10	0718-10	Water	07/11/18 10:55	07/12/18 11:05
580-78785-11	0718-11	Water	07/11/18 12:05	07/12/18 11:05
580-78785-12	0718-12	Water	07/11/18 13:35	07/12/18 11:05
580-78785-13	Trip Blank	Water	07/11/18 00:01	07/12/18 11:05

Client SCS Engineers			Client Contact Dan Vanchiarutti / Sam Graber			Date 7/12/18			Chain of Custody Number 37403																	
Address 2405 140th Ave NE, Suite 107			Telephone Number (Area Code)/Fax Number 425-289-5455			Lab Number			Page 1 of 2																	
City Bellevue		State WA	Zip Code 98005	Sampler Sam G.		Lab Contact Kayse Zalmai		Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt															
Project Name and Location (State) Coupeville Solid Waste Facility, (Island Co.)				Billing Contact		300.0-28D 300-43HR 2320B 6020A-LL 6010C 350.1 5220D 5M 5310 8260C-LL 2540C																				
Contract/Purchase Order/Quote No.				Matrix		Containers & Preservatives																				
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)				Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH											
0718-01				7/10/18	1105	X							3												*: Please Filter	
0718-02					1200	X				2	2	2	3													6010C Metab
0718-03					1330	X				2	2	2	3													in lab. Was not
0718-04					1345	X				2	2	2	3													able to Field
0718-05					1510	X							3													Filter these
0718-06					1603	X				2	2	2	3													samples.
0718-07 *					1715	X				3	2	1	3													
0718-08 *				↓	1850	X				3	2	1	3													
0718-09 *				7/11/18	940	X				3	2	1	3													
0718-10 *					1055	X				3	2	1	3													
0718-11 *					1205	X				3	2	1	3													
0718-12 *				↓	1335	X				3	2	1	3													
Cooler ☐ Yes ☐ No Cooler Temp: _____		Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown				Sample Disposal ☐ Return To Client ☒ Disposal By Lab		Disposal By Lab ☐ Archive For _____ Months		(A fee may be assessed if samples are retained longer than 1 month)																
Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other Standard						QC Requirements (Specify)																				
1. Relinquished By Sign/Print				Date	Time	1. Received By Sign/Print				Date	Time															
2. Relinquished By Sign/Print				Date	Time	2. Received By Sign/Print				Date	Time															
3. Relinquished By Sign/Print				Date	Time	3. Received By Sign/Print				Date	Time															
Therm. ID: A2 Cor: 4.7 ° Unc: 4.6				Therm. ID: A2 Cor: 5.5 ° Unc: 5.4				Therm. ID: A2 Cor: 3.4 ° Unc: 3.3																		
Cooler Dsc: bgs Blue				Cooler Dsc: bgs Blue				Cooler Dsc: bgs Blue																		
Packing: Bubble				Packing: Bubble				Packing: Bubble																		
Cust. Seal: Yes No X				Cust. Seal: Yes No X				Cust. Seal: Yes No X																		
Lab Cour: X				Lab Cour: X				Lab Cour: X																		
Wet/Packs/Dry Ice/None				Wet/Packs/Dry Ice/None				Wet/Packs/Dry Ice/None																		
Other: _____				Other: _____				Other: _____																		
Comments				Comments				Comments																		
DISTRIBUTION:				DISTRIBUTION:				DISTRIBUTION:																		
Page 56 of 58				Page 56 of 58				Page 56 of 58																		
580-78785 Chain of Custody				580-78785 Chain of Custody				580-78785 Chain of Custody																		

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

[illegible]

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-78785-1

Login Number: 78785

List Source: TestAmerica Seattle

List Number: 1

Creator: Gall, Brandon A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

DATA VALIDATION REPORT – ISLAND COUNTY CSWF 4Q 2018

Project Details

Project No.	04207033.11	Site Name	Island County Coupeville SWF
Data Validator	Travis Berndahl and Sam Graber	Data Level	Level II
Date	12/21/2018	DV Tier	Tier I
QA Document	CSWF Groundwater Sampling, Analysis, and Quality Assurance Project Plan (Revised September 2007)		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
580-81131-1	No Comments	Test America
580-81163-1	No Comments	Test America

Analytical Summary

Sample Group	Analyses						
	Metals	Ns, COD	VOCs	Ions/TDS	Alk	TOC	Herbicides
580-81131-1	X	X	X	X	X	X	-
580-81163-1	X	X	X	X	X	X	-

X = Analysis performed on at least one sample in sample group.

- = Analysis not performed on any sample in sample group.

Laboratory Quality Assurance Samples

Lab QA Samples	Results	Comments
Method Blank	Acceptable	No comments.
LCS/LCSD	Acceptable	No comments.
Duplicates	Acceptable	No comments.
MS/MSD	Acceptable	See case narrative (580-81131-1, 580-81163-1)

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Field Replicates	580-81131-1, 580-81163-1	See below.	See detailed results below.
Trip Blank	580-81131-1, 580-81163-1	N/A	No Detections.

Detailed Field Replicate Evaluation

Analyte	Units	N3S (1018-03)	N3S DUP (1018-05)	RPD (%)	S11S (1018-14)	S11S DUP (1018-16)	RPD (%)
Alkalinity	mg/L	440	450	1.1	360	360	0.0
Ammonia	mg/L	2.7	1.7	22.7	0.5 U	0.5 U	0.0
Arsenic	mg/L	0.0024	0.0023	2.1	0.0057	0.0056	0.9
Barium	mg/L	0.033	0.033	0.0	0.03	0.03	0.0
Bicarbonate Alkalinity as CaCO3	mg/L	440	450	1.1	360	360	0.0
Calcium	mg/L	130	130	0.0	79	77	1.3
Chemical Oxygen Demand	mg/L	10 U	10 U	0.0	12	13	4.0
Chloride	mg/L	38	38	0.0	60	60	0.0
Chromium	mg/L	0.01	0.01	0.0	0.0004 U	0.0004 U	0.0
Fluoride	mg/L	0.2 U	0.2 U	0.0	0.22	0.22	0.0
Magnesium	mg/L	48	48	0.0	52	50	2.0
Manganese	mg/L	0.02 U	0.02 U	0.0	0.2	0.19	2.6
Nitrate Nitrite as N	mg/L	6.8	6.8	0.0	0.4 U	0.4 U	0.0
Potassium	mg/L	6.1	6.1	0.0	6.6	6.5	0.8
Sodium	mg/L	29	28	1.8	34	33	1.5
Sulfate	mg/L	46	46	0.0	31	31	0.0
Total Dissolved Solids	mg/L	600	610	0.8	500	440	6.4
Total Organic Carbon	mg/L	1.4	1.3	3.7	2.3	2.5	4.2
Trichlorofluoromethane	ug/L	1.1	1.1	0.0	0.5 U	0.5 U	0.0
Vanadium	mg/L	0.0055	0.0055	0.0	0.004 U	0.004 U	0.0

U = Reporting limit used in place of a non-detection for the given parameter to allow for calculation.

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
F1	MS and/or MSD Recovery is outside acceptance limits.	580-81131-1, 580-81163-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	580-81131-1, 580-81163-1
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	580-81131-1

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-81131-1

Client Project/Site: Coupeville Solid Waste Facility 4th Qtr

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
10/31/2018 3:02:48 PM

Kayse Zalmai, Project Manager I
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Job ID: 580-81131-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-81131-1

Receipt

The samples were received on 10/16/2018 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.9° C, 2.9° C, 3.5° C and 4.1° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-286875 recovered outside acceptance criteria, low biased, for Chloroethane, Chloromethane and Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-286875 was outside criteria for the following analyte(s): 4-Methyl-2-pentanone and 2-Hexanone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The following volatile sample was analyzed with significant headspace in the sample container(s): 1018-13 (580-81131-13). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-01

Date Collected: 10/15/18 11:10

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 19:49	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 19:49	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 19:49	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 19:49	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 19:49	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 19:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 19:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 19:49	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 19:49	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 19:49	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 19:49	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 19:49	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 19:49	1
2-Butanone	ND		10		ug/L			10/18/18 19:49	1
2-Hexanone	ND		3.0		ug/L			10/18/18 19:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 19:49	1
Acetone	ND		6.0		ug/L			10/18/18 19:49	1
Acrylonitrile	ND		10		ug/L			10/18/18 19:49	1
Benzene	ND		0.20		ug/L			10/18/18 19:49	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 19:49	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 19:49	1
Bromoform	ND		0.50		ug/L			10/18/18 19:49	1
Bromomethane	ND		0.50		ug/L			10/18/18 19:49	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 19:49	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 19:49	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 19:49	1
Chloroethane	ND		0.50		ug/L			10/18/18 19:49	1
Chloroform	ND		0.20		ug/L			10/18/18 19:49	1
Chloromethane	ND		0.50		ug/L			10/18/18 19:49	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 19:49	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 19:49	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 19:49	1
Dibromomethane	ND		0.20		ug/L			10/18/18 19:49	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 19:49	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 19:49	1
Methyl iodide	ND		0.50		ug/L			10/18/18 19:49	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 19:49	1
o-Xylene	ND		0.50		ug/L			10/18/18 19:49	1
Styrene	ND		0.50		ug/L			10/18/18 19:49	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 19:49	1
Toluene	ND		0.20		ug/L			10/18/18 19:49	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 19:49	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 19:49	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 19:49	1
Trichloroethene	ND		0.20		ug/L			10/18/18 19:49	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 19:49	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 19:49	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 19:49	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-01

Date Collected: 10/15/18 11:10

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/18/18 19:49	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/18/18 19:49	1
Dibromofluoromethane (Surr)	97		80 - 120		10/18/18 19:49	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 19:49	1
Trifluorotoluene (Surr)	100		80 - 120		10/18/18 19:49	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	71		1.1		mg/L		10/26/18 11:37	10/29/18 14:47	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 14:47	1
Magnesium	27		1.1		mg/L		10/26/18 11:37	10/29/18 14:47	1
Manganese	0.035		0.020		mg/L		10/26/18 11:37	10/29/18 14:47	1
Potassium	6.1		3.3		mg/L		10/26/18 11:37	10/29/18 14:47	1
Sodium	22		2.0		mg/L		10/26/18 11:37	10/29/18 14:47	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Arsenic	0.0083		0.0010		mg/L		10/22/18 15:47	10/23/18 12:10	1
Barium	0.028		0.0012		mg/L		10/22/18 15:47	10/23/18 12:10	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Chromium	0.00052		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:10	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:10	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:10	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:10	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:10	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 12:10	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 19:30	1
Chloride	37		0.90		mg/L			10/23/18 19:30	1
Sulfate	25		1.2		mg/L			10/23/18 19:30	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Nitrate Nitrite as N	ND		0.15		mg/L			10/24/18 12:42	1
Total Organic Carbon	1.9		1.0		mg/L			10/17/18 09:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	250		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	250		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	340		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 11:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-02

Date Collected: 10/15/18 11:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 20:15	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 20:15	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 20:15	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 20:15	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 20:15	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 20:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 20:15	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 20:15	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 20:15	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 20:15	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 20:15	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 20:15	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 20:15	1
2-Butanone	ND		10		ug/L			10/18/18 20:15	1
2-Hexanone	ND		3.0		ug/L			10/18/18 20:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 20:15	1
Acetone	ND		6.0		ug/L			10/18/18 20:15	1
Acrylonitrile	ND		10		ug/L			10/18/18 20:15	1
Benzene	ND		0.20		ug/L			10/18/18 20:15	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 20:15	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 20:15	1
Bromoform	ND		0.50		ug/L			10/18/18 20:15	1
Bromomethane	ND		0.50		ug/L			10/18/18 20:15	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 20:15	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 20:15	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 20:15	1
Chloroethane	ND		0.50		ug/L			10/18/18 20:15	1
Chloroform	ND		0.20		ug/L			10/18/18 20:15	1
Chloromethane	ND		0.50		ug/L			10/18/18 20:15	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 20:15	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 20:15	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 20:15	1
Dibromomethane	ND		0.20		ug/L			10/18/18 20:15	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 20:15	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 20:15	1
Methyl iodide	ND		0.50		ug/L			10/18/18 20:15	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 20:15	1
o-Xylene	ND		0.50		ug/L			10/18/18 20:15	1
Styrene	ND		0.50		ug/L			10/18/18 20:15	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 20:15	1
Toluene	ND		0.20		ug/L			10/18/18 20:15	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 20:15	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 20:15	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 20:15	1
Trichloroethene	ND		0.20		ug/L			10/18/18 20:15	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 20:15	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 20:15	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 20:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-02

Date Collected: 10/15/18 11:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		10/18/18 20:15	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 20:15	1
Dibromofluoromethane (Surr)	97		80 - 120		10/18/18 20:15	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 20:15	1
Trifluorotoluene (Surr)	101		80 - 120		10/18/18 20:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	70		1.1		mg/L		10/26/18 11:37	10/29/18 15:13	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:13	1
Magnesium	44		1.1		mg/L		10/26/18 11:37	10/29/18 15:13	1
Manganese	0.26		0.020		mg/L		10/26/18 11:37	10/29/18 15:13	1
Potassium	6.6		3.3		mg/L		10/26/18 11:37	10/29/18 15:13	1
Sodium	26		2.0		mg/L		10/26/18 11:37	10/29/18 15:13	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Arsenic	0.0062		0.0010		mg/L		10/22/18 15:47	10/23/18 12:14	1
Barium	0.028		0.0012		mg/L		10/22/18 15:47	10/23/18 12:14	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Chromium	0.0012		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:14	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:14	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:14	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:14	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:14	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 12:14	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.20		mg/L			10/23/18 20:06	1
Chloride	35		0.90		mg/L			10/23/18 20:06	1
Sulfate	16		1.2		mg/L			10/23/18 20:06	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Nitrate Nitrite as N	ND		0.15		mg/L			10/24/18 12:43	1
Total Organic Carbon	1.7		1.0		mg/L			10/17/18 09:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	330		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	330		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	380		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 11:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-03

Date Collected: 10/15/18 11:57

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 20:42	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 20:42	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 20:42	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 20:42	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 20:42	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 20:42	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 20:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 20:42	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 20:42	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 20:42	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 20:42	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 20:42	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 20:42	1
2-Butanone	ND		10		ug/L			10/18/18 20:42	1
2-Hexanone	ND		3.0		ug/L			10/18/18 20:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 20:42	1
Acetone	ND		6.0		ug/L			10/18/18 20:42	1
Acrylonitrile	ND		10		ug/L			10/18/18 20:42	1
Benzene	ND		0.20		ug/L			10/18/18 20:42	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 20:42	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 20:42	1
Bromoform	ND		0.50		ug/L			10/18/18 20:42	1
Bromomethane	ND		0.50		ug/L			10/18/18 20:42	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 20:42	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 20:42	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 20:42	1
Chloroethane	ND		0.50		ug/L			10/18/18 20:42	1
Chloroform	ND		0.20		ug/L			10/18/18 20:42	1
Chloromethane	ND		0.50		ug/L			10/18/18 20:42	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 20:42	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 20:42	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 20:42	1
Dibromomethane	ND		0.20		ug/L			10/18/18 20:42	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 20:42	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 20:42	1
Methyl iodide	ND		0.50		ug/L			10/18/18 20:42	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 20:42	1
o-Xylene	ND		0.50		ug/L			10/18/18 20:42	1
Styrene	ND		0.50		ug/L			10/18/18 20:42	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 20:42	1
Toluene	ND		0.20		ug/L			10/18/18 20:42	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 20:42	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 20:42	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 20:42	1
Trichloroethene	ND		0.20		ug/L			10/18/18 20:42	1
Trichlorofluoromethane	1.1		0.50		ug/L			10/18/18 20:42	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 20:42	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 20:42	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-03

Date Collected: 10/15/18 11:57

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/18/18 20:42	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/18/18 20:42	1
Dibromofluoromethane (Surr)	97		80 - 120		10/18/18 20:42	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 20:42	1
Trifluorotoluene (Surr)	102		80 - 120		10/18/18 20:42	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130		1.1		mg/L		10/26/18 11:37	10/29/18 15:16	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:16	1
Magnesium	48		1.1		mg/L		10/26/18 11:37	10/29/18 15:16	1
Manganese	ND		0.020		mg/L		10/26/18 11:37	10/29/18 15:16	1
Potassium	6.1		3.3		mg/L		10/26/18 11:37	10/29/18 15:16	1
Sodium	29		2.0		mg/L		10/26/18 11:37	10/29/18 15:16	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Arsenic	0.0024		0.0010		mg/L		10/22/18 15:47	10/23/18 12:18	1
Barium	0.033		0.0012		mg/L		10/22/18 15:47	10/23/18 12:18	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Chromium	0.010		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:18	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:18	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:18	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:18	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:18	1
Vanadium	0.0055		0.0040		mg/L		10/22/18 15:47	10/23/18 12:18	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 20:17	1
Chloride	38		0.90		mg/L			10/23/18 20:17	1
Sulfate	46		1.2		mg/L			10/23/18 20:17	1
Ammonia	2.7		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Nitrate Nitrite as N	6.8		0.75		mg/L			10/30/18 14:05	5
Total Organic Carbon	1.4		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	440		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	440		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	600		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 11:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-04

Date Collected: 10/15/18 12:50

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 21:09	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 21:09	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 21:09	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 21:09	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 21:09	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 21:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 21:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 21:09	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 21:09	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 21:09	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 21:09	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 21:09	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 21:09	1
2-Butanone	ND		10		ug/L			10/18/18 21:09	1
2-Hexanone	ND		3.0		ug/L			10/18/18 21:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 21:09	1
Acetone	ND		6.0		ug/L			10/18/18 21:09	1
Acrylonitrile	ND		10		ug/L			10/18/18 21:09	1
Benzene	ND		0.20		ug/L			10/18/18 21:09	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 21:09	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 21:09	1
Bromoform	ND		0.50		ug/L			10/18/18 21:09	1
Bromomethane	ND		0.50		ug/L			10/18/18 21:09	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 21:09	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 21:09	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 21:09	1
Chloroethane	ND		0.50		ug/L			10/18/18 21:09	1
Chloroform	ND		0.20		ug/L			10/18/18 21:09	1
Chloromethane	ND		0.50		ug/L			10/18/18 21:09	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 21:09	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 21:09	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 21:09	1
Dibromomethane	ND		0.20		ug/L			10/18/18 21:09	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 21:09	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 21:09	1
Methyl iodide	ND		0.50		ug/L			10/18/18 21:09	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 21:09	1
o-Xylene	ND		0.50		ug/L			10/18/18 21:09	1
Styrene	ND		0.50		ug/L			10/18/18 21:09	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 21:09	1
Toluene	ND		0.20		ug/L			10/18/18 21:09	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 21:09	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 21:09	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 21:09	1
Trichloroethene	ND		0.20		ug/L			10/18/18 21:09	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 21:09	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 21:09	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 21:09	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-04

Date Collected: 10/15/18 12:50

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/18/18 21:09	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 21:09	1
Dibromofluoromethane (Surr)	97		80 - 120		10/18/18 21:09	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 21:09	1
Trifluorotoluene (Surr)	99		80 - 120		10/18/18 21:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150		1.1		mg/L		10/26/18 11:37	10/29/18 15:20	1
Iron	1.6		0.30		mg/L		10/26/18 11:37	10/29/18 15:20	1
Magnesium	69		1.1		mg/L		10/26/18 11:37	10/29/18 15:20	1
Manganese	0.23		0.020		mg/L		10/26/18 11:37	10/29/18 15:20	1
Potassium	7.4		3.3		mg/L		10/26/18 11:37	10/29/18 15:20	1
Sodium	32		2.0		mg/L		10/26/18 11:37	10/29/18 15:20	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Arsenic	0.0060		0.0010		mg/L		10/22/18 15:47	10/23/18 12:23	1
Barium	0.067		0.0012		mg/L		10/22/18 15:47	10/23/18 12:23	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:23	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:23	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:23	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:23	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:23	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 12:23	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 20:29	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 12:12	1
Chloride	21		0.90		mg/L			10/23/18 20:29	1
Sulfate	22		1.2		mg/L			10/23/18 20:29	1
Ammonia	2.5		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.5		1.0		mg/L			10/18/18 17:52	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	630		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	630		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	680		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 11:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-05

Date Collected: 10/15/18 12:05

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 21:36	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 21:36	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 21:36	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 21:36	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 21:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 21:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 21:36	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 21:36	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 21:36	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 21:36	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 21:36	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 21:36	1
2-Butanone	ND		10		ug/L			10/18/18 21:36	1
2-Hexanone	ND		3.0		ug/L			10/18/18 21:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 21:36	1
Acetone	ND		6.0		ug/L			10/18/18 21:36	1
Acrylonitrile	ND		10		ug/L			10/18/18 21:36	1
Benzene	ND		0.20		ug/L			10/18/18 21:36	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 21:36	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 21:36	1
Bromoform	ND		0.50		ug/L			10/18/18 21:36	1
Bromomethane	ND		0.50		ug/L			10/18/18 21:36	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 21:36	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 21:36	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 21:36	1
Chloroethane	ND		0.50		ug/L			10/18/18 21:36	1
Chloroform	ND		0.20		ug/L			10/18/18 21:36	1
Chloromethane	ND		0.50		ug/L			10/18/18 21:36	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 21:36	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 21:36	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 21:36	1
Dibromomethane	ND		0.20		ug/L			10/18/18 21:36	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 21:36	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 21:36	1
Methyl iodide	ND		0.50		ug/L			10/18/18 21:36	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 21:36	1
o-Xylene	ND		0.50		ug/L			10/18/18 21:36	1
Styrene	ND		0.50		ug/L			10/18/18 21:36	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 21:36	1
Toluene	ND		0.20		ug/L			10/18/18 21:36	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 21:36	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 21:36	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 21:36	1
Trichloroethene	ND		0.20		ug/L			10/18/18 21:36	1
Trichlorofluoromethane	1.1		0.50		ug/L			10/18/18 21:36	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 21:36	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 21:36	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-05

Date Collected: 10/15/18 12:05

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/18/18 21:36	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 21:36	1
Dibromofluoromethane (Surr)	96		80 - 120		10/18/18 21:36	1
Toluene-d8 (Surr)	99		75 - 125		10/18/18 21:36	1
Trifluorotoluene (Surr)	100		80 - 120		10/18/18 21:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130		1.1		mg/L		10/26/18 11:37	10/29/18 15:23	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:23	1
Magnesium	48		1.1		mg/L		10/26/18 11:37	10/29/18 15:23	1
Manganese	ND		0.020		mg/L		10/26/18 11:37	10/29/18 15:23	1
Potassium	6.1		3.3		mg/L		10/26/18 11:37	10/29/18 15:23	1
Sodium	28		2.0		mg/L		10/26/18 11:37	10/29/18 15:23	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Arsenic	0.0023		0.0010		mg/L		10/22/18 15:47	10/23/18 12:27	1
Barium	0.033		0.0012		mg/L		10/22/18 15:47	10/23/18 12:27	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Chromium	0.010		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:27	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:27	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:27	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:27	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:27	1
Vanadium	0.0055		0.0040		mg/L		10/22/18 15:47	10/23/18 12:27	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 20:41	1
Chloride	38		0.90		mg/L			10/23/18 20:41	1
Sulfate	46		1.2		mg/L			10/23/18 20:41	1
Ammonia	1.7		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Nitrate Nitrite as N	6.8		0.75		mg/L			10/30/18 14:01	5
Total Organic Carbon	1.3		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	450		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	450		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	610		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-06

Date Collected: 10/15/18 14:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 22:02	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 22:02	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 22:02	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 22:02	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 22:02	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 22:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 22:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 22:02	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 22:02	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:02	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 22:02	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 22:02	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:02	1
2-Butanone	ND		10		ug/L			10/18/18 22:02	1
2-Hexanone	ND		3.0		ug/L			10/18/18 22:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 22:02	1
Acetone	ND		6.0		ug/L			10/18/18 22:02	1
Acrylonitrile	ND		10		ug/L			10/18/18 22:02	1
Benzene	ND		0.20		ug/L			10/18/18 22:02	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 22:02	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 22:02	1
Bromoform	ND		0.50		ug/L			10/18/18 22:02	1
Bromomethane	ND		0.50		ug/L			10/18/18 22:02	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 22:02	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 22:02	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 22:02	1
Chloroethane	ND		0.50		ug/L			10/18/18 22:02	1
Chloroform	ND		0.20		ug/L			10/18/18 22:02	1
Chloromethane	ND		0.50		ug/L			10/18/18 22:02	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:02	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:02	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 22:02	1
Dibromomethane	ND		0.20		ug/L			10/18/18 22:02	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 22:02	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 22:02	1
Methyl iodide	ND		0.50		ug/L			10/18/18 22:02	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 22:02	1
o-Xylene	ND		0.50		ug/L			10/18/18 22:02	1
Styrene	ND		0.50		ug/L			10/18/18 22:02	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 22:02	1
Toluene	ND		0.20		ug/L			10/18/18 22:02	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:02	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:02	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 22:02	1
Trichloroethene	ND		0.20		ug/L			10/18/18 22:02	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 22:02	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 22:02	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 22:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-06

Date Collected: 10/15/18 14:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		10/18/18 22:02	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 22:02	1
Dibromofluoromethane (Surr)	98		80 - 120		10/18/18 22:02	1
Toluene-d8 (Surr)	101		75 - 125		10/18/18 22:02	1
Trifluorotoluene (Surr)	101		80 - 120		10/18/18 22:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	42		1.1		mg/L		10/26/18 11:37	10/29/18 15:26	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:26	1
Magnesium	29		1.1		mg/L		10/26/18 11:37	10/29/18 15:26	1
Manganese	0.078		0.020		mg/L		10/26/18 11:37	10/29/18 15:26	1
Potassium	11		3.3		mg/L		10/26/18 11:37	10/29/18 15:26	1
Sodium	31		2.0		mg/L		10/26/18 11:37	10/29/18 15:26	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Arsenic	0.015		0.0010		mg/L		10/22/18 15:47	10/23/18 12:31	1
Barium	0.035		0.0012		mg/L		10/22/18 15:47	10/23/18 12:31	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:31	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:31	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:31	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:31	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:31	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 12:31	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22		0.20		mg/L			10/23/18 21:16	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 12:58	1
Chloride	31		0.90		mg/L			10/23/18 21:16	1
Sulfate	14		1.2		mg/L			10/23/18 21:16	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	3.4		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	220		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	220		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	300		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-07

Date Collected: 10/15/18 13:18

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 22:29	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 22:29	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 22:29	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 22:29	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 22:29	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 22:29	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 22:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 22:29	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 22:29	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:29	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 22:29	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 22:29	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:29	1
2-Butanone	ND		10		ug/L			10/18/18 22:29	1
2-Hexanone	ND		3.0		ug/L			10/18/18 22:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 22:29	1
Acetone	ND		6.0		ug/L			10/18/18 22:29	1
Acrylonitrile	ND		10		ug/L			10/18/18 22:29	1
Benzene	ND		0.20		ug/L			10/18/18 22:29	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 22:29	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 22:29	1
Bromoform	ND		0.50		ug/L			10/18/18 22:29	1
Bromomethane	ND		0.50		ug/L			10/18/18 22:29	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 22:29	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 22:29	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 22:29	1
Chloroethane	ND		0.50		ug/L			10/18/18 22:29	1
Chloroform	ND		0.20		ug/L			10/18/18 22:29	1
Chloromethane	ND		0.50		ug/L			10/18/18 22:29	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:29	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:29	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 22:29	1
Dibromomethane	ND		0.20		ug/L			10/18/18 22:29	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 22:29	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 22:29	1
Methyl iodide	ND		0.50		ug/L			10/18/18 22:29	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 22:29	1
o-Xylene	ND		0.50		ug/L			10/18/18 22:29	1
Styrene	ND		0.50		ug/L			10/18/18 22:29	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 22:29	1
Toluene	ND		0.20		ug/L			10/18/18 22:29	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:29	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:29	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 22:29	1
Trichloroethene	ND		0.20		ug/L			10/18/18 22:29	1
Trichlorofluoromethane	0.54		0.50		ug/L			10/18/18 22:29	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 22:29	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 22:29	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-07

Date Collected: 10/15/18 13:18

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-7

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/18/18 22:29	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 22:29	1
Dibromofluoromethane (Surr)	96		80 - 120		10/18/18 22:29	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 22:29	1
Trifluorotoluene (Surr)	101		80 - 120		10/18/18 22:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		10/26/18 11:37	10/29/18 15:30	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:30	1
Magnesium	75		1.1		mg/L		10/26/18 11:37	10/29/18 15:30	1
Manganese	ND		0.020		mg/L		10/26/18 11:37	10/29/18 15:30	1
Potassium	8.4		3.3		mg/L		10/26/18 11:37	10/29/18 15:30	1
Sodium	41		2.0		mg/L		10/26/18 11:37	10/29/18 15:30	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Arsenic	0.0029		0.0010		mg/L		10/22/18 15:47	10/23/18 12:35	1
Barium	0.029		0.0012		mg/L		10/22/18 15:47	10/23/18 12:35	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:35	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:35	1
Nickel	0.0044		0.0030		mg/L		10/22/18 15:47	10/23/18 12:35	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:35	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:35	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 12:35	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 21:28	1
Nitrate Nitrite as N	3.0		0.40		mg/L			10/17/18 12:46	1
Chloride	66		0.90		mg/L			10/23/18 21:28	1
Sulfate	69		1.2		mg/L			10/23/18 21:28	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	2.3		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	480		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	480		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	690		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-08

Date Collected: 10/15/18 15:40

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 22:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 22:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 22:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 22:55	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 22:55	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 22:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 22:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 22:55	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 22:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:55	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 22:55	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 22:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 22:55	1
2-Butanone	ND		10		ug/L			10/18/18 22:55	1
2-Hexanone	ND		3.0		ug/L			10/18/18 22:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 22:55	1
Acetone	ND		6.0		ug/L			10/18/18 22:55	1
Acrylonitrile	ND		10		ug/L			10/18/18 22:55	1
Benzene	ND		0.20		ug/L			10/18/18 22:55	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 22:55	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 22:55	1
Bromoform	ND		0.50		ug/L			10/18/18 22:55	1
Bromomethane	ND		0.50		ug/L			10/18/18 22:55	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 22:55	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 22:55	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 22:55	1
Chloroethane	ND		0.50		ug/L			10/18/18 22:55	1
Chloroform	ND		0.20		ug/L			10/18/18 22:55	1
Chloromethane	ND		0.50		ug/L			10/18/18 22:55	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:55	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 22:55	1
Dibromomethane	ND		0.20		ug/L			10/18/18 22:55	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 22:55	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 22:55	1
Methyl iodide	ND		0.50		ug/L			10/18/18 22:55	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 22:55	1
o-Xylene	ND		0.50		ug/L			10/18/18 22:55	1
Styrene	ND		0.50		ug/L			10/18/18 22:55	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 22:55	1
Toluene	ND		0.20		ug/L			10/18/18 22:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 22:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 22:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 22:55	1
Trichloroethene	ND		0.20		ug/L			10/18/18 22:55	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 22:55	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 22:55	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 22:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-08

Date Collected: 10/15/18 15:40

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/18/18 22:55	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/18/18 22:55	1
Dibromofluoromethane (Surr)	98		80 - 120		10/18/18 22:55	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 22:55	1
Trifluorotoluene (Surr)	100		80 - 120		10/18/18 22:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150		1.1		mg/L		10/26/18 11:37	10/29/18 15:33	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:33	1
Magnesium	59		1.1		mg/L		10/26/18 11:37	10/29/18 15:33	1
Manganese	ND		0.020		mg/L		10/26/18 11:37	10/29/18 15:33	1
Potassium	6.3		3.3		mg/L		10/26/18 11:37	10/29/18 15:33	1
Sodium	30		2.0		mg/L		10/26/18 11:37	10/29/18 15:33	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Arsenic	0.0024		0.0010		mg/L		10/22/18 15:47	10/23/18 12:39	1
Barium	0.047		0.0012		mg/L		10/22/18 15:47	10/23/18 12:39	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Chromium	0.0043		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:39	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:39	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 12:39	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:39	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:39	1
Vanadium	0.0055		0.0040		mg/L		10/22/18 15:47	10/23/18 12:39	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 21:39	1
Nitrate Nitrite as N	2.0		0.40		mg/L			10/17/18 13:56	1
Chloride	46		0.90		mg/L			10/23/18 21:39	1
Sulfate	47		1.2		mg/L			10/23/18 21:39	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.3		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	540		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	540		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	710		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-09

Date Collected: 10/15/18 14:07

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 23:22	1
1,1,1-Trichloroethane	0.52		0.20		ug/L			10/18/18 23:22	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 23:22	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 23:22	1
1,1-Dichloroethane	0.49		0.20		ug/L			10/18/18 23:22	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 23:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 23:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 23:22	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 23:22	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 23:22	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 23:22	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 23:22	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 23:22	1
2-Butanone	ND		10		ug/L			10/18/18 23:22	1
2-Hexanone	ND		3.0		ug/L			10/18/18 23:22	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 23:22	1
Acetone	ND		6.0		ug/L			10/18/18 23:22	1
Acrylonitrile	ND		10		ug/L			10/18/18 23:22	1
Benzene	ND		0.20		ug/L			10/18/18 23:22	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 23:22	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 23:22	1
Bromoform	ND		0.50		ug/L			10/18/18 23:22	1
Bromomethane	ND		0.50		ug/L			10/18/18 23:22	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 23:22	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 23:22	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 23:22	1
Chloroethane	ND		0.50		ug/L			10/18/18 23:22	1
Chloroform	ND		0.20		ug/L			10/18/18 23:22	1
Chloromethane	ND		0.50		ug/L			10/18/18 23:22	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 23:22	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 23:22	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 23:22	1
Dibromomethane	ND		0.20		ug/L			10/18/18 23:22	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 23:22	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 23:22	1
Methyl iodide	ND		0.50		ug/L			10/18/18 23:22	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 23:22	1
o-Xylene	ND		0.50		ug/L			10/18/18 23:22	1
Styrene	ND		0.50		ug/L			10/18/18 23:22	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 23:22	1
Toluene	ND		0.20		ug/L			10/18/18 23:22	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 23:22	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 23:22	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 23:22	1
Trichloroethene	ND		0.20		ug/L			10/18/18 23:22	1
Trichlorofluoromethane	3.4		0.50		ug/L			10/18/18 23:22	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 23:22	1
Vinyl chloride	0.18		0.020		ug/L			10/18/18 23:22	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-09

Date Collected: 10/15/18 14:07

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		10/18/18 23:22	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/18/18 23:22	1
Dibromofluoromethane (Surr)	98		80 - 120		10/18/18 23:22	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 23:22	1
Trifluorotoluene (Surr)	102		80 - 120		10/18/18 23:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	170		1.1		mg/L		10/26/18 11:37	10/29/18 15:37	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:37	1
Magnesium	90		1.1		mg/L		10/26/18 11:37	10/29/18 15:37	1
Manganese	0.025		0.020		mg/L		10/26/18 11:37	10/29/18 15:37	1
Potassium	9.7		3.3		mg/L		10/26/18 11:37	10/29/18 15:37	1
Sodium	33		2.0		mg/L		10/26/18 11:37	10/29/18 15:37	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Arsenic	0.0012		0.0010		mg/L		10/22/18 15:47	10/23/18 12:44	1
Barium	0.057		0.0012		mg/L		10/22/18 15:47	10/23/18 12:44	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Chromium	0.00074		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 12:44	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 12:44	1
Nickel	0.0067		0.0030		mg/L		10/22/18 15:47	10/23/18 12:44	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 12:44	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 12:44	1
Vanadium	0.0042		0.0040		mg/L		10/22/18 15:47	10/23/18 12:44	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 21:51	1
Nitrate Nitrite as N	6.8		0.40		mg/L			10/17/18 13:33	1
Chloride	20		0.90		mg/L			10/23/18 21:51	1
Sulfate	110		2.4		mg/L			10/23/18 22:03	2
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.9		1.0		mg/L			10/18/18 17:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	690		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	690		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	900		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-10

Date Collected: 10/15/18 16:45

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 23:49	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 23:49	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 23:49	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 23:49	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 23:49	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 23:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 23:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 23:49	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 23:49	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 23:49	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 23:49	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 23:49	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 23:49	1
2-Butanone	ND		10		ug/L			10/18/18 23:49	1
2-Hexanone	ND		3.0		ug/L			10/18/18 23:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 23:49	1
Acetone	ND		6.0		ug/L			10/18/18 23:49	1
Acrylonitrile	ND		10		ug/L			10/18/18 23:49	1
Benzene	ND		0.20		ug/L			10/18/18 23:49	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 23:49	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 23:49	1
Bromoform	ND		0.50		ug/L			10/18/18 23:49	1
Bromomethane	ND		0.50		ug/L			10/18/18 23:49	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 23:49	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 23:49	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 23:49	1
Chloroethane	ND		0.50		ug/L			10/18/18 23:49	1
Chloroform	ND		0.20		ug/L			10/18/18 23:49	1
Chloromethane	ND		0.50		ug/L			10/18/18 23:49	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 23:49	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 23:49	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 23:49	1
Dibromomethane	ND		0.20		ug/L			10/18/18 23:49	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 23:49	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 23:49	1
Methyl iodide	ND		0.50		ug/L			10/18/18 23:49	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 23:49	1
o-Xylene	ND		0.50		ug/L			10/18/18 23:49	1
Styrene	ND		0.50		ug/L			10/18/18 23:49	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 23:49	1
Toluene	ND		0.20		ug/L			10/18/18 23:49	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 23:49	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 23:49	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 23:49	1
Trichloroethene	ND		0.20		ug/L			10/18/18 23:49	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 23:49	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 23:49	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 23:49	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-10

Date Collected: 10/15/18 16:45

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/18/18 23:49	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/18/18 23:49	1
Dibromofluoromethane (Surr)	98		80 - 120		10/18/18 23:49	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 23:49	1
Trifluorotoluene (Surr)	100		80 - 120		10/18/18 23:49	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	52		1.1		mg/L		10/26/18 11:37	10/29/18 15:40	1
Iron	1.3		0.30		mg/L		10/26/18 11:37	10/29/18 15:40	1
Magnesium	28		1.1		mg/L		10/26/18 11:37	10/29/18 15:40	1
Manganese	0.33		0.020		mg/L		10/26/18 11:37	10/29/18 15:40	1
Potassium	6.4		3.3		mg/L		10/26/18 11:37	10/29/18 15:40	1
Sodium	27		2.0		mg/L		10/26/18 11:37	10/29/18 15:40	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Arsenic	0.0037		0.0010		mg/L		10/22/18 15:47	10/23/18 13:05	1
Barium	0.081		0.0012		mg/L		10/22/18 15:47	10/23/18 13:05	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 13:05	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 13:05	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 13:05	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 13:05	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 13:05	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 13:05	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21		0.20		mg/L			10/23/18 22:14	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 15:18	1
Chloride	14		0.90		mg/L			10/23/18 22:14	1
Sulfate	26		1.2		mg/L			10/23/18 22:14	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.3		1.0		mg/L			10/19/18 10:36	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	240		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	240		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	300		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-11

Date Collected: 10/15/18 15:48

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/19/18 00:16	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/19/18 00:16	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/19/18 00:16	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/19/18 00:16	1
1,1-Dichloroethane	ND		0.20		ug/L			10/19/18 00:16	1
1,1-Dichloroethene	ND		0.20		ug/L			10/19/18 00:16	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/19/18 00:16	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/19/18 00:16	1
1,2-Dibromoethane	ND		0.10		ug/L			10/19/18 00:16	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/19/18 00:16	1
1,2-Dichloroethane	ND		0.20		ug/L			10/19/18 00:16	1
1,2-Dichloropropane	ND		0.20		ug/L			10/19/18 00:16	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/19/18 00:16	1
2-Butanone	ND		10		ug/L			10/19/18 00:16	1
2-Hexanone	ND		3.0		ug/L			10/19/18 00:16	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/19/18 00:16	1
Acetone	ND		6.0		ug/L			10/19/18 00:16	1
Acrylonitrile	ND		10		ug/L			10/19/18 00:16	1
Benzene	ND		0.20		ug/L			10/19/18 00:16	1
Bromochloromethane	ND		0.20		ug/L			10/19/18 00:16	1
Bromodichloromethane	ND		0.20		ug/L			10/19/18 00:16	1
Bromoform	ND		0.50		ug/L			10/19/18 00:16	1
Bromomethane	ND		0.50		ug/L			10/19/18 00:16	1
Carbon disulfide	ND		0.30		ug/L			10/19/18 00:16	1
Carbon tetrachloride	ND		0.20		ug/L			10/19/18 00:16	1
Chlorobenzene	ND		0.20		ug/L			10/19/18 00:16	1
Chloroethane	ND		0.50		ug/L			10/19/18 00:16	1
Chloroform	ND		0.20		ug/L			10/19/18 00:16	1
Chloromethane	ND		0.50		ug/L			10/19/18 00:16	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 00:16	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 00:16	1
Dibromochloromethane	ND		0.20		ug/L			10/19/18 00:16	1
Dibromomethane	ND		0.20		ug/L			10/19/18 00:16	1
Ethylbenzene	ND		0.20		ug/L			10/19/18 00:16	1
m,p-Xylene	ND		0.50		ug/L			10/19/18 00:16	1
Methyl iodide	ND		0.50		ug/L			10/19/18 00:16	1
Methylene Chloride	ND		5.0		ug/L			10/19/18 00:16	1
o-Xylene	ND		0.50		ug/L			10/19/18 00:16	1
Styrene	ND		0.50		ug/L			10/19/18 00:16	1
Tetrachloroethene	ND		0.50		ug/L			10/19/18 00:16	1
Toluene	ND		0.20		ug/L			10/19/18 00:16	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 00:16	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 00:16	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/19/18 00:16	1
Trichloroethene	ND		0.20		ug/L			10/19/18 00:16	1
Trichlorofluoromethane	ND		0.50		ug/L			10/19/18 00:16	1
Vinyl acetate	ND		1.0		ug/L			10/19/18 00:16	1
Vinyl chloride	ND		0.020		ug/L			10/19/18 00:16	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-11

Date Collected: 10/15/18 15:48

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/19/18 00:16	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/19/18 00:16	1
Dibromofluoromethane (Surr)	98		80 - 120		10/19/18 00:16	1
Toluene-d8 (Surr)	100		75 - 125		10/19/18 00:16	1
Trifluorotoluene (Surr)	98		80 - 120		10/19/18 00:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120		1.1		mg/L		10/26/18 11:37	10/29/18 15:50	1
Iron	0.39		0.30		mg/L		10/26/18 11:37	10/29/18 15:50	1
Magnesium	99		1.1		mg/L		10/26/18 11:37	10/29/18 15:50	1
Manganese	0.30		0.020		mg/L		10/26/18 11:37	10/29/18 15:50	1
Potassium	9.6		3.3		mg/L		10/26/18 11:37	10/29/18 15:50	1
Sodium	47		2.0		mg/L		10/26/18 11:37	10/29/18 15:50	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Arsenic	0.0045		0.0010		mg/L		10/22/18 15:47	10/23/18 13:09	1
Barium	0.11		0.0012		mg/L		10/22/18 15:47	10/23/18 13:09	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 13:09	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 13:09	1
Nickel	0.013		0.0030		mg/L		10/22/18 15:47	10/23/18 13:09	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 13:09	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 13:09	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 13:09	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 22:26	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 14:43	1
Chloride	130		4.5		mg/L			10/23/18 22:38	5
Sulfate	150		6.0		mg/L			10/23/18 22:38	5
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	3.8		1.0		mg/L			10/19/18 10:36	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	490		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	490		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	900		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	13		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-12

Date Collected: 10/15/18 18:00

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/19/18 00:42	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/19/18 00:42	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/19/18 00:42	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/19/18 00:42	1
1,1-Dichloroethane	ND		0.20		ug/L			10/19/18 00:42	1
1,1-Dichloroethene	ND		0.20		ug/L			10/19/18 00:42	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/19/18 00:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/19/18 00:42	1
1,2-Dibromoethane	ND		0.10		ug/L			10/19/18 00:42	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/19/18 00:42	1
1,2-Dichloroethane	ND		0.20		ug/L			10/19/18 00:42	1
1,2-Dichloropropane	ND		0.20		ug/L			10/19/18 00:42	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/19/18 00:42	1
2-Butanone	ND		10		ug/L			10/19/18 00:42	1
2-Hexanone	ND		3.0		ug/L			10/19/18 00:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/19/18 00:42	1
Acetone	ND		6.0		ug/L			10/19/18 00:42	1
Acrylonitrile	ND		10		ug/L			10/19/18 00:42	1
Benzene	ND		0.20		ug/L			10/19/18 00:42	1
Bromochloromethane	ND		0.20		ug/L			10/19/18 00:42	1
Bromodichloromethane	ND		0.20		ug/L			10/19/18 00:42	1
Bromoform	ND		0.50		ug/L			10/19/18 00:42	1
Bromomethane	ND		0.50		ug/L			10/19/18 00:42	1
Carbon disulfide	ND		0.30		ug/L			10/19/18 00:42	1
Carbon tetrachloride	ND		0.20		ug/L			10/19/18 00:42	1
Chlorobenzene	ND		0.20		ug/L			10/19/18 00:42	1
Chloroethane	ND		0.50		ug/L			10/19/18 00:42	1
Chloroform	ND		0.20		ug/L			10/19/18 00:42	1
Chloromethane	ND		0.50		ug/L			10/19/18 00:42	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 00:42	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 00:42	1
Dibromochloromethane	ND		0.20		ug/L			10/19/18 00:42	1
Dibromomethane	ND		0.20		ug/L			10/19/18 00:42	1
Ethylbenzene	ND		0.20		ug/L			10/19/18 00:42	1
m,p-Xylene	ND		0.50		ug/L			10/19/18 00:42	1
Methyl iodide	ND		0.50		ug/L			10/19/18 00:42	1
Methylene Chloride	ND		5.0		ug/L			10/19/18 00:42	1
o-Xylene	ND		0.50		ug/L			10/19/18 00:42	1
Styrene	ND		0.50		ug/L			10/19/18 00:42	1
Tetrachloroethene	ND		0.50		ug/L			10/19/18 00:42	1
Toluene	ND		0.20		ug/L			10/19/18 00:42	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 00:42	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 00:42	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/19/18 00:42	1
Trichloroethene	ND		0.20		ug/L			10/19/18 00:42	1
Trichlorofluoromethane	ND		0.50		ug/L			10/19/18 00:42	1
Vinyl acetate	ND		1.0		ug/L			10/19/18 00:42	1
Vinyl chloride	ND		0.020		ug/L			10/19/18 00:42	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-12

Date Collected: 10/15/18 18:00

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-12

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/19/18 00:42	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/19/18 00:42	1
Dibromofluoromethane (Surr)	97		80 - 120		10/19/18 00:42	1
Toluene-d8 (Surr)	99		75 - 125		10/19/18 00:42	1
Trifluorotoluene (Surr)	99		80 - 120		10/19/18 00:42	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	63		1.1		mg/L		10/26/18 11:37	10/29/18 15:53	1
Iron	0.33		0.30		mg/L		10/26/18 11:37	10/29/18 15:53	1
Magnesium	42		1.1		mg/L		10/26/18 11:37	10/29/18 15:53	1
Manganese	0.16		0.020		mg/L		10/26/18 11:37	10/29/18 15:53	1
Potassium	6.5		3.3		mg/L		10/26/18 11:37	10/29/18 15:53	1
Sodium	26		2.0		mg/L		10/26/18 11:37	10/29/18 15:53	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Arsenic	0.0058		0.0010		mg/L		10/22/18 15:47	10/23/18 13:13	1
Barium	0.026		0.0012		mg/L		10/22/18 15:47	10/23/18 13:13	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 13:13	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 13:13	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 13:13	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 13:13	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 13:13	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 13:13	1
Zinc	0.11		0.0070		mg/L		10/22/18 15:47	10/23/18 13:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20	F1	0.20		mg/L			10/23/18 22:49	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 16:52	1
Chloride	23		0.90		mg/L			10/23/18 22:49	1
Sulfate	23		1.2		mg/L			10/23/18 22:49	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.2		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	400		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 14:20	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-13

Date Collected: 10/15/18 16:43

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/19/18 01:09	1
1,1,1-Trichloroethane	0.35		0.20		ug/L			10/19/18 01:09	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/19/18 01:09	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/19/18 01:09	1
1,1-Dichloroethane	ND		0.20		ug/L			10/19/18 01:09	1
1,1-Dichloroethene	ND		0.20		ug/L			10/19/18 01:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/19/18 01:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/19/18 01:09	1
1,2-Dibromoethane	ND		0.10		ug/L			10/19/18 01:09	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/19/18 01:09	1
1,2-Dichloroethane	ND		0.20		ug/L			10/19/18 01:09	1
1,2-Dichloropropane	ND		0.20		ug/L			10/19/18 01:09	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/19/18 01:09	1
2-Butanone	ND		10		ug/L			10/19/18 01:09	1
2-Hexanone	ND		3.0		ug/L			10/19/18 01:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/19/18 01:09	1
Acetone	ND		6.0		ug/L			10/19/18 01:09	1
Acrylonitrile	ND		10		ug/L			10/19/18 01:09	1
Benzene	ND		0.20		ug/L			10/19/18 01:09	1
Bromochloromethane	ND		0.20		ug/L			10/19/18 01:09	1
Bromodichloromethane	ND		0.20		ug/L			10/19/18 01:09	1
Bromoform	ND		0.50		ug/L			10/19/18 01:09	1
Bromomethane	ND		0.50		ug/L			10/19/18 01:09	1
Carbon disulfide	ND		0.30		ug/L			10/19/18 01:09	1
Carbon tetrachloride	ND		0.20		ug/L			10/19/18 01:09	1
Chlorobenzene	ND		0.20		ug/L			10/19/18 01:09	1
Chloroethane	ND		0.50		ug/L			10/19/18 01:09	1
Chloroform	ND		0.20		ug/L			10/19/18 01:09	1
Chloromethane	ND		0.50		ug/L			10/19/18 01:09	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 01:09	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 01:09	1
Dibromochloromethane	ND		0.20		ug/L			10/19/18 01:09	1
Dibromomethane	ND		0.20		ug/L			10/19/18 01:09	1
Ethylbenzene	ND		0.20		ug/L			10/19/18 01:09	1
m,p-Xylene	ND		0.50		ug/L			10/19/18 01:09	1
Methyl iodide	ND		0.50		ug/L			10/19/18 01:09	1
Methylene Chloride	ND		5.0		ug/L			10/19/18 01:09	1
o-Xylene	ND		0.50		ug/L			10/19/18 01:09	1
Styrene	ND		0.50		ug/L			10/19/18 01:09	1
Tetrachloroethene	ND		0.50		ug/L			10/19/18 01:09	1
Toluene	ND		0.20		ug/L			10/19/18 01:09	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 01:09	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 01:09	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/19/18 01:09	1
Trichloroethene	ND		0.20		ug/L			10/19/18 01:09	1
Trichlorofluoromethane	2.0		0.50		ug/L			10/19/18 01:09	1
Vinyl acetate	ND		1.0		ug/L			10/19/18 01:09	1
Vinyl chloride	25		0.020		ug/L			10/19/18 01:09	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-13

Date Collected: 10/15/18 16:43

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-13

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/19/18 01:09	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/19/18 01:09	1
Dibromofluoromethane (Surr)	98		80 - 120		10/19/18 01:09	1
Toluene-d8 (Surr)	99		75 - 125		10/19/18 01:09	1
Trifluorotoluene (Surr)	98		80 - 120		10/19/18 01:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190		1.1		mg/L		10/26/18 11:37	10/29/18 15:56	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 15:56	1
Magnesium	93		1.1		mg/L		10/26/18 11:37	10/29/18 15:56	1
Manganese	0.062		0.020		mg/L		10/26/18 11:37	10/29/18 15:56	1
Potassium	8.6		3.3		mg/L		10/26/18 11:37	10/29/18 15:56	1
Sodium	37		2.0		mg/L		10/26/18 11:37	10/29/18 15:56	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Arsenic	0.0018		0.0010		mg/L		10/22/18 15:47	10/23/18 13:17	1
Barium	0.044		0.0012		mg/L		10/22/18 15:47	10/23/18 13:17	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 13:17	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 13:17	1
Nickel	0.0065		0.0030		mg/L		10/22/18 15:47	10/23/18 13:17	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 13:17	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 13:17	1
Vanadium	0.0059		0.0040		mg/L		10/22/18 15:47	10/23/18 13:17	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 23:48	1
Nitrate Nitrite as N	6.3		0.40		mg/L			10/17/18 14:55	1
Chloride	31		0.90		mg/L			10/23/18 23:48	1
Sulfate	77		1.2		mg/L			10/23/18 23:48	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	2.2		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	780		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	780		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	820		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	17		10		mg/L		10/18/18 12:10	10/18/18 12:16	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-15

Date Collected: 10/15/18 17:48

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/19/18 01:36	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/19/18 01:36	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/19/18 01:36	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/19/18 01:36	1
1,1-Dichloroethane	ND		0.20		ug/L			10/19/18 01:36	1
1,1-Dichloroethene	ND		0.20		ug/L			10/19/18 01:36	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/19/18 01:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/19/18 01:36	1
1,2-Dibromoethane	ND		0.10		ug/L			10/19/18 01:36	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/19/18 01:36	1
1,2-Dichloroethane	ND		0.20		ug/L			10/19/18 01:36	1
1,2-Dichloropropane	ND		0.20		ug/L			10/19/18 01:36	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/19/18 01:36	1
2-Butanone	ND		10		ug/L			10/19/18 01:36	1
2-Hexanone	ND		3.0		ug/L			10/19/18 01:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/19/18 01:36	1
Acetone	ND		6.0		ug/L			10/19/18 01:36	1
Acrylonitrile	ND		10		ug/L			10/19/18 01:36	1
Benzene	ND		0.20		ug/L			10/19/18 01:36	1
Bromochloromethane	ND		0.20		ug/L			10/19/18 01:36	1
Bromodichloromethane	ND		0.20		ug/L			10/19/18 01:36	1
Bromoform	ND		0.50		ug/L			10/19/18 01:36	1
Bromomethane	ND		0.50		ug/L			10/19/18 01:36	1
Carbon disulfide	ND		0.30		ug/L			10/19/18 01:36	1
Carbon tetrachloride	ND		0.20		ug/L			10/19/18 01:36	1
Chlorobenzene	ND		0.20		ug/L			10/19/18 01:36	1
Chloroethane	ND		0.50		ug/L			10/19/18 01:36	1
Chloroform	ND		0.20		ug/L			10/19/18 01:36	1
Chloromethane	ND		0.50		ug/L			10/19/18 01:36	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 01:36	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 01:36	1
Dibromochloromethane	ND		0.20		ug/L			10/19/18 01:36	1
Dibromomethane	ND		0.20		ug/L			10/19/18 01:36	1
Ethylbenzene	ND		0.20		ug/L			10/19/18 01:36	1
m,p-Xylene	ND		0.50		ug/L			10/19/18 01:36	1
Methyl iodide	ND		0.50		ug/L			10/19/18 01:36	1
Methylene Chloride	ND		5.0		ug/L			10/19/18 01:36	1
o-Xylene	ND		0.50		ug/L			10/19/18 01:36	1
Styrene	ND		0.50		ug/L			10/19/18 01:36	1
Tetrachloroethene	ND		0.50		ug/L			10/19/18 01:36	1
Toluene	ND		0.20		ug/L			10/19/18 01:36	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/19/18 01:36	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/19/18 01:36	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/19/18 01:36	1
Trichloroethene	ND		0.20		ug/L			10/19/18 01:36	1
Trichlorofluoromethane	2.0		0.50		ug/L			10/19/18 01:36	1
Vinyl acetate	ND		1.0		ug/L			10/19/18 01:36	1
Vinyl chloride	0.083		0.020		ug/L			10/19/18 01:36	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-15

Date Collected: 10/15/18 17:48

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-14

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/19/18 01:36	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/19/18 01:36	1
Dibromofluoromethane (Surr)	98		80 - 120		10/19/18 01:36	1
Toluene-d8 (Surr)	100		75 - 125		10/19/18 01:36	1
Trifluorotoluene (Surr)	101		80 - 120		10/19/18 01:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	160		1.1		mg/L		10/26/18 11:37	10/29/18 16:00	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 16:00	1
Magnesium	67		1.1		mg/L		10/26/18 11:37	10/29/18 16:00	1
Manganese	0.44		0.020		mg/L		10/26/18 11:37	10/29/18 16:00	1
Potassium	7.4		3.3		mg/L		10/26/18 11:37	10/29/18 16:00	1
Sodium	32		2.0		mg/L		10/26/18 11:37	10/29/18 16:00	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Arsenic	0.0012		0.0010		mg/L		10/22/18 15:47	10/23/18 13:21	1
Barium	0.056		0.0012		mg/L		10/22/18 15:47	10/23/18 13:21	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Cobalt	0.00090		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 13:21	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 13:21	1
Nickel	0.0049		0.0030		mg/L		10/22/18 15:47	10/23/18 13:21	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 13:21	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 13:21	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 13:21	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/24/18 00:00	1
Nitrate Nitrite as N	8.5		0.40		mg/L			10/17/18 16:28	1
Chloride	21		0.90		mg/L			10/24/18 00:00	1
Sulfate	69		1.2		mg/L			10/24/18 00:00	1
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1
Total Organic Carbon	1.3		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	580		5.0		mg/L			10/25/18 16:15	1
Bicarbonate Alkalinity as CaCO3	580		5.0		mg/L			10/25/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 16:15	1
Total Dissolved Solids	770		10		mg/L			10/19/18 10:14	1
Chemical Oxygen Demand	ND		10		mg/L		10/18/18 12:10	10/18/18 12:16	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: Trip Blank

Date Collected: 10/15/18 00:00

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 18:28	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 18:28	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 18:28	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 18:28	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 18:28	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 18:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 18:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 18:28	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 18:28	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 18:28	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 18:28	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 18:28	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 18:28	1
2-Butanone	ND		10		ug/L			10/18/18 18:28	1
2-Hexanone	ND		3.0		ug/L			10/18/18 18:28	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 18:28	1
Acetone	ND		6.0		ug/L			10/18/18 18:28	1
Acrylonitrile	ND		10		ug/L			10/18/18 18:28	1
Benzene	ND		0.20		ug/L			10/18/18 18:28	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 18:28	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 18:28	1
Bromoform	ND		0.50		ug/L			10/18/18 18:28	1
Bromomethane	ND		0.50		ug/L			10/18/18 18:28	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 18:28	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 18:28	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 18:28	1
Chloroethane	ND		0.50		ug/L			10/18/18 18:28	1
Chloroform	ND		0.20		ug/L			10/18/18 18:28	1
Chloromethane	ND		0.50		ug/L			10/18/18 18:28	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 18:28	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 18:28	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 18:28	1
Dibromomethane	ND		0.20		ug/L			10/18/18 18:28	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 18:28	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 18:28	1
Methyl iodide	ND		0.50		ug/L			10/18/18 18:28	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 18:28	1
o-Xylene	ND		0.50		ug/L			10/18/18 18:28	1
Styrene	ND		0.50		ug/L			10/18/18 18:28	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 18:28	1
Toluene	ND		0.20		ug/L			10/18/18 18:28	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 18:28	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 18:28	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 18:28	1
Trichloroethene	ND		0.20		ug/L			10/18/18 18:28	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 18:28	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 18:28	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 18:28	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: Trip Blank

Date Collected: 10/15/18 00:00

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-15

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/18/18 18:28	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/18/18 18:28	1
Dibromofluoromethane (Surr)	96		80 - 120		10/18/18 18:28	1
Toluene-d8 (Surr)	100		75 - 125		10/18/18 18:28	1
Trifluorotoluene (Surr)	101		80 - 120		10/18/18 18:28	1

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-286875/7

Matrix: Water

Analysis Batch: 286875

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/18/18 17:35	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/18/18 17:35	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/18/18 17:35	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/18/18 17:35	1
1,1-Dichloroethane	ND		0.20		ug/L			10/18/18 17:35	1
1,1-Dichloroethene	ND		0.20		ug/L			10/18/18 17:35	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/18/18 17:35	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/18/18 17:35	1
1,2-Dibromoethane	ND		0.10		ug/L			10/18/18 17:35	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/18/18 17:35	1
1,2-Dichloroethane	ND		0.20		ug/L			10/18/18 17:35	1
1,2-Dichloropropane	ND		0.20		ug/L			10/18/18 17:35	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/18/18 17:35	1
2-Butanone	ND		10		ug/L			10/18/18 17:35	1
2-Hexanone	ND		3.0		ug/L			10/18/18 17:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/18/18 17:35	1
Acetone	ND		6.0		ug/L			10/18/18 17:35	1
Acrylonitrile	ND		10		ug/L			10/18/18 17:35	1
Benzene	ND		0.20		ug/L			10/18/18 17:35	1
Bromochloromethane	ND		0.20		ug/L			10/18/18 17:35	1
Bromodichloromethane	ND		0.20		ug/L			10/18/18 17:35	1
Bromoform	ND		0.50		ug/L			10/18/18 17:35	1
Bromomethane	ND		0.50		ug/L			10/18/18 17:35	1
Carbon disulfide	ND		0.30		ug/L			10/18/18 17:35	1
Carbon tetrachloride	ND		0.20		ug/L			10/18/18 17:35	1
Chlorobenzene	ND		0.20		ug/L			10/18/18 17:35	1
Chloroethane	ND		0.50		ug/L			10/18/18 17:35	1
Chloroform	ND		0.20		ug/L			10/18/18 17:35	1
Chloromethane	ND		0.50		ug/L			10/18/18 17:35	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 17:35	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 17:35	1
Dibromochloromethane	ND		0.20		ug/L			10/18/18 17:35	1
Dibromomethane	ND		0.20		ug/L			10/18/18 17:35	1
Ethylbenzene	ND		0.20		ug/L			10/18/18 17:35	1
m,p-Xylene	ND		0.50		ug/L			10/18/18 17:35	1
Methyl iodide	ND		0.50		ug/L			10/18/18 17:35	1
Methylene Chloride	ND		5.0		ug/L			10/18/18 17:35	1
o-Xylene	ND		0.50		ug/L			10/18/18 17:35	1
Styrene	ND		0.50		ug/L			10/18/18 17:35	1
Tetrachloroethene	ND		0.50		ug/L			10/18/18 17:35	1
Toluene	ND		0.20		ug/L			10/18/18 17:35	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/18/18 17:35	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/18/18 17:35	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/18/18 17:35	1
Trichloroethene	ND		0.20		ug/L			10/18/18 17:35	1
Trichlorofluoromethane	ND		0.50		ug/L			10/18/18 17:35	1
Vinyl acetate	ND		1.0		ug/L			10/18/18 17:35	1
Vinyl chloride	ND		0.020		ug/L			10/18/18 17:35	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/18/18 17:35	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/18/18 17:35	1
Dibromofluoromethane (Surr)	99		80 - 120		10/18/18 17:35	1
Toluene-d8 (Surr)	101		75 - 125		10/18/18 17:35	1
Trifluorotoluene (Surr)	103		80 - 120		10/18/18 17:35	1

Lab Sample ID: LCS 580-286875/4

Matrix: Water

Analysis Batch: 286875

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.48		ug/L		110	79 - 139
1,1,1-Trichloroethane	5.00	5.14		ug/L		103	74 - 137
1,1,2,2-Tetrachloroethane	5.00	5.72		ug/L		114	69 - 147
1,1,2-Trichloroethane	5.00	5.75		ug/L		115	80 - 127
1,1-Dichloroethane	5.00	5.10		ug/L		102	80 - 135
1,1-Dichloroethene	5.00	4.75		ug/L		95	71 - 134
1,2,3-Trichloropropane	5.00	5.57		ug/L		111	80 - 127
1,2-Dibromo-3-Chloropropane	5.00	5.26		ug/L		105	69 - 130
1,2-Dibromoethane	5.00	5.36		ug/L		107	80 - 126
1,2-Dichlorobenzene	5.00	5.83		ug/L		117	80 - 129
1,2-Dichloroethane	5.00	5.40		ug/L		108	80 - 130
1,2-Dichloropropane	5.00	5.70		ug/L		114	80 - 130
1,4-Dichlorobenzene	5.00	6.13		ug/L		123	80 - 129
2-Butanone	25.0	29.4		ug/L		118	64 - 144
2-Hexanone	25.0	31.1		ug/L		124	77 - 144
4-Methyl-2-pentanone	25.0	30.9		ug/L		124	78 - 137
Acetone	25.0	28.8		ug/L		115	43 - 150
Acrylonitrile	50.0	56.9		ug/L		114	67 - 148
Benzene	5.00	5.70		ug/L		114	73 - 133
Bromochloromethane	5.00	5.52		ug/L		110	79 - 131
Bromodichloromethane	5.00	5.72		ug/L		114	80 - 131
Bromoform	5.00	5.43		ug/L		109	69 - 125
Bromomethane	5.00	4.67		ug/L		93	61 - 141
Carbon disulfide	5.00	4.53		ug/L		91	65 - 138
Carbon tetrachloride	5.00	5.08		ug/L		102	71 - 140
Chlorobenzene	5.00	5.29		ug/L		106	80 - 129
Chloroethane	5.00	4.68		ug/L		94	58 - 150
Chloroform	5.00	5.63		ug/L		113	80 - 130
Chloromethane	5.00	3.61		ug/L		72	61 - 143
cis-1,2-Dichloroethene	5.00	5.41		ug/L		108	79 - 130
cis-1,3-Dichloropropene	5.00	5.51		ug/L		110	79 - 132
Dibromochloromethane	5.00	5.49		ug/L		110	76 - 131
Dibromomethane	5.00	5.75		ug/L		115	76 - 129
Ethylbenzene	5.00	5.47		ug/L		109	74 - 138
m,p-Xylene	5.00	5.53		ug/L		111	73 - 130
Methyl iodide	5.00	4.87		ug/L		97	76 - 133
Methylene Chloride	5.00	5.11		ug/L		102	75 - 134
o-Xylene	5.00	5.66		ug/L		113	80 - 139
Styrene	5.00	6.04		ug/L		121	74 - 136
Tetrachloroethene	5.00	5.20		ug/L		104	75 - 131
Toluene	5.00	5.32		ug/L		106	80 - 126
trans-1,2-Dichloroethene	5.00	4.99		ug/L		100	75 - 133
trans-1,3-Dichloropropene	5.00	5.54		ug/L		111	78 - 128

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-286875/4

Matrix: Water

Analysis Batch: 286875

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	5.87		ug/L		117	20 - 150
Trichloroethene	5.00	5.22		ug/L		104	72 - 136
Trichlorofluoromethane	5.00	4.83		ug/L		97	60 - 139
Vinyl acetate	12.5	13.8		ug/L		110	22 - 150
Vinyl chloride	5.00	4.77		ug/L		95	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	96		75 - 125
Trifluorotoluene (Surr)	99		80 - 120

Lab Sample ID: LCSD 580-286875/5

Matrix: Water

Analysis Batch: 286875

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.00		ug/L		100	79 - 139	9	20
1,1,1-Trichloroethane	5.00	4.86		ug/L		97	74 - 137	6	20
1,1,2,2-Tetrachloroethane	5.00	4.90		ug/L		98	69 - 147	15	16
1,1,2-Trichloroethane	5.00	5.07		ug/L		101	80 - 127	13	19
1,1-Dichloroethane	5.00	4.81		ug/L		96	80 - 135	6	20
1,1-Dichloroethene	5.00	4.66		ug/L		93	71 - 134	2	28
1,2,3-Trichloropropane	5.00	4.86		ug/L		97	80 - 127	14	20
1,2-Dibromo-3-Chloropropane	5.00	4.30		ug/L		86	69 - 130	20	20
1,2-Dibromoethane	5.00	4.65		ug/L		93	80 - 126	14	20
1,2-Dichlorobenzene	5.00	5.18		ug/L		104	80 - 129	12	14
1,2-Dichloroethane	5.00	4.85		ug/L		97	80 - 130	11	15
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 130	8	20
1,4-Dichlorobenzene	5.00	5.52		ug/L		110	80 - 129	10	11
2-Butanone	25.0	25.0		ug/L		100	64 - 144	16	29
2-Hexanone	25.0	26.6		ug/L		106	77 - 144	16	21
4-Methyl-2-pentanone	25.0	25.7		ug/L		103	78 - 137	18	19
Acetone	25.0	25.1		ug/L		100	43 - 150	14	35
Acrylonitrile	50.0	47.5		ug/L		95	67 - 148	18	23
Benzene	5.00	5.35		ug/L		107	73 - 133	6	20
Bromochloromethane	5.00	4.96		ug/L		99	79 - 131	11	20
Bromodichloromethane	5.00	4.99		ug/L		100	80 - 131	14	20
Bromoform	5.00	4.69		ug/L		94	69 - 125	15	20
Bromomethane	5.00	4.64		ug/L		93	61 - 141	1	31
Carbon disulfide	5.00	4.43		ug/L		89	65 - 138	2	23
Carbon tetrachloride	5.00	4.83		ug/L		97	71 - 140	5	21
Chlorobenzene	5.00	4.86		ug/L		97	80 - 129	8	12
Chloroethane	5.00	3.80		ug/L		76	58 - 150	21	35
Chloroform	5.00	5.11		ug/L		102	80 - 130	10	20
Chloromethane	5.00	3.43		ug/L		69	61 - 143	5	31
cis-1,2-Dichloroethene	5.00	4.98		ug/L		100	79 - 130	8	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-286875/5

Matrix: Water

Analysis Batch: 286875

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.88		ug/L		98	79 - 132	12	22
Dibromochloromethane	5.00	4.81		ug/L		96	76 - 131	13	20
Dibromomethane	5.00	5.00		ug/L		100	76 - 129	14	20
Ethylbenzene	5.00	5.08		ug/L		102	74 - 138	7	20
m,p-Xylene	5.00	5.18		ug/L		104	73 - 130	7	20
Methyl iodide	5.00	4.76		ug/L		95	76 - 133	2	15
Methylene Chloride	5.00	4.86	J	ug/L		97	75 - 134	5	29
o-Xylene	5.00	5.23		ug/L		105	80 - 139	8	20
Styrene	5.00	5.49		ug/L		110	74 - 136	9	20
Tetrachloroethene	5.00	4.91		ug/L		98	75 - 131	6	20
Toluene	5.00	4.96		ug/L		99	80 - 126	7	20
trans-1,2-Dichloroethene	5.00	4.81		ug/L		96	75 - 133	4	27
trans-1,3-Dichloropropene	5.00	4.87		ug/L		97	78 - 128	13	21
trans-1,4-Dichloro-2-butene	5.00	4.91		ug/L		98	20 - 150	18	20
Trichloroethene	5.00	4.86		ug/L		97	72 - 136	7	20
Trichlorofluoromethane	5.00	4.68		ug/L		94	60 - 139	3	31
Vinyl acetate	12.5	10.4		ug/L		83	22 - 150	28	35
Vinyl chloride	5.00	4.52		ug/L		90	59 - 140	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	99		80 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-287504/22-A

Matrix: Water

Analysis Batch: 287711

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		10/26/18 11:37	10/29/18 14:38	1
Iron	ND		0.30		mg/L		10/26/18 11:37	10/29/18 14:38	1
Magnesium	ND		1.1		mg/L		10/26/18 11:37	10/29/18 14:38	1
Manganese	ND		0.020		mg/L		10/26/18 11:37	10/29/18 14:38	1
Potassium	ND		3.3		mg/L		10/26/18 11:37	10/29/18 14:38	1
Sodium	ND		2.0		mg/L		10/26/18 11:37	10/29/18 14:38	1

Lab Sample ID: LCS 580-287504/23-A

Matrix: Water

Analysis Batch: 287711

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	20.0	20.4		mg/L		102	80 - 120
Iron	22.0	22.4		mg/L		102	80 - 120
Magnesium	20.0	20.2		mg/L		101	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 580-287504/23-A

Matrix: Water

Analysis Batch: 287711

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1.00	1.05		mg/L		105	80 - 120
Potassium	20.0	20.0		mg/L		100	80 - 120
Sodium	20.0	20.1		mg/L		100	80 - 120

Lab Sample ID: LCSD 580-287504/24-A

Matrix: Water

Analysis Batch: 287711

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 287504

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	20.0	20.0		mg/L		100	80 - 120	2	20
Iron	22.0	22.0		mg/L		100	80 - 120	2	20
Magnesium	20.0	19.8		mg/L		99	80 - 120	2	20
Manganese	1.00	1.03		mg/L		103	80 - 120	1	20
Potassium	20.0	19.8		mg/L		99	80 - 120	1	20
Sodium	20.0	19.8		mg/L		99	80 - 120	1	20

Lab Sample ID: 580-81131-1 MS

Matrix: Water

Analysis Batch: 287711

Client Sample ID: 1018-01

Prep Type: Dissolved

Prep Batch: 287504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	71		20.0	92.7		mg/L		107	75 - 125
Iron	ND		22.0	22.7		mg/L		103	75 - 125
Magnesium	27		20.0	47.2		mg/L		102	75 - 125
Manganese	0.035		1.00	1.09		mg/L		105	75 - 125
Potassium	6.1		20.0	26.7		mg/L		103	75 - 125
Sodium	22		20.0	42.6		mg/L		105	75 - 125

Lab Sample ID: 580-81131-1 MSD

Matrix: Water

Analysis Batch: 287711

Client Sample ID: 1018-01

Prep Type: Dissolved

Prep Batch: 287504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Calcium	71		20.0	89.2		mg/L		90	75 - 125	4	20
Iron	ND		22.0	22.3		mg/L		101	75 - 125	2	20
Magnesium	27		20.0	45.5		mg/L		94	75 - 125	4	20
Manganese	0.035		1.00	1.07		mg/L		103	75 - 125	2	20
Potassium	6.1		20.0	26.0		mg/L		100	75 - 125	3	20
Sodium	22		20.0	41.4		mg/L		99	75 - 125	3	20

Lab Sample ID: 580-81131-1 DU

Matrix: Water

Analysis Batch: 287711

Client Sample ID: 1018-01

Prep Type: Dissolved

Prep Batch: 287504

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Calcium	71		70.6		mg/L		0.9	20
Iron	ND		ND		mg/L		NC	20
Magnesium	27		26.5		mg/L		0.9	20
Manganese	0.035		0.0347		mg/L		2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-81131-1 DU

Matrix: Water

Analysis Batch: 287711

Client Sample ID: 1018-01

Prep Type: Dissolved

Prep Batch: 287504

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Potassium	6.1		6.04		mg/L		1	20
Sodium	22		21.3		mg/L		1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-287099/22-A

Matrix: Water

Analysis Batch: 287183

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Arsenic	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 11:20	1
Barium	ND		0.0012		mg/L		10/22/18 15:47	10/23/18 11:20	1
Beryllium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Cadmium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Chromium	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Cobalt	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Copper	ND		0.0020		mg/L		10/22/18 15:47	10/23/18 11:20	1
Lead	ND		0.00080		mg/L		10/22/18 15:47	10/23/18 11:20	1
Nickel	ND		0.0030		mg/L		10/22/18 15:47	10/23/18 11:20	1
Selenium	ND		0.0080		mg/L		10/22/18 15:47	10/23/18 11:20	1
Silver	ND		0.00040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Thallium	ND		0.0010		mg/L		10/22/18 15:47	10/23/18 11:20	1
Vanadium	ND		0.0040		mg/L		10/22/18 15:47	10/23/18 11:20	1
Zinc	ND		0.0070		mg/L		10/22/18 15:47	10/23/18 11:20	1

Lab Sample ID: LCS 580-287099/23-A

Matrix: Water

Analysis Batch: 287183

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.92		mg/L		97	80 - 120
Arsenic	4.00	4.07		mg/L		102	80 - 120
Barium	4.00	3.97		mg/L		99	80 - 120
Beryllium	0.100	0.0990		mg/L		99	80 - 120
Cadmium	0.100	0.104		mg/L		104	80 - 120
Chromium	0.400	0.400		mg/L		100	80 - 120
Cobalt	1.00	1.02		mg/L		102	80 - 120
Copper	0.500	0.515		mg/L		103	80 - 120
Lead	1.00	0.910		mg/L		91	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Selenium	4.00	4.09		mg/L		102	80 - 120
Silver	0.600	0.605		mg/L		101	80 - 120
Thallium	4.00	3.53		mg/L		88	80 - 120
Vanadium	1.00	1.01		mg/L		101	80 - 120
Zinc	4.00	4.10		mg/L		103	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-287099/24-A

Matrix: Water

Analysis Batch: 287183

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 287099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.92		mg/L		97	80 - 120	0	20
Arsenic	4.00	4.00		mg/L		100	80 - 120	2	20
Barium	4.00	3.86		mg/L		96	80 - 120	3	20
Beryllium	0.100	0.0972		mg/L		97	80 - 120	2	20
Cadmium	0.100	0.103		mg/L		103	80 - 120	1	20
Chromium	0.400	0.396		mg/L		99	80 - 120	1	20
Cobalt	1.00	1.03		mg/L		103	80 - 120	1	20
Copper	0.500	0.517		mg/L		103	80 - 120	0	20
Lead	1.00	0.916		mg/L		92	80 - 120	1	20
Nickel	1.00	1.04		mg/L		104	80 - 120	2	20
Selenium	4.00	4.05		mg/L		101	80 - 120	1	20
Silver	0.600	0.591		mg/L		98	80 - 120	2	20
Thallium	4.00	3.53		mg/L		88	80 - 120	0	20
Vanadium	1.00	0.988		mg/L		99	80 - 120	2	20
Zinc	4.00	3.99		mg/L		100	80 - 120	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-286835/3

Matrix: Water

Analysis Batch: 286835

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 11:01	1

Lab Sample ID: LCS 580-286835/4

Matrix: Water

Analysis Batch: 286835

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-286835/5

Matrix: Water

Analysis Batch: 286835

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.0		mg/L		100	90 - 110	0	15

Lab Sample ID: 580-81131-8 MS

Matrix: Water

Analysis Batch: 286835

Client Sample ID: 1018-08

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	2.0		10.0	12.8		mg/L		108	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-81131-8 MSD
Matrix: Water
Analysis Batch: 286835

Client Sample ID: 1018-08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	2.0		10.0	12.5		mg/L		105	90 - 110	2	15

Lab Sample ID: MB 580-287252/3
Matrix: Water
Analysis Batch: 287252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/23/18 18:55	1
Chloride	ND		0.90		mg/L			10/23/18 18:55	1
Sulfate	ND		1.2		mg/L			10/23/18 18:55	1

Lab Sample ID: LCS 580-287252/4
Matrix: Water
Analysis Batch: 287252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	4.97		mg/L		99	90 - 110
Chloride	50.0	50.6		mg/L		101	90 - 110
Sulfate	50.0	49.7		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-287252/5
Matrix: Water
Analysis Batch: 287252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	4.99		mg/L		100	90 - 110	0	15
Chloride	50.0	50.5		mg/L		101	90 - 110	0	15
Sulfate	50.0	49.8		mg/L		100	90 - 110	0	15

Lab Sample ID: 580-81131-1 MS
Matrix: Water
Analysis Batch: 287252

Client Sample ID: 1018-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		5.00	5.06		mg/L		98	90 - 110
Chloride	37		50.0	87.3		mg/L		100	90 - 110
Sulfate	25		50.0	77.4		mg/L		106	90 - 110

Lab Sample ID: 580-81131-1 MSD
Matrix: Water
Analysis Batch: 287252

Client Sample ID: 1018-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		5.00	5.15		mg/L		100	90 - 110	2	15
Chloride	37		50.0	88.3		mg/L		102	90 - 110	1	15
Sulfate	25		50.0	78.2		mg/L		107	90 - 110	1	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-81131-12 MS

Matrix: Water

Analysis Batch: 287252

Client Sample ID: 1018-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.20	F1	5.00	3.72	F1	mg/L		70	90 - 110
Chloride	23		50.0	75.1		mg/L		105	90 - 110
Sulfate	23		50.0	76.0		mg/L		106	90 - 110

Lab Sample ID: 580-81131-12 MSD

Matrix: Water

Analysis Batch: 287252

Client Sample ID: 1018-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.20	F1	5.00	3.76	F1	mg/L		71	90 - 110	1	15
Chloride	23		50.0	74.9		mg/L		104	90 - 110	0	15
Sulfate	23		50.0	75.8		mg/L		106	90 - 110	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 580-287592/1-A

Matrix: Water

Analysis Batch: 287597

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 287592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.50		mg/L		10/27/18 12:33	10/27/18 12:56	1

Lab Sample ID: LCS 580-287592/2-A

Matrix: Water

Analysis Batch: 287597

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 287592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.00	2.21		mg/L		110	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 580-287314/14

Matrix: Water

Analysis Batch: 287314

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.15		mg/L			10/24/18 12:33	1

Lab Sample ID: LCS 580-287314/15

Matrix: Water

Analysis Batch: 287314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.988		mg/L		99	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCSD 580-287314/16

Matrix: Water

Analysis Batch: 287314

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.988		mg/L		99	90 - 110	0	20

Lab Sample ID: MB 580-287764/14

Matrix: Water

Analysis Batch: 287764

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.15		mg/L			10/30/18 13:57	1

Lab Sample ID: LCS 580-287764/15

Matrix: Water

Analysis Batch: 287764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.966		mg/L		97	90 - 110		

Lab Sample ID: LCSD 580-287764/16

Matrix: Water

Analysis Batch: 287764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.970		mg/L		97	90 - 110	0	20

Lab Sample ID: 580-81131-5 MS

Matrix: Water

Analysis Batch: 287764

Client Sample ID: 1018-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	6.8		0.500	7.27	4	mg/L		99	90 - 110		

Lab Sample ID: 580-81131-5 MSD

Matrix: Water

Analysis Batch: 287764

Client Sample ID: 1018-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	6.8		0.500	7.29	4	mg/L		104	90 - 110	0	20

Lab Sample ID: 580-81131-5 DU

Matrix: Water

Analysis Batch: 287764

Client Sample ID: 1018-05

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate Nitrite as N	6.8		6.81		mg/L		0.5	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-287442/2

Matrix: Water

Analysis Batch: 287442

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	95.2		mg/L		95	85 - 115

Lab Sample ID: 580-81131-1 DU

Matrix: Water

Analysis Batch: 287442

Client Sample ID: 1018-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	250		261		mg/L		4	17
Bicarbonate Alkalinity as CaCO3	250		261		mg/L		4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-286938/1

Matrix: Water

Analysis Batch: 286938

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			10/19/18 10:14	1

Lab Sample ID: LCS 580-286938/2

Matrix: Water

Analysis Batch: 286938

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	968		mg/L		97	80 - 120

Lab Sample ID: 580-81131-8 DU

Matrix: Water

Analysis Batch: 286938

Client Sample ID: 1018-08

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	710		699		mg/L		1	20

Method: SM 5220D - COD

Lab Sample ID: MB 580-286738/3-A

Matrix: Water

Analysis Batch: 286739

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 286738

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		10/17/18 11:00	10/17/18 11:15	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: SM 5220D - COD (Continued)

Lab Sample ID: LCS 580-286738/4-A
Matrix: Water
Analysis Batch: 286739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	72.3		mg/L		96	80 - 120

Lab Sample ID: MB 580-286865/3-A
Matrix: Water
Analysis Batch: 286867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286865

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		10/18/18 12:10	10/18/18 12:16	1

Lab Sample ID: LCS 580-286865/4-A
Matrix: Water
Analysis Batch: 286867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286865

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	69.9		mg/L		93	80 - 120

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-286762/3
Matrix: Water
Analysis Batch: 286762

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/17/18 09:45	1

Lab Sample ID: LCS 580-286762/4
Matrix: Water
Analysis Batch: 286762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.4		mg/L		104	85 - 115

Lab Sample ID: MB 580-286926/5
Matrix: Water
Analysis Batch: 286926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/18/18 17:52	1

Lab Sample ID: LCS 580-286926/6
Matrix: Water
Analysis Batch: 286926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.7		mg/L		107	85 - 115

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 580-81131-3 MS

Matrix: Water

Analysis Batch: 286926

Client Sample ID: 1018-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.4		10.0	11.4		mg/L		100	85 - 115

Lab Sample ID: 580-81131-3 MSD

Matrix: Water

Analysis Batch: 286926

Client Sample ID: 1018-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	1.4		10.0	11.6		mg/L		102	85 - 115	2	20

Lab Sample ID: 580-81131-3 DU

Matrix: Water

Analysis Batch: 286926

Client Sample ID: 1018-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.4		1.27		mg/L		12	20

Lab Sample ID: MB 580-286981/3

Matrix: Water

Analysis Batch: 286981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/19/18 10:36	1

Lab Sample ID: LCS 580-286981/4

Matrix: Water

Analysis Batch: 286981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.3		mg/L		103	85 - 115

Lab Sample ID: MB 580-287056/3

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/19/18 17:50	1

Lab Sample ID: LCS 580-287056/4

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.6		mg/L		106	85 - 115

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-01

Date Collected: 10/15/18 11:10

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 19:49	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 14:47	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:10	FCW	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 19:30	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	353.2		1	287314	10/24/18 12:42	TTN	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 11:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286762	10/17/18 09:45	TTN	TAL SEA

Client Sample ID: 1018-02

Date Collected: 10/15/18 11:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 20:15	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:13	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:14	FCW	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 20:06	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	353.2		1	287314	10/24/18 12:43	TTN	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 11:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286762	10/17/18 09:45	TTN	TAL SEA

Client Sample ID: 1018-03

Date Collected: 10/15/18 11:57

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 20:42	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-03

Date Collected: 10/15/18 11:57

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1	287711	10/29/18 15:16	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:18	FCW	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 20:17	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	353.2		5	287764	10/30/18 14:05	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 11:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-04

Date Collected: 10/15/18 12:50

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 21:09	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:20	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:23	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 12:12	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 20:29	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 11:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-05

Date Collected: 10/15/18 12:05

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 21:36	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:23	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-05

Date Collected: 10/15/18 12:05

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:27	FCW	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 20:41	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	353.2		5	287764	10/30/18 14:01	HJM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-06

Date Collected: 10/15/18 14:15

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 22:02	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:26	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:31	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 12:58	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 21:16	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-07

Date Collected: 10/15/18 13:18

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 22:29	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:30	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:35	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 12:46	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-07

Date Collected: 10/15/18 13:18

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	287252	10/23/18 21:28	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-08

Date Collected: 10/15/18 15:40

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 22:55	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:33	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:39	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 13:56	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 21:39	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-09

Date Collected: 10/15/18 14:07

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 23:22	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:37	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 12:44	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 13:33	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 21:51	EMM	TAL SEA
Total/NA	Analysis	300.0		2	287252	10/23/18 22:03	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-09

Lab Sample ID: 580-81131-9

Date Collected: 10/15/18 14:07

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286926	10/18/18 17:52	TTN	TAL SEA

Client Sample ID: 1018-10

Lab Sample ID: 580-81131-10

Date Collected: 10/15/18 16:45

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 23:49	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:40	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 13:05	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 15:18	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 22:14	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286981	10/19/18 10:36	TTN	TAL SEA

Client Sample ID: 1018-11

Lab Sample ID: 580-81131-11

Date Collected: 10/15/18 15:48

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/19/18 00:16	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:50	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 13:09	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 14:43	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 22:26	EMM	TAL SEA
Total/NA	Analysis	300.0		5	287252	10/23/18 22:38	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-11

Lab Sample ID: 580-81131-11

Date Collected: 10/15/18 15:48

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	286981	10/19/18 10:36	TTN	TAL SEA

Client Sample ID: 1018-12

Lab Sample ID: 580-81131-12

Date Collected: 10/15/18 18:00

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/19/18 00:42	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:53	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 13:13	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 16:52	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 22:49	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286738	10/17/18 11:00	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286739	10/17/18 14:20	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-13

Lab Sample ID: 580-81131-13

Date Collected: 10/15/18 16:43

Matrix: Water

Date Received: 10/16/18 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/19/18 01:09	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 15:56	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 13:17	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 14:55	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/23/18 23:48	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Client Sample ID: 1018-13

Date Collected: 10/15/18 16:43

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286865	10/18/18 12:10	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286867	10/18/18 12:16	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-15

Date Collected: 10/15/18 17:48

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/19/18 01:36	W1T	TAL SEA
Dissolved	Prep	3005A			287504	10/26/18 11:37	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287711	10/29/18 16:00	HJM	TAL SEA
Total Recoverable	Prep	3005A			287099	10/22/18 15:47	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287183	10/23/18 13:21	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286835	10/17/18 16:28	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287252	10/24/18 00:00	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287592	10/27/18 12:33	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287597	10/27/18 12:56	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287442	10/25/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	286938	10/19/18 10:14	R1K	TAL SEA
Total/NA	Prep	SM 5220			286865	10/18/18 12:10	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286867	10/18/18 12:16	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 10/15/18 00:00

Date Received: 10/16/18 15:50

Lab Sample ID: 580-81131-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	286875	10/18/18 18:28	W1T	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

TestAmerica Seattle

Accreditation/Certification Summary

Client: SCS Engineers

TestAmerica Job ID: 580-81131-1

Project/Site: Coupeville Solid Waste Facility 4th Qtr

Laboratory: TestAmerica Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Nevada	State Program	9	WA000502019-1	07-31-19
Oregon	NELAP	10	WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

Sample Summary

Client: SCS Engineers

Project/Site: Coupeville Solid Waste Facility 4th Qtr

TestAmerica Job ID: 580-81131-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-81131-1	1018-01	Water	10/15/18 11:10	10/16/18 15:50
580-81131-2	1018-02	Water	10/15/18 11:15	10/16/18 15:50
580-81131-3	1018-03	Water	10/15/18 11:57	10/16/18 15:50
580-81131-4	1018-04	Water	10/15/18 12:50	10/16/18 15:50
580-81131-5	1018-05	Water	10/15/18 12:05	10/16/18 15:50
580-81131-6	1018-06	Water	10/15/18 14:15	10/16/18 15:50
580-81131-7	1018-07	Water	10/15/18 13:18	10/16/18 15:50
580-81131-8	1018-08	Water	10/15/18 15:40	10/16/18 15:50
580-81131-9	1018-09	Water	10/15/18 14:07	10/16/18 15:50
580-81131-10	1018-10	Water	10/15/18 16:45	10/16/18 15:50
580-81131-11	1018-11	Water	10/15/18 15:48	10/16/18 15:50
580-81131-12	1018-12	Water	10/15/18 18:00	10/16/18 15:50
580-81131-13	1018-13	Water	10/15/18 16:43	10/16/18 15:50
580-81131-14	1018-15	Water	10/15/18 17:48	10/16/18 15:50
580-81131-15	Trip Blank	Water	10/15/18 00:00	10/16/18 15:50

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

100

580-81131 Chain of Custody

estAm
THE LEADER IN ENVIR

Loc: 580
81131

Client Information		Sampler: S.G. & T.B.	Lab PM: Zalmal, Kayse	680-8111 Chain of Custody														
Client Contact: Mr. Sam Graber		Phone: 425-766-3362	E-Mail: kayse.zalmal@testamericainc.com	JC No: 080-27751-7749.1														
Company: SCS Engineers		Page 1 of 2																
Address: 2405 140th Avenue NE Suite 107 City: Bellevue State, Zip: WA, 98005-1877		Due Date Requested: Standard	Analysis Requested															
Phone: 425-289-5443(Tel)		TAT Requested (days):	Job #: 04207033.11															
Email: sgrab@scsengineers.com		PO #:	Preservation Codes:															
Project Name: Coupeville SWF 4th Qtr		WO #:	A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)															
Site: Washington		Project #: 58009563	Other:															
		SSOW#:																
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab) BT=Tissue, A=Air	Matrix (W=water, S=solid, O=waste/oil)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	100.1 Calcd - Total Dissolved Solids	300.0 - Chloride, Sulfate, Fluoride	415.1 - Total Organic Carbon	350.1 - Ammonia as N	Dissolved 6010C - Ca, Fe, Mg, Mn, K, Na (FF)	Total 6020A - As, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Ti, V, Zn	300.0 Nitrate - Nitrite	8260C_LL - 8260 Low Level	3140.1 - Alkalinity, Carbonate, Bicarbonate	5520 - COD	Total Number of Containers	Special Instructions/Note:
1018-01	10/15/18	1110	G	Water	X	N	N	S	S	D	D	N	A	N	S		9	Please note bottle labels originally said "Friday Harbor" for location. Changed to "CSWF".
1018-02		1115		Water													9	
1018-03		1157		Water														
1018-04		1250		Water														
1018-05		1205		Water														
1018-06		1415		Water														
1018-07		1318		Water														
1018-08		1540		Water														
1018-09		1407		Water														
1018-10		1645		Water														
1018-11		1548		Water														
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)													
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological					☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months													
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:													
Empty Kit Relinquished by:					Date:		Time:		Method of Shipment:									
Relinquished by:		Date/Time:		Company		Received by:		Date/Time:		Company		Received by:		Date/Time:		Company		
Relinquished by:		Date/Time:		Company		Received by:		Date/Time:		Company		Received by:		Date/Time:		Company		
Relinquished by:		Date/Time:		Company		Received by:		Date/Time:		Company		Received by:		Date/Time:		Company		
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:														

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Phone (253) 922-2310 Fax (253) 922-3047 Client Information Client Contact: Mr. Sam Graber Company: SCS Engineers		Sampler: SG + TB Phone: 425-766-3362 Lab PM: Zalmi, Kayse E-Mail: kayse.zalmi@testamericainc.com		Carrier Tracking No(s): COC No: 580-27751-7749.1 Page: 2 of 2 Job #: 04207033.11																																																																																																																																																																																																																			
Address: 2405 140th Avenue NE Suite 107 City: Bellevue State, Zip: WA, 98005-1877 Phone: 425-289-5443(Tel) Email: sgrab@scsengineers.com Project Name: Coupeville SWF 4th Qtr Site: Washington		Due Date Requested: Standard TAT Requested (days): PO #: WO #: Project #: 58009563 SSOW#:		Analysis Requested <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Field Filtered Sample (Yes or No)</td> <td>Perform MS/MSD (Yes or No)</td> <td>160.1 - Calcd - Total Dissolved Solids</td> <td>300.0 - Chloride, Sulfate, Fluoride</td> <td>415.1 - Total Organic Carbon</td> <td>350.1 - Ammonia as N</td> <td>Dissolved 6010C - Ca, Fe, Mg, Mn, K, Na (FF)</td> <td>Total 6020A - As, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Ti, V, Zn</td> <td>300.0 Nitrate, Nitrite</td> <td>8260C_LL - 8260 Low Level</td> <td>3140.1 - Alkalinity, Carbonate, Bicarbonate</td> <td>5520 - COD</td> </tr> </table>		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	160.1 - Calcd - Total Dissolved Solids	300.0 - Chloride, Sulfate, Fluoride	415.1 - Total Organic Carbon	350.1 - Ammonia as N	Dissolved 6010C - Ca, Fe, Mg, Mn, K, Na (FF)	Total 6020A - As, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Ti, V, Zn	300.0 Nitrate, Nitrite	8260C_LL - 8260 Low Level	3140.1 - Alkalinity, Carbonate, Bicarbonate	5520 - COD																																																																																																																																																																																																						
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Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:																																																																																																																																																																																																																	
Relinquished by:		Date/Time: 10/16/18 400		Company: SCS		Received by:																																																																																																																																																																																																																	
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Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:																																																																																																																																																																																																																			

Therm. ID: A2 Cor: 2.9 ° Inc: 2.6 °
Cooler Desc: 15 Blac
Packing: Black/C FedEx: _____
Cust. Seal: Yes No X Lab Cour: _____
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: 184 Cor: 3.5 ° Inc: 3.5 °
Cooler Desc: 15 Blac FedEx: _____
Packing: Black/C UPS: _____
Cust. Seal: Yes No X Lab Cour: _____
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: 184 Cor: 4.1 ° Inc: 4.1 °
Cooler Desc: 15 Blac FedEx: _____
Packing: Black/C UPS: _____
Cust. Seal: Yes No X Lab Cour: _____
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: A2 Cor: 2.4 ° Inc: 2.6 °
Cooler Desc: 15 Blac FedEx: _____
Packing: Black/C UPS: _____
Cust. Seal: Yes No X Lab Cour: _____
Wet/Packs/Dry Ice/None Other: _____

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-81131-1

Login Number: 81131

List Source: TestAmerica Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-81163-1

Client Project/Site: Coupeville SWF 4th Qtr

For:

SCS Engineers
2405 140th Avenue NE
Suite 107
Bellevue, Washington 98005-1877

Attn: Mr. Dan Venchiarutti



Authorized for release by:
11/1/2018 1:49:14 PM

Kayse Zalmai, Project Manager I
(253)922-2310
kayse.zalmai@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Job ID: 580-81163-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-81163-1

Receipt

The samples were received on 10/17/2018 11:38 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.9° C, 1.5° C, 2.2° C, 2.5° C and 3.8° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-287078 recovered outside acceptance criteria, low biased, for Chloromethane, Chloroethane and Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-287078 was outside criteria for the following analyte(s): 2-Hexanone and 4-Methyl-2-pentanone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-287139 recovered outside acceptance criteria, low biased, for Chloroethane, Chloromethane and Dibromochloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-287139 was outside criteria for the following analyte(s): 4-Methyl-2-pentanone. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 1018-23 (580-81163-9). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-14

Date Collected: 10/16/18 10:10

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/22/18 21:35	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/22/18 21:35	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/22/18 21:35	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/22/18 21:35	1
1,1-Dichloroethane	ND		0.20		ug/L			10/22/18 21:35	1
1,1-Dichloroethene	ND		0.20		ug/L			10/22/18 21:35	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/22/18 21:35	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/22/18 21:35	1
1,2-Dibromoethane	ND		0.10		ug/L			10/22/18 21:35	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/22/18 21:35	1
1,2-Dichloroethane	ND		0.20		ug/L			10/22/18 21:35	1
1,2-Dichloropropane	ND		0.20		ug/L			10/22/18 21:35	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/22/18 21:35	1
2-Butanone	ND		10		ug/L			10/22/18 21:35	1
2-Hexanone	ND		3.0		ug/L			10/22/18 21:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/22/18 21:35	1
Acetone	ND		6.0		ug/L			10/22/18 21:35	1
Acrylonitrile	ND		10		ug/L			10/22/18 21:35	1
Benzene	ND		0.20		ug/L			10/22/18 21:35	1
Bromochloromethane	ND		0.20		ug/L			10/22/18 21:35	1
Bromodichloromethane	ND		0.20		ug/L			10/22/18 21:35	1
Bromoform	ND		0.50		ug/L			10/22/18 21:35	1
Bromomethane	ND		0.50		ug/L			10/22/18 21:35	1
Carbon disulfide	ND		0.30		ug/L			10/22/18 21:35	1
Carbon tetrachloride	ND		0.20		ug/L			10/22/18 21:35	1
Chlorobenzene	ND		0.20		ug/L			10/22/18 21:35	1
Chloroethane	ND		0.50		ug/L			10/22/18 21:35	1
Chloroform	ND		0.20		ug/L			10/22/18 21:35	1
Chloromethane	ND		0.50		ug/L			10/22/18 21:35	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 21:35	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 21:35	1
Dibromochloromethane	ND		0.20		ug/L			10/22/18 21:35	1
Dibromomethane	ND		0.20		ug/L			10/22/18 21:35	1
Ethylbenzene	ND		0.20		ug/L			10/22/18 21:35	1
m,p-Xylene	ND		0.50		ug/L			10/22/18 21:35	1
Methyl iodide	ND		0.50		ug/L			10/22/18 21:35	1
Methylene Chloride	ND		5.0		ug/L			10/22/18 21:35	1
o-Xylene	ND		0.50		ug/L			10/22/18 21:35	1
Styrene	ND		0.50		ug/L			10/22/18 21:35	1
Tetrachloroethene	ND		0.50		ug/L			10/22/18 21:35	1
Toluene	ND		0.20		ug/L			10/22/18 21:35	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 21:35	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 21:35	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/22/18 21:35	1
Trichloroethene	ND		0.20		ug/L			10/22/18 21:35	1
Trichlorofluoromethane	ND		0.50		ug/L			10/22/18 21:35	1
Vinyl acetate	ND		1.0		ug/L			10/22/18 21:35	1
Vinyl chloride	ND		0.020		ug/L			10/22/18 21:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-14

Date Collected: 10/16/18 10:10

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		10/22/18 21:35	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/22/18 21:35	1
Dibromofluoromethane (Surr)	98		80 - 120		10/22/18 21:35	1
Toluene-d8 (Surr)	100		75 - 125		10/22/18 21:35	1
Trifluorotoluene (Surr)	100		80 - 120		10/22/18 21:35	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79		1.1		mg/L		10/30/18 16:10	10/31/18 13:25	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 13:25	1
Magnesium	52		1.1		mg/L		10/30/18 16:10	10/31/18 13:25	1
Manganese	0.20		0.020		mg/L		10/30/18 16:10	10/31/18 13:25	1
Potassium	6.6		3.3		mg/L		10/30/18 16:10	10/31/18 13:25	1
Sodium	34		2.0		mg/L		10/30/18 16:10	10/31/18 13:25	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Arsenic	0.0057		0.0010		mg/L		10/29/18 17:11	10/30/18 18:39	1
Barium	0.030		0.0012		mg/L		10/29/18 17:11	10/30/18 18:39	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 18:39	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 18:39	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 18:39	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 18:39	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 18:39	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 18:39	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 18:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22	F1	0.20		mg/L			10/24/18 23:02	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 22:20	1
Chloride	60		0.90		mg/L			10/24/18 23:02	1
Sulfate	31		1.2		mg/L			10/24/18 23:02	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.3		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	360		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	360		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	500		10		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	12		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-17

Date Collected: 10/16/18 09:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/22/18 22:01	1
1,1,1-Trichloroethane	0.43		0.20		ug/L			10/22/18 22:01	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/22/18 22:01	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/22/18 22:01	1
1,1-Dichloroethane	ND		0.20		ug/L			10/22/18 22:01	1
1,1-Dichloroethene	ND		0.20		ug/L			10/22/18 22:01	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/22/18 22:01	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/22/18 22:01	1
1,2-Dibromoethane	ND		0.10		ug/L			10/22/18 22:01	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:01	1
1,2-Dichloroethane	ND		0.20		ug/L			10/22/18 22:01	1
1,2-Dichloropropane	ND		0.20		ug/L			10/22/18 22:01	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:01	1
2-Butanone	ND		10		ug/L			10/22/18 22:01	1
2-Hexanone	ND		3.0		ug/L			10/22/18 22:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/22/18 22:01	1
Acetone	ND		6.0		ug/L			10/22/18 22:01	1
Acrylonitrile	ND		10		ug/L			10/22/18 22:01	1
Benzene	ND		0.20		ug/L			10/22/18 22:01	1
Bromochloromethane	ND		0.20		ug/L			10/22/18 22:01	1
Bromodichloromethane	ND		0.20		ug/L			10/22/18 22:01	1
Bromoform	ND		0.50		ug/L			10/22/18 22:01	1
Bromomethane	ND		0.50		ug/L			10/22/18 22:01	1
Carbon disulfide	ND		0.30		ug/L			10/22/18 22:01	1
Carbon tetrachloride	ND		0.20		ug/L			10/22/18 22:01	1
Chlorobenzene	ND		0.20		ug/L			10/22/18 22:01	1
Chloroethane	ND		0.50		ug/L			10/22/18 22:01	1
Chloroform	ND		0.20		ug/L			10/22/18 22:01	1
Chloromethane	ND		0.50		ug/L			10/22/18 22:01	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:01	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:01	1
Dibromochloromethane	ND		0.20		ug/L			10/22/18 22:01	1
Dibromomethane	ND		0.20		ug/L			10/22/18 22:01	1
Ethylbenzene	ND		0.20		ug/L			10/22/18 22:01	1
m,p-Xylene	ND		0.50		ug/L			10/22/18 22:01	1
Methyl iodide	ND		0.50		ug/L			10/22/18 22:01	1
Methylene Chloride	ND		5.0		ug/L			10/22/18 22:01	1
o-Xylene	ND		0.50		ug/L			10/22/18 22:01	1
Styrene	ND		0.50		ug/L			10/22/18 22:01	1
Tetrachloroethene	ND		0.50		ug/L			10/22/18 22:01	1
Toluene	ND		0.20		ug/L			10/22/18 22:01	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:01	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:01	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/22/18 22:01	1
Trichloroethene	ND		0.20		ug/L			10/22/18 22:01	1
Trichlorofluoromethane	4.4		0.50		ug/L			10/22/18 22:01	1
Vinyl acetate	ND		1.0		ug/L			10/22/18 22:01	1
Vinyl chloride	ND		0.020		ug/L			10/22/18 22:01	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-17

Date Collected: 10/16/18 09:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-2

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/22/18 22:01	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/22/18 22:01	1
Dibromofluoromethane (Surr)	99		80 - 120		10/22/18 22:01	1
Toluene-d8 (Surr)	99		75 - 125		10/22/18 22:01	1
Trifluorotoluene (Surr)	99		80 - 120		10/22/18 22:01	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130		1.1		mg/L		10/30/18 16:10	10/31/18 13:50	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 13:50	1
Magnesium	77		1.1		mg/L		10/30/18 16:10	10/31/18 13:50	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 13:50	1
Potassium	6.7		3.3		mg/L		10/30/18 16:10	10/31/18 13:50	1
Sodium	29		2.0		mg/L		10/30/18 16:10	10/31/18 13:50	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Arsenic	0.0021		0.0010		mg/L		10/29/18 17:11	10/30/18 19:17	1
Barium	0.031		0.0012		mg/L		10/29/18 17:11	10/30/18 19:17	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Chromium	0.0050		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:17	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:17	1
Nickel	0.0046		0.0030		mg/L		10/29/18 17:11	10/30/18 19:17	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:17	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:17	1
Vanadium	0.0043		0.0040		mg/L		10/29/18 17:11	10/30/18 19:17	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/24/18 23:37	1
Nitrate Nitrite as N	34		4.0		mg/L			10/17/18 23:18	10
Chloride	58		0.90		mg/L			10/24/18 23:37	1
Sulfate	93		1.2		mg/L			10/24/18 23:37	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.0		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	370		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	370		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	810		10		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	21		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-18

Date Collected: 10/16/18 11:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/22/18 22:28	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/22/18 22:28	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/22/18 22:28	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/22/18 22:28	1
1,1-Dichloroethane	ND		0.20		ug/L			10/22/18 22:28	1
1,1-Dichloroethene	ND		0.20		ug/L			10/22/18 22:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/22/18 22:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/22/18 22:28	1
1,2-Dibromoethane	ND		0.10		ug/L			10/22/18 22:28	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:28	1
1,2-Dichloroethane	ND		0.20		ug/L			10/22/18 22:28	1
1,2-Dichloropropane	ND		0.20		ug/L			10/22/18 22:28	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:28	1
2-Butanone	ND		10		ug/L			10/22/18 22:28	1
2-Hexanone	ND		3.0		ug/L			10/22/18 22:28	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/22/18 22:28	1
Acetone	ND		6.0		ug/L			10/22/18 22:28	1
Acrylonitrile	ND		10		ug/L			10/22/18 22:28	1
Benzene	ND		0.20		ug/L			10/22/18 22:28	1
Bromochloromethane	ND		0.20		ug/L			10/22/18 22:28	1
Bromodichloromethane	ND		0.20		ug/L			10/22/18 22:28	1
Bromoform	ND		0.50		ug/L			10/22/18 22:28	1
Bromomethane	ND		0.50		ug/L			10/22/18 22:28	1
Carbon disulfide	ND		0.30		ug/L			10/22/18 22:28	1
Carbon tetrachloride	ND		0.20		ug/L			10/22/18 22:28	1
Chlorobenzene	ND		0.20		ug/L			10/22/18 22:28	1
Chloroethane	ND		0.50		ug/L			10/22/18 22:28	1
Chloroform	ND		0.20		ug/L			10/22/18 22:28	1
Chloromethane	ND		0.50		ug/L			10/22/18 22:28	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:28	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:28	1
Dibromochloromethane	ND		0.20		ug/L			10/22/18 22:28	1
Dibromomethane	ND		0.20		ug/L			10/22/18 22:28	1
Ethylbenzene	ND		0.20		ug/L			10/22/18 22:28	1
m,p-Xylene	ND		0.50		ug/L			10/22/18 22:28	1
Methyl iodide	ND		0.50		ug/L			10/22/18 22:28	1
Methylene Chloride	ND		5.0		ug/L			10/22/18 22:28	1
o-Xylene	ND		0.50		ug/L			10/22/18 22:28	1
Styrene	ND		0.50		ug/L			10/22/18 22:28	1
Tetrachloroethene	ND		0.50		ug/L			10/22/18 22:28	1
Toluene	ND		0.20		ug/L			10/22/18 22:28	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:28	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:28	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/22/18 22:28	1
Trichloroethene	ND		0.20		ug/L			10/22/18 22:28	1
Trichlorofluoromethane	ND		0.50		ug/L			10/22/18 22:28	1
Vinyl acetate	ND		1.0		ug/L			10/22/18 22:28	1
Vinyl chloride	ND		0.020		ug/L			10/22/18 22:28	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-18

Date Collected: 10/16/18 11:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		10/22/18 22:28	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/22/18 22:28	1
Dibromofluoromethane (Surr)	102		80 - 120		10/22/18 22:28	1
Toluene-d8 (Surr)	100		75 - 125		10/22/18 22:28	1
Trifluorotoluene (Surr)	100		80 - 120		10/22/18 22:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	75		1.1		mg/L		10/30/18 16:10	10/31/18 13:54	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 13:54	1
Magnesium	54		1.1		mg/L		10/30/18 16:10	10/31/18 13:54	1
Manganese	0.16		0.020		mg/L		10/30/18 16:10	10/31/18 13:54	1
Potassium	7.4		3.3		mg/L		10/30/18 16:10	10/31/18 13:54	1
Sodium	35		2.0		mg/L		10/30/18 16:10	10/31/18 13:54	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Arsenic	0.0082		0.0010		mg/L		10/29/18 17:11	10/30/18 19:21	1
Barium	0.040		0.0012		mg/L		10/29/18 17:11	10/30/18 19:21	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Chromium	0.00069		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:21	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:21	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 19:21	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:21	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:21	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:21	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.20		mg/L			10/24/18 23:49	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 23:30	1
Chloride	73		0.90		mg/L			10/24/18 23:49	1
Sulfate	32		1.2		mg/L			10/24/18 23:49	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.6		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	340		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	340		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	510		10		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	17		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-19

Date Collected: 10/16/18 10:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/22/18 22:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/22/18 22:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/22/18 22:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/22/18 22:55	1
1,1-Dichloroethane	ND		0.20		ug/L			10/22/18 22:55	1
1,1-Dichloroethene	ND		0.20		ug/L			10/22/18 22:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/22/18 22:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/22/18 22:55	1
1,2-Dibromoethane	ND		0.10		ug/L			10/22/18 22:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:55	1
1,2-Dichloroethane	ND		0.20		ug/L			10/22/18 22:55	1
1,2-Dichloropropane	ND		0.20		ug/L			10/22/18 22:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/22/18 22:55	1
2-Butanone	ND		10		ug/L			10/22/18 22:55	1
2-Hexanone	ND		3.0		ug/L			10/22/18 22:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/22/18 22:55	1
Acetone	ND		6.0		ug/L			10/22/18 22:55	1
Acrylonitrile	ND		10		ug/L			10/22/18 22:55	1
Benzene	ND		0.20		ug/L			10/22/18 22:55	1
Bromochloromethane	ND		0.20		ug/L			10/22/18 22:55	1
Bromodichloromethane	ND		0.20		ug/L			10/22/18 22:55	1
Bromoform	ND		0.50		ug/L			10/22/18 22:55	1
Bromomethane	ND		0.50		ug/L			10/22/18 22:55	1
Carbon disulfide	ND		0.30		ug/L			10/22/18 22:55	1
Carbon tetrachloride	ND		0.20		ug/L			10/22/18 22:55	1
Chlorobenzene	ND		0.20		ug/L			10/22/18 22:55	1
Chloroethane	ND		0.50		ug/L			10/22/18 22:55	1
Chloroform	ND		0.20		ug/L			10/22/18 22:55	1
Chloromethane	ND		0.50		ug/L			10/22/18 22:55	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:55	1
Dibromochloromethane	ND		0.20		ug/L			10/22/18 22:55	1
Dibromomethane	ND		0.20		ug/L			10/22/18 22:55	1
Ethylbenzene	ND		0.20		ug/L			10/22/18 22:55	1
m,p-Xylene	ND		0.50		ug/L			10/22/18 22:55	1
Methyl iodide	ND		0.50		ug/L			10/22/18 22:55	1
Methylene Chloride	ND		5.0		ug/L			10/22/18 22:55	1
o-Xylene	ND		0.50		ug/L			10/22/18 22:55	1
Styrene	ND		0.50		ug/L			10/22/18 22:55	1
Tetrachloroethene	ND		0.50		ug/L			10/22/18 22:55	1
Toluene	ND		0.20		ug/L			10/22/18 22:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 22:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 22:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/22/18 22:55	1
Trichloroethene	ND		0.20		ug/L			10/22/18 22:55	1
Trichlorofluoromethane	ND		0.50		ug/L			10/22/18 22:55	1
Vinyl acetate	ND		1.0		ug/L			10/22/18 22:55	1
Vinyl chloride	0.20		0.020		ug/L			10/22/18 22:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-19

Date Collected: 10/16/18 10:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/22/18 22:55	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/22/18 22:55	1
Dibromofluoromethane (Surr)	100		80 - 120		10/22/18 22:55	1
Toluene-d8 (Surr)	99		75 - 125		10/22/18 22:55	1
Trifluorotoluene (Surr)	97		80 - 120		10/22/18 22:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	180		1.1		mg/L		10/30/18 16:10	10/31/18 13:57	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 13:57	1
Magnesium	120		1.1		mg/L		10/30/18 16:10	10/31/18 13:57	1
Manganese	0.049		0.020		mg/L		10/30/18 16:10	10/31/18 13:57	1
Potassium	9.1		3.3		mg/L		10/30/18 16:10	10/31/18 13:57	1
Sodium	44		2.0		mg/L		10/30/18 16:10	10/31/18 13:57	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Arsenic	0.0044		0.0010		mg/L		10/29/18 17:11	10/30/18 19:26	1
Barium	0.045		0.0012		mg/L		10/29/18 17:11	10/30/18 19:26	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Cobalt	0.00073		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:26	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:26	1
Nickel	0.0056		0.0030		mg/L		10/29/18 17:11	10/30/18 19:26	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:26	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:26	1
Vanadium	0.0062		0.0040		mg/L		10/29/18 17:11	10/30/18 19:26	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/25/18 00:01	1
Nitrate Nitrite as N	0.99		0.40		mg/L			10/17/18 22:43	1
Chloride	75		0.90		mg/L			10/25/18 00:01	1
Sulfate	85		1.2		mg/L			10/25/18 00:01	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	1.9		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	820		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	820		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	1000		20		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	15		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-16

Date Collected: 10/16/18 10:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 13:42	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 13:42	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 13:42	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 13:42	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 13:42	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 13:42	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 13:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 13:42	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 13:42	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 13:42	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 13:42	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 13:42	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 13:42	1
2-Butanone	ND		10		ug/L			10/23/18 13:42	1
2-Hexanone	ND		3.0		ug/L			10/23/18 13:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 13:42	1
Acetone	ND		6.0		ug/L			10/23/18 13:42	1
Acrylonitrile	ND		10		ug/L			10/23/18 13:42	1
Benzene	ND		0.20		ug/L			10/23/18 13:42	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 13:42	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 13:42	1
Bromoform	ND		0.50		ug/L			10/23/18 13:42	1
Bromomethane	ND		0.50		ug/L			10/23/18 13:42	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 13:42	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 13:42	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 13:42	1
Chloroethane	ND		0.50		ug/L			10/23/18 13:42	1
Chloroform	ND		0.20		ug/L			10/23/18 13:42	1
Chloromethane	ND		0.50		ug/L			10/23/18 13:42	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 13:42	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 13:42	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 13:42	1
Dibromomethane	ND		0.20		ug/L			10/23/18 13:42	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 13:42	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 13:42	1
Methyl iodide	ND		0.50		ug/L			10/23/18 13:42	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 13:42	1
o-Xylene	ND		0.50		ug/L			10/23/18 13:42	1
Styrene	ND		0.50		ug/L			10/23/18 13:42	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 13:42	1
Toluene	ND		0.20		ug/L			10/23/18 13:42	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 13:42	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 13:42	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 13:42	1
Trichloroethene	ND		0.20		ug/L			10/23/18 13:42	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 13:42	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 13:42	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 13:42	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-16

Date Collected: 10/16/18 10:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/23/18 13:42	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/23/18 13:42	1
Dibromofluoromethane (Surr)	99		80 - 120		10/23/18 13:42	1
Toluene-d8 (Surr)	99		75 - 125		10/23/18 13:42	1
Trifluorotoluene (Surr)	99		80 - 120		10/23/18 13:42	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	77		1.1		mg/L		10/30/18 16:10	10/31/18 14:00	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:00	1
Magnesium	50		1.1		mg/L		10/30/18 16:10	10/31/18 14:00	1
Manganese	0.19		0.020		mg/L		10/30/18 16:10	10/31/18 14:00	1
Potassium	6.5		3.3		mg/L		10/30/18 16:10	10/31/18 14:00	1
Sodium	33		2.0		mg/L		10/30/18 16:10	10/31/18 14:00	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Arsenic	0.0056		0.0010		mg/L		10/29/18 17:11	10/30/18 19:30	1
Barium	0.030		0.0012		mg/L		10/29/18 17:11	10/30/18 19:30	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:30	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:30	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 19:30	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:30	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:30	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:30	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22		0.20		mg/L			10/25/18 00:12	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 22:31	1
Chloride	60		0.90		mg/L			10/25/18 00:12	1
Sulfate	31		1.2		mg/L			10/25/18 00:12	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.5		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	360		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	360		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	440		10		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	13		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-20

Date Collected: 10/16/18 12:25

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 14:08	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 14:08	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 14:08	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 14:08	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 14:08	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 14:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 14:08	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 14:08	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 14:08	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 14:08	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 14:08	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 14:08	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 14:08	1
2-Butanone	ND		10		ug/L			10/23/18 14:08	1
2-Hexanone	ND		3.0		ug/L			10/23/18 14:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 14:08	1
Acetone	ND		6.0		ug/L			10/23/18 14:08	1
Acrylonitrile	ND		10		ug/L			10/23/18 14:08	1
Benzene	ND		0.20		ug/L			10/23/18 14:08	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 14:08	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 14:08	1
Bromoform	ND		0.50		ug/L			10/23/18 14:08	1
Bromomethane	ND		0.50		ug/L			10/23/18 14:08	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 14:08	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 14:08	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 14:08	1
Chloroethane	ND		0.50		ug/L			10/23/18 14:08	1
Chloroform	ND		0.20		ug/L			10/23/18 14:08	1
Chloromethane	ND		0.50		ug/L			10/23/18 14:08	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 14:08	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 14:08	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 14:08	1
Dibromomethane	ND		0.20		ug/L			10/23/18 14:08	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 14:08	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 14:08	1
Methyl iodide	ND		0.50		ug/L			10/23/18 14:08	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 14:08	1
o-Xylene	ND		0.50		ug/L			10/23/18 14:08	1
Styrene	ND		0.50		ug/L			10/23/18 14:08	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 14:08	1
Toluene	ND		0.20		ug/L			10/23/18 14:08	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 14:08	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 14:08	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 14:08	1
Trichloroethene	ND		0.20		ug/L			10/23/18 14:08	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 14:08	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 14:08	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 14:08	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-20

Date Collected: 10/16/18 12:25

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/23/18 14:08	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/23/18 14:08	1
Dibromofluoromethane (Surr)	99		80 - 120		10/23/18 14:08	1
Toluene-d8 (Surr)	98		75 - 125		10/23/18 14:08	1
Trifluorotoluene (Surr)	98		80 - 120		10/23/18 14:08	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	79		1.1		mg/L		10/30/18 16:10	10/31/18 14:03	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:03	1
Magnesium	45		1.1		mg/L		10/30/18 16:10	10/31/18 14:03	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 14:03	1
Potassium	5.3		3.3		mg/L		10/30/18 16:10	10/31/18 14:03	1
Sodium	31		2.0		mg/L		10/30/18 16:10	10/31/18 14:03	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Arsenic	0.0033		0.0010		mg/L		10/29/18 17:11	10/30/18 19:34	1
Barium	0.021		0.0012		mg/L		10/29/18 17:11	10/30/18 19:34	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Chromium	0.0016		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Copper	0.048		0.0020		mg/L		10/29/18 17:11	10/30/18 19:34	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:34	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 19:34	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:34	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:34	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:34	1
Zinc	0.054		0.0070		mg/L		10/29/18 17:11	10/30/18 19:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.20		mg/L			10/25/18 00:24	1
Nitrate Nitrite as N	1.0		0.40		mg/L			10/18/18 11:52	1
Chloride	56		0.90		mg/L			10/25/18 00:24	1
Sulfate	44		1.2		mg/L			10/25/18 00:24	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.2		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	470		10		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	13		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-21

Date Collected: 10/16/18 11:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-7

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	14		1.5		mg/L			10/31/18 17:04	10

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-22

Date Collected: 10/16/18 13:43

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 14:35	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 14:35	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 14:35	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 14:35	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 14:35	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 14:35	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 14:35	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 14:35	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 14:35	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 14:35	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 14:35	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 14:35	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 14:35	1
2-Butanone	ND		10		ug/L			10/23/18 14:35	1
2-Hexanone	ND		3.0		ug/L			10/23/18 14:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 14:35	1
Acetone	ND		6.0		ug/L			10/23/18 14:35	1
Acrylonitrile	ND		10		ug/L			10/23/18 14:35	1
Benzene	ND		0.20		ug/L			10/23/18 14:35	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 14:35	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 14:35	1
Bromoform	ND		0.50		ug/L			10/23/18 14:35	1
Bromomethane	ND		0.50		ug/L			10/23/18 14:35	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 14:35	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 14:35	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 14:35	1
Chloroethane	ND		0.50		ug/L			10/23/18 14:35	1
Chloroform	ND		0.20		ug/L			10/23/18 14:35	1
Chloromethane	ND		0.50		ug/L			10/23/18 14:35	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 14:35	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 14:35	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 14:35	1
Dibromomethane	ND		0.20		ug/L			10/23/18 14:35	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 14:35	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 14:35	1
Methyl iodide	ND		0.50		ug/L			10/23/18 14:35	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 14:35	1
o-Xylene	ND		0.50		ug/L			10/23/18 14:35	1
Styrene	ND		0.50		ug/L			10/23/18 14:35	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 14:35	1
Toluene	ND		0.20		ug/L			10/23/18 14:35	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 14:35	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 14:35	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 14:35	1
Trichloroethene	ND		0.20		ug/L			10/23/18 14:35	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 14:35	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 14:35	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 14:35	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-22

Date Collected: 10/16/18 13:43

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		10/23/18 14:35	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/23/18 14:35	1
Dibromofluoromethane (Surr)	98		80 - 120		10/23/18 14:35	1
Toluene-d8 (Surr)	99		75 - 125		10/23/18 14:35	1
Trifluorotoluene (Surr)	99		80 - 120		10/23/18 14:35	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120		1.1		mg/L		10/30/18 16:10	10/31/18 14:07	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:07	1
Magnesium	95		1.1		mg/L		10/30/18 16:10	10/31/18 14:07	1
Manganese	0.22		0.020		mg/L		10/30/18 16:10	10/31/18 14:07	1
Potassium	10		3.3		mg/L		10/30/18 16:10	10/31/18 14:07	1
Sodium	45		2.0		mg/L		10/30/18 16:10	10/31/18 14:07	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Arsenic	0.0034		0.0010		mg/L		10/29/18 17:11	10/30/18 19:38	1
Barium	0.077		0.0012		mg/L		10/29/18 17:11	10/30/18 19:38	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:38	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:38	1
Nickel	0.0086		0.0030		mg/L		10/29/18 17:11	10/30/18 19:38	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:38	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:38	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:38	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/25/18 00:36	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 12:28	1
Chloride	100		1.8		mg/L			10/25/18 00:47	2
Sulfate	71		1.2		mg/L			10/25/18 00:36	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.8		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	560		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	560		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	780		20		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	10		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-23

Date Collected: 10/16/18 12:27

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 15:02	1
1,1,1-Trichloroethane	0.80		0.20		ug/L			10/23/18 15:02	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 15:02	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 15:02	1
1,1-Dichloroethane	2.9		0.20		ug/L			10/23/18 15:02	1
1,1-Dichloroethene	0.30		0.20		ug/L			10/23/18 15:02	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 15:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 15:02	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 15:02	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:02	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 15:02	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 15:02	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:02	1
2-Butanone	ND		10		ug/L			10/23/18 15:02	1
2-Hexanone	ND		3.0		ug/L			10/23/18 15:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 15:02	1
Acetone	ND		6.0		ug/L			10/23/18 15:02	1
Acrylonitrile	ND		10		ug/L			10/23/18 15:02	1
Benzene	ND		0.20		ug/L			10/23/18 15:02	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 15:02	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 15:02	1
Bromoform	ND		0.50		ug/L			10/23/18 15:02	1
Bromomethane	ND		0.50		ug/L			10/23/18 15:02	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 15:02	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 15:02	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 15:02	1
Chloroethane	ND		0.50		ug/L			10/23/18 15:02	1
Chloroform	ND		0.20		ug/L			10/23/18 15:02	1
Chloromethane	ND		0.50		ug/L			10/23/18 15:02	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:02	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:02	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 15:02	1
Dibromomethane	ND		0.20		ug/L			10/23/18 15:02	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 15:02	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 15:02	1
Methyl iodide	ND		0.50		ug/L			10/23/18 15:02	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 15:02	1
o-Xylene	ND		0.50		ug/L			10/23/18 15:02	1
Styrene	ND		0.50		ug/L			10/23/18 15:02	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 15:02	1
Toluene	ND		0.20		ug/L			10/23/18 15:02	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:02	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:02	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 15:02	1
Trichloroethene	ND		0.20		ug/L			10/23/18 15:02	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 15:02	1
Vinyl chloride	4.1		0.020		ug/L			10/23/18 15:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-23

Date Collected: 10/16/18 12:27

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-9

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		10/23/18 15:02	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/23/18 15:02	1
Dibromofluoromethane (Surr)	100		80 - 120		10/23/18 15:02	1
Toluene-d8 (Surr)	99		75 - 125		10/23/18 15:02	1
Trifluorotoluene (Surr)	97		80 - 120		10/23/18 15:02	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	76		5.0		ug/L			10/24/18 18:50	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		10/24/18 18:50	10
4-Bromofluorobenzene (Surr)	94		80 - 120		10/24/18 18:50	10
Dibromofluoromethane (Surr)	101		80 - 120		10/24/18 18:50	10
Toluene-d8 (Surr)	99		75 - 125		10/24/18 18:50	10
Trifluorotoluene (Surr)	98		80 - 120		10/24/18 18:50	10

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	220		1.1		mg/L		10/30/18 16:10	10/31/18 14:10	1
Iron	0.30		0.30		mg/L		10/30/18 16:10	10/31/18 14:10	1
Magnesium	93		1.1		mg/L		10/30/18 16:10	10/31/18 14:10	1
Manganese	0.62		0.020		mg/L		10/30/18 16:10	10/31/18 14:10	1
Potassium	8.5		3.3		mg/L		10/30/18 16:10	10/31/18 14:10	1
Sodium	31		2.0		mg/L		10/30/18 16:10	10/31/18 14:10	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Arsenic	0.0021		0.0010		mg/L		10/29/18 17:11	10/30/18 19:43	1
Barium	0.054		0.0012		mg/L		10/29/18 17:11	10/30/18 19:43	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Cobalt	0.0022		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:43	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:43	1
Nickel	0.022		0.0030		mg/L		10/29/18 17:11	10/30/18 19:43	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:43	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:43	1
Vanadium	0.0040		0.0040		mg/L		10/29/18 17:11	10/30/18 19:43	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/25/18 01:23	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 12:04	1
Chloride	41		0.90		mg/L			10/25/18 01:23	1
Sulfate	160		6.0		mg/L			10/25/18 01:34	5
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-23

Date Collected: 10/16/18 12:27

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-9

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	15		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	810		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	810		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	1100		20		mg/L			10/23/18 10:57	1
Chemical Oxygen Demand	36		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-24

Date Collected: 10/16/18 15:30

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 15:28	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 15:28	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 15:28	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 15:28	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 15:28	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 15:28	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 15:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 15:28	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 15:28	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:28	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 15:28	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 15:28	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:28	1
2-Butanone	ND		10		ug/L			10/23/18 15:28	1
2-Hexanone	ND		3.0		ug/L			10/23/18 15:28	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 15:28	1
Acetone	ND		6.0		ug/L			10/23/18 15:28	1
Acrylonitrile	ND		10		ug/L			10/23/18 15:28	1
Benzene	ND		0.20		ug/L			10/23/18 15:28	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 15:28	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 15:28	1
Bromoform	ND		0.50		ug/L			10/23/18 15:28	1
Bromomethane	ND		0.50		ug/L			10/23/18 15:28	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 15:28	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 15:28	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 15:28	1
Chloroethane	ND		0.50		ug/L			10/23/18 15:28	1
Chloroform	ND		0.20		ug/L			10/23/18 15:28	1
Chloromethane	ND		0.50		ug/L			10/23/18 15:28	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:28	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:28	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 15:28	1
Dibromomethane	ND		0.20		ug/L			10/23/18 15:28	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 15:28	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 15:28	1
Methyl iodide	ND		0.50		ug/L			10/23/18 15:28	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 15:28	1
o-Xylene	ND		0.50		ug/L			10/23/18 15:28	1
Styrene	ND		0.50		ug/L			10/23/18 15:28	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 15:28	1
Toluene	ND		0.20		ug/L			10/23/18 15:28	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:28	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:28	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 15:28	1
Trichloroethene	ND		0.20		ug/L			10/23/18 15:28	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 15:28	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 15:28	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 15:28	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-24

Date Collected: 10/16/18 15:30

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		10/23/18 15:28	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/23/18 15:28	1
Dibromofluoromethane (Surr)	99		80 - 120		10/23/18 15:28	1
Toluene-d8 (Surr)	100		75 - 125		10/23/18 15:28	1
Trifluorotoluene (Surr)	100		80 - 120		10/23/18 15:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100		1.1		mg/L		10/30/18 16:10	10/31/18 14:13	1
Iron	1.4		0.30		mg/L		10/30/18 16:10	10/31/18 14:13	1
Magnesium	60		1.1		mg/L		10/30/18 16:10	10/31/18 14:13	1
Manganese	0.089		0.020		mg/L		10/30/18 16:10	10/31/18 14:13	1
Potassium	7.5		3.3		mg/L		10/30/18 16:10	10/31/18 14:13	1
Sodium	30		2.0		mg/L		10/30/18 16:10	10/31/18 14:13	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Arsenic	0.0054		0.0010		mg/L		10/29/18 17:11	10/30/18 19:47	1
Barium	0.042		0.0012		mg/L		10/29/18 17:11	10/30/18 19:47	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:47	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:47	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 19:47	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:47	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:47	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:47	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21		0.20		mg/L			10/25/18 01:46	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 12:51	1
Chloride	64		0.90		mg/L			10/25/18 01:46	1
Sulfate	44		1.2		mg/L			10/25/18 01:46	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	1.9		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	400		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	400		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	550		10		mg/L			10/20/18 12:02	1
Chemical Oxygen Demand	21		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-25

Date Collected: 10/16/18 13:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 15:55	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 15:55	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 15:55	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 15:55	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 15:55	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 15:55	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 15:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 15:55	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 15:55	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:55	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 15:55	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 15:55	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 15:55	1
2-Butanone	ND		10		ug/L			10/23/18 15:55	1
2-Hexanone	ND		3.0		ug/L			10/23/18 15:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 15:55	1
Acetone	ND		6.0		ug/L			10/23/18 15:55	1
Acrylonitrile	ND		10		ug/L			10/23/18 15:55	1
Benzene	ND		0.20		ug/L			10/23/18 15:55	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 15:55	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 15:55	1
Bromoform	ND		0.50		ug/L			10/23/18 15:55	1
Bromomethane	ND		0.50		ug/L			10/23/18 15:55	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 15:55	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 15:55	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 15:55	1
Chloroethane	ND		0.50		ug/L			10/23/18 15:55	1
Chloroform	ND		0.20		ug/L			10/23/18 15:55	1
Chloromethane	ND		0.50		ug/L			10/23/18 15:55	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:55	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:55	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 15:55	1
Dibromomethane	ND		0.20		ug/L			10/23/18 15:55	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 15:55	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 15:55	1
Methyl iodide	ND		0.50		ug/L			10/23/18 15:55	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 15:55	1
o-Xylene	ND		0.50		ug/L			10/23/18 15:55	1
Styrene	ND		0.50		ug/L			10/23/18 15:55	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 15:55	1
Toluene	ND		0.20		ug/L			10/23/18 15:55	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 15:55	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 15:55	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 15:55	1
Trichloroethene	ND		0.20		ug/L			10/23/18 15:55	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 15:55	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 15:55	1
Vinyl chloride	0.035		0.020		ug/L			10/23/18 15:55	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-25

Date Collected: 10/16/18 13:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/23/18 15:55	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/23/18 15:55	1
Dibromofluoromethane (Surr)	100		80 - 120		10/23/18 15:55	1
Toluene-d8 (Surr)	98		75 - 125		10/23/18 15:55	1
Trifluorotoluene (Surr)	98		80 - 120		10/23/18 15:55	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	57		1.1		mg/L		10/30/18 16:10	10/31/18 14:23	1
Iron	0.68		0.30		mg/L		10/30/18 16:10	10/31/18 14:23	1
Magnesium	29		1.1		mg/L		10/30/18 16:10	10/31/18 14:23	1
Manganese	0.67		0.020		mg/L		10/30/18 16:10	10/31/18 14:23	1
Potassium	6.0		3.3		mg/L		10/30/18 16:10	10/31/18 14:23	1
Sodium	38		2.0		mg/L		10/30/18 16:10	10/31/18 14:23	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Arsenic	0.0012		0.0010		mg/L		10/29/18 17:11	10/30/18 19:51	1
Barium	0.078		0.0012		mg/L		10/29/18 17:11	10/30/18 19:51	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 19:51	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 19:51	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 19:51	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 19:51	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 19:51	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 19:51	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 19:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.20		mg/L			10/25/18 01:58	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 12:16	1
Chloride	21		0.90		mg/L			10/25/18 01:58	1
Sulfate	35		1.2		mg/L			10/25/18 01:58	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	3.8		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	270		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	270		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	360		10		mg/L			10/20/18 12:02	1
Chemical Oxygen Demand	18		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-26

Date Collected: 10/16/18 16:56

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-12

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 16:22	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 16:22	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 16:22	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 16:22	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 16:22	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 16:22	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 16:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 16:22	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 16:22	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 16:22	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 16:22	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 16:22	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 16:22	1
2-Butanone	ND		10		ug/L			10/23/18 16:22	1
2-Hexanone	ND		3.0		ug/L			10/23/18 16:22	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 16:22	1
Acetone	ND		6.0		ug/L			10/23/18 16:22	1
Acrylonitrile	ND		10		ug/L			10/23/18 16:22	1
Benzene	ND		0.20		ug/L			10/23/18 16:22	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 16:22	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 16:22	1
Bromoform	ND		0.50		ug/L			10/23/18 16:22	1
Bromomethane	ND		0.50		ug/L			10/23/18 16:22	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 16:22	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 16:22	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 16:22	1
Chloroethane	ND		0.50		ug/L			10/23/18 16:22	1
Chloroform	ND		0.20		ug/L			10/23/18 16:22	1
Chloromethane	ND		0.50		ug/L			10/23/18 16:22	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 16:22	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 16:22	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 16:22	1
Dibromomethane	ND		0.20		ug/L			10/23/18 16:22	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 16:22	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 16:22	1
Methyl iodide	ND		0.50		ug/L			10/23/18 16:22	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 16:22	1
o-Xylene	ND		0.50		ug/L			10/23/18 16:22	1
Styrene	ND		0.50		ug/L			10/23/18 16:22	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 16:22	1
Toluene	ND		0.20		ug/L			10/23/18 16:22	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 16:22	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 16:22	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 16:22	1
Trichloroethene	ND		0.20		ug/L			10/23/18 16:22	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 16:22	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 16:22	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 16:22	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-26

Date Collected: 10/16/18 16:56

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-12

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		10/23/18 16:22	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/23/18 16:22	1
Dibromofluoromethane (Surr)	99		80 - 120		10/23/18 16:22	1
Toluene-d8 (Surr)	99		75 - 125		10/23/18 16:22	1
Trifluorotoluene (Surr)	98		80 - 120		10/23/18 16:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31		1.1		mg/L		10/30/18 16:10	10/31/18 14:27	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:27	1
Magnesium	35		1.1		mg/L		10/30/18 16:10	10/31/18 14:27	1
Manganese	0.048		0.020		mg/L		10/30/18 16:10	10/31/18 14:27	1
Potassium	15		3.3		mg/L		10/30/18 16:10	10/31/18 14:27	1
Sodium	16		2.0		mg/L		10/30/18 16:10	10/31/18 14:27	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Arsenic	0.020		0.0010		mg/L		10/29/18 17:11	10/30/18 20:12	1
Barium	0.032		0.0012		mg/L		10/29/18 17:11	10/30/18 20:12	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Chromium	0.0024		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Cobalt	0.00054		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Copper	0.0029		0.0020		mg/L		10/29/18 17:11	10/30/18 20:12	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 20:12	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 20:12	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 20:12	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 20:12	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 20:12	1
Zinc	0.0097		0.0070		mg/L		10/29/18 17:11	10/30/18 20:12	1

Method: 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019		0.0010		mg/L		10/30/18 16:10	10/31/18 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22	F1	0.20		mg/L			10/25/18 02:09	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 13:03	1
Chloride	41		0.90		mg/L			10/25/18 02:09	1
Sulfate	20		1.2		mg/L			10/25/18 02:09	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	1.9		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	190		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	190		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	300		10		mg/L			10/20/18 12:02	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-26

Date Collected: 10/16/18 16:56

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-12

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-27

Date Collected: 10/16/18 14:40

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 16:48	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 16:48	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 16:48	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 16:48	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 16:48	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 16:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 16:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 16:48	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 16:48	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 16:48	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 16:48	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 16:48	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 16:48	1
2-Butanone	ND		10		ug/L			10/23/18 16:48	1
2-Hexanone	ND		3.0		ug/L			10/23/18 16:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 16:48	1
Acetone	ND		6.0		ug/L			10/23/18 16:48	1
Acrylonitrile	ND		10		ug/L			10/23/18 16:48	1
Benzene	ND		0.20		ug/L			10/23/18 16:48	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 16:48	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 16:48	1
Bromoform	ND		0.50		ug/L			10/23/18 16:48	1
Bromomethane	ND		0.50		ug/L			10/23/18 16:48	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 16:48	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 16:48	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 16:48	1
Chloroethane	ND		0.50		ug/L			10/23/18 16:48	1
Chloroform	ND		0.20		ug/L			10/23/18 16:48	1
Chloromethane	ND		0.50		ug/L			10/23/18 16:48	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 16:48	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 16:48	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 16:48	1
Dibromomethane	ND		0.20		ug/L			10/23/18 16:48	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 16:48	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 16:48	1
Methyl iodide	ND		0.50		ug/L			10/23/18 16:48	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 16:48	1
o-Xylene	ND		0.50		ug/L			10/23/18 16:48	1
Styrene	ND		0.50		ug/L			10/23/18 16:48	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 16:48	1
Toluene	ND		0.20		ug/L			10/23/18 16:48	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 16:48	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 16:48	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 16:48	1
Trichloroethene	ND		0.20		ug/L			10/23/18 16:48	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 16:48	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 16:48	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 16:48	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-27

Date Collected: 10/16/18 14:40

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-13

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/23/18 16:48	1
4-Bromofluorobenzene (Surr)	95		80 - 120		10/23/18 16:48	1
Dibromofluoromethane (Surr)	102		80 - 120		10/23/18 16:48	1
Toluene-d8 (Surr)	100		75 - 125		10/23/18 16:48	1
Trifluorotoluene (Surr)	99		80 - 120		10/23/18 16:48	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	60		1.1		mg/L		10/30/18 16:10	10/31/18 14:30	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:30	1
Magnesium	35		1.1		mg/L		10/30/18 16:10	10/31/18 14:30	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 14:30	1
Potassium	6.0		3.3		mg/L		10/30/18 16:10	10/31/18 14:30	1
Sodium	25		2.0		mg/L		10/30/18 16:10	10/31/18 14:30	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Arsenic	0.0074		0.0010		mg/L		10/29/18 17:11	10/30/18 20:16	1
Barium	0.017		0.0012		mg/L		10/29/18 17:11	10/30/18 20:16	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 20:16	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 20:16	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 20:16	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 20:16	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 20:16	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 20:16	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 20:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.20		mg/L			10/25/18 02:44	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 12:39	1
Chloride	38		0.90		mg/L			10/25/18 02:44	1
Sulfate	37		1.2		mg/L			10/25/18 02:44	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	1.4		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	260		5.0		mg/L			10/25/18 14:16	1
Bicarbonate Alkalinity as CaCO3	260		5.0		mg/L			10/25/18 14:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/25/18 14:16	1
Total Dissolved Solids	370		10		mg/L			10/20/18 12:02	1
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-28

Date Collected: 10/16/18 18:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-14

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 17:15	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 17:15	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 17:15	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 17:15	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 17:15	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 17:15	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 17:15	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 17:15	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 17:15	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 17:15	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 17:15	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 17:15	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 17:15	1
2-Butanone	ND		10		ug/L			10/23/18 17:15	1
2-Hexanone	ND		3.0		ug/L			10/23/18 17:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 17:15	1
Acetone	ND		6.0		ug/L			10/23/18 17:15	1
Acrylonitrile	ND		10		ug/L			10/23/18 17:15	1
Benzene	ND		0.20		ug/L			10/23/18 17:15	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 17:15	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 17:15	1
Bromoform	ND		0.50		ug/L			10/23/18 17:15	1
Bromomethane	ND		0.50		ug/L			10/23/18 17:15	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 17:15	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 17:15	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 17:15	1
Chloroethane	ND		0.50		ug/L			10/23/18 17:15	1
Chloroform	ND		0.20		ug/L			10/23/18 17:15	1
Chloromethane	ND		0.50		ug/L			10/23/18 17:15	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 17:15	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 17:15	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 17:15	1
Dibromomethane	ND		0.20		ug/L			10/23/18 17:15	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 17:15	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 17:15	1
Methyl iodide	ND		0.50		ug/L			10/23/18 17:15	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 17:15	1
o-Xylene	ND		0.50		ug/L			10/23/18 17:15	1
Styrene	ND		0.50		ug/L			10/23/18 17:15	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 17:15	1
Toluene	ND		0.20		ug/L			10/23/18 17:15	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 17:15	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 17:15	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 17:15	1
Trichloroethene	ND		0.20		ug/L			10/23/18 17:15	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 17:15	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 17:15	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 17:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-28

Date Collected: 10/16/18 18:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-14

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/23/18 17:15	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/23/18 17:15	1
Dibromofluoromethane (Surr)	100		80 - 120		10/23/18 17:15	1
Toluene-d8 (Surr)	99		75 - 125		10/23/18 17:15	1
Trifluorotoluene (Surr)	97		80 - 120		10/23/18 17:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	78		1.1		mg/L		10/30/18 16:10	10/31/18 14:34	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:34	1
Magnesium	44		1.1		mg/L		10/30/18 16:10	10/31/18 14:34	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 14:34	1
Potassium	5.4		3.3		mg/L		10/30/18 16:10	10/31/18 14:34	1
Sodium	28		2.0		mg/L		10/30/18 16:10	10/31/18 14:34	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Arsenic	0.0039		0.0010		mg/L		10/29/18 17:11	10/30/18 20:21	1
Barium	0.018		0.0012		mg/L		10/29/18 17:11	10/30/18 20:21	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Chromium	0.0033		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Copper	0.0036		0.0020		mg/L		10/29/18 17:11	10/30/18 20:21	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 20:21	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 20:21	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 20:21	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 20:21	1
Vanadium	0.0068		0.0040		mg/L		10/29/18 17:11	10/30/18 20:21	1
Zinc	0.0071		0.0070		mg/L		10/29/18 17:11	10/30/18 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22		0.20		mg/L			10/25/18 02:56	1
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 13:14	1
Chloride	66		0.90		mg/L			10/25/18 02:56	1
Sulfate	53		1.2		mg/L			10/25/18 02:56	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	2.1		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	280		5.0		mg/L			10/26/18 16:15	1
Bicarbonate Alkalinity as CaCO3	280		5.0		mg/L			10/26/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/26/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/26/18 16:15	1
Total Dissolved Solids	440		10		mg/L			10/20/18 12:02	1
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-29

Date Collected: 10/16/18 16:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-15

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 17:42	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 17:42	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 17:42	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 17:42	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 17:42	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 17:42	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 17:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 17:42	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 17:42	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 17:42	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 17:42	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 17:42	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 17:42	1
2-Butanone	ND		10		ug/L			10/23/18 17:42	1
2-Hexanone	ND		3.0		ug/L			10/23/18 17:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 17:42	1
Acetone	ND		6.0		ug/L			10/23/18 17:42	1
Acrylonitrile	ND		10		ug/L			10/23/18 17:42	1
Benzene	ND		0.20		ug/L			10/23/18 17:42	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 17:42	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 17:42	1
Bromoform	ND		0.50		ug/L			10/23/18 17:42	1
Bromomethane	ND		0.50		ug/L			10/23/18 17:42	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 17:42	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 17:42	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 17:42	1
Chloroethane	ND		0.50		ug/L			10/23/18 17:42	1
Chloroform	ND		0.20		ug/L			10/23/18 17:42	1
Chloromethane	ND		0.50		ug/L			10/23/18 17:42	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 17:42	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 17:42	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 17:42	1
Dibromomethane	ND		0.20		ug/L			10/23/18 17:42	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 17:42	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 17:42	1
Methyl iodide	ND		0.50		ug/L			10/23/18 17:42	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 17:42	1
o-Xylene	ND		0.50		ug/L			10/23/18 17:42	1
Styrene	ND		0.50		ug/L			10/23/18 17:42	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 17:42	1
Toluene	ND		0.20		ug/L			10/23/18 17:42	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 17:42	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 17:42	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 17:42	1
Trichloroethene	ND		0.20		ug/L			10/23/18 17:42	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 17:42	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 17:42	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 17:42	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-29

Date Collected: 10/16/18 16:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-15

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		10/23/18 17:42	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/23/18 17:42	1
Dibromofluoromethane (Surr)	100		80 - 120		10/23/18 17:42	1
Toluene-d8 (Surr)	98		75 - 125		10/23/18 17:42	1
Trifluorotoluene (Surr)	97		80 - 120		10/23/18 17:42	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110		1.1		mg/L		10/30/18 16:10	10/31/18 14:37	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 14:37	1
Magnesium	35		1.1		mg/L		10/30/18 16:10	10/31/18 14:37	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 14:37	1
Potassium	5.5		3.3		mg/L		10/30/18 16:10	10/31/18 14:37	1
Sodium	17		2.0		mg/L		10/30/18 16:10	10/31/18 14:37	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Arsenic	0.0027		0.0010		mg/L		10/29/18 17:11	10/30/18 20:25	1
Barium	0.029		0.0012		mg/L		10/29/18 17:11	10/30/18 20:25	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Chromium	0.0042		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Copper	0.0032		0.0020		mg/L		10/29/18 17:11	10/30/18 20:25	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 20:25	1
Nickel	0.0050		0.0030		mg/L		10/29/18 17:11	10/30/18 20:25	1
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 20:25	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 20:25	1
Vanadium	0.0052		0.0040		mg/L		10/29/18 17:11	10/30/18 20:25	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/25/18 03:08	1
Nitrate Nitrite as N	3.7		0.40		mg/L			10/18/18 13:26	1
Chloride	19		0.90		mg/L			10/25/18 03:08	1
Sulfate	70		1.2		mg/L			10/25/18 03:08	1
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1
Total Organic Carbon	1.5		1.0		mg/L			10/19/18 17:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	320		5.0		mg/L			10/26/18 16:15	1
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L			10/26/18 16:15	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/26/18 16:15	1
Hydroxide Alkalinity as CaCO3	ND		5.0		mg/L			10/26/18 16:15	1
Total Dissolved Solids	480		10		mg/L			10/20/18 12:02	1
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: Trip Blank

Date Collected: 10/16/18 00:01

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-16

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 18:09	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 18:09	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 18:09	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 18:09	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 18:09	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 18:09	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 18:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 18:09	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 18:09	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 18:09	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 18:09	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 18:09	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 18:09	1
2-Butanone	ND		10		ug/L			10/23/18 18:09	1
2-Hexanone	ND		3.0		ug/L			10/23/18 18:09	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 18:09	1
Acetone	ND		6.0		ug/L			10/23/18 18:09	1
Acrylonitrile	ND		10		ug/L			10/23/18 18:09	1
Benzene	ND		0.20		ug/L			10/23/18 18:09	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 18:09	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 18:09	1
Bromoform	ND		0.50		ug/L			10/23/18 18:09	1
Bromomethane	ND		0.50		ug/L			10/23/18 18:09	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 18:09	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 18:09	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 18:09	1
Chloroethane	ND		0.50		ug/L			10/23/18 18:09	1
Chloroform	ND		0.20		ug/L			10/23/18 18:09	1
Chloromethane	ND		0.50		ug/L			10/23/18 18:09	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 18:09	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 18:09	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 18:09	1
Dibromomethane	ND		0.20		ug/L			10/23/18 18:09	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 18:09	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 18:09	1
Methyl iodide	ND		0.50		ug/L			10/23/18 18:09	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 18:09	1
o-Xylene	ND		0.50		ug/L			10/23/18 18:09	1
Styrene	ND		0.50		ug/L			10/23/18 18:09	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 18:09	1
Toluene	ND		0.20		ug/L			10/23/18 18:09	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 18:09	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 18:09	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 18:09	1
Trichloroethene	ND		0.20		ug/L			10/23/18 18:09	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 18:09	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 18:09	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 18:09	1

TestAmerica Seattle

Client Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-81163-16

Date Collected: 10/16/18 00:01

Matrix: Water

Date Received: 10/17/18 11:38

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		10/23/18 18:09	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/23/18 18:09	1
Dibromofluoromethane (Surr)	99		80 - 120		10/23/18 18:09	1
Toluene-d8 (Surr)	98		75 - 125		10/23/18 18:09	1
Trifluorotoluene (Surr)	99		80 - 120		10/23/18 18:09	1

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-287078/7

Matrix: Water

Analysis Batch: 287078

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/22/18 17:08	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/22/18 17:08	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/22/18 17:08	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/22/18 17:08	1
1,1-Dichloroethane	ND		0.20		ug/L			10/22/18 17:08	1
1,1-Dichloroethene	ND		0.20		ug/L			10/22/18 17:08	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/22/18 17:08	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/22/18 17:08	1
1,2-Dibromoethane	ND		0.10		ug/L			10/22/18 17:08	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/22/18 17:08	1
1,2-Dichloroethane	ND		0.20		ug/L			10/22/18 17:08	1
1,2-Dichloropropane	ND		0.20		ug/L			10/22/18 17:08	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/22/18 17:08	1
2-Butanone	ND		10		ug/L			10/22/18 17:08	1
2-Hexanone	ND		3.0		ug/L			10/22/18 17:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/22/18 17:08	1
Acetone	ND		6.0		ug/L			10/22/18 17:08	1
Acrylonitrile	ND		10		ug/L			10/22/18 17:08	1
Benzene	ND		0.20		ug/L			10/22/18 17:08	1
Bromochloromethane	ND		0.20		ug/L			10/22/18 17:08	1
Bromodichloromethane	ND		0.20		ug/L			10/22/18 17:08	1
Bromoform	ND		0.50		ug/L			10/22/18 17:08	1
Bromomethane	ND		0.50		ug/L			10/22/18 17:08	1
Carbon disulfide	ND		0.30		ug/L			10/22/18 17:08	1
Carbon tetrachloride	ND		0.20		ug/L			10/22/18 17:08	1
Chlorobenzene	ND		0.20		ug/L			10/22/18 17:08	1
Chloroethane	ND		0.50		ug/L			10/22/18 17:08	1
Chloroform	ND		0.20		ug/L			10/22/18 17:08	1
Chloromethane	ND		0.50		ug/L			10/22/18 17:08	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 17:08	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 17:08	1
Dibromochloromethane	ND		0.20		ug/L			10/22/18 17:08	1
Dibromomethane	ND		0.20		ug/L			10/22/18 17:08	1
Ethylbenzene	ND		0.20		ug/L			10/22/18 17:08	1
m,p-Xylene	ND		0.50		ug/L			10/22/18 17:08	1
Methyl iodide	ND		0.50		ug/L			10/22/18 17:08	1
Methylene Chloride	ND		5.0		ug/L			10/22/18 17:08	1
o-Xylene	ND		0.50		ug/L			10/22/18 17:08	1
Styrene	ND		0.50		ug/L			10/22/18 17:08	1
Tetrachloroethene	ND		0.50		ug/L			10/22/18 17:08	1
Toluene	ND		0.20		ug/L			10/22/18 17:08	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/22/18 17:08	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/22/18 17:08	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/22/18 17:08	1
Trichloroethene	ND		0.20		ug/L			10/22/18 17:08	1
Trichlorofluoromethane	ND		0.50		ug/L			10/22/18 17:08	1
Vinyl acetate	ND		1.0		ug/L			10/22/18 17:08	1
Vinyl chloride	ND		0.020		ug/L			10/22/18 17:08	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		10/22/18 17:08	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/22/18 17:08	1
Dibromofluoromethane (Surr)	99		80 - 120		10/22/18 17:08	1
Toluene-d8 (Surr)	100		75 - 125		10/22/18 17:08	1
Trifluorotoluene (Surr)	101		80 - 120		10/22/18 17:08	1

Lab Sample ID: LCS 580-287078/4

Matrix: Water

Analysis Batch: 287078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.12		ug/L		102	79 - 139
1,1,1-Trichloroethane	5.00	5.27		ug/L		105	74 - 137
1,1,2,2-Tetrachloroethane	5.00	5.45		ug/L		109	69 - 147
1,1,2-Trichloroethane	5.00	5.28		ug/L		106	80 - 127
1,1-Dichloroethane	5.00	5.14		ug/L		103	80 - 135
1,1-Dichloroethene	5.00	5.03		ug/L		101	71 - 134
1,2,3-Trichloropropane	5.00	5.20		ug/L		104	80 - 127
1,2-Dibromo-3-Chloropropane	5.00	5.09		ug/L		102	69 - 130
1,2-Dibromoethane	5.00	4.98		ug/L		100	80 - 126
1,2-Dichlorobenzene	5.00	5.52		ug/L		110	80 - 129
1,2-Dichloroethane	5.00	5.12		ug/L		102	80 - 130
1,2-Dichloropropane	5.00	5.46		ug/L		109	80 - 130
1,4-Dichlorobenzene	5.00	5.73		ug/L		115	80 - 129
2-Butanone	25.0	28.2		ug/L		113	64 - 144
2-Hexanone	25.0	29.6		ug/L		119	77 - 144
4-Methyl-2-pentanone	25.0	28.4		ug/L		114	78 - 137
Acetone	25.0	30.9		ug/L		124	43 - 150
Acrylonitrile	50.0	51.5		ug/L		103	67 - 148
Benzene	5.00	5.75		ug/L		115	73 - 133
Bromochloromethane	5.00	5.31		ug/L		106	79 - 131
Bromodichloromethane	5.00	5.20		ug/L		104	80 - 131
Bromoform	5.00	5.13		ug/L		103	69 - 125
Bromomethane	5.00	4.63		ug/L		93	61 - 141
Carbon disulfide	5.00	4.57		ug/L		91	65 - 138
Carbon tetrachloride	5.00	5.29		ug/L		106	71 - 140
Chlorobenzene	5.00	5.02		ug/L		100	80 - 129
Chloroethane	5.00	4.02		ug/L		80	58 - 150
Chloroform	5.00	5.38		ug/L		108	80 - 130
Chloromethane	5.00	3.25		ug/L		65	61 - 143
cis-1,2-Dichloroethene	5.00	5.36		ug/L		107	79 - 130
cis-1,3-Dichloropropene	5.00	5.08		ug/L		102	79 - 132
Dibromochloromethane	5.00	5.12		ug/L		102	76 - 131
Dibromomethane	5.00	5.33		ug/L		107	76 - 129
Ethylbenzene	5.00	5.29		ug/L		106	74 - 138
m,p-Xylene	5.00	5.33		ug/L		107	73 - 130
Methyl iodide	5.00	4.91		ug/L		98	76 - 133
Methylene Chloride	5.00	5.21		ug/L		104	75 - 134
o-Xylene	5.00	5.40		ug/L		108	80 - 139
Styrene	5.00	5.73		ug/L		115	74 - 136
Tetrachloroethene	5.00	5.24		ug/L		105	75 - 131
Toluene	5.00	5.22		ug/L		104	80 - 126
trans-1,2-Dichloroethene	5.00	5.22		ug/L		104	75 - 133
trans-1,3-Dichloropropene	5.00	5.09		ug/L		102	78 - 128

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-287078/4

Matrix: Water

Analysis Batch: 287078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,4-Dichloro-2-butene	5.00	5.27		ug/L		105	20 - 150
Trichloroethene	5.00	5.26		ug/L		105	72 - 136
Trichlorofluoromethane	5.00	4.86		ug/L		97	60 - 139
Vinyl acetate	12.5	11.2		ug/L		89	22 - 150
Vinyl chloride	5.00	4.43		ug/L		89	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	97		80 - 120

Lab Sample ID: LCSD 580-287078/5

Matrix: Water

Analysis Batch: 287078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.14		ug/L		103	79 - 139	0	20
1,1,1-Trichloroethane	5.00	5.27		ug/L		105	74 - 137	0	20
1,1,2,2-Tetrachloroethane	5.00	5.16		ug/L		103	69 - 147	5	16
1,1,2-Trichloroethane	5.00	5.35		ug/L		107	80 - 127	1	19
1,1-Dichloroethane	5.00	5.18		ug/L		104	80 - 135	1	20
1,1-Dichloroethene	5.00	5.03		ug/L		101	71 - 134	0	28
1,2,3-Trichloropropane	5.00	5.09		ug/L		102	80 - 127	2	20
1,2-Dibromo-3-Chloropropane	5.00	4.74		ug/L		95	69 - 130	7	20
1,2-Dibromoethane	5.00	4.95		ug/L		99	80 - 126	1	20
1,2-Dichlorobenzene	5.00	5.32		ug/L		106	80 - 129	4	14
1,2-Dichloroethane	5.00	5.20		ug/L		104	80 - 130	2	15
1,2-Dichloropropane	5.00	5.44		ug/L		109	80 - 130	0	20
1,4-Dichlorobenzene	5.00	5.58		ug/L		112	80 - 129	3	11
2-Butanone	25.0	28.7		ug/L		115	64 - 144	1	29
2-Hexanone	25.0	29.3		ug/L		117	77 - 144	1	21
4-Methyl-2-pentanone	25.0	28.3		ug/L		113	78 - 137	0	19
Acetone	25.0	31.7		ug/L		127	43 - 150	3	35
Acrylonitrile	50.0	52.6		ug/L		105	67 - 148	2	23
Benzene	5.00	5.75		ug/L		115	73 - 133	0	20
Bromochloromethane	5.00	5.37		ug/L		107	79 - 131	1	20
Bromodichloromethane	5.00	5.20		ug/L		104	80 - 131	0	20
Bromoform	5.00	4.96		ug/L		99	69 - 125	3	20
Bromomethane	5.00	4.60		ug/L		92	61 - 141	1	31
Carbon disulfide	5.00	4.62		ug/L		92	65 - 138	1	23
Carbon tetrachloride	5.00	5.33		ug/L		107	71 - 140	1	21
Chlorobenzene	5.00	5.04		ug/L		101	80 - 129	0	12
Chloroethane	5.00	3.89		ug/L		78	58 - 150	4	35
Chloroform	5.00	5.42		ug/L		108	80 - 130	1	20
Chloromethane	5.00	3.09		ug/L		62	61 - 143	5	31
cis-1,2-Dichloroethene	5.00	5.33		ug/L		107	79 - 130	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-287078/5

Matrix: Water

Analysis Batch: 287078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	5.10		ug/L		102	79 - 132	0	22
Dibromochloromethane	5.00	5.01		ug/L		100	76 - 131	2	20
Dibromomethane	5.00	5.35		ug/L		107	76 - 129	0	20
Ethylbenzene	5.00	5.30		ug/L		106	74 - 138	0	20
m,p-Xylene	5.00	5.35		ug/L		107	73 - 130	0	20
Methyl iodide	5.00	4.97		ug/L		99	76 - 133	1	15
Methylene Chloride	5.00	5.32		ug/L		106	75 - 134	2	29
o-Xylene	5.00	5.41		ug/L		108	80 - 139	0	20
Styrene	5.00	5.65		ug/L		113	74 - 136	2	20
Tetrachloroethene	5.00	5.25		ug/L		105	75 - 131	0	20
Toluene	5.00	5.24		ug/L		105	80 - 126	0	20
trans-1,2-Dichloroethene	5.00	5.21		ug/L		104	75 - 133	0	27
trans-1,3-Dichloropropene	5.00	5.10		ug/L		102	78 - 128	0	21
trans-1,4-Dichloro-2-butene	5.00	5.05		ug/L		101	20 - 150	4	20
Trichloroethene	5.00	5.31		ug/L		106	72 - 136	1	20
Trichlorofluoromethane	5.00	4.91		ug/L		98	60 - 139	1	31
Vinyl acetate	12.5	10.7		ug/L		86	22 - 150	4	35
Vinyl chloride	5.00	4.56		ug/L		91	59 - 140	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	97		75 - 125
Trifluorotoluene (Surr)	97		80 - 120

Lab Sample ID: MB 580-287139/7

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.30		ug/L			10/23/18 12:48	1
1,1,1-Trichloroethane	ND		0.20		ug/L			10/23/18 12:48	1
1,1,2,2-Tetrachloroethane	ND		0.20		ug/L			10/23/18 12:48	1
1,1,2-Trichloroethane	ND		0.20		ug/L			10/23/18 12:48	1
1,1-Dichloroethane	ND		0.20		ug/L			10/23/18 12:48	1
1,1-Dichloroethene	ND		0.20		ug/L			10/23/18 12:48	1
1,2,3-Trichloropropane	ND		0.20		ug/L			10/23/18 12:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			10/23/18 12:48	1
1,2-Dibromoethane	ND		0.10		ug/L			10/23/18 12:48	1
1,2-Dichlorobenzene	ND		0.30		ug/L			10/23/18 12:48	1
1,2-Dichloroethane	ND		0.20		ug/L			10/23/18 12:48	1
1,2-Dichloropropane	ND		0.20		ug/L			10/23/18 12:48	1
1,4-Dichlorobenzene	ND		0.30		ug/L			10/23/18 12:48	1
2-Butanone	ND		10		ug/L			10/23/18 12:48	1
2-Hexanone	ND		3.0		ug/L			10/23/18 12:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			10/23/18 12:48	1
Acetone	ND		6.0		ug/L			10/23/18 12:48	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-287139/7

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		10		ug/L			10/23/18 12:48	1
Benzene	ND		0.20		ug/L			10/23/18 12:48	1
Bromochloromethane	ND		0.20		ug/L			10/23/18 12:48	1
Bromodichloromethane	ND		0.20		ug/L			10/23/18 12:48	1
Bromoform	ND		0.50		ug/L			10/23/18 12:48	1
Bromomethane	ND		0.50		ug/L			10/23/18 12:48	1
Carbon disulfide	ND		0.30		ug/L			10/23/18 12:48	1
Carbon tetrachloride	ND		0.20		ug/L			10/23/18 12:48	1
Chlorobenzene	ND		0.20		ug/L			10/23/18 12:48	1
Chloroethane	ND		0.50		ug/L			10/23/18 12:48	1
Chloroform	ND		0.20		ug/L			10/23/18 12:48	1
Chloromethane	ND		0.50		ug/L			10/23/18 12:48	1
cis-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 12:48	1
cis-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 12:48	1
Dibromochloromethane	ND		0.20		ug/L			10/23/18 12:48	1
Dibromomethane	ND		0.20		ug/L			10/23/18 12:48	1
Ethylbenzene	ND		0.20		ug/L			10/23/18 12:48	1
m,p-Xylene	ND		0.50		ug/L			10/23/18 12:48	1
Methyl iodide	ND		0.50		ug/L			10/23/18 12:48	1
Methylene Chloride	ND		5.0		ug/L			10/23/18 12:48	1
o-Xylene	ND		0.50		ug/L			10/23/18 12:48	1
Styrene	ND		0.50		ug/L			10/23/18 12:48	1
Tetrachloroethene	ND		0.50		ug/L			10/23/18 12:48	1
Toluene	ND		0.20		ug/L			10/23/18 12:48	1
trans-1,2-Dichloroethene	ND		0.20		ug/L			10/23/18 12:48	1
trans-1,3-Dichloropropene	ND		0.20		ug/L			10/23/18 12:48	1
trans-1,4-Dichloro-2-butene	ND		2.0		ug/L			10/23/18 12:48	1
Trichloroethene	ND		0.20		ug/L			10/23/18 12:48	1
Trichlorofluoromethane	ND		0.50		ug/L			10/23/18 12:48	1
Vinyl acetate	ND		1.0		ug/L			10/23/18 12:48	1
Vinyl chloride	ND		0.020		ug/L			10/23/18 12:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		10/23/18 12:48	1
4-Bromofluorobenzene (Surr)	100		80 - 120		10/23/18 12:48	1
Dibromofluoromethane (Surr)	101		80 - 120		10/23/18 12:48	1
Toluene-d8 (Surr)	98		75 - 125		10/23/18 12:48	1
Trifluorotoluene (Surr)	96		80 - 120		10/23/18 12:48	1

Lab Sample ID: LCS 580-287139/4

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.29		ug/L		106	79 - 139
1,1,1-Trichloroethane	5.00	5.35		ug/L		107	74 - 137
1,1,2,2-Tetrachloroethane	5.00	5.15		ug/L		103	69 - 147
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 127

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-287139/4

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	5.00	5.33		ug/L		107	80 - 135
1,1-Dichloroethene	5.00	5.18		ug/L		104	71 - 134
1,2,3-Trichloropropane	5.00	4.89		ug/L		98	80 - 127
1,2-Dibromo-3-Chloropropane	5.00	5.15		ug/L		103	69 - 130
1,2-Dibromoethane	5.00	4.70		ug/L		94	80 - 126
1,2-Dichlorobenzene	5.00	5.55		ug/L		111	80 - 129
1,2-Dichloroethane	5.00	5.11		ug/L		102	80 - 130
1,2-Dichloropropane	5.00	5.25		ug/L		105	80 - 130
1,4-Dichlorobenzene	5.00	5.65		ug/L		113	80 - 129
2-Butanone	25.0	27.1		ug/L		108	64 - 144
2-Hexanone	25.0	26.7		ug/L		107	77 - 144
4-Methyl-2-pentanone	25.0	26.9		ug/L		108	78 - 137
Acetone	25.0	27.3		ug/L		109	43 - 150
Acrylonitrile	50.0	53.8		ug/L		108	67 - 148
Benzene	5.00	5.79		ug/L		116	73 - 133
Bromochloromethane	5.00	5.59		ug/L		112	79 - 131
Bromodichloromethane	5.00	5.03		ug/L		101	80 - 131
Bromoform	5.00	4.79		ug/L		96	69 - 125
Bromomethane	5.00	4.82		ug/L		96	61 - 141
Carbon disulfide	5.00	4.77		ug/L		95	65 - 138
Carbon tetrachloride	5.00	5.46		ug/L		109	71 - 140
Chlorobenzene	5.00	4.94		ug/L		99	80 - 129
Chloroethane	5.00	4.88		ug/L		98	58 - 150
Chloroform	5.00	5.59		ug/L		112	80 - 130
Chloromethane	5.00	3.51		ug/L		70	61 - 143
cis-1,2-Dichloroethene	5.00	5.64		ug/L		113	79 - 130
cis-1,3-Dichloropropene	5.00	4.94		ug/L		99	79 - 132
Dibromochloromethane	5.00	4.89		ug/L		98	76 - 131
Dibromomethane	5.00	5.31		ug/L		106	76 - 129
Ethylbenzene	5.00	5.14		ug/L		103	74 - 138
m,p-Xylene	5.00	5.19		ug/L		104	73 - 130
Methyl iodide	5.00	5.20		ug/L		104	76 - 133
Methylene Chloride	5.00	5.49		ug/L		110	75 - 134
o-Xylene	5.00	5.39		ug/L		108	80 - 139
Styrene	5.00	5.35		ug/L		107	74 - 136
Tetrachloroethene	5.00	5.23		ug/L		105	75 - 131
Toluene	5.00	5.13		ug/L		103	80 - 126
trans-1,2-Dichloroethene	5.00	5.38		ug/L		108	75 - 133
trans-1,3-Dichloropropene	5.00	4.68		ug/L		94	78 - 128
trans-1,4-Dichloro-2-butene	5.00	4.71		ug/L		94	20 - 150
Trichloroethene	5.00	5.36		ug/L		107	72 - 136
Trichlorofluoromethane	5.00	5.13		ug/L		103	60 - 139
Vinyl acetate	12.5	12.9		ug/L		103	22 - 150
Vinyl chloride	5.00	4.90		ug/L		98	59 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-287139/4

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	96		75 - 125
Trifluorotoluene (Surr)	102		80 - 120

Lab Sample ID: LCSD 580-287139/5

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.01		ug/L		100	79 - 139	5	20
1,1,1-Trichloroethane	5.00	5.28		ug/L		106	74 - 137	1	20
1,1,2,2-Tetrachloroethane	5.00	4.96		ug/L		99	69 - 147	4	16
1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 127	3	19
1,1-Dichloroethane	5.00	5.18		ug/L		104	80 - 135	3	20
1,1-Dichloroethene	5.00	5.08		ug/L		102	71 - 134	2	28
1,2,3-Trichloropropane	5.00	4.94		ug/L		99	80 - 127	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.66		ug/L		93	69 - 130	10	20
1,2-Dibromoethane	5.00	4.83		ug/L		97	80 - 126	3	20
1,2-Dichlorobenzene	5.00	5.26		ug/L		105	80 - 129	5	14
1,2-Dichloroethane	5.00	5.15		ug/L		103	80 - 130	1	15
1,2-Dichloropropane	5.00	5.39		ug/L		108	80 - 130	3	20
1,4-Dichlorobenzene	5.00	5.53		ug/L		111	80 - 129	2	11
2-Butanone	25.0	28.0		ug/L		112	64 - 144	3	29
2-Hexanone	25.0	27.7		ug/L		111	77 - 144	4	21
4-Methyl-2-pentanone	25.0	26.8		ug/L		107	78 - 137	0	19
Acetone	25.0	27.8		ug/L		111	43 - 150	2	35
Acrylonitrile	50.0	52.0		ug/L		104	67 - 148	3	23
Benzene	5.00	5.77		ug/L		115	73 - 133	0	20
Bromochloromethane	5.00	5.48		ug/L		110	79 - 131	2	20
Bromodichloromethane	5.00	5.19		ug/L		104	80 - 131	3	20
Bromoform	5.00	4.83		ug/L		97	69 - 125	1	20
Bromomethane	5.00	4.60		ug/L		92	61 - 141	5	31
Carbon disulfide	5.00	4.62		ug/L		92	65 - 138	3	23
Carbon tetrachloride	5.00	5.34		ug/L		107	71 - 140	2	21
Chlorobenzene	5.00	4.95		ug/L		99	80 - 129	0	12
Chloroethane	5.00	3.89		ug/L		78	58 - 150	23	35
Chloroform	5.00	5.45		ug/L		109	80 - 130	3	20
Chloromethane	5.00	3.22		ug/L		64	61 - 143	9	31
cis-1,2-Dichloroethene	5.00	5.43		ug/L		109	79 - 130	4	20
cis-1,3-Dichloropropene	5.00	4.99		ug/L		100	79 - 132	1	22
Dibromochloromethane	5.00	4.98		ug/L		100	76 - 131	2	20
Dibromomethane	5.00	5.42		ug/L		108	76 - 129	2	20
Ethylbenzene	5.00	5.17		ug/L		103	74 - 138	1	20
m,p-Xylene	5.00	5.24		ug/L		105	73 - 130	1	20
Methyl iodide	5.00	5.11		ug/L		102	76 - 133	2	15
Methylene Chloride	5.00	5.28		ug/L		106	75 - 134	4	29
o-Xylene	5.00	5.31		ug/L		106	80 - 139	2	20
Styrene	5.00	5.52		ug/L		110	74 - 136	3	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-287139/5

Matrix: Water

Analysis Batch: 287139

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	5.00	5.20		ug/L		104	75 - 131	1	20
Toluene	5.00	5.16		ug/L		103	80 - 126	1	20
trans-1,2-Dichloroethene	5.00	5.20		ug/L		104	75 - 133	3	27
trans-1,3-Dichloropropene	5.00	4.90		ug/L		98	78 - 128	5	21
trans-1,4-Dichloro-2-butene	5.00	4.87		ug/L		97	20 - 150	3	20
Trichloroethene	5.00	5.35		ug/L		107	72 - 136	0	20
Trichlorofluoromethane	5.00	4.88		ug/L		98	60 - 139	5	31
Vinyl acetate	12.5	11.1		ug/L		88	22 - 150	15	35
Vinyl chloride	5.00	4.47		ug/L		89	59 - 140	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	96		75 - 125
Trifluorotoluene (Surr)	97		80 - 120

Lab Sample ID: MB 580-287255/7

Matrix: Water

Analysis Batch: 287255

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.50		ug/L			10/24/18 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		80 - 120		10/24/18 12:36	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/24/18 12:36	1
Dibromofluoromethane (Surr)	99		80 - 120		10/24/18 12:36	1
Toluene-d8 (Surr)	100		75 - 125		10/24/18 12:36	1
Trifluorotoluene (Surr)	102		80 - 120		10/24/18 12:36	1

Lab Sample ID: LCS 580-287255/4

Matrix: Water

Analysis Batch: 287255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	5.00	5.12		ug/L		102	60 - 139

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	96		75 - 125
Trifluorotoluene (Surr)	99		80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-287255/5

Matrix: Water

Analysis Batch: 287255

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	5.00	4.97		ug/L		99	60 - 139	3	31
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	96		80 - 120						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	96		75 - 125						
Trifluorotoluene (Surr)	96		80 - 120						

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-287790/22-A

Matrix: Water

Analysis Batch: 287896

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.1		mg/L		10/30/18 16:10	10/31/18 13:16	1
Iron	ND		0.30		mg/L		10/30/18 16:10	10/31/18 13:16	1
Magnesium	ND		1.1		mg/L		10/30/18 16:10	10/31/18 13:16	1
Manganese	ND		0.020		mg/L		10/30/18 16:10	10/31/18 13:16	1
Potassium	ND		3.3		mg/L		10/30/18 16:10	10/31/18 13:16	1
Sodium	ND		2.0		mg/L		10/30/18 16:10	10/31/18 13:16	1

Lab Sample ID: LCS 580-287790/23-A

Matrix: Water

Analysis Batch: 287896

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium	20.0	20.9		mg/L		104	80 - 120		
Iron	22.0	23.1		mg/L		105	80 - 120		
Magnesium	20.0	20.8		mg/L		104	80 - 120		
Manganese	1.00	1.05		mg/L		105	80 - 120		
Potassium	20.0	20.5		mg/L		103	80 - 120		
Sodium	20.0	20.0		mg/L		100	80 - 120		

Lab Sample ID: LCSD 580-287790/24-A

Matrix: Water

Analysis Batch: 287896

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	20.0	20.5		mg/L		102	80 - 120	2	20
Iron	22.0	22.5		mg/L		102	80 - 120	2	20
Magnesium	20.0	20.3		mg/L		102	80 - 120	2	20
Manganese	1.00	1.03		mg/L		103	80 - 120	2	20
Potassium	20.0	20.1		mg/L		101	80 - 120	2	20
Sodium	20.0	19.6		mg/L		98	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 580-81163-1 MS

Matrix: Water

Analysis Batch: 287896

Client Sample ID: 1018-14

Prep Type: Dissolved

Prep Batch: 287790

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	79		20.0	99.6		mg/L		101	75 - 125
Iron	ND		22.0	23.0		mg/L		104	75 - 125
Magnesium	52		20.0	72.8		mg/L		102	75 - 125
Manganese	0.20		1.00	1.25		mg/L		105	75 - 125
Potassium	6.6		20.0	27.3		mg/L		103	75 - 125
Sodium	34		20.0	54.1		mg/L		101	75 - 125

Lab Sample ID: 580-81163-1 MSD

Matrix: Water

Analysis Batch: 287896

Client Sample ID: 1018-14

Prep Type: Dissolved

Prep Batch: 287790

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	79		20.0	99.9		mg/L		103	75 - 125	0	20
Iron	ND		22.0	22.9		mg/L		104	75 - 125	0	20
Magnesium	52		20.0	73.0		mg/L		103	75 - 125	0	20
Manganese	0.20		1.00	1.24		mg/L		104	75 - 125	1	20
Potassium	6.6		20.0	27.4		mg/L		104	75 - 125	0	20
Sodium	34		20.0	54.2		mg/L		102	75 - 125	0	20

Lab Sample ID: 580-81163-1 DU

Matrix: Water

Analysis Batch: 287896

Client Sample ID: 1018-14

Prep Type: Dissolved

Prep Batch: 287790

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Calcium	79		78.6		mg/L		0.9	20
Iron	ND		ND		mg/L		NC	20
Magnesium	52		51.8		mg/L		1	20
Manganese	0.20		0.198		mg/L		1	20
Potassium	6.6		6.63		mg/L		0.1	20
Sodium	34		33.7		mg/L		0.4	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-287704/22-A

Matrix: Water

Analysis Batch: 287827

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Arsenic	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 18:26	1
Barium	ND		0.0012		mg/L		10/29/18 17:11	10/30/18 18:26	1
Beryllium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Cadmium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Chromium	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Cobalt	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Copper	ND		0.0020		mg/L		10/29/18 17:11	10/30/18 18:26	1
Lead	ND		0.00080		mg/L		10/29/18 17:11	10/30/18 18:26	1
Nickel	ND		0.0030		mg/L		10/29/18 17:11	10/30/18 18:26	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-287704/22-A

Matrix: Water

Analysis Batch: 287827

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.0080		mg/L		10/29/18 17:11	10/30/18 18:26	1
Silver	ND		0.00040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Thallium	ND		0.0010		mg/L		10/29/18 17:11	10/30/18 18:26	1
Vanadium	ND		0.0040		mg/L		10/29/18 17:11	10/30/18 18:26	1
Zinc	ND		0.0070		mg/L		10/29/18 17:11	10/30/18 18:26	1

Lab Sample ID: LCS 580-287704/23-A

Matrix: Water

Analysis Batch: 287827

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.94		mg/L		98	80 - 120
Arsenic	4.00	4.02		mg/L		101	80 - 120
Barium	4.00	3.95		mg/L		99	80 - 120
Beryllium	0.100	0.100		mg/L		100	80 - 120
Cadmium	0.100	0.106		mg/L		106	80 - 120
Chromium	0.400	0.395		mg/L		99	80 - 120
Cobalt	1.00	0.987		mg/L		99	80 - 120
Copper	0.500	0.507		mg/L		101	80 - 120
Lead	1.00	0.976		mg/L		98	80 - 120
Nickel	1.00	0.981		mg/L		98	80 - 120
Selenium	4.00	3.94		mg/L		98	80 - 120
Silver	0.600	0.598		mg/L		100	80 - 120
Thallium	4.00	3.71		mg/L		93	80 - 120
Vanadium	1.00	0.977		mg/L		98	80 - 120
Zinc	4.00	3.94		mg/L		98	80 - 120

Lab Sample ID: LCSD 580-287704/24-A

Matrix: Water

Analysis Batch: 287827

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.95		mg/L		98	80 - 120	1	20
Arsenic	4.00	4.01		mg/L		100	80 - 120	0	20
Barium	4.00	3.99		mg/L		100	80 - 120	1	20
Beryllium	0.100	0.0960		mg/L		96	80 - 120	4	20
Cadmium	0.100	0.108		mg/L		108	80 - 120	2	20
Chromium	0.400	0.402		mg/L		100	80 - 120	2	20
Cobalt	1.00	0.980		mg/L		98	80 - 120	1	20
Copper	0.500	0.501		mg/L		100	80 - 120	1	20
Lead	1.00	0.976		mg/L		98	80 - 120	0	20
Nickel	1.00	1.01		mg/L		101	80 - 120	3	20
Selenium	4.00	3.97		mg/L		99	80 - 120	1	20
Silver	0.600	0.607		mg/L		101	80 - 120	1	20
Thallium	4.00	3.69		mg/L		92	80 - 120	0	20
Vanadium	1.00	0.967		mg/L		97	80 - 120	1	20
Zinc	4.00	4.03		mg/L		101	80 - 120	2	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-81163-1 MS

Matrix: Water

Analysis Batch: 287827

Client Sample ID: 1018-14

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	ND		3.00	3.02		mg/L		101	80 - 120
Arsenic	0.0057		4.00	4.14		mg/L		103	80 - 120
Barium	0.030		4.00	4.14		mg/L		103	80 - 120
Beryllium	ND		0.100	0.103		mg/L		103	80 - 120
Cadmium	ND		0.100	0.111		mg/L		111	80 - 120
Chromium	ND		0.400	0.398		mg/L		100	80 - 120
Cobalt	ND		1.00	1.01		mg/L		101	80 - 120
Copper	ND		0.500	0.501		mg/L		100	80 - 120
Lead	ND		1.00	1.01		mg/L		101	80 - 120
Nickel	ND		1.00	1.03		mg/L		103	80 - 120
Selenium	ND		4.00	4.07		mg/L		102	80 - 120
Silver	ND		0.600	0.624		mg/L		104	80 - 120
Thallium	ND		4.00	3.88		mg/L		97	80 - 120
Vanadium	ND		1.00	0.993		mg/L		99	80 - 120
Zinc	ND		4.00	4.10		mg/L		102	80 - 120

Lab Sample ID: 580-81163-1 MSD

Matrix: Water

Analysis Batch: 287827

Client Sample ID: 1018-14

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	ND		3.00	3.05		mg/L		102	80 - 120	1	20
Arsenic	0.0057		4.00	4.14		mg/L		103	80 - 120	0	20
Barium	0.030		4.00	4.09		mg/L		102	80 - 120	1	20
Beryllium	ND		0.100	0.104		mg/L		104	80 - 120	2	20
Cadmium	ND		0.100	0.112		mg/L		112	80 - 120	1	20
Chromium	ND		0.400	0.420		mg/L		105	80 - 120	5	20
Cobalt	ND		1.00	1.03		mg/L		103	80 - 120	2	20
Copper	ND		0.500	0.511		mg/L		102	80 - 120	2	20
Lead	ND		1.00	1.02		mg/L		102	80 - 120	0	20
Nickel	ND		1.00	1.04		mg/L		104	80 - 120	1	20
Selenium	ND		4.00	4.11		mg/L		103	80 - 120	1	20
Silver	ND		0.600	0.623		mg/L		104	80 - 120	0	20
Thallium	ND		4.00	3.87		mg/L		97	80 - 120	0	20
Vanadium	ND		1.00	1.02		mg/L		102	80 - 120	3	20
Zinc	ND		4.00	4.18		mg/L		104	80 - 120	2	20

Lab Sample ID: 580-81163-1 DU

Matrix: Water

Analysis Batch: 287827

Client Sample ID: 1018-14

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	ND		ND		mg/L		NC	20
Arsenic	0.0057		0.00559		mg/L		2	20
Barium	0.030		0.0291		mg/L		3	20
Beryllium	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-81163-1 DU

Matrix: Water

Analysis Batch: 287827

Client Sample ID: 1018-14

Prep Type: Total Recoverable

Prep Batch: 287704

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Cobalt	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Lead	ND		ND		mg/L		NC	20
Nickel	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-287790/22-A

Matrix: Water

Analysis Batch: 287894

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		10/30/18 16:10	10/31/18 12:29	1

Lab Sample ID: LCS 580-287790/23-A

Matrix: Water

Analysis Batch: 287894

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.00	3.90		mg/L		98	80 - 120

Lab Sample ID: LCSD 580-287790/24-A

Matrix: Water

Analysis Batch: 287894

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 287790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	4.00	3.89		mg/L		97	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-286838/3

Matrix: Water

Analysis Batch: 286838

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			10/17/18 18:49	1

Lab Sample ID: LCS 580-286838/4

Matrix: Water

Analysis Batch: 286838

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	10.0	9.99		mg/L		100	90 - 110

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-286838/5

Matrix: Water

Analysis Batch: 286838

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	9.99		mg/L		100	90 - 110	0	15

Lab Sample ID: MB 580-286953/17

Matrix: Water

Analysis Batch: 286953

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.40		mg/L			10/18/18 14:36	1

Lab Sample ID: LCS 580-286953/18

Matrix: Water

Analysis Batch: 286953

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	10.0	10.2		mg/L		102	90 - 110		

Lab Sample ID: LCSD 580-286953/19

Matrix: Water

Analysis Batch: 286953

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110	1	15

Lab Sample ID: 580-81163-11 MS

Matrix: Water

Analysis Batch: 286953

Client Sample ID: 1018-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	ND		10.0	11.0		mg/L		110	90 - 110		

Lab Sample ID: 580-81163-11 MSD

Matrix: Water

Analysis Batch: 286953

Client Sample ID: 1018-25

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		10.0	11.0		mg/L		110	90 - 110	0	15

Lab Sample ID: MB 580-287394/3

Matrix: Water

Analysis Batch: 287394

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			10/24/18 20:53	1
Chloride	ND		0.90		mg/L			10/24/18 20:53	1
Sulfate	ND		1.2		mg/L			10/24/18 20:53	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-287394/4

Matrix: Water

Analysis Batch: 287394

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	5.00	5.37		mg/L		107	90 - 110
Chloride	50.0	50.7		mg/L		101	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-287394/5

Matrix: Water

Analysis Batch: 287394

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	5.00	5.37		mg/L		107	90 - 110	0	15
Chloride	50.0	50.6		mg/L		101	90 - 110	0	15
Sulfate	50.0	50.1		mg/L		100	90 - 110	0	15

Lab Sample ID: 580-81163-1 MS

Matrix: Water

Analysis Batch: 287394

Client Sample ID: 1018-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.22	F1	5.00	4.27	F1	mg/L		81	90 - 110
Chloride	60		50.0	106		mg/L		92	90 - 110
Sulfate	31		50.0	82.8		mg/L		104	90 - 110

Lab Sample ID: 580-81163-1 MSD

Matrix: Water

Analysis Batch: 287394

Client Sample ID: 1018-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.22	F1	5.00	4.29	F1	mg/L		81	90 - 110	0	15
Chloride	60		50.0	106		mg/L		93	90 - 110	0	15
Sulfate	31		50.0	83.0		mg/L		104	90 - 110	0	15

Lab Sample ID: 580-81163-12 MS

Matrix: Water

Analysis Batch: 287394

Client Sample ID: 1018-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.22	F1	5.00	4.52	F1	mg/L		86	90 - 110
Chloride	41		50.0	90.3		mg/L		100	90 - 110
Sulfate	20		50.0	73.8		mg/L		107	90 - 110

Lab Sample ID: 580-81163-12 MSD

Matrix: Water

Analysis Batch: 287394

Client Sample ID: 1018-26

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.22	F1	5.00	4.55	F1	mg/L		87	90 - 110	1	15
Chloride	41		50.0	90.8		mg/L		100	90 - 110	0	15
Sulfate	20		50.0	74.1		mg/L		107	90 - 110	0	15

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 580-287607/1-A
Matrix: Water
Analysis Batch: 287596

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.50		mg/L		10/27/18 15:15	10/29/18 10:00	1

Lab Sample ID: LCS 580-287607/2-A
Matrix: Water
Analysis Batch: 287596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 287607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.00	2.11		mg/L		105	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 580-287916/13
Matrix: Water
Analysis Batch: 287916

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.15		mg/L			10/31/18 16:30	1

Lab Sample ID: LCS 580-287916/14
Matrix: Water
Analysis Batch: 287916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.996		mg/L		100	90 - 110

Lab Sample ID: LCSD 580-287916/15
Matrix: Water
Analysis Batch: 287916

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.00	0.994		mg/L		99	90 - 110	0	20

Lab Sample ID: 580-81163-7 MS
Matrix: Water
Analysis Batch: 287916

Client Sample ID: 1018-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	14		0.500	13.9	4	mg/L		84	90 - 110

Lab Sample ID: 580-81163-7 MSD
Matrix: Water
Analysis Batch: 287916

Client Sample ID: 1018-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	14		0.500	13.9	4	mg/L		84	90 - 110	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 580-81163-7 DU
Matrix: Water
Analysis Batch: 287916

Client Sample ID: 1018-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Nitrate Nitrite as N	14		13.5		mg/L		0.07	20

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 580-287544/2
Matrix: Water
Analysis Batch: 287544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	98.8		mg/L		99	85 - 115

Lab Sample ID: 580-81163-1 DU
Matrix: Water
Analysis Batch: 287544

Client Sample ID: 1018-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Alkalinity	360		362		mg/L		2	17
Bicarbonate Alkalinity as CaCO3	360		362		mg/L		2	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: LCS 580-287585/2
Matrix: Water
Analysis Batch: 287585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	99.4		mg/L		99	85 - 115

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-287017/1
Matrix: Water
Analysis Batch: 287017

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			10/20/18 12:02	1

Lab Sample ID: LCS 580-287017/2
Matrix: Water
Analysis Batch: 287017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	950		mg/L		95	80 - 120

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 580-81163-10 DU
Matrix: Water
Analysis Batch: 287017

Client Sample ID: 1018-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	550		555		mg/L		0.5	20

Lab Sample ID: MB 580-287150/1
Matrix: Water
Analysis Batch: 287150

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			10/23/18 10:57	1

Lab Sample ID: LCS 580-287150/2
Matrix: Water
Analysis Batch: 287150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	930		mg/L		93	80 - 120

Lab Sample ID: 580-81163-1 DU
Matrix: Water
Analysis Batch: 287150

Client Sample ID: 1018-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	500		470		mg/L		6	20

Method: SM 5220D - COD

Lab Sample ID: MB 580-286969/3-A
Matrix: Water
Analysis Batch: 286974

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286969

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:45	10/19/18 12:00	1

Lab Sample ID: LCS 580-286969/4-A
Matrix: Water
Analysis Batch: 286974

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	76.9		mg/L		103	80 - 120

Lab Sample ID: MB 580-286970/3-A
Matrix: Water
Analysis Batch: 286976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286970

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		10/19/18 11:55	10/19/18 12:15	1

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: SM 5220D - COD (Continued)

Lab Sample ID: LCS 580-286970/4-A

Matrix: Water

Analysis Batch: 286976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 286970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	79.0		mg/L		105	80 - 120

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-287056/22

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/19/18 17:50	1

Lab Sample ID: MB 580-287056/3

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0		mg/L			10/19/18 17:50	1

Lab Sample ID: LCS 580-287056/23

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.4		mg/L		104	85 - 115

Lab Sample ID: LCS 580-287056/4

Matrix: Water

Analysis Batch: 287056

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.6		mg/L		106	85 - 115

Lab Sample ID: 580-81163-5 MS

Matrix: Water

Analysis Batch: 287056

Client Sample ID: 1018-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	2.5		10.0	12.4		mg/L		100	85 - 115

Lab Sample ID: 580-81163-5 MSD

Matrix: Water

Analysis Batch: 287056

Client Sample ID: 1018-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	2.5		10.0	12.4		mg/L		100	85 - 115	0	20

TestAmerica Seattle

QC Sample Results

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 580-81163-5 DU
Matrix: Water
Analysis Batch: 287056

Client Sample ID: 1018-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	2.5		2.37		mg/L	—	3	20

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-14

Date Collected: 10/16/18 10:10

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287078	10/22/18 21:35	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 13:25	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 18:39	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286838	10/17/18 22:20	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/24/18 23:02	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-17

Date Collected: 10/16/18 09:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287078	10/22/18 22:01	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 13:50	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:17	FCW	TAL SEA
Total/NA	Analysis	300.0		10	286838	10/17/18 23:18	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/24/18 23:37	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-18

Date Collected: 10/16/18 11:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287078	10/22/18 22:28	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 13:54	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:21	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286838	10/17/18 23:30	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/24/18 23:49	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-19

Date Collected: 10/16/18 10:44

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287078	10/22/18 22:55	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 13:57	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:26	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286838	10/17/18 22:43	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 00:01	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-16

Date Collected: 10/16/18 10:20

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 13:42	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:00	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:30	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286838	10/17/18 22:31	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 00:12	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-20

Date Collected: 10/16/18 12:25

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 14:08	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:03	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:34	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 11:52	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 00:24	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-21

Date Collected: 10/16/18 11:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		10	287916	10/31/18 17:04	HJM	TAL SEA

Client Sample ID: 1018-22

Date Collected: 10/16/18 13:43

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 14:35	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:07	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:38	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 12:28	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 00:36	EMM	TAL SEA
Total/NA	Analysis	300.0		2	287394	10/25/18 00:47	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-23

Date Collected: 10/16/18 12:27

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 15:02	CJ	TAL SEA
Total/NA	Analysis	8260C	DL	10	287255	10/24/18 18:50	RSB	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:10	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:43	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 12:04	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 01:23	EMM	TAL SEA
Total/NA	Analysis	300.0		5	287394	10/25/18 01:34	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-23

Date Collected: 10/16/18 12:27

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	287150	10/23/18 10:57	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-24

Date Collected: 10/16/18 15:30

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 15:28	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:13	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:47	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 12:51	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 01:46	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286969	10/19/18 11:45	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286974	10/19/18 12:00	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-25

Date Collected: 10/16/18 13:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 15:55	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:23	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 19:51	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 12:16	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 01:58	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-25

Date Collected: 10/16/18 13:35

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286970	10/19/18 11:55	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286976	10/19/18 12:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-26

Date Collected: 10/16/18 16:56

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 16:22	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:27	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 20:12	FCW	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6020B		1	287894	10/31/18 12:42	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 13:03	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 02:09	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286970	10/19/18 11:55	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286976	10/19/18 12:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-27

Date Collected: 10/16/18 14:40

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 16:48	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:30	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 20:16	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 12:39	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 02:44	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-27

Date Collected: 10/16/18 14:40

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287544	10/25/18 14:16	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286970	10/19/18 11:55	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286976	10/19/18 12:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-28

Date Collected: 10/16/18 18:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 17:15	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:34	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 20:21	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 13:14	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 02:56	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287585	10/26/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286970	10/19/18 11:55	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286976	10/19/18 12:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: 1018-29

Date Collected: 10/16/18 16:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 17:42	CJ	TAL SEA
Dissolved	Filtration	FILTRATION			287087	10/22/18 14:49	JKM	TAL SEA
Dissolved	Prep	3005A			287790	10/30/18 16:10	T1H	TAL SEA
Dissolved	Analysis	6010C		1	287896	10/31/18 14:37	HJM	TAL SEA
Total Recoverable	Prep	3005A			287704	10/29/18 17:11	T1H	TAL SEA
Total Recoverable	Analysis	6020A		1	287827	10/30/18 20:25	FCW	TAL SEA
Total/NA	Analysis	300.0		1	286953	10/18/18 13:26	EMM	TAL SEA
Total/NA	Analysis	300.0		1	287394	10/25/18 03:08	EMM	TAL SEA
Total/NA	Prep	Distill/Ammonia			287607	10/27/18 15:15	EMM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Client Sample ID: 1018-29

Date Collected: 10/16/18 16:00

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	287596	10/29/18 10:00	EMM	TAL SEA
Total/NA	Analysis	SM 2320B		1	287585	10/26/18 16:15	EMM	TAL SEA
Total/NA	Analysis	SM 2540C		1	287017	10/20/18 12:02	R1K	TAL SEA
Total/NA	Prep	SM 5220			286970	10/19/18 11:55	TTN	TAL SEA
Total/NA	Analysis	SM 5220D		1	286976	10/19/18 12:15	TTN	TAL SEA
Total/NA	Analysis	SM 5310B		1	287056	10/19/18 17:50	TTN	TAL SEA

Client Sample ID: Trip Blank

Date Collected: 10/16/18 00:01

Date Received: 10/17/18 11:38

Lab Sample ID: 580-81163-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	287139	10/23/18 18:09	CJ	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C553	02-17-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3005A	Water	Calcium
6010C	3005A	Water	Iron
6010C	3005A	Water	Magnesium
6010C	3005A	Water	Manganese
6010C	3005A	Water	Potassium
6010C	3005A	Water	Sodium
6020A	3005A	Water	Antimony
6020A	3005A	Water	Arsenic
6020A	3005A	Water	Barium
6020A	3005A	Water	Beryllium
6020A	3005A	Water	Cadmium
6020A	3005A	Water	Chromium
6020A	3005A	Water	Cobalt
6020A	3005A	Water	Copper
6020A	3005A	Water	Lead
6020A	3005A	Water	Nickel
6020A	3005A	Water	Selenium
6020A	3005A	Water	Silver
6020A	3005A	Water	Thallium
6020A	3005A	Water	Vanadium
6020A	3005A	Water	Zinc
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Sample Summary

Client: SCS Engineers
Project/Site: Coupeville SWF 4th Qtr

TestAmerica Job ID: 580-81163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-81163-1	1018-14	Water	10/16/18 10:10	10/17/18 11:38
580-81163-2	1018-17	Water	10/16/18 09:44	10/17/18 11:38
580-81163-3	1018-18	Water	10/16/18 11:20	10/17/18 11:38
580-81163-4	1018-19	Water	10/16/18 10:44	10/17/18 11:38
580-81163-5	1018-16	Water	10/16/18 10:20	10/17/18 11:38
580-81163-6	1018-20	Water	10/16/18 12:25	10/17/18 11:38
580-81163-7	1018-21	Water	10/16/18 11:35	10/17/18 11:38
580-81163-8	1018-22	Water	10/16/18 13:43	10/17/18 11:38
580-81163-9	1018-23	Water	10/16/18 12:27	10/17/18 11:38
580-81163-10	1018-24	Water	10/16/18 15:30	10/17/18 11:38
580-81163-11	1018-25	Water	10/16/18 13:35	10/17/18 11:38
580-81163-12	1018-26	Water	10/16/18 16:56	10/17/18 11:38
580-81163-13	1018-27	Water	10/16/18 14:40	10/17/18 11:38
580-81163-14	1018-28	Water	10/16/18 18:00	10/17/18 11:38
580-81163-15	1018-29	Water	10/16/18 16:00	10/17/18 11:38
580-81163-16	Trip Blank	Water	10/16/18 00:01	10/17/18 11:38

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

81163

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information			Sampler: <u>Sam G. & Travis B.</u>			Lab PM: Zalmay, Kayse			Carrier Tracking No(s):										
Client Contact: Mr. Sam Graber			Phone: <u>425-766-3362</u>			E-Mail: <u>kayse.zalmay@testamericainc.com</u>			COC No: 580-27751-7749.1										
Company: SCS Engineers						Page: Page <u>L of 2</u>													
Address: 2405 140th Avenue NE Suite 107 City: Bellevue State, Zip: WA, 98005-1877 Phone: 425-289-5443(Tel) Email: sgrab@scsengineers.com						Due Date Requested: <u>Standard</u> TAT Requested (days): PO #: WO #:													
Project Name: Coupeville SWF 4th Qtr Site: Washington						Analysis Requested													
						Job #: <u>04207033.11</u>													
						Preservation Codes:													
						A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)													
						Other:													
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, Sed=solid, Or=waste/oil, BT=tissue, A=Air)	Field Filtered Sample (Yes or No) / Perform MSMSD (Yes or No)												Total Number of containers	Special Instructions/Note:
						N	S	D	A	N	S								
1018-14	10/16/18	1010	G	Water	Y	X	X	X	X	X	X	X	X	X	X	9 labds originally said "Friday Harbor" switched to "CSWF"			
1018-17		944		Water															
1018-18		1120		Water															
1018-19		1044		Water															
1018-16		1020		Water															
1018-20		1225		Water															
1018-21*		1135		Water	N					X						* Nitrate/Nitrite ok			
1018-22		1343		Water	Y	X	X	X	X	X	X	X	X	X	X	9			
1018-23		1227		Water															
1018-24		1530		Water															
1018-25	✓	1335	↓	Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)													
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological						☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months													
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:													
Empty Kit Relinquished by:			Date:	Time:			Method of Shipment:												
Relinquished by: [Signature]			Date/Time: 10/17/18 1140	Company: SCS			Received by: [Signature]			Date/Time: 10/17/18 1138	Company: THSEA								
Relinquished by:			Date/Time:	Date/Time:			Date/Time:			Company:									
Relinquished by:			Date/Time:	Date/Time:			Date/Time:			Company:									
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.: _____		Barcode				rks: _____											

81163

[illegible]

Therm. ID: A2 Cor: 0.9 ° Inc: 0.6 °
Cooler Dsc: Lg Bln FedEx: _____
Packing: Bnbbl UPS: _____
Cust. Seal: Yes No Lab Cour: ✓
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: A2 Cor: 3.9 ° Inc: 3.5 °
Cooler Dsc: Lg Bln FedEx: _____
Packing: Bnbbl UPS: _____
Cust. Seal: Yes No Lab Cour: ✓
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: A2 Cor: 1.5 ° Inc: 1.2 °
Cooler Dsc: Lg Bln FedEx: _____
Packing: Bnbbl UPS: _____
Cust. Seal: Yes No Lab Cour: ✓
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: A2 Cor: 2.5 ° Inc: 2.2 °
Cooler Dsc: Lg Bln FedEx: _____
Packing: Bnbbl UPS: _____
Cust. Seal: Yes No Lab Cour: X
Wet/Packs/Dry Ice/None Other: _____

Therm. ID: A2 Cor: 2.2 ° Inc: 1.4 °
Cooler Dsc: Lg Bln FedEx: _____
Packing: Bnbbl UPS: _____
Cust. Seal: Yes No Lab Cour: X
Wet/Packs/Dry Ice/None Other: _____

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 580-81163-1

Login Number: 81163

List Number: 1

Creator: Blankinship, Tom X

List Source: TestAmerica Seattle

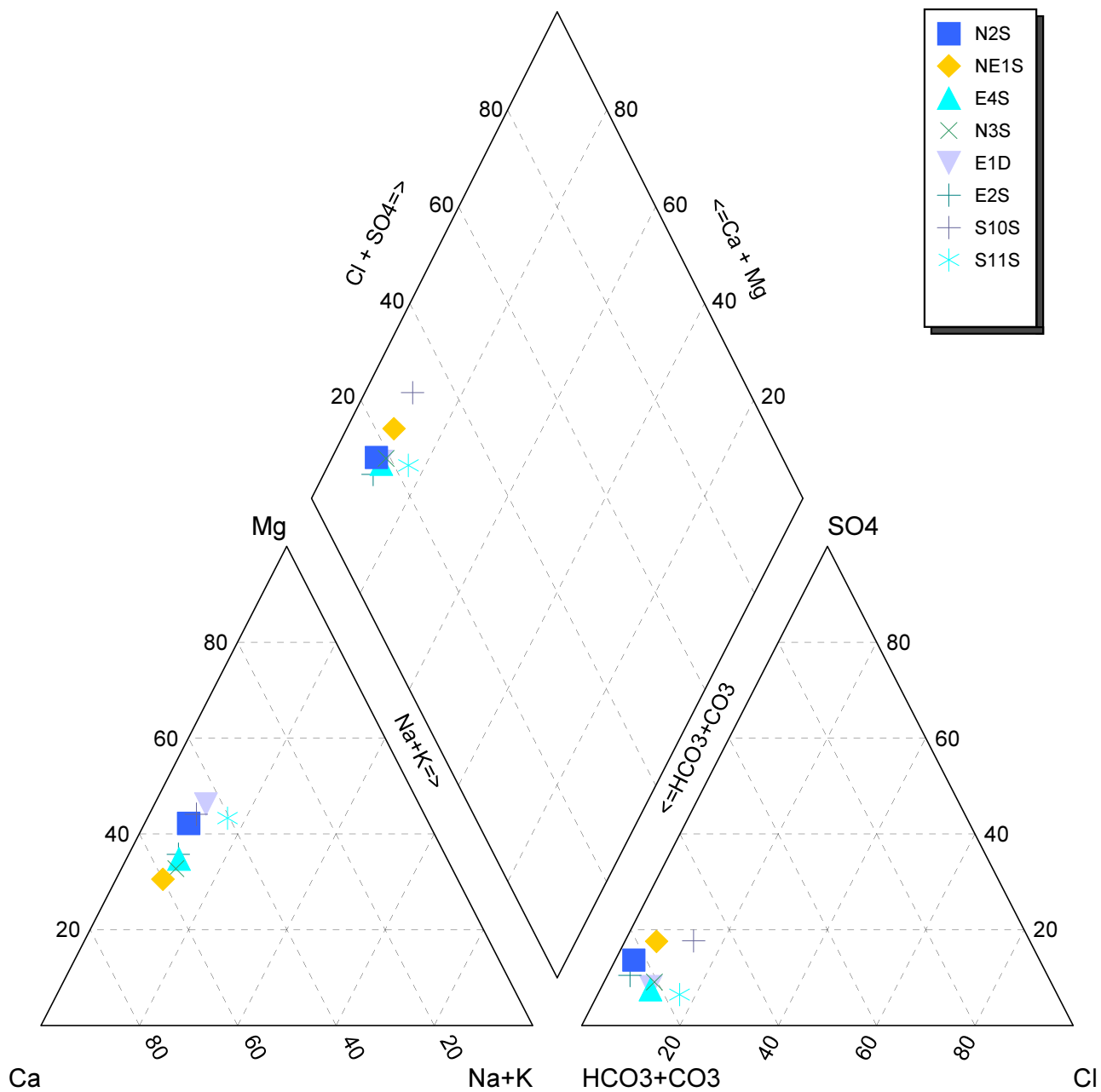
Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Appendix C

2018 Groundwater Geochemical Evaluation





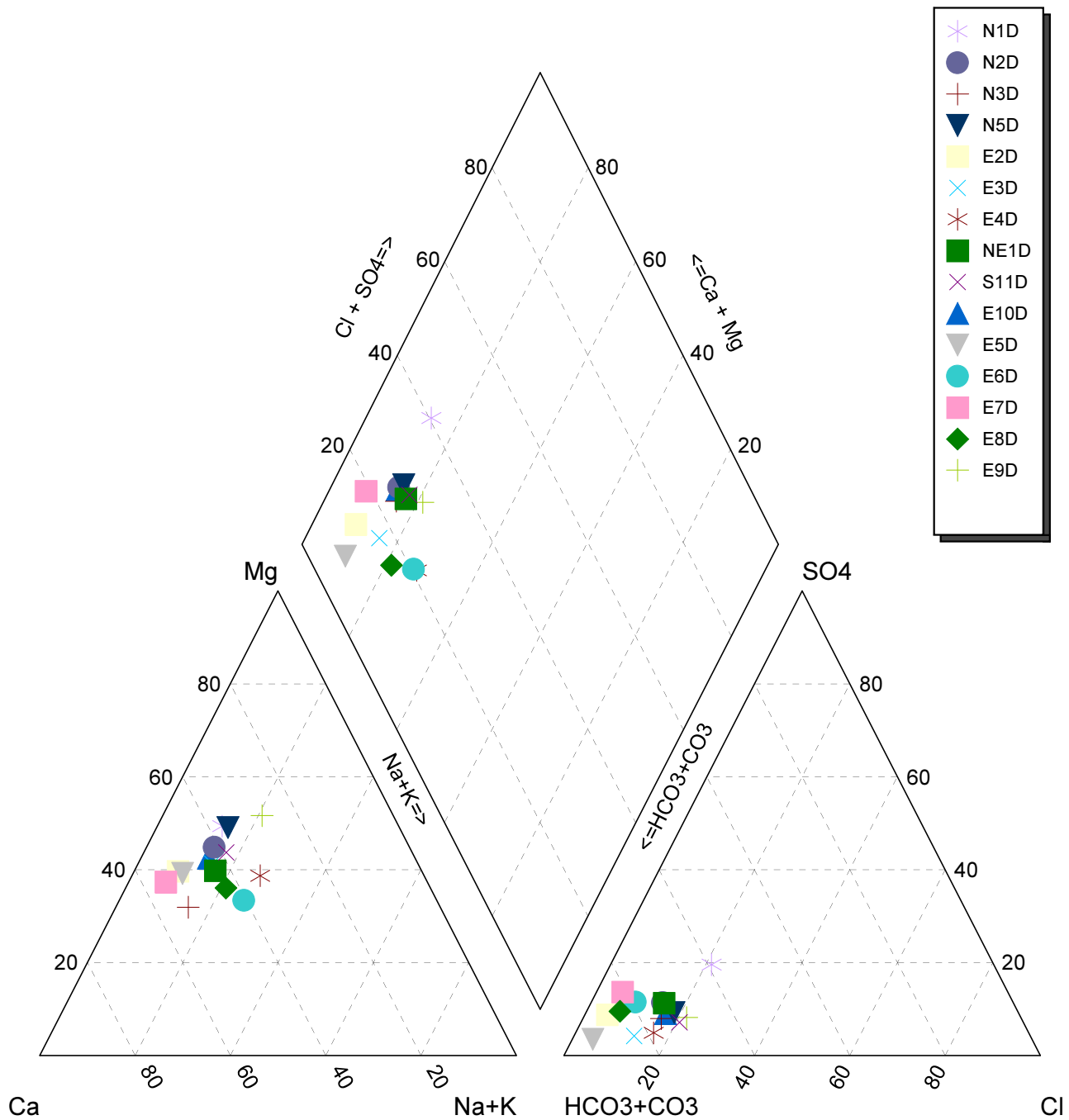
DESCRIPTION: 2Q18 Piper Plot - Aquifer 1

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019



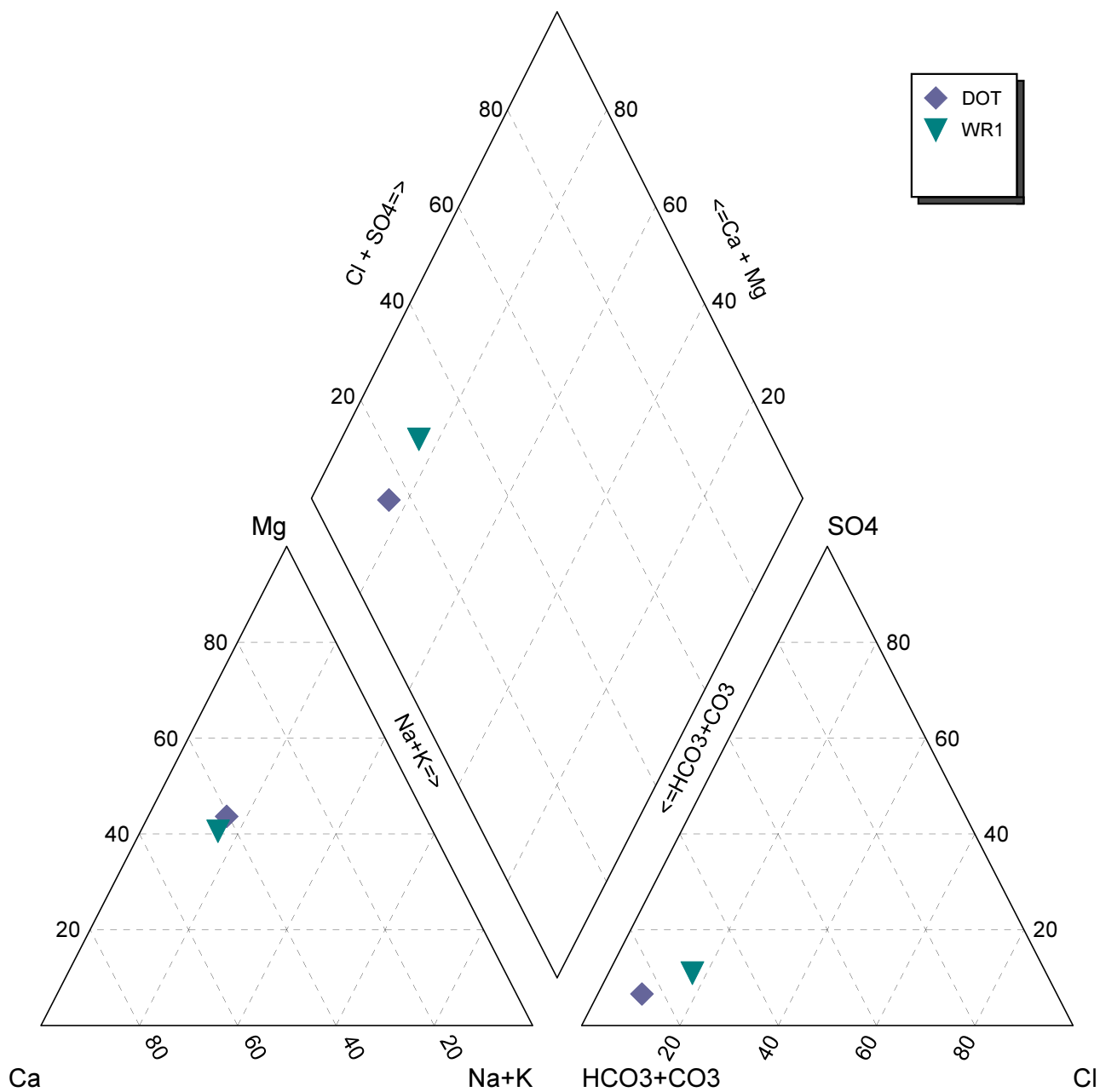
DESCRIPTION: 2Q18 Piper Plot - Aquifer 2

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019



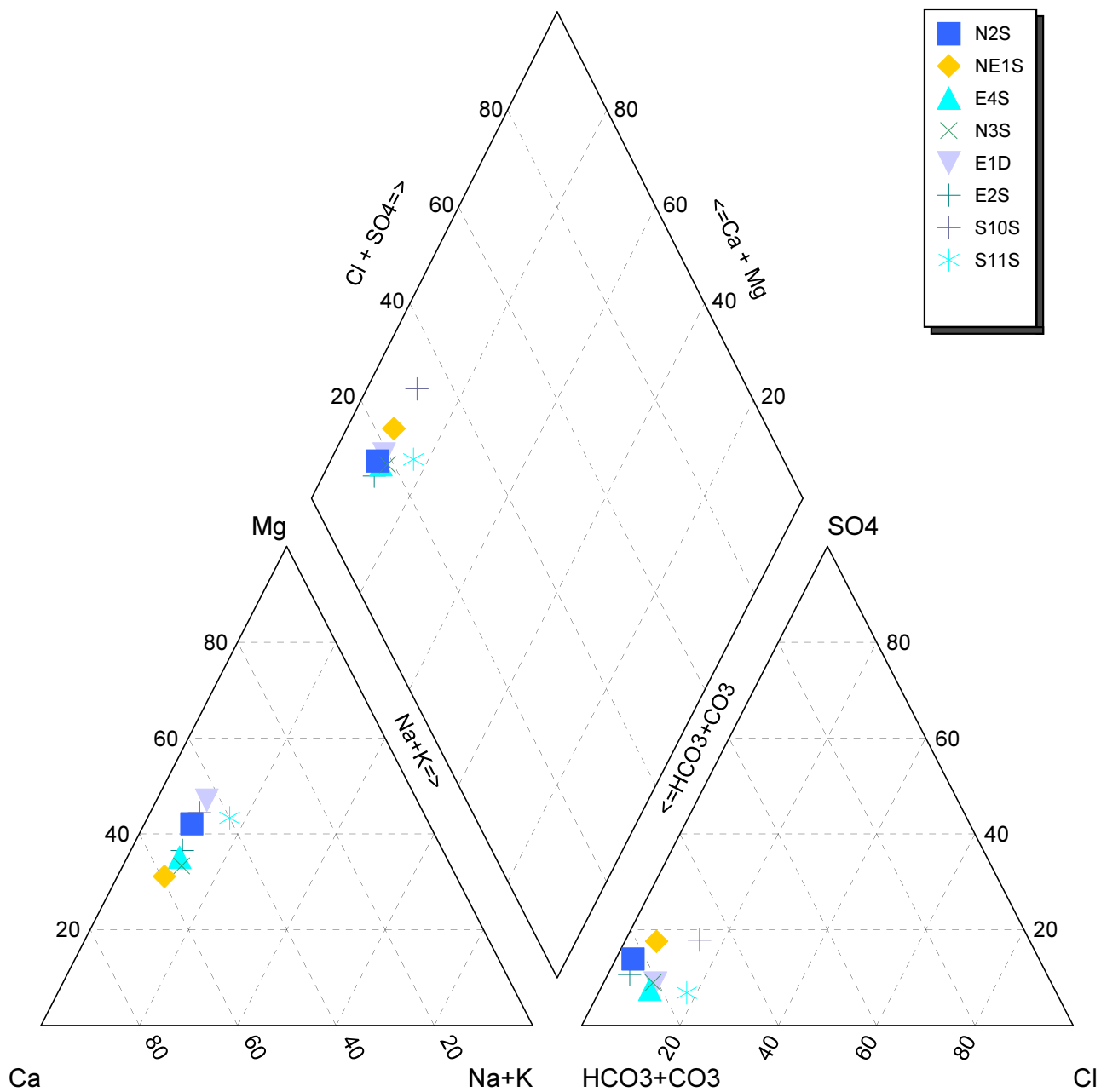
DESCRIPTION: 2Q18 Piper Plot - Water Supply Wells

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019



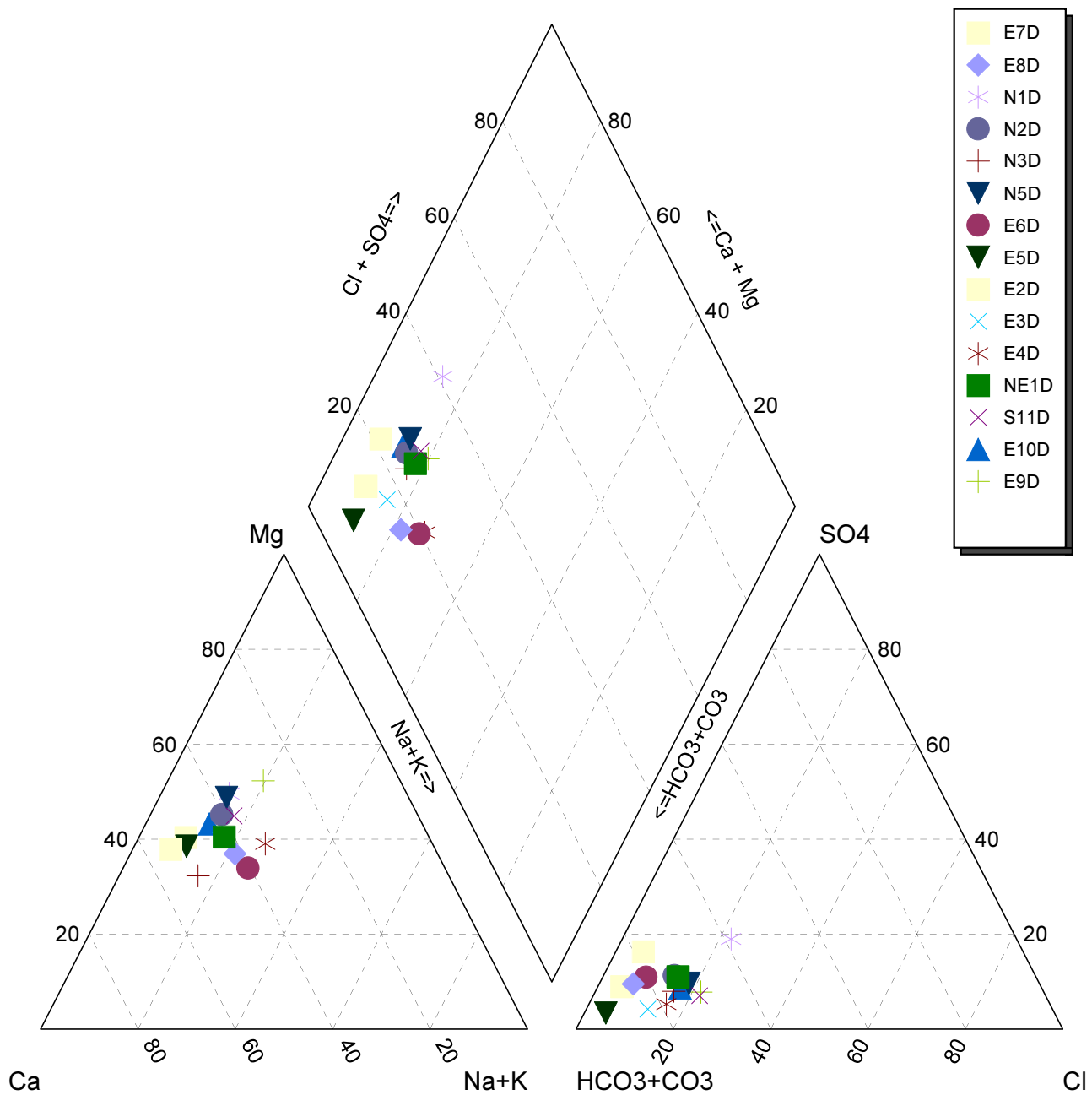
DESCRIPTION: 4Q18 Piper Plot - Aquifer 1

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019



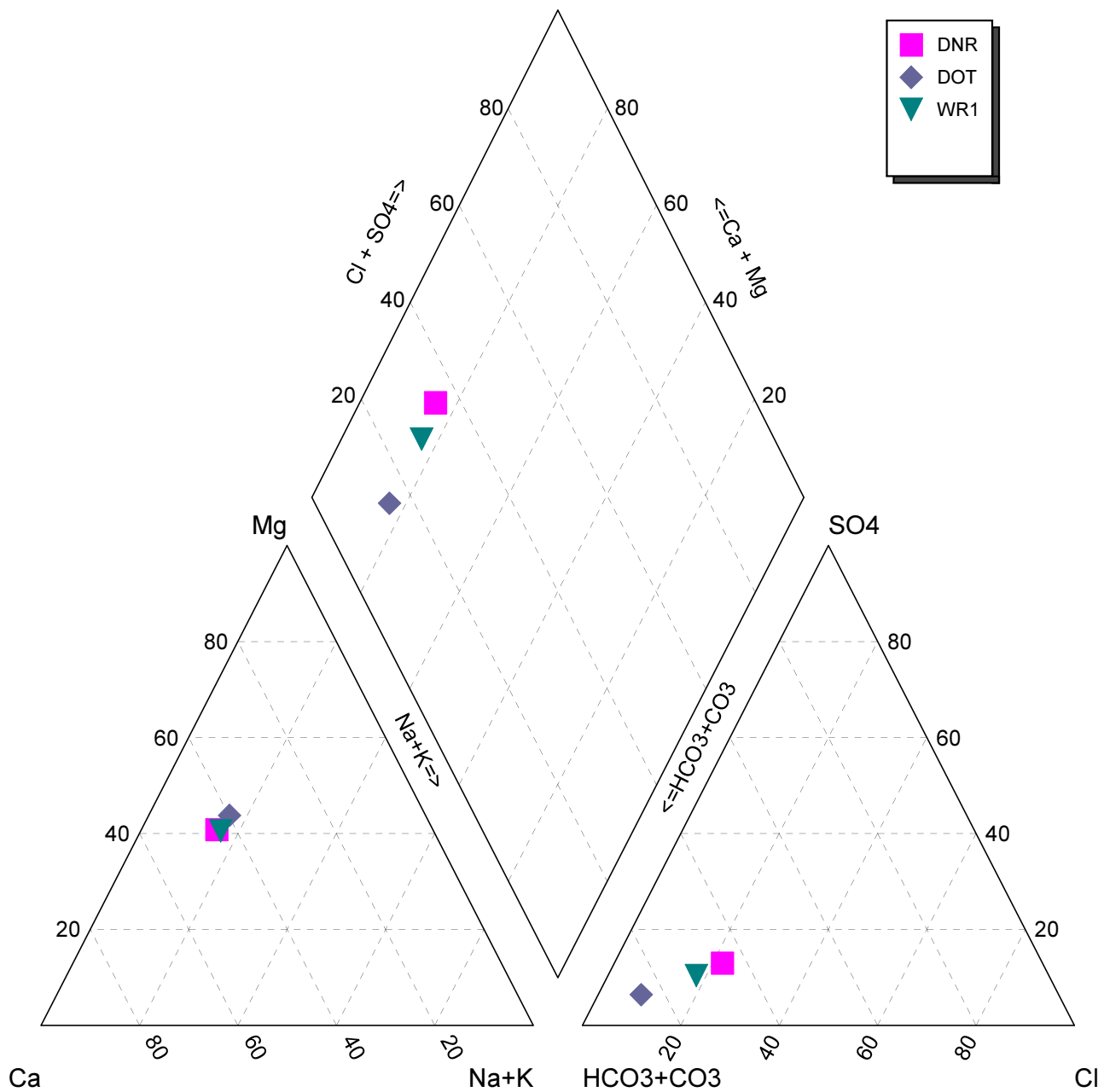
DESCRIPTION: 4Q18 Piper Plot - Aquifer 2

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019



DESCRIPTION: 4Q18 Piper Plot - Water Supply Wells

PROJECT: Coupeville Solid Waste Complex

PROJECT NO: 04207033.11

CLIENT: Island County Public Works

DATE: January 2019

Cation/Anion Balance

Location DOT
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	24.00	1.04
Fe	0.03581	<0.15	<0
Mn	0.0364	0.16	0.0058
K	0.02258	6.20	0.159
Ca	0.04990	61.00	3.04
Mg	0.08229	40.00	3.29
Sum of Cations			7.54 meq/L
Cl	0.02821	23.00	0.65
SO4	0.02082	23.00	0.48
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	372.00	6.10
Sum of Anions			7.23 meq/L
Balance (% difference) *			2.14 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E10D
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	1.4	0
Mn	0.0364	0.088	0.0032
K	0.02258	6.80	0.174
Ca	0.04990	91.00	4.54
Mg	0.08229	54.00	4.44
Sum of Cations			10.47 meq/L
Cl	0.02821	60.00	1.69
SO4	0.02082	44.00	0.92
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	456.00	7.47
Sum of Anions			10.09 meq/L
Balance (% difference) *			1.85 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E1D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	42.00	1.83
Fe	0.03581	<0.15	<0
Mn	0.0364	0.044	0.0016
K	0.02258	8.50	0.217
Ca	0.04990	170.00	8.48
Mg	0.08229	110.00	9.05
Sum of Cations			19.6 meq/L
Cl	0.02821	69.00	1.95
SO4	0.02082	76.00	1.58
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	972.00	15.93
Sum of Anions			19.46 meq/L
Balance (% difference) *			0.30 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E2D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	36.00	1.57
Fe	0.03581	<0.15	<0
Mn	0.0364	0.06	0.0022
K	0.02258	8.50	0.217
Ca	0.04990	200.00	9.98
Mg	0.08229	94.00	7.74
Sum of Cations			19.5 meq/L
Cl	0.02821	30.00	0.85
SO4	0.02082	77.00	1.60
NO3	0.01613	5.00	0.08
HCO3	0.01639	960.00	15.73
Sum of Anions			18.26 meq/L
Balance (% difference) *			3.27 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] \times 100$

Cation/Anion Balance

Location E2S
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	<0.15	<0
Mn	0.0364	0.41	0.0149
K	0.02258	7.00	0.179
Ca	0.04990	160.00	7.98
Mg	0.08229	64.00	5.27
Sum of Cations			14.75 meq/L
Cl	0.02821	22.00	0.62
SO4	0.02082	69.00	1.44
NO3	0.01613	8.70	0.14
HCO3	0.01639	708.00	11.60
Sum of Anions			13.8 meq/L
Balance (% difference) *			3.32 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E3D
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	25.00	1.09
Fe	0.03581	<0.15	<0
Mn	0.0364	0.26	0.0095
K	0.02258	6.10	0.156
Ca	0.04990	69.00	3.44
Mg	0.08229	40.00	3.29
Sum of Cations			7.99 meq/L
Cl	0.02821	35.00	0.99
SO4	0.02082	16.00	0.33
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	396.00	6.49
Sum of Anions			7.81 meq/L
Balance (% difference) *			1.10 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E4D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	31.00	1.35
Fe	0.03581	<0.15	<0
Mn	0.0364	0.07	0.0025
K	0.02258	10.00	0.256
Ca	0.04990	41.00	2.05
Mg	0.08229	28.00	2.30
Sum of Cations			5.96 meq/L
Cl	0.02821	32.00	0.90
SO4	0.02082	13.00	0.27
NO3	0.01613	<0.08	<0.00
HCO3	0.01639	264.00	4.33
Sum of Anions			5.5 meq/L
Balance (% difference) *			3.98 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E4S
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.20	0.159
Ca	0.04990	150.00	7.49
Mg	0.08229	58.00	4.77
Sum of Cations			13.72 meq/L
Cl	0.02821	46.00	1.30
SO4	0.02082	46.00	0.96
NO3	0.01613	1.90	0.03
HCO3	0.01639	636.00	10.42
Sum of Anions			12.7 meq/L
Balance (% difference) *			3.83 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E5D
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	29.00	1.26
Fe	0.03581	1.7	0
Mn	0.0364	0.21	0.0076
K	0.02258	6.90	0.176
Ca	0.04990	140.00	6.99
Mg	0.08229	66.00	5.43
Sum of Cations			13.86 meq/L
Cl	0.02821	20.00	0.56
SO4	0.02082	22.00	0.46
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	732.00	12.00
Sum of Anions			13.02 meq/L
Balance (% difference) *			3.13 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E6D
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	38.00	1.65
Fe	0.03581	0.63	0
Mn	0.0364	0.69	0.0251
K	0.02258	5.90	0.151
Ca	0.04990	56.00	2.79
Mg	0.08229	28.00	2.30
Sum of Cations			6.93 meq/L
Cl	0.02821	22.00	0.62
SO4	0.02082	37.00	0.77
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	324.00	5.31
Sum of Anions			6.7 meq/L
Balance (% difference) *			1.64 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E7D
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	32.00	1.39
Fe	0.03581	0.3	0
Mn	0.0364	0.63	0.0229
K	0.02258	8.70	0.223
Ca	0.04990	230.00	11.48
Mg	0.08229	95.00	7.82
Sum of Cations			20.93 meq/L
Cl	0.02821	38.00	1.07
SO4	0.02082	130.00	2.71
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	972.00	15.93
Sum of Anions			19.7 meq/L
Balance (% difference) *			3.00 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E8D
Sample Date 4/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	25.00	1.09
Fe	0.03581	1.4	0
Mn	0.0364	0.35	0.0127
K	0.02258	6.30	0.161
Ca	0.04990	51.00	2.55
Mg	0.08229	26.00	2.14
Sum of Cations			5.95 meq/L
Cl	0.02821	14.00	0.39
SO4	0.02082	26.00	0.54
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	288.00	4.72
Sum of Anions			5.66 meq/L
Balance (% difference) *			2.46 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E9D
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	17.00	0.74
Fe	0.03581	<0.15	<0
Mn	0.0364	0.053	0.0019
K	0.02258	14.00	0.358
Ca	0.04990	29.00	1.45
Mg	0.08229	33.00	2.72
Sum of Cations			5.26 meq/L
Cl	0.02821	41.00	1.16
SO4	0.02082	21.00	0.44
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	228.00	3.74
Sum of Anions			5.33 meq/L
Balance (% difference) *			-0.68 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N1D
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	45.00	1.96
Fe	0.03581	0.38	0
Mn	0.0364	0.29	0.0106
K	0.02258	9.40	0.240
Ca	0.04990	120.00	5.99
Mg	0.08229	97.00	7.98
Sum of Cations			16.18 meq/L
Cl	0.02821	120.00	3.38
SO4	0.02082	150.00	3.13
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	576.00	9.44
Sum of Anions			15.95 meq/L
Balance (% difference) *			0.70 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N2D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	39.00	1.70
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	8.10	0.207
Ca	0.04990	110.00	5.49
Mg	0.08229	73.00	6.01
Sum of Cations			13.4 meq/L
Cl	0.02821	67.00	1.89
SO4	0.02082	69.00	1.44
NO3	0.01613	3.40	0.05
HCO3	0.01639	564.00	9.24
Sum of Anions			12.63 meq/L
Balance (% difference) *			2.98 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N2S
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	<0.15	<0
Mn	0.0364	0.045	0.0016
K	0.02258	9.40	0.240
Ca	0.04990	170.00	8.48
Mg	0.08229	89.00	7.32
Sum of Cations			17.35 meq/L
Cl	0.02821	22.00	0.62
SO4	0.02082	110.00	2.29
NO3	0.01613	6.10	0.10
HCO3	0.01639	840.00	13.77
Sum of Anions			16.78 meq/L
Balance (% difference) *			1.69 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N3D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	20.00	0.87
Fe	0.03581	<0.15	<0
Mn	0.0364	0.031	0.0011
K	0.02258	5.80	0.148
Ca	0.04990	71.00	3.54
Mg	0.08229	26.00	2.14
Sum of Cations			6.7 meq/L
Cl	0.02821	38.00	1.07
SO4	0.02082	25.00	0.52
NO3	0.01613	<0.08	<0.00
HCO3	0.01639	300.00	4.92
Sum of Anions			6.51 meq/L
Balance (% difference) *			1.45 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N3S
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	26.00	1.13
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.70	0.146
Ca	0.04990	130.00	6.49
Mg	0.08229	46.00	3.79
Sum of Cations			11.55 meq/L
Cl	0.02821	39.00	1.10
SO4	0.02082	47.00	0.98
NO3	0.01613	6.10	0.10
HCO3	0.01639	528.00	8.65
Sum of Anions			10.83 meq/L
Balance (% difference) *			3.21 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N5D
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	47.00	2.04
Fe	0.03581	<0.15	<0
Mn	0.0364	0.19	0.0069
K	0.02258	9.50	0.243
Ca	0.04990	110.00	5.49
Mg	0.08229	91.00	7.49
Sum of Cations			15.27 meq/L
Cl	0.02821	100.00	2.82
SO4	0.02082	68.00	1.42
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	672.00	11.01
Sum of Anions			15.25 meq/L
Balance (% difference) *			0.06 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] \times 100$

Cation/Anion Balance

Location NE1D
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	24.00	1.04
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.70	0.146
Ca	0.04990	61.00	3.04
Mg	0.08229	34.00	2.80
Sum of Cations			7.03 meq/L
Cl	0.02821	38.00	1.07
SO4	0.02082	38.00	0.79
NO3	0.01613	<0.08	<0.00
HCO3	0.01639	312.00	5.11
Sum of Anions			6.98 meq/L
Balance (% difference) *			0.38 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location NE1S
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	17.00	0.74
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.20	0.133
Ca	0.04990	110.00	5.49
Mg	0.08229	34.00	2.80
Sum of Cations			9.16 meq/L
Cl	0.02821	19.00	0.54
SO4	0.02082	70.00	1.46
NO3	0.01613	5.30	0.09
HCO3	0.01639	384.00	6.29
Sum of Anions			8.37 meq/L
Balance (% difference) *			4.49 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S10S
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	27.00	1.17
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.40	0.164
Ca	0.04990	130.00	6.49
Mg	0.08229	75.00	6.17
Sum of Cations			14.0 meq/L
Cl	0.02821	54.00	1.52
SO4	0.02082	93.00	1.94
NO3	0.01613	40.00	0.65
HCO3	0.01639	456.00	7.47
Sum of Anions			11.58 meq/L
Balance (% difference) *			9.46 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S11D
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	34.00	1.48
Fe	0.03581	<0.15	<0
Mn	0.0364	0.16	0.0058
K	0.02258	7.00	0.179
Ca	0.04990	75.00	3.74
Mg	0.08229	51.00	4.20
Sum of Cations			9.6 meq/L
Cl	0.02821	70.00	1.97
SO4	0.02082	33.00	0.69
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	420.00	6.88
Sum of Anions			9.55 meq/L
Balance (% difference) *			0.29 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S11S
Sample Date 4/18/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	32.00	1.39
Fe	0.03581	<0.15	<0
Mn	0.0364	0.19	0.0069
K	0.02258	6.20	0.159
Ca	0.04990	77.00	3.84
Mg	0.08229	50.00	4.11
Sum of Cations			9.51 meq/L
Cl	0.02821	53.00	1.49
SO4	0.02082	28.00	0.58
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	420.00	6.88
Sum of Anions			8.96 meq/L
Balance (% difference) *			2.97 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location WR1
Sample Date 4/17/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.20	0.133
Ca	0.04990	80.00	3.99
Mg	0.08229	45.00	3.70
Sum of Cations			9.13 meq/L
Cl	0.02821	53.00	1.49
SO4	0.02082	46.00	0.96
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	384.00	6.29
Sum of Anions			8.75 meq/L
Balance (% difference) *			2.15 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location DNR
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	28.00	1.22
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.40	0.138
Ca	0.04990	78.00	3.89
Mg	0.08229	44.00	3.62
Sum of Cations			8.87 meq/L
Cl	0.02821	66.00	1.86
SO4	0.02082	53.00	1.10
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	336.00	5.51
Sum of Anions			8.48 meq/L
Balance (% difference) *			2.27 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location DOT
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	26.00	1.13
Fe	0.03581	0.33	0
Mn	0.0364	0.16	0.0058
K	0.02258	6.50	0.166
Ca	0.04990	63.00	3.14
Mg	0.08229	42.00	3.46
Sum of Cations			7.9 meq/L
Cl	0.02821	23.00	0.65
SO4	0.02082	23.00	0.48
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	384.00	6.29
Sum of Anions			7.42 meq/L
Balance (% difference) *			3.12 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] \times 100$

Cation/Anion Balance

Location E10D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	1.4	0
Mn	0.0364	0.089	0.0032
K	0.02258	7.50	0.192
Ca	0.04990	100.00	4.99
Mg	0.08229	60.00	4.94
Sum of Cations			11.43 meq/L
Cl	0.02821	64.00	1.81
SO4	0.02082	44.00	0.92
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	480.00	7.87
Sum of Anions			10.6 meq/L
Balance (% difference) *			3.80 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E1D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	44.00	1.91
Fe	0.03581	<0.15	<0
Mn	0.0364	0.049	0.0018
K	0.02258	9.10	0.233
Ca	0.04990	180.00	8.98
Mg	0.08229	120.00	9.87
Sum of Cations			21.0 meq/L
Cl	0.02821	75.00	2.12
SO4	0.02082	85.00	1.77
NO3	0.01613	0.99	0.02
HCO3	0.01639	984.00	16.13
Sum of Anions			20.03 meq/L
Balance (% difference) *			2.38 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E2D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	37.00	1.61
Fe	0.03581	<0.15	<0
Mn	0.0364	0.062	0.0023
K	0.02258	8.60	0.220
Ca	0.04990	190.00	9.48
Mg	0.08229	93.00	7.65
Sum of Cations			18.97 meq/L
Cl	0.02821	31.00	0.87
SO4	0.02082	77.00	1.60
NO3	0.01613	6.30	0.10
HCO3	0.01639	936.00	15.34
Sum of Anions			17.92 meq/L
Balance (% difference) *			2.84 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E2S
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	32.00	1.39
Fe	0.03581	<0.15	<0
Mn	0.0364	0.44	0.0160
K	0.02258	7.40	0.189
Ca	0.04990	160.00	7.98
Mg	0.08229	67.00	5.51
Sum of Cations			15.1 meq/L
Cl	0.02821	21.00	0.59
SO4	0.02082	69.00	1.44
NO3	0.01613	8.50	0.14
HCO3	0.01639	696.00	11.41
Sum of Anions			13.57 meq/L
Balance (% difference) *			5.31 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E3D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	26.00	1.13
Fe	0.03581	<0.15	<0
Mn	0.0364	0.26	0.0095
K	0.02258	6.60	0.169
Ca	0.04990	70.00	3.49
Mg	0.08229	44.00	3.62
Sum of Cations			8.42 meq/L
Cl	0.02821	35.00	0.99
SO4	0.02082	16.00	0.33
NO3	0.01613	<0.08	<0.00
HCO3	0.01639	396.00	6.49
Sum of Anions			7.81 meq/L
Balance (% difference) *			3.77 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E4D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	31.00	1.35
Fe	0.03581	<0.15	<0
Mn	0.0364	0.078	0.0028
K	0.02258	11.00	0.281
Ca	0.04990	42.00	2.10
Mg	0.08229	29.00	2.39
Sum of Cations			6.11 meq/L
Cl	0.02821	31.00	0.87
SO4	0.02082	14.00	0.29
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	264.00	4.33
Sum of Anions			5.5 meq/L
Balance (% difference) *			5.33 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E4S
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	30.00	1.30
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.30	0.161
Ca	0.04990	150.00	7.49
Mg	0.08229	59.00	4.85
Sum of Cations			13.8 meq/L
Cl	0.02821	46.00	1.30
SO4	0.02082	47.00	0.98
NO3	0.01613	2.00	0.03
HCO3	0.01639	648.00	10.62
Sum of Anions			12.93 meq/L
Balance (% difference) *			3.28 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] \times 100$

Cation/Anion Balance

Location E5D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	32.00	1.39
Fe	0.03581	1.6	0
Mn	0.0364	0.23	0.0084
K	0.02258	7.40	0.189
Ca	0.04990	150.00	7.49
Mg	0.08229	69.00	5.68
Sum of Cations			14.75 meq/L
Cl	0.02821	21.00	0.59
SO4	0.02082	22.00	0.46
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	756.00	12.39
Sum of Anions			13.44 meq/L
Balance (% difference) *			4.64 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E6D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	38.00	1.65
Fe	0.03581	0.68	0
Mn	0.0364	0.67	0.0244
K	0.02258	6.00	0.153
Ca	0.04990	57.00	2.84
Mg	0.08229	29.00	2.39
Sum of Cations			7.06 meq/L
Cl	0.02821	21.00	0.59
SO4	0.02082	35.00	0.73
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	324.00	5.31
Sum of Anions			6.63 meq/L
Balance (% difference) *			3.12 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] \times 100$

Cation/Anion Balance

Location E7D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	31.00	1.35
Fe	0.03581	0.3	0
Mn	0.0364	0.62	0.0226
K	0.02258	8.50	0.217
Ca	0.04990	220.00	10.98
Mg	0.08229	93.00	7.65
Sum of Cations			20.2 meq/L
Cl	0.02821	41.00	1.16
SO4	0.02082	160.00	3.33
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	972.00	15.93
Sum of Anions			20.42 meq/L
Balance (% difference) *			-0.50 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E8D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	27.00	1.17
Fe	0.03581	1.3	0
Mn	0.0364	0.33	0.0120
K	0.02258	6.40	0.164
Ca	0.04990	52.00	2.59
Mg	0.08229	28.00	2.30
Sum of Cations			6.25 meq/L
Cl	0.02821	14.00	0.39
SO4	0.02082	26.00	0.54
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	288.00	4.72
Sum of Anions			5.66 meq/L
Balance (% difference) *			4.95 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location E9D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	16.00	0.70
Fe	0.03581	<0.15	<0
Mn	0.0364	0.048	0.0017
K	0.02258	15.00	0.384
Ca	0.04990	31.00	1.55
Mg	0.08229	35.00	2.88
Sum of Cations			5.51 meq/L
Cl	0.02821	41.00	1.16
SO4	0.02082	20.00	0.42
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	228.00	3.74
Sum of Anions			5.31 meq/L
Balance (% difference) *			1.81 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N1D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	47.00	2.04
Fe	0.03581	0.39	0
Mn	0.0364	0.3	0.0109
K	0.02258	9.60	0.246
Ca	0.04990	120.00	5.99
Mg	0.08229	99.00	8.15
Sum of Cations			16.44 meq/L
Cl	0.02821	130.00	3.67
SO4	0.02082	150.00	3.13
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	588.00	9.64
Sum of Anions			16.43 meq/L
Balance (% difference) *			0.01 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N2D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	41.00	1.78
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	8.40	0.215
Ca	0.04990	110.00	5.49
Mg	0.08229	75.00	6.17
Sum of Cations			13.66 meq/L
Cl	0.02821	66.00	1.86
SO4	0.02082	69.00	1.44
NO3	0.01613	3.00	0.05
HCO3	0.01639	576.00	9.44
Sum of Anions			12.8 meq/L
Balance (% difference) *			3.30 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N2S
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	33.00	1.44
Fe	0.03581	<0.15	<0
Mn	0.0364	0.025	0.0009
K	0.02258	9.70	0.248
Ca	0.04990	170.00	8.48
Mg	0.08229	90.00	7.41
Sum of Cations			17.57 meq/L
Cl	0.02821	20.00	0.56
SO4	0.02082	110.00	2.29
NO3	0.01613	6.80	0.11
HCO3	0.01639	828.00	13.57
Sum of Anions			16.54 meq/L
Balance (% difference) *			3.04 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N3D
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	22.00	0.96
Fe	0.03581	<0.15	<0
Mn	0.0364	0.035	0.0013
K	0.02258	6.10	0.156
Ca	0.04990	71.00	3.54
Mg	0.08229	27.00	2.22
Sum of Cations			6.88 meq/L
Cl	0.02821	37.00	1.04
SO4	0.02082	25.00	0.52
NO3	0.01613	<0.08	<0.00
HCO3	0.01639	300.00	4.92
Sum of Anions			6.48 meq/L
Balance (% difference) *			2.97 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N3S
Sample Date 10/15/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	29.00	1.26
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.10	0.156
Ca	0.04990	130.00	6.49
Mg	0.08229	48.00	3.95
Sum of Cations			11.85 meq/L
Cl	0.02821	38.00	1.07
SO4	0.02082	46.00	0.96
NO3	0.01613	6.80	0.11
HCO3	0.01639	528.00	8.65
Sum of Anions			10.8 meq/L
Balance (% difference) *			4.69 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location N5D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	45.00	1.96
Fe	0.03581	<0.15	<0
Mn	0.0364	0.22	0.0080
K	0.02258	10.00	0.256
Ca	0.04990	120.00	5.99
Mg	0.08229	95.00	7.82
Sum of Cations			16.03 meq/L
Cl	0.02821	100.00	2.82
SO4	0.02082	71.00	1.48
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	672.00	11.01
Sum of Anions			15.32 meq/L
Balance (% difference) *			2.27 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location NE1D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	25.00	1.09
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.00	0.153
Ca	0.04990	60.00	2.99
Mg	0.08229	35.00	2.88
Sum of Cations			7.12 meq/L
Cl	0.02821	38.00	1.07
SO4	0.02082	37.00	0.77
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	312.00	5.11
Sum of Anions			6.96 meq/L
Balance (% difference) *			1.11 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location NE1S
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	17.00	0.74
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.50	0.141
Ca	0.04990	110.00	5.49
Mg	0.08229	35.00	2.88
Sum of Cations			9.25 meq/L
Cl	0.02821	19.00	0.54
SO4	0.02082	70.00	1.46
NO3	0.01613	3.70	0.06
HCO3	0.01639	384.00	6.29
Sum of Anions			8.35 meq/L
Balance (% difference) *			5.13 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S10S
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	29.00	1.26
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	6.70	0.171
Ca	0.04990	130.00	6.49
Mg	0.08229	77.00	6.34
Sum of Cations			14.26 meq/L
Cl	0.02821	58.00	1.64
SO4	0.02082	93.00	1.94
NO3	0.01613	34.00	0.55
HCO3	0.01639	444.00	7.28
Sum of Anions			11.4 meq/L
Balance (% difference) *			11.14 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S11D
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	35.00	1.52
Fe	0.03581	<0.15	<0
Mn	0.0364	0.16	0.0058
K	0.02258	7.40	0.189
Ca	0.04990	75.00	3.74
Mg	0.08229	54.00	4.44
Sum of Cations			9.9 meq/L
Cl	0.02821	73.00	2.06
SO4	0.02082	32.00	0.67
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	408.00	6.69
Sum of Anions			9.42 meq/L
Balance (% difference) *			2.53 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location S11S
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	34.00	1.48
Fe	0.03581	<0.15	<0
Mn	0.0364	0.2	0.0073
K	0.02258	6.60	0.169
Ca	0.04990	79.00	3.94
Mg	0.08229	52.00	4.28
Sum of Cations			9.88 meq/L
Cl	0.02821	60.00	1.69
SO4	0.02082	31.00	0.65
NO3	0.01613	<0.20	<0.00
HCO3	0.01639	432.00	7.08
Sum of Anions			9.42 meq/L
Balance (% difference) *			2.36 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Cation/Anion Balance

Location WR1
Sample Date 10/16/2018

Major Ions	Conversion Factor +	mg/l	meq/l
Na	0.04350	31.00	1.35
Fe	0.03581	<0.15	<0
Mn	0.0364	<0.01	<0.0004
K	0.02258	5.30	0.136
Ca	0.04990	79.00	3.94
Mg	0.08229	45.00	3.70
Sum of Cations			9.13 meq/L
Cl	0.02821	56.00	1.58
SO4	0.02082	44.00	0.92
NO3	0.01613	1.00	0.02
HCO3	0.01639	384.00	6.29
Sum of Anions			8.8 meq/L
Balance (% difference) *			1.81 %

+ mg/l to meq/l

* $[(\text{Total anions} - \text{Total cations}) / (\text{Total anions} + \text{Total cations})] * 100$

Table C1 - pH Times Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

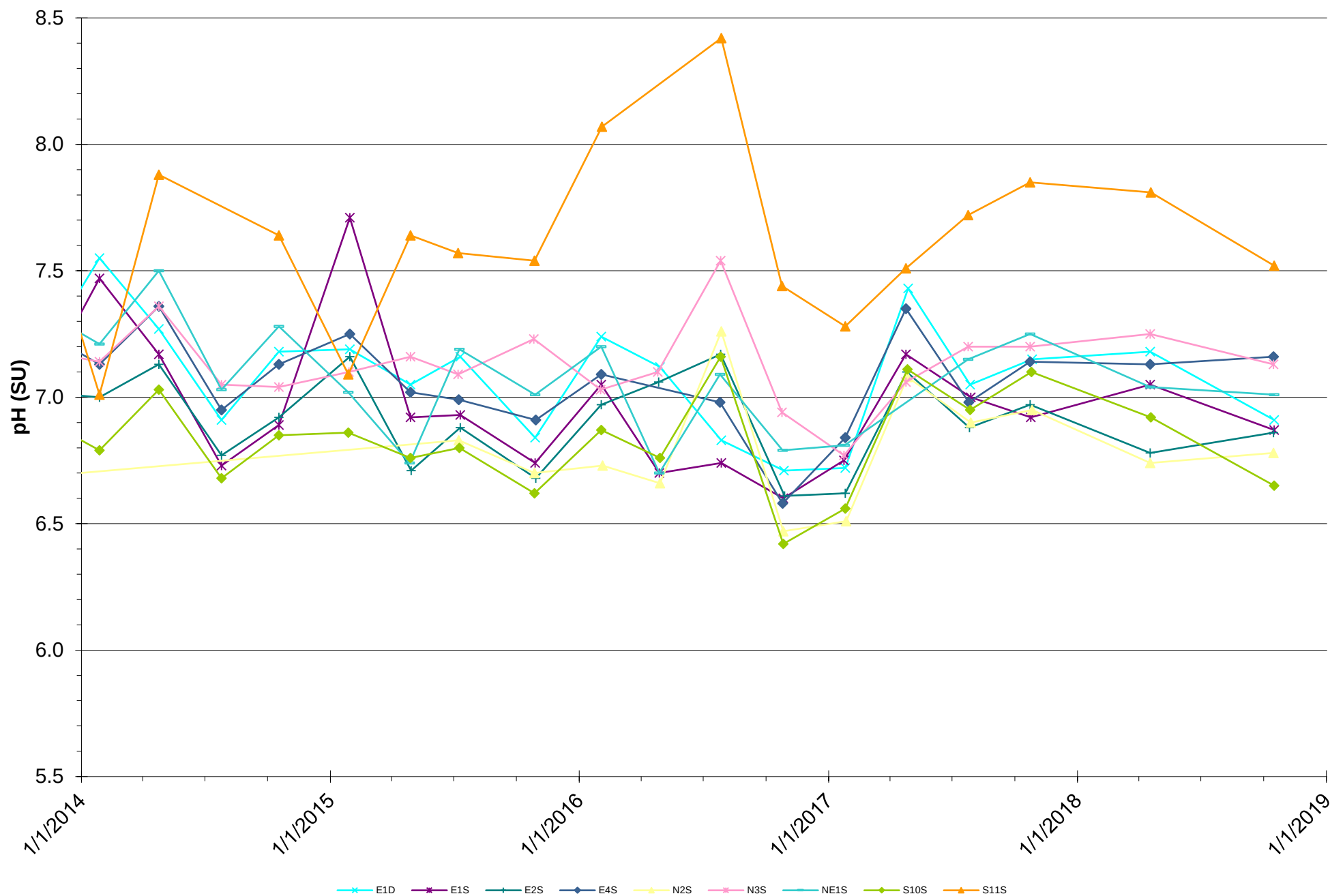


Table C2 - pH Times Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

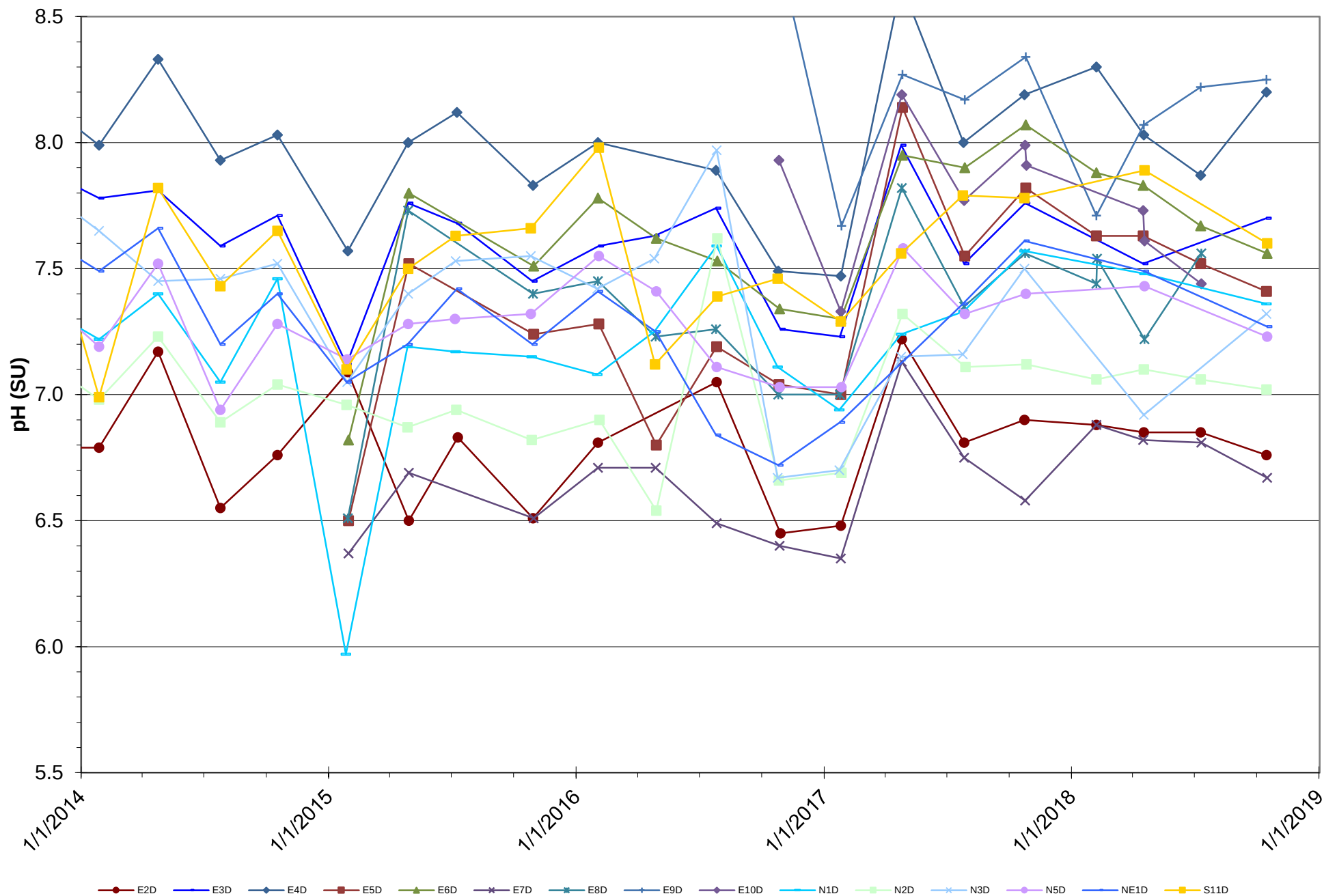


Table C3 - pH Times Series - Pumping Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

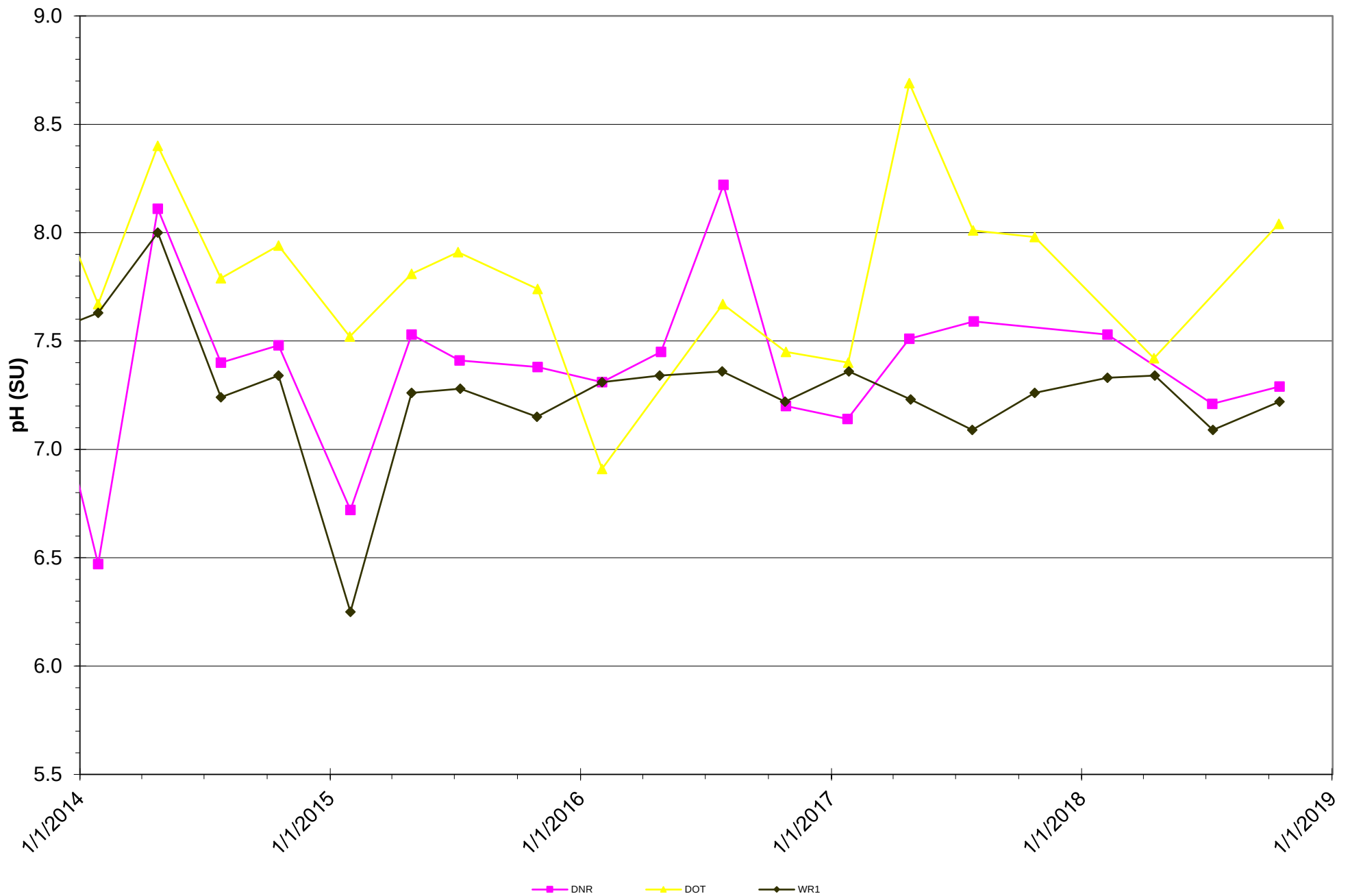


Table C4 - Specific Conductivity Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

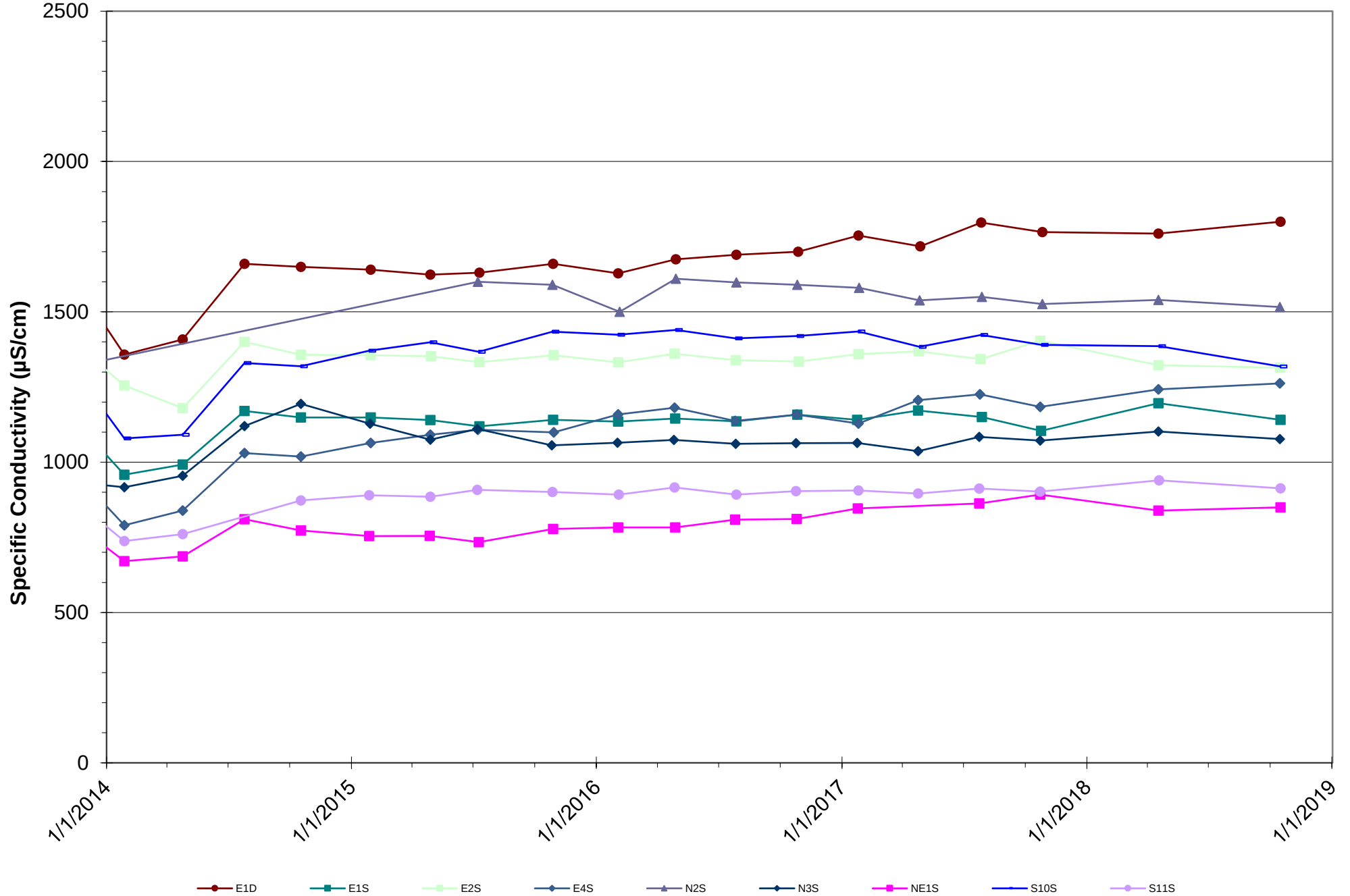


Table C5 - Specific Conductivity Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

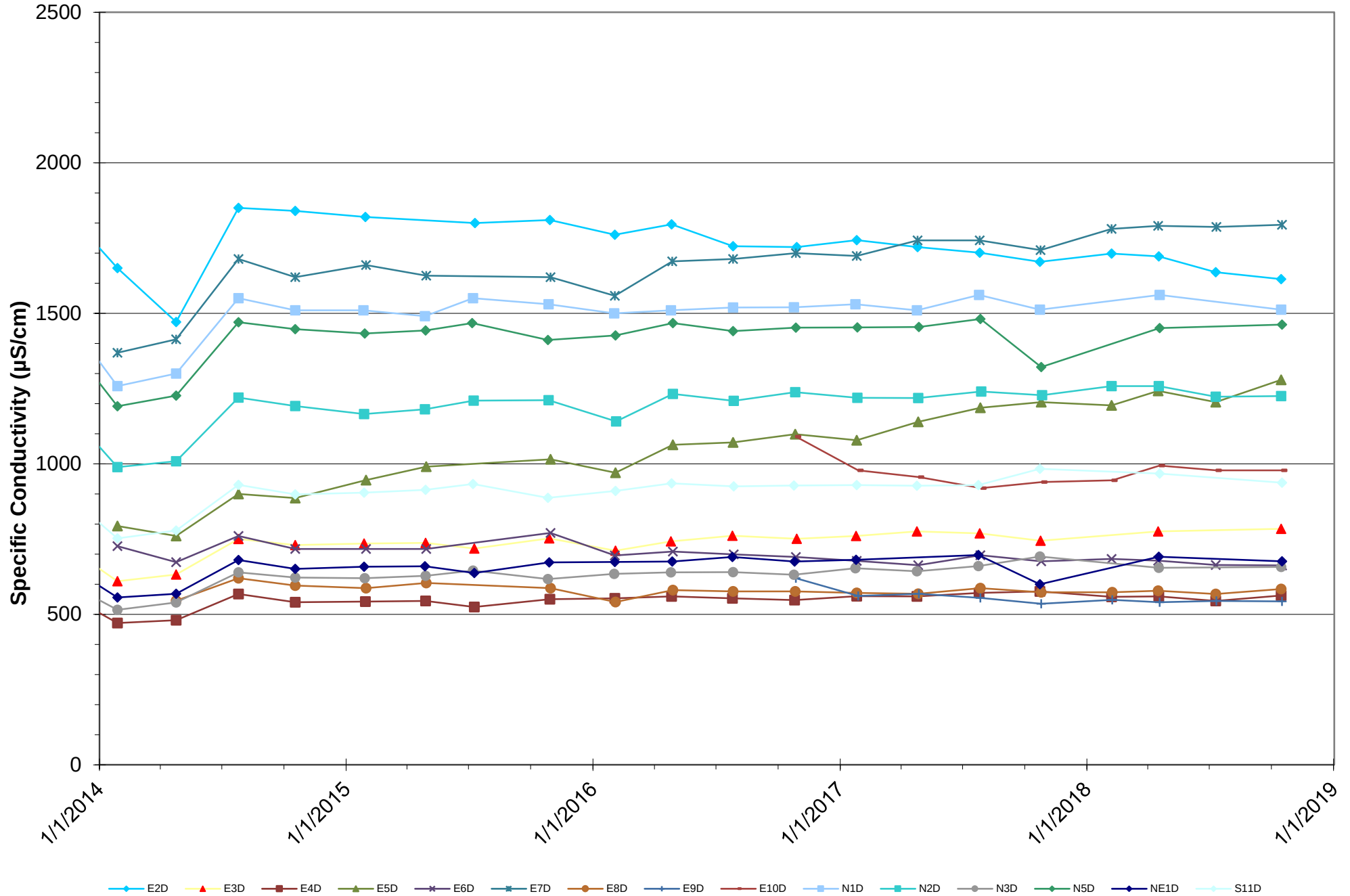


Table C6 - Specific Conductivity Time Series - Pumping Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

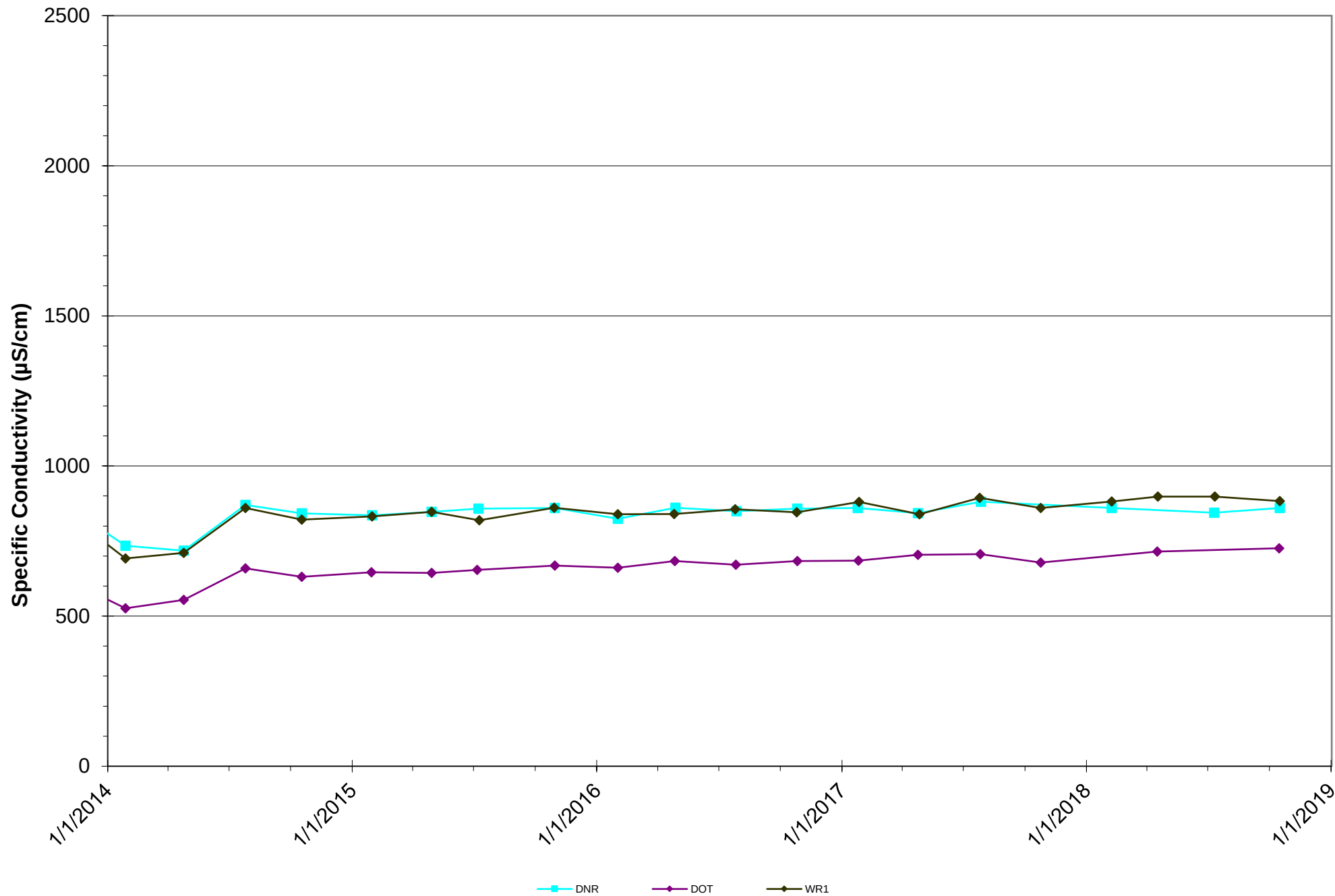


Table C7 - Alkalinity Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

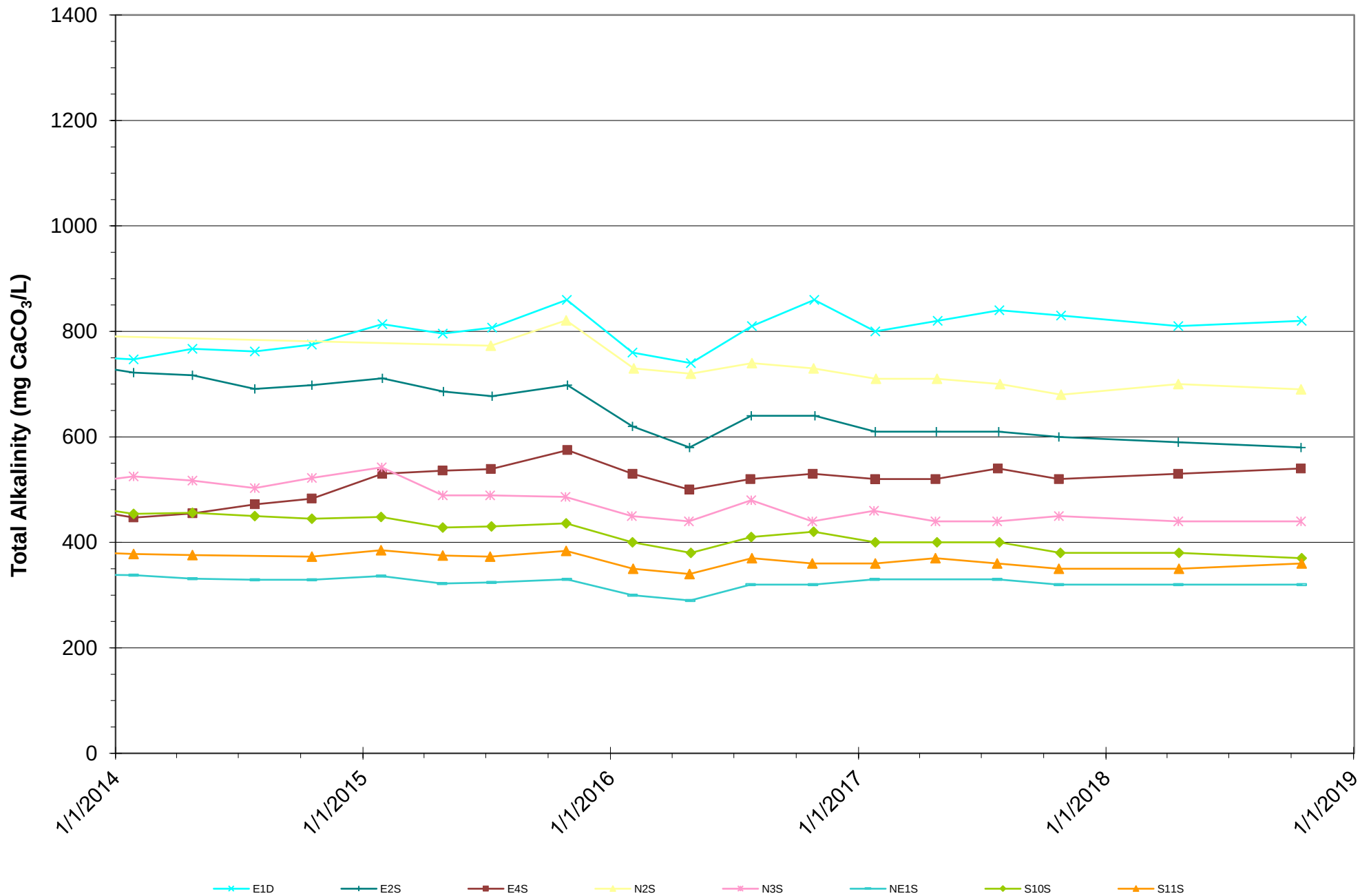


Table C8 - Alkalinity Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

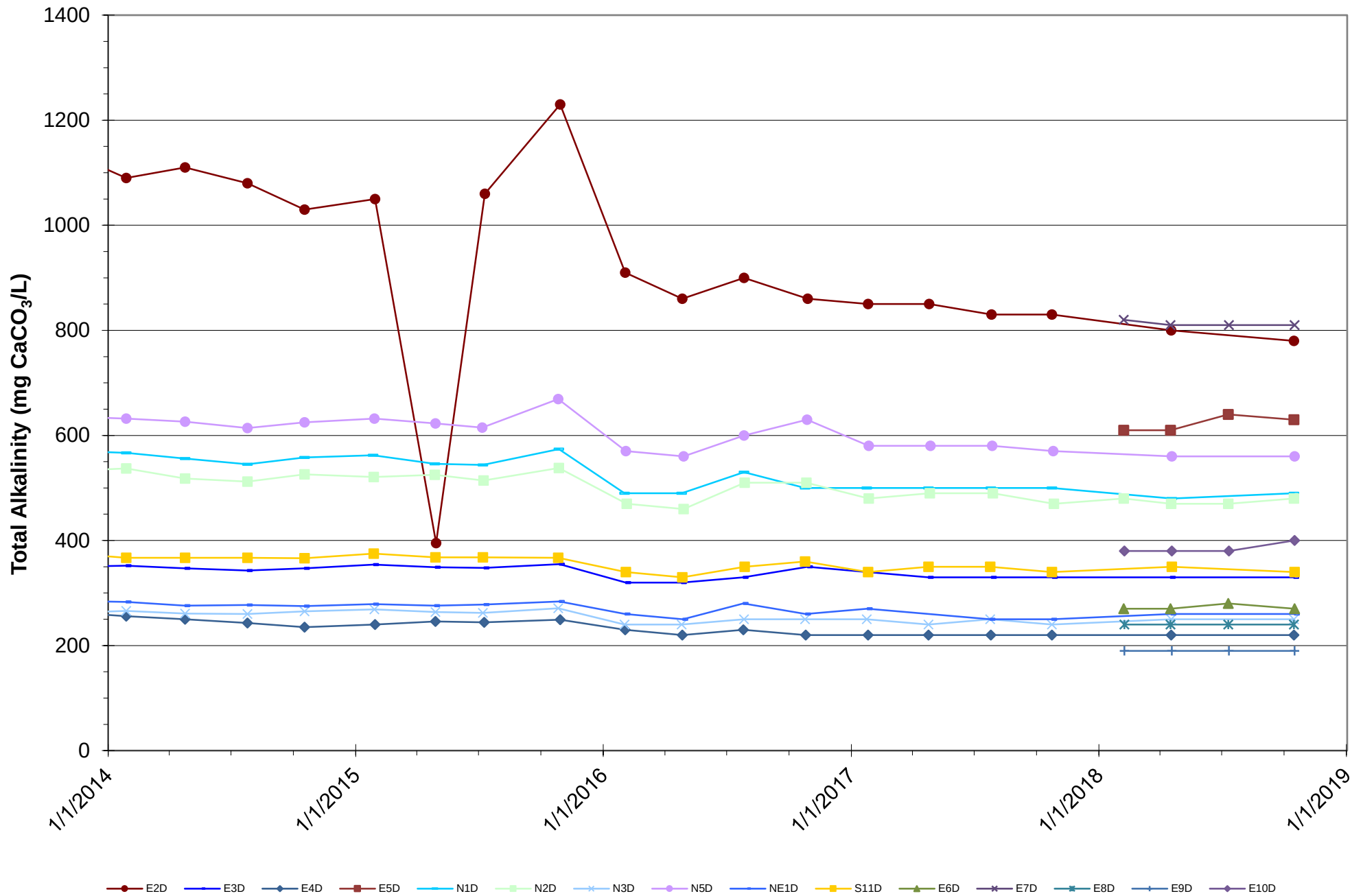


Table C9 - Total Alkalinity Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

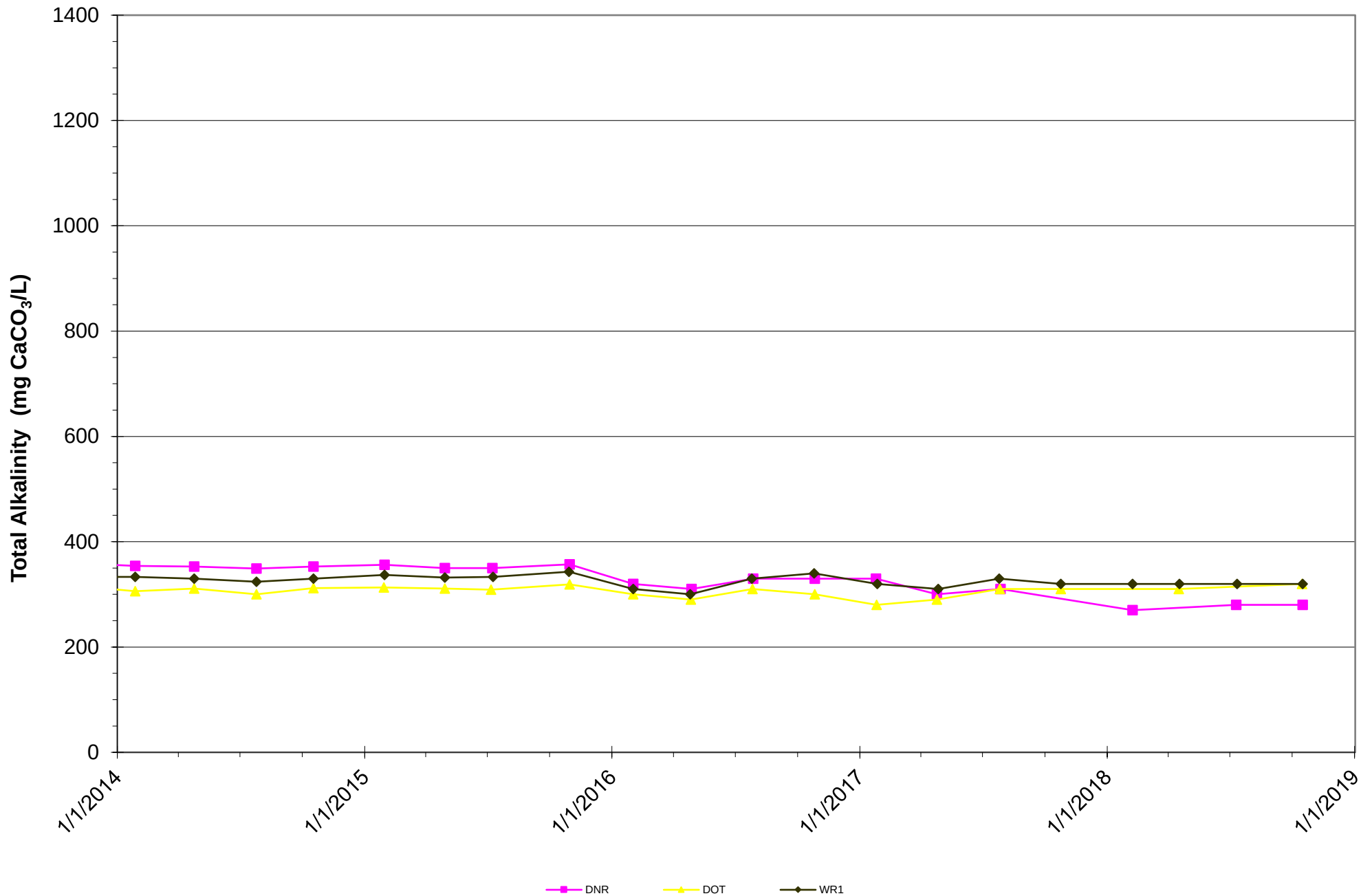


Table C10 - Chloride Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

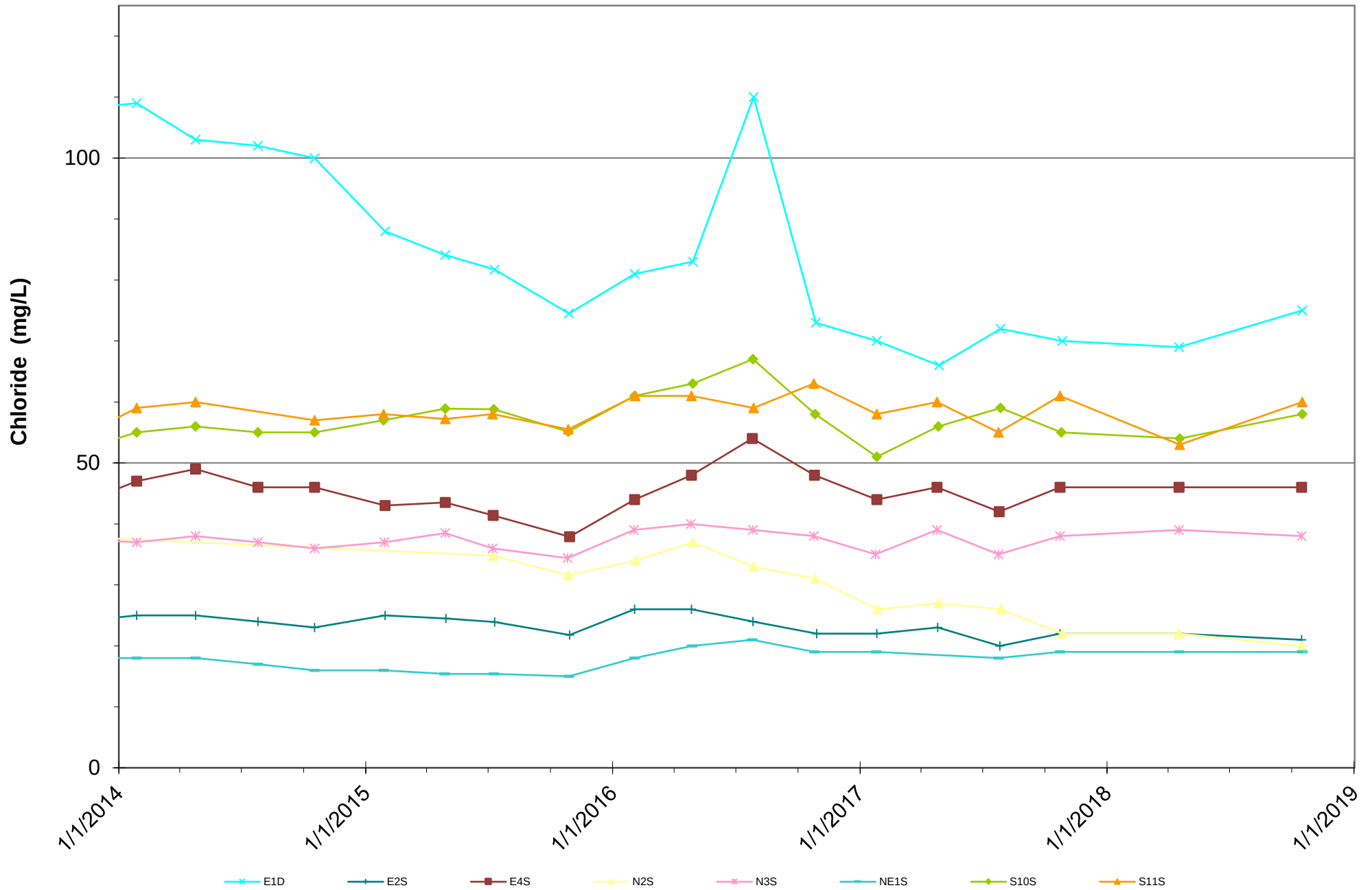


Table C11 - Chloride Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

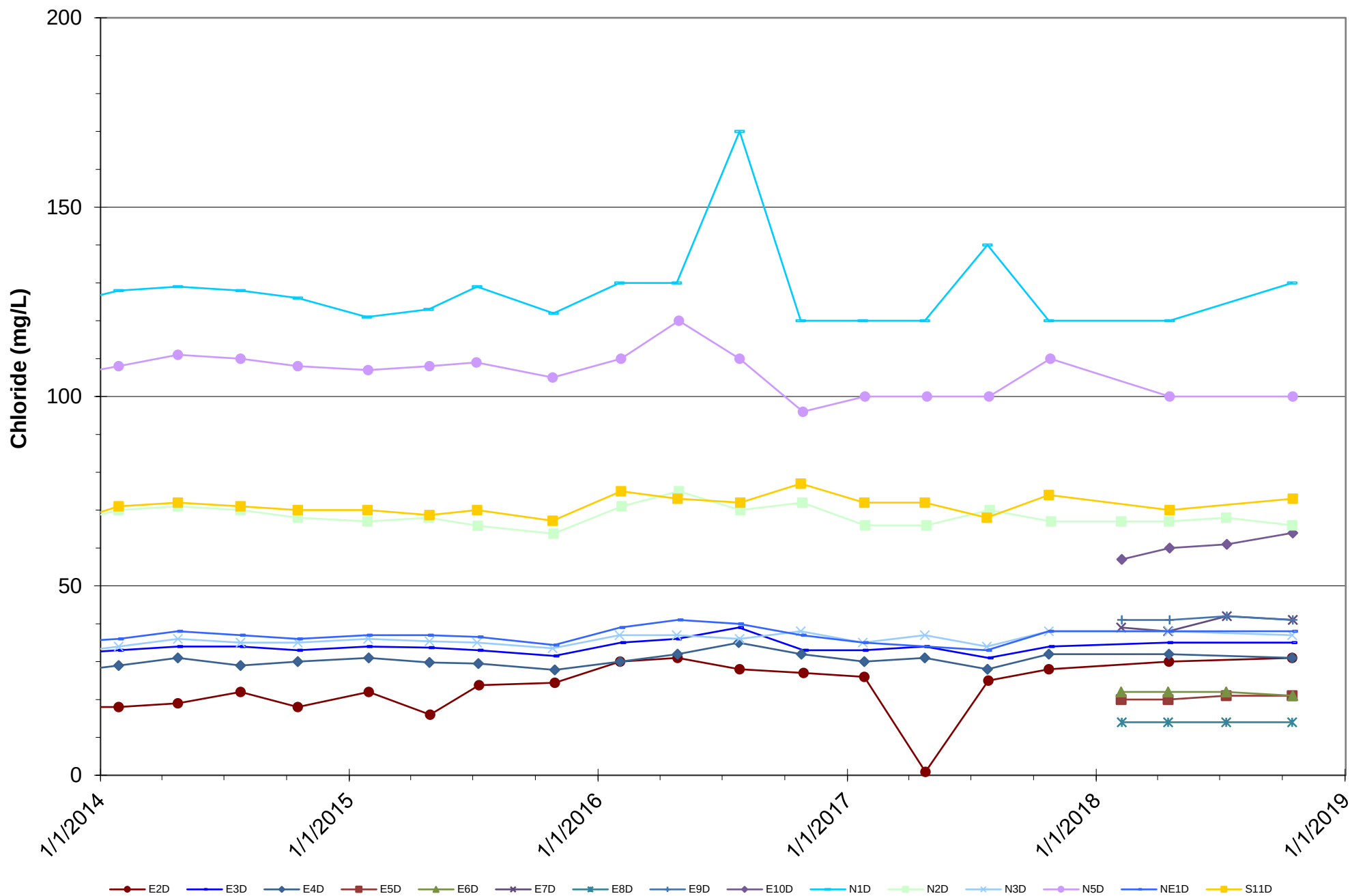
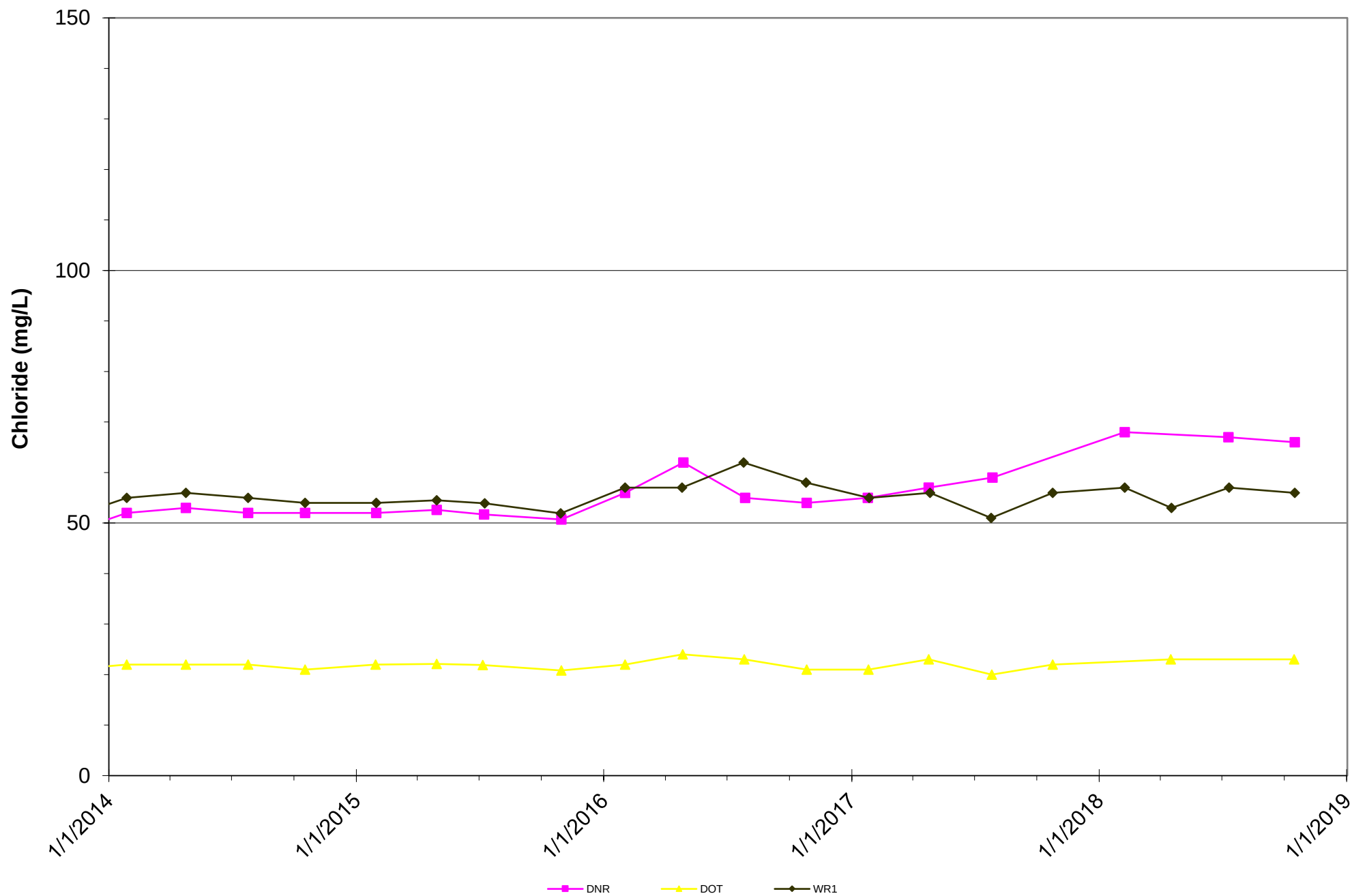


Table C12 - Chloride Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington



Tables C13 - Sulfate Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

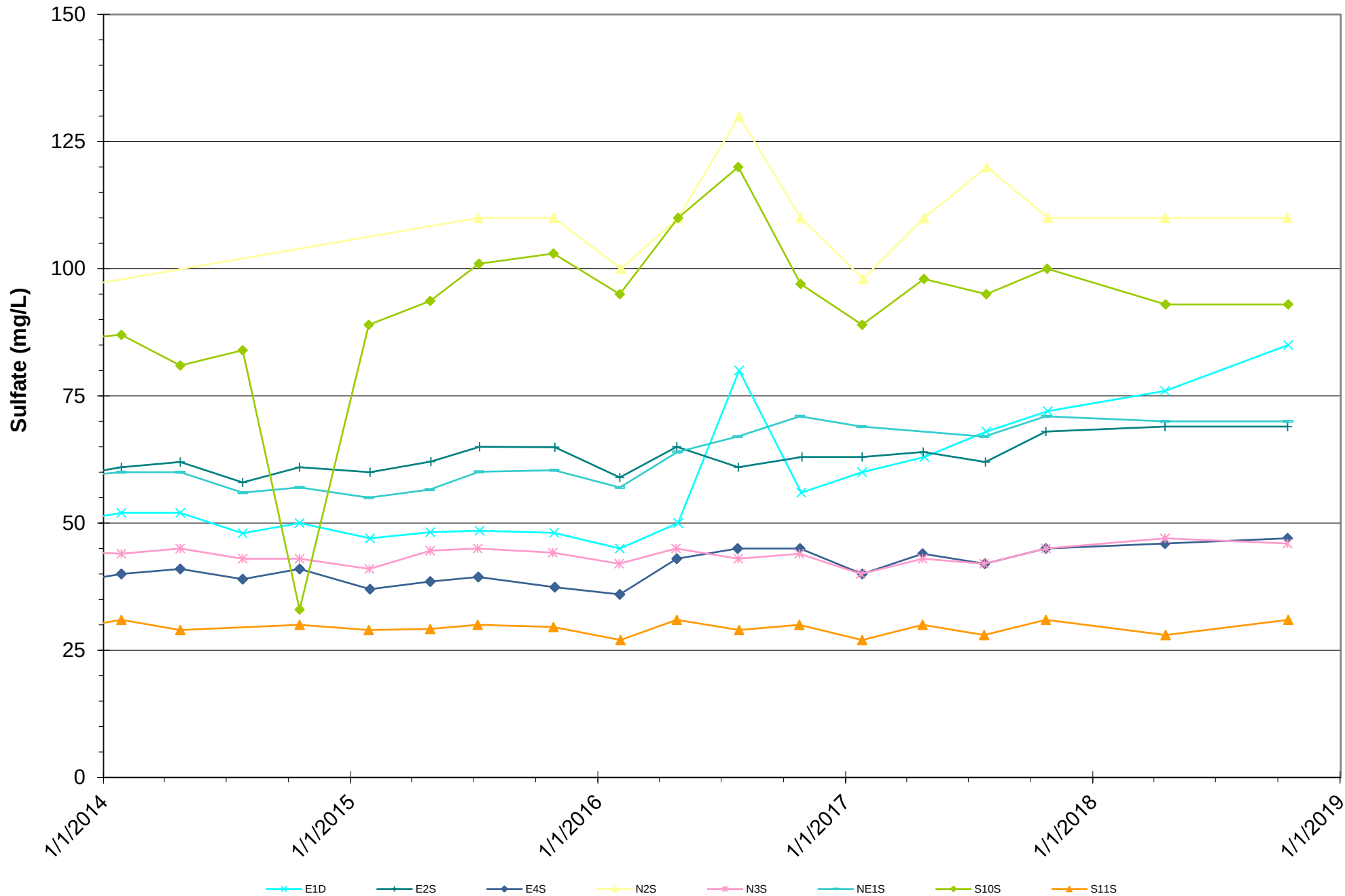


Table C14 - Sulfate Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

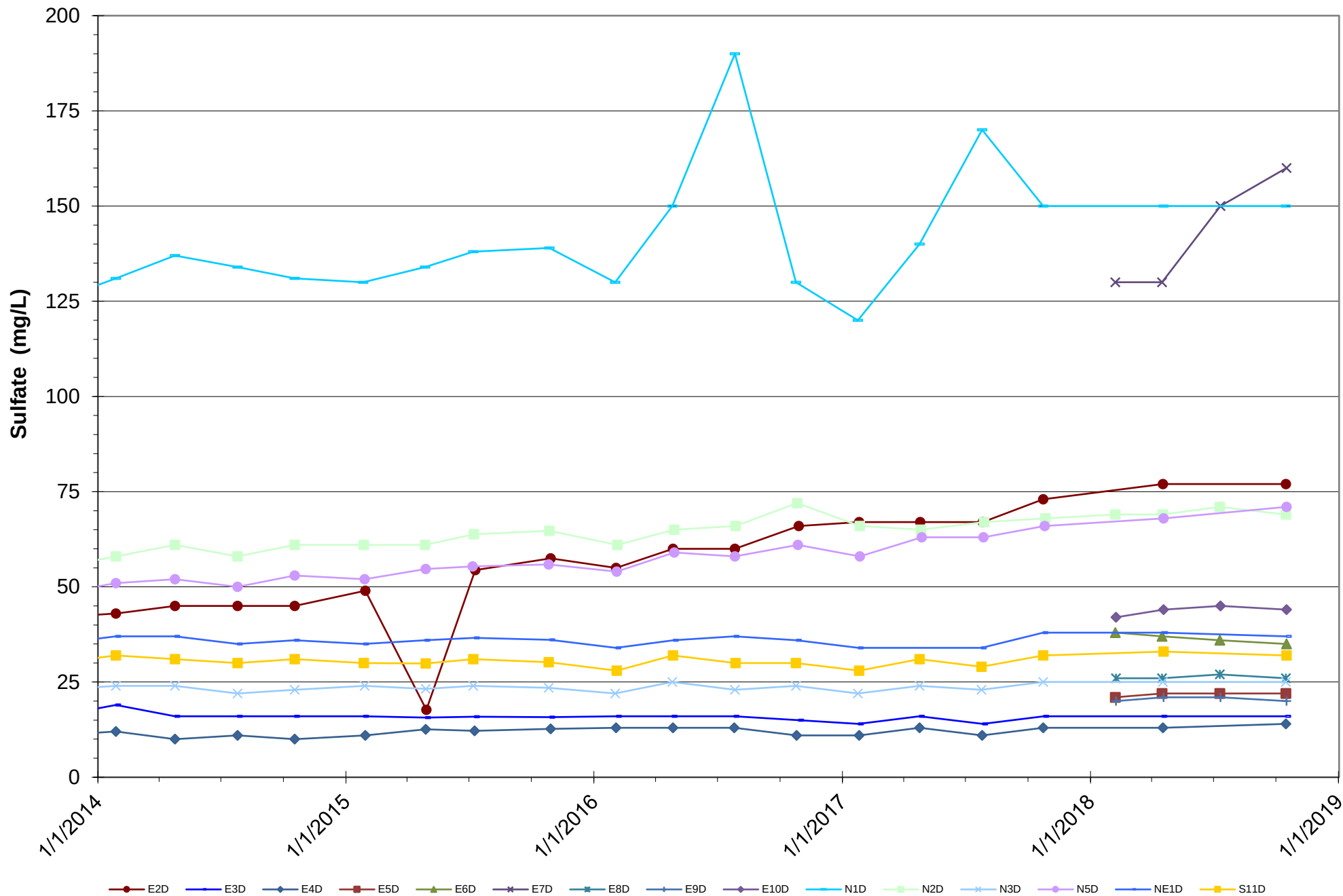


Table C15 - Sulfate Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

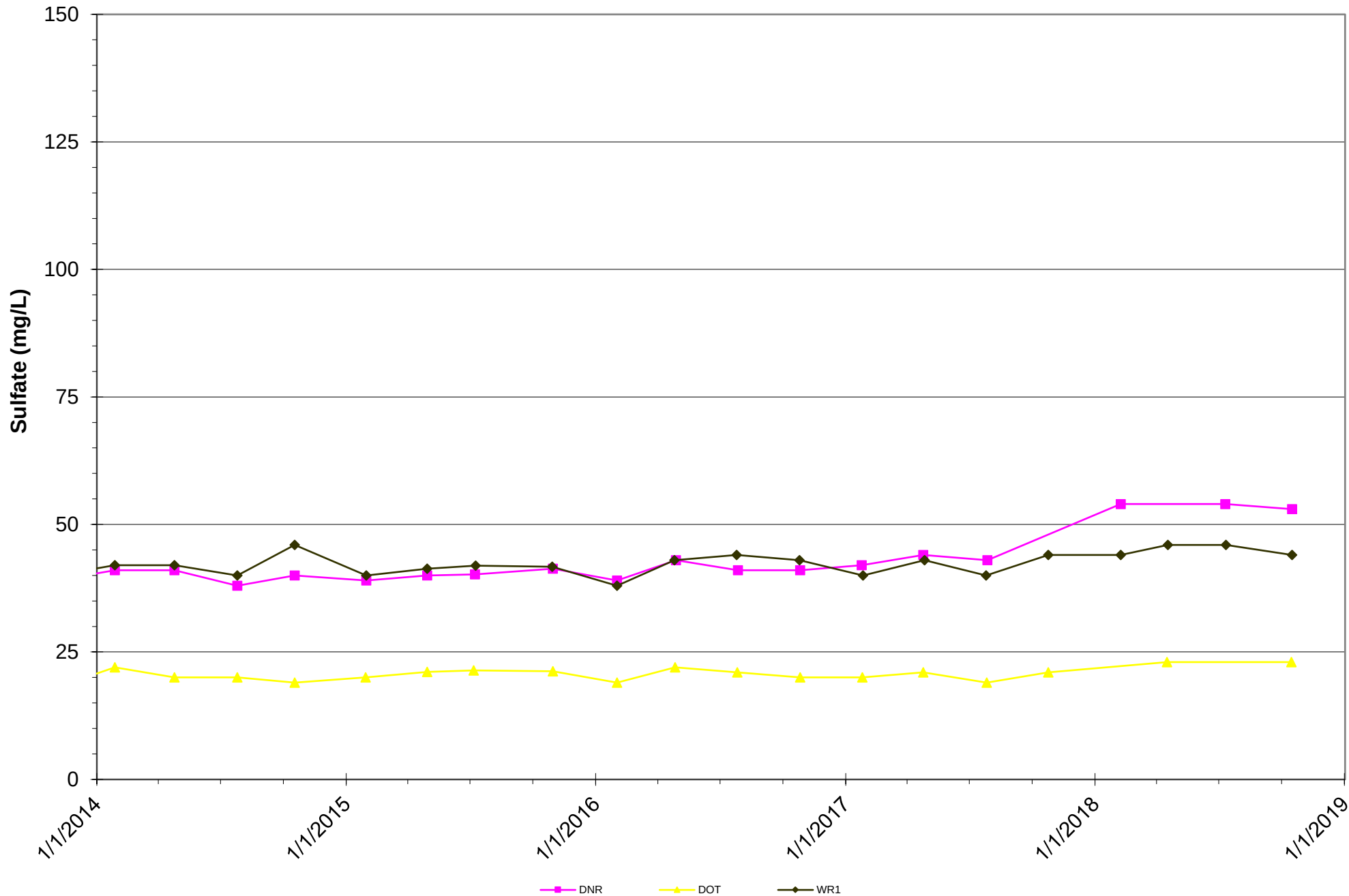


Table C16 - Total Dissolved Solids Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

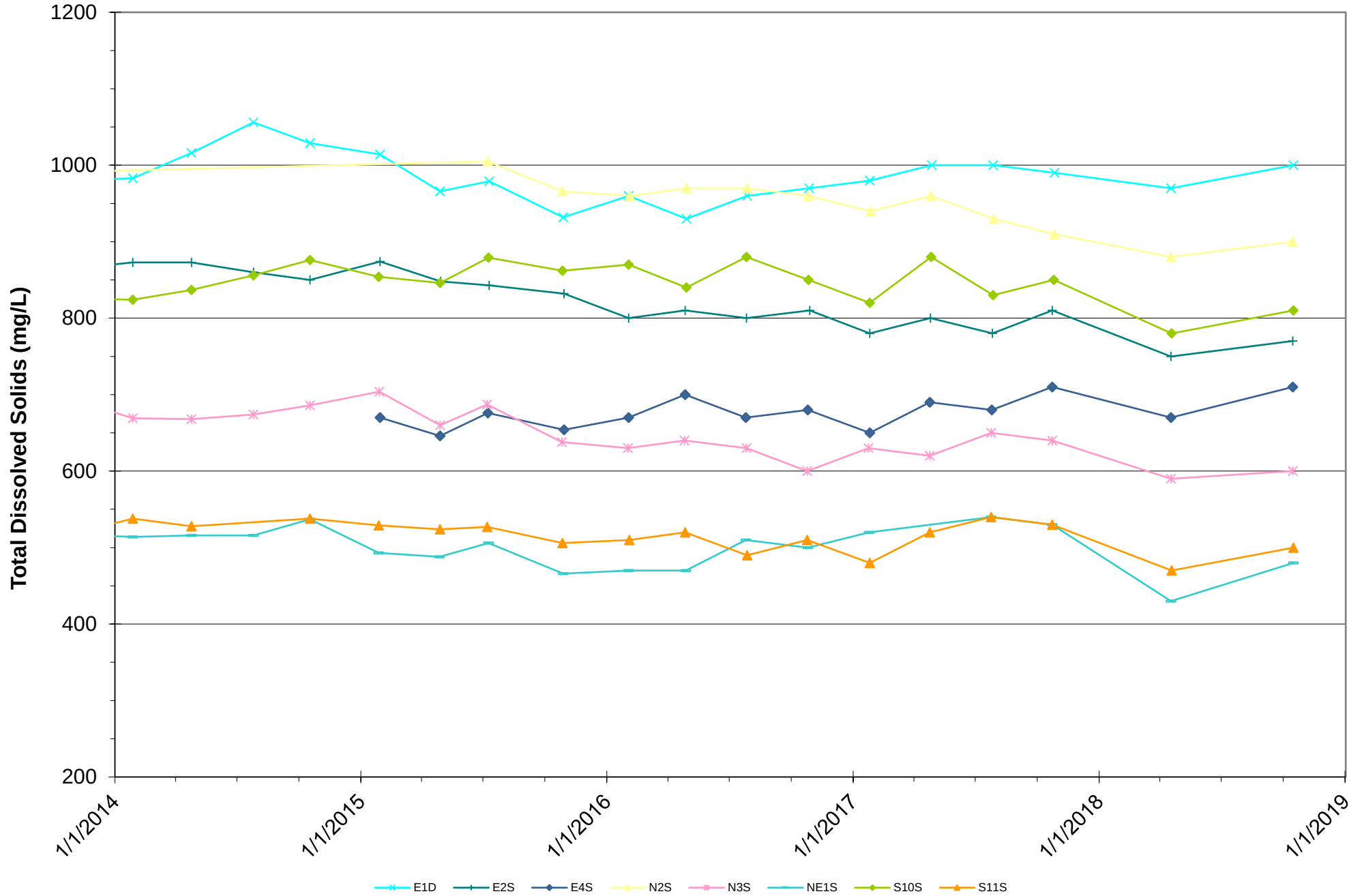


Table C17 - Total Dissolved Solids Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

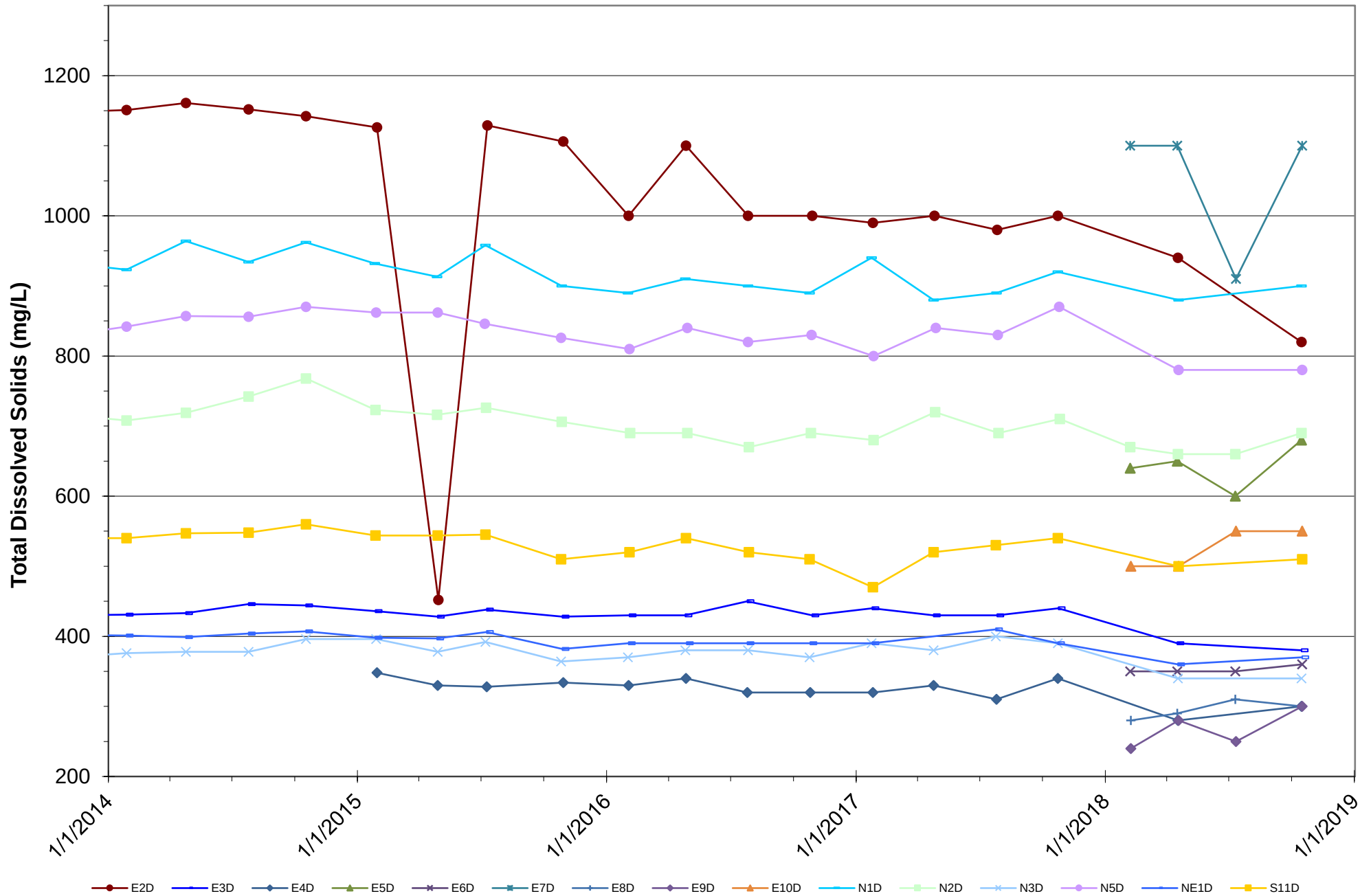


Table C18 -Total Dissolved Solids Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

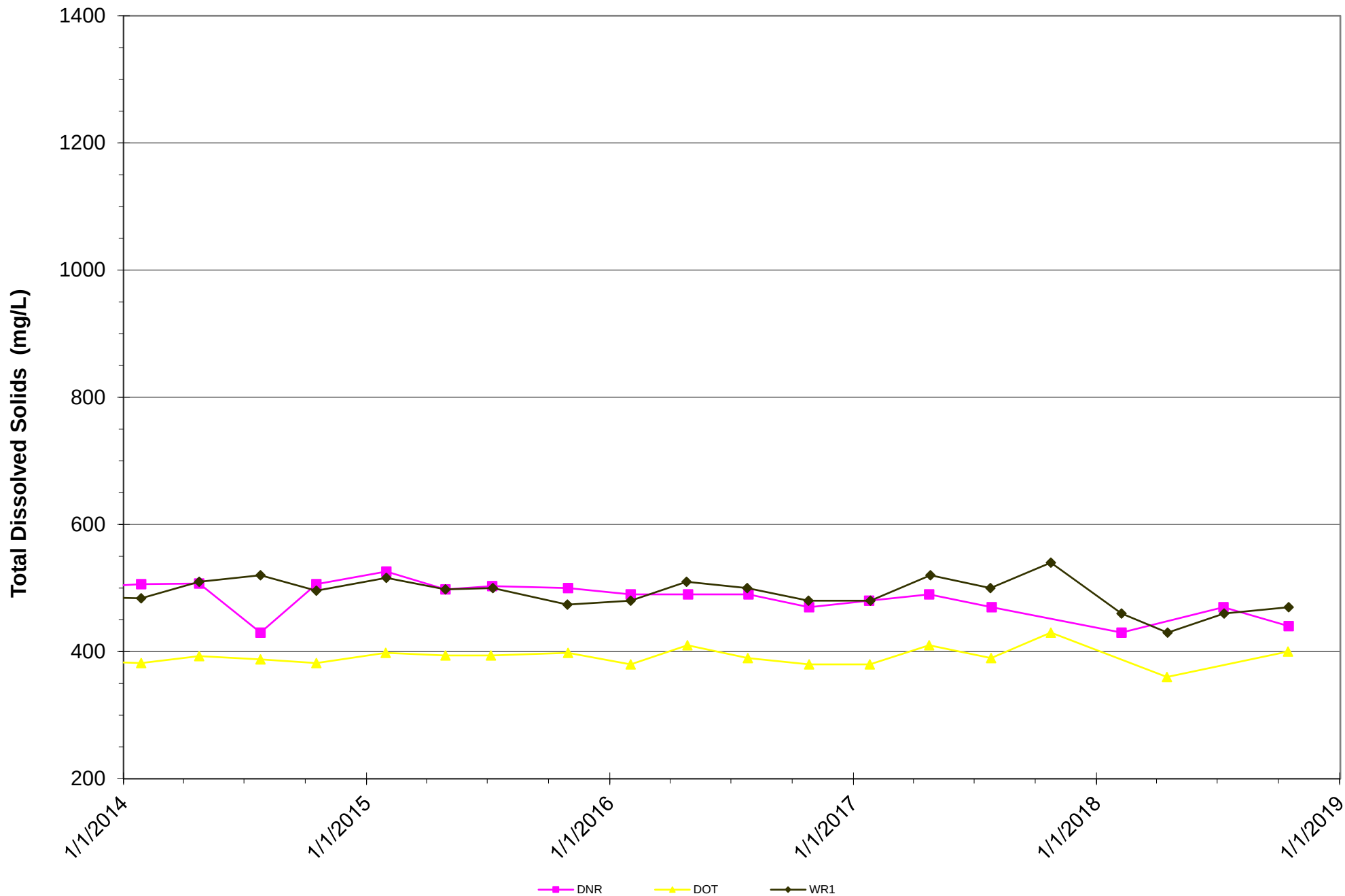


Table C19 - Total Nitrate/Nitrite Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

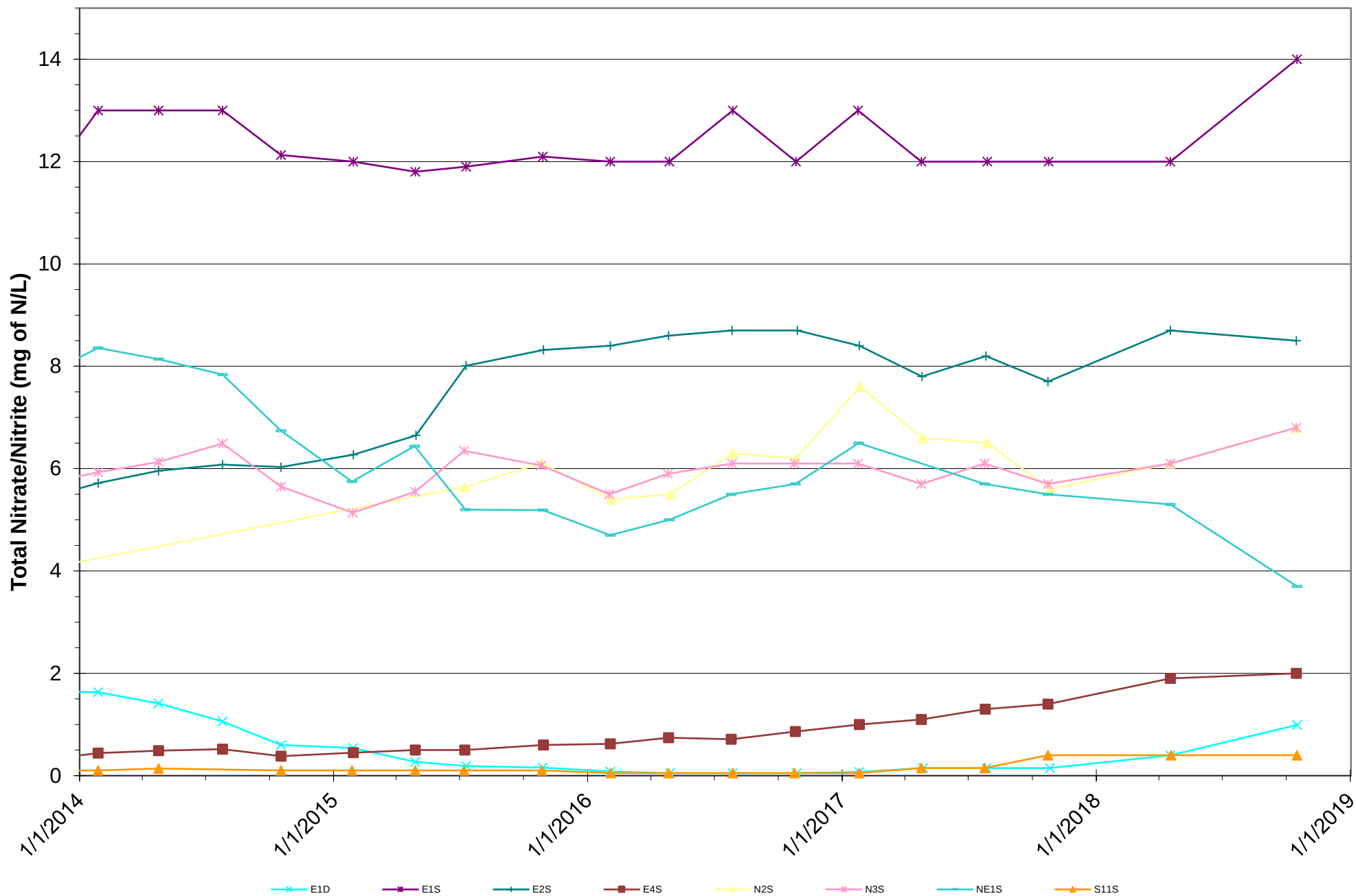


Table C20 -Total Nitrate/Nitrite Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste , Island County, Washington

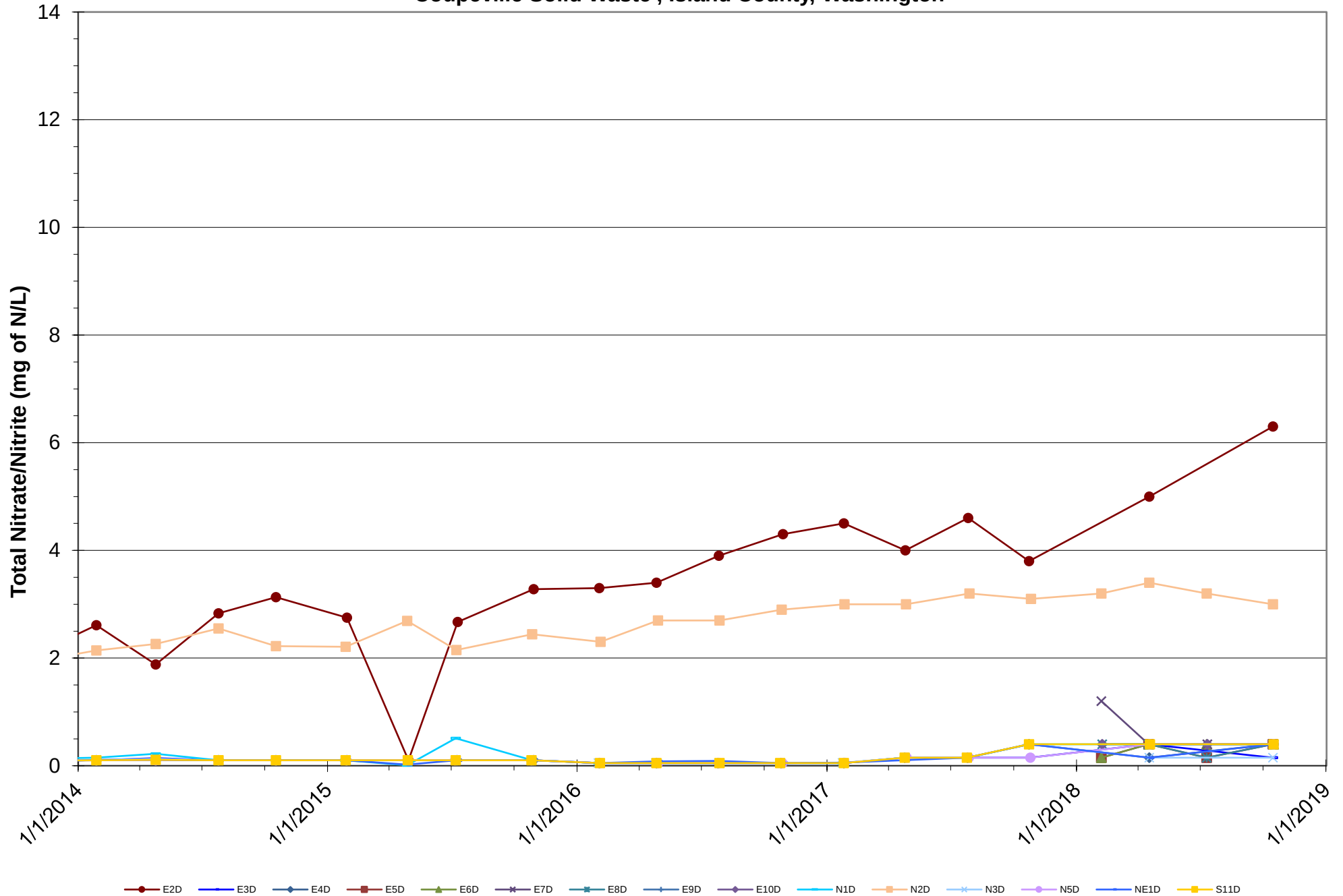


Table C21 - Total Nitrate/Nitrite Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

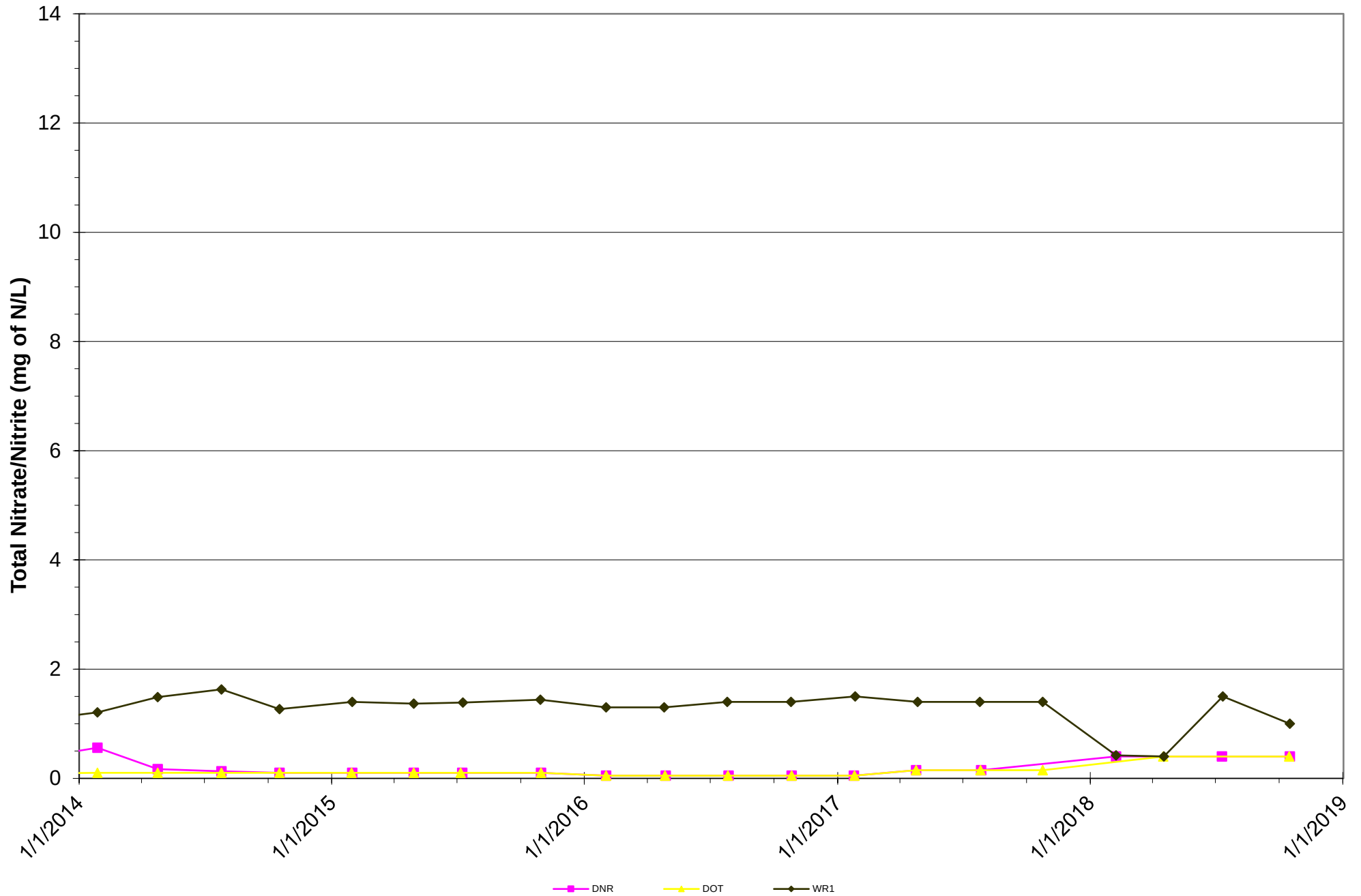


Table C22 -Total Nitrate/Nitrite Time Series - S10S
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

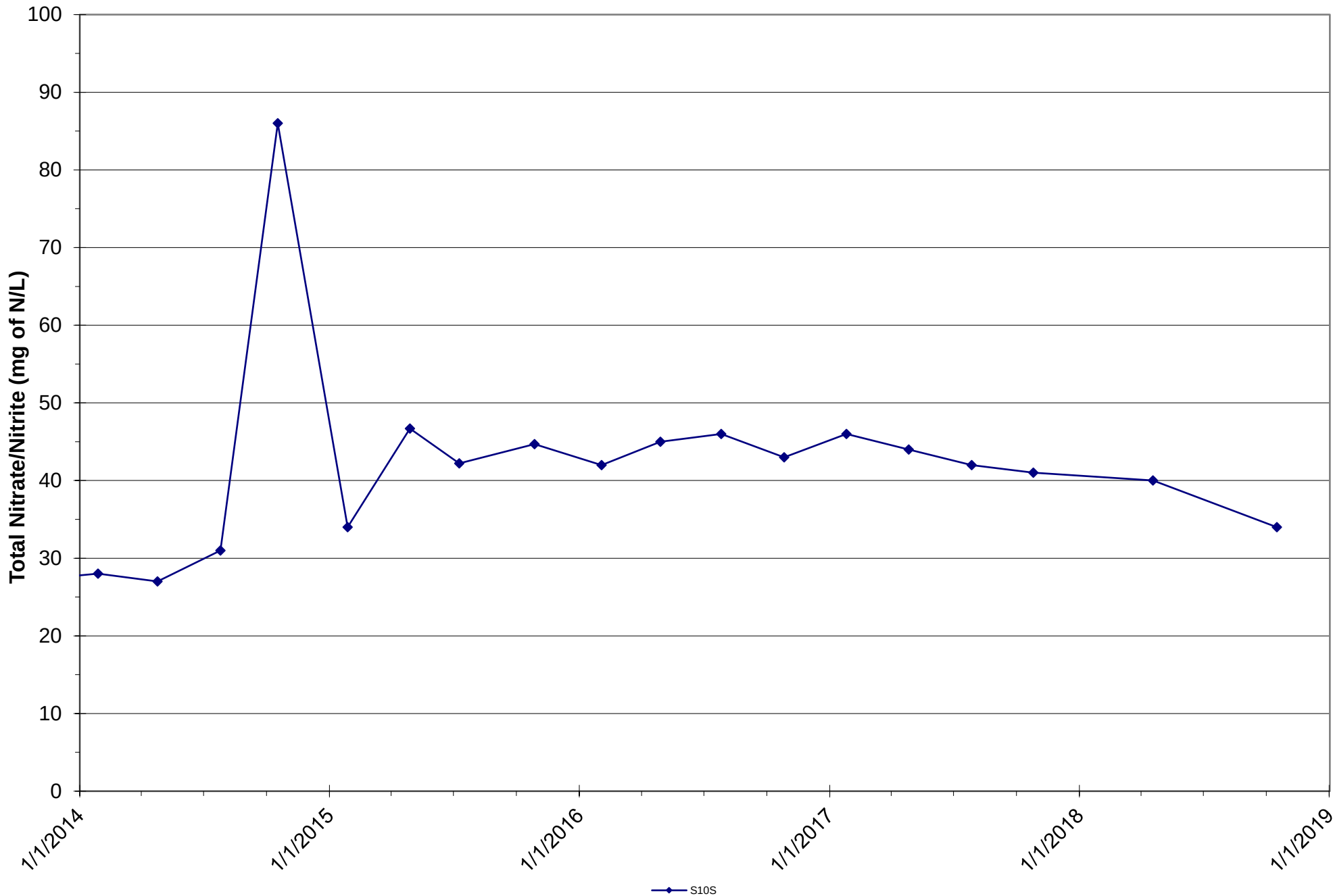


Table C23 - Total Organic Carbon Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

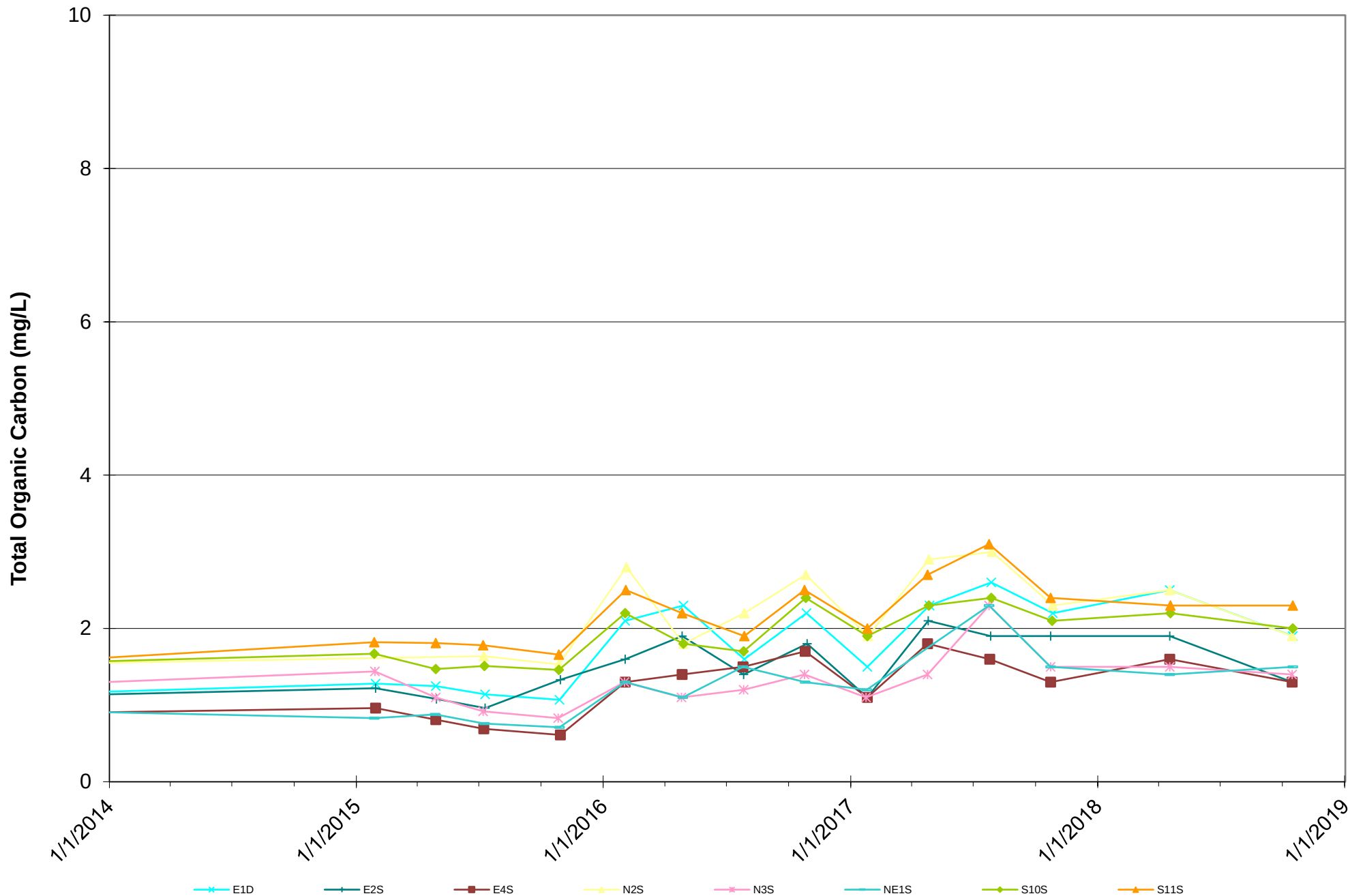


Table C24 - Total Organic Carbon Time Series - Aquifer 2
 2018 Annual Monitoring Report
 Coupeville Solid Waste Facility, Island County, Washington

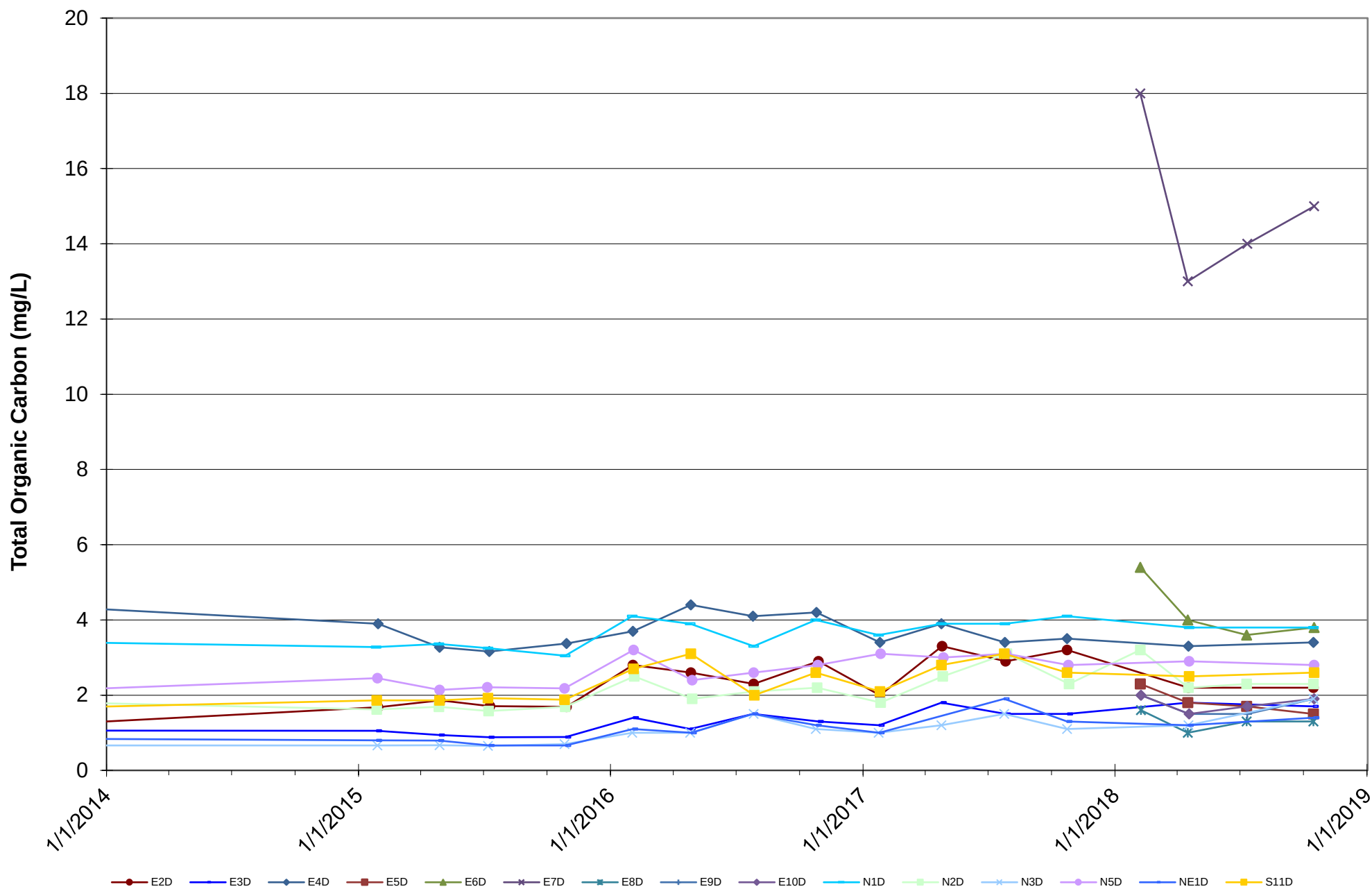


Table C25 - Total Organic Carbon Time Series - Water Supply Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

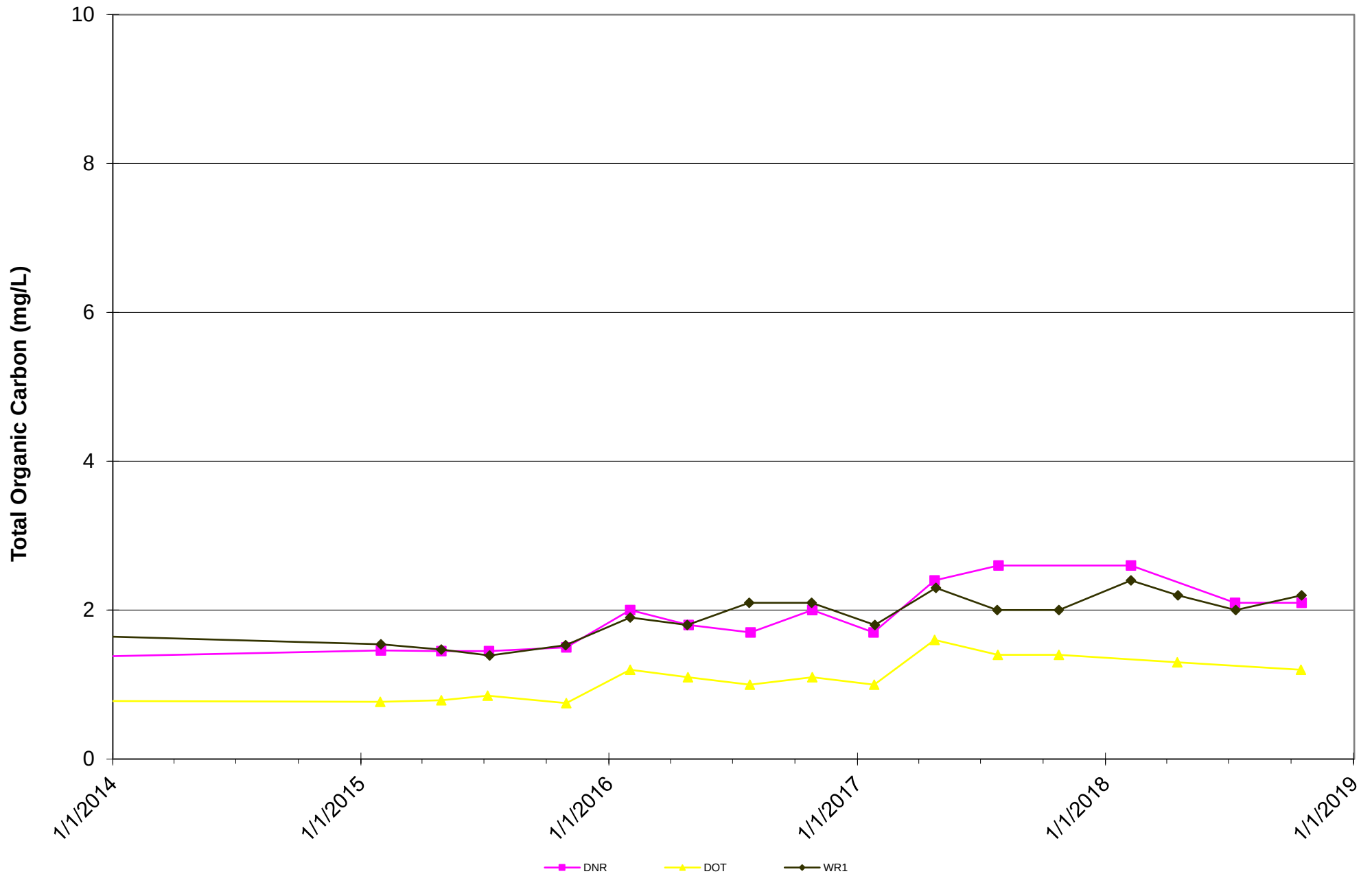


Table C26 - Barium Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

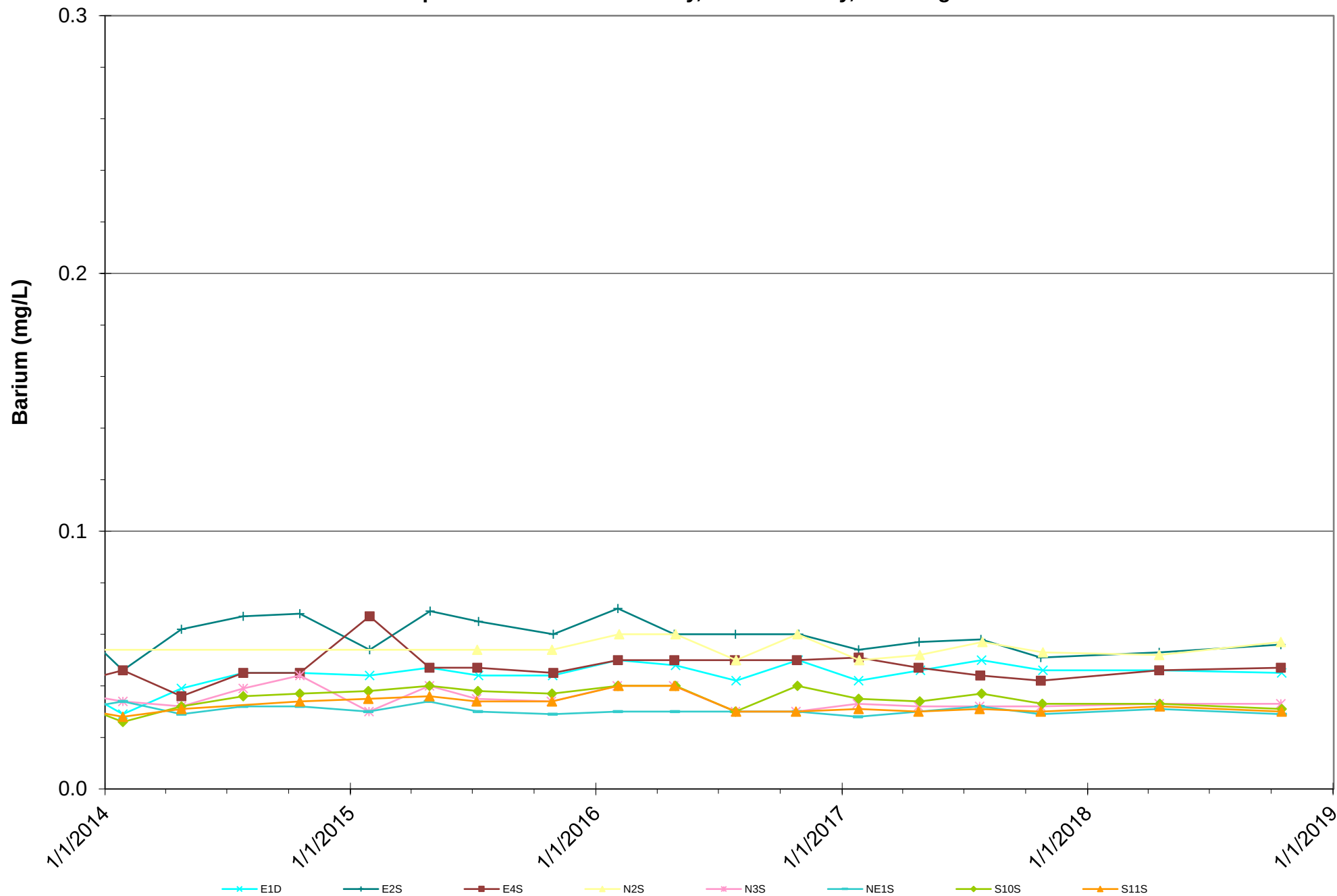


Table C27 - Barium Time Series - Aquifer 2
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

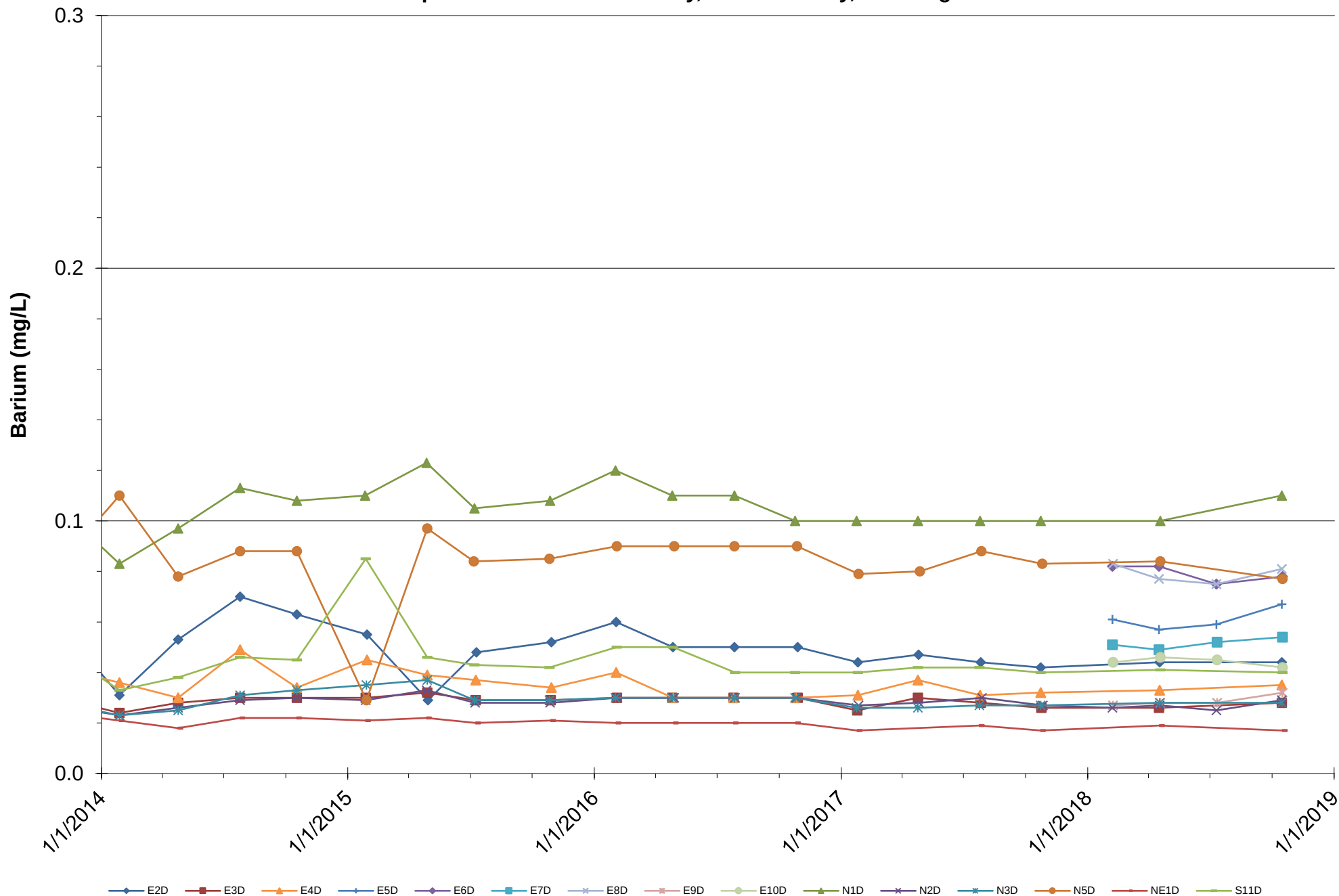


Table C28 - Barium Time Series - Pumping Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

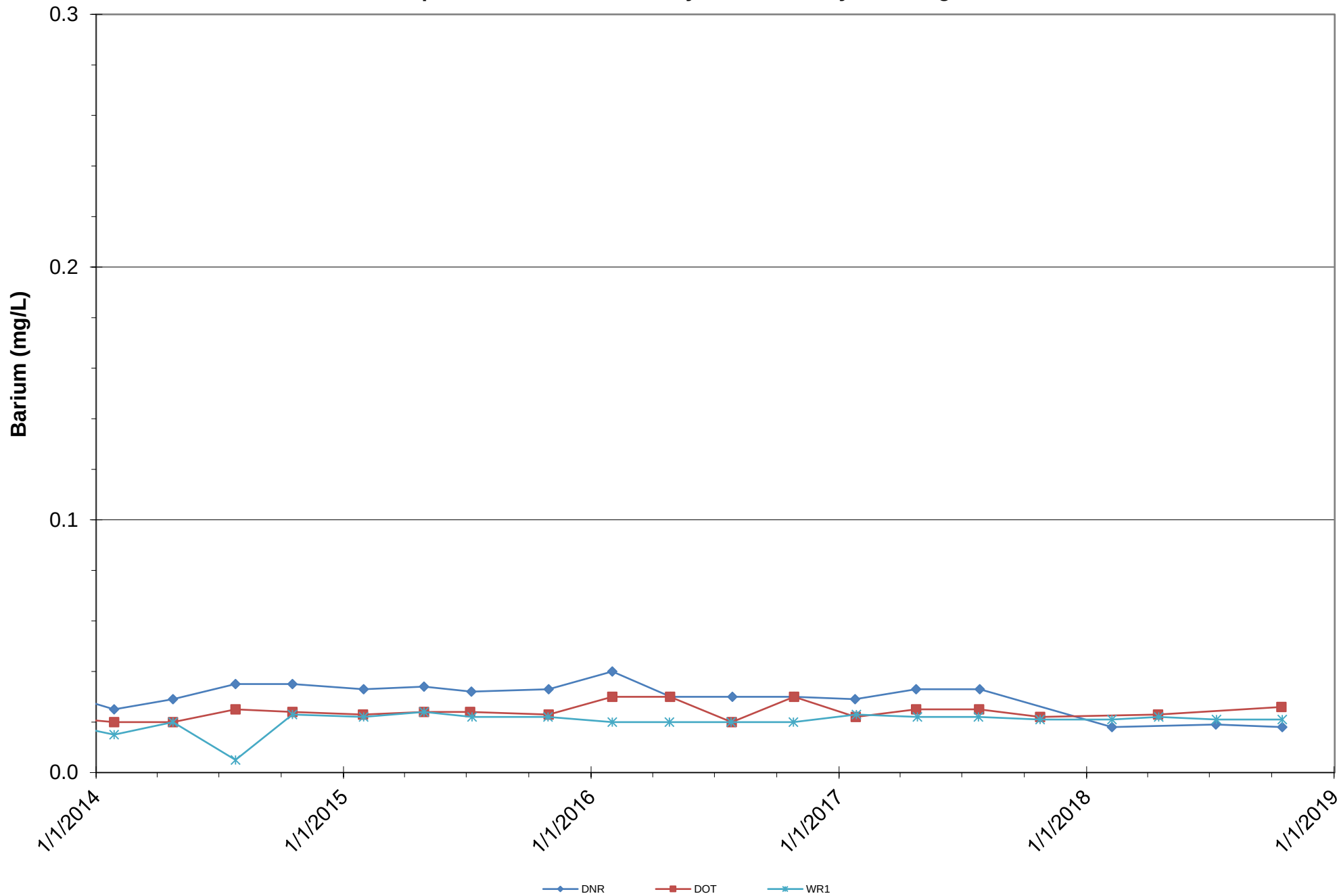


Table C29 - 1,1-Dichloroethane Time Series
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

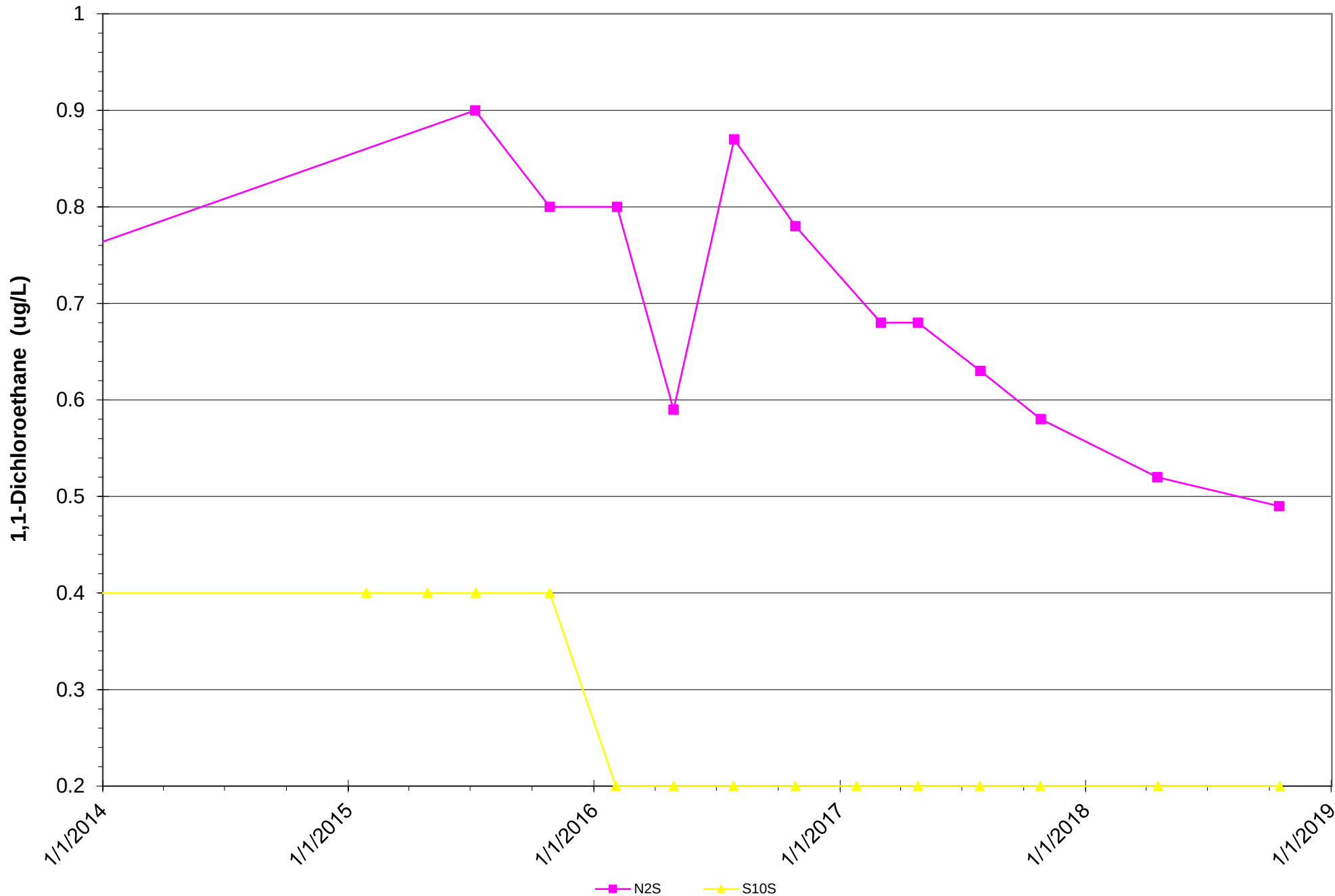


Table C30 - Methylene Chloride Time Series
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

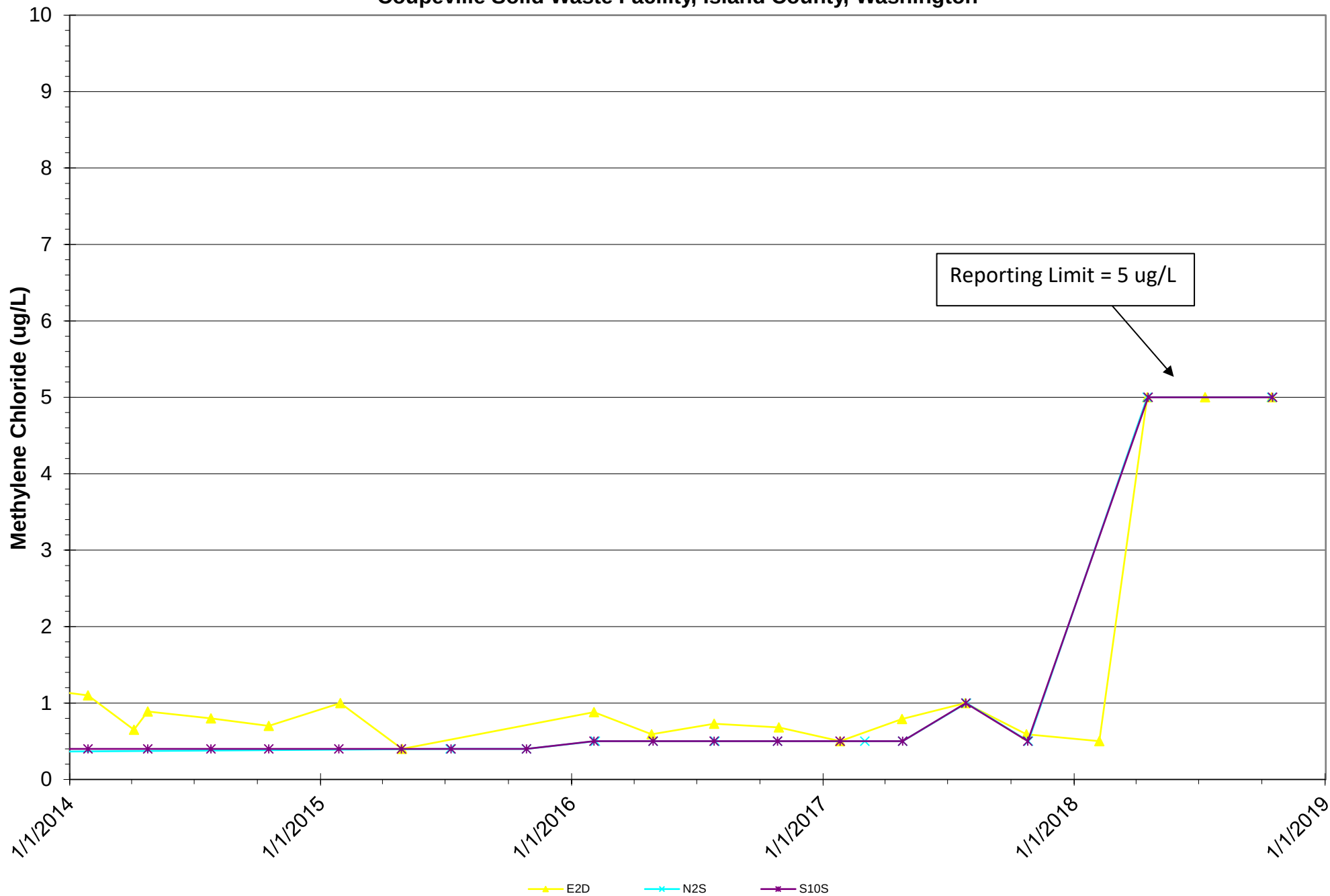


Table C31 - Vinyl Chloride Time Series - Aquifer 1
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

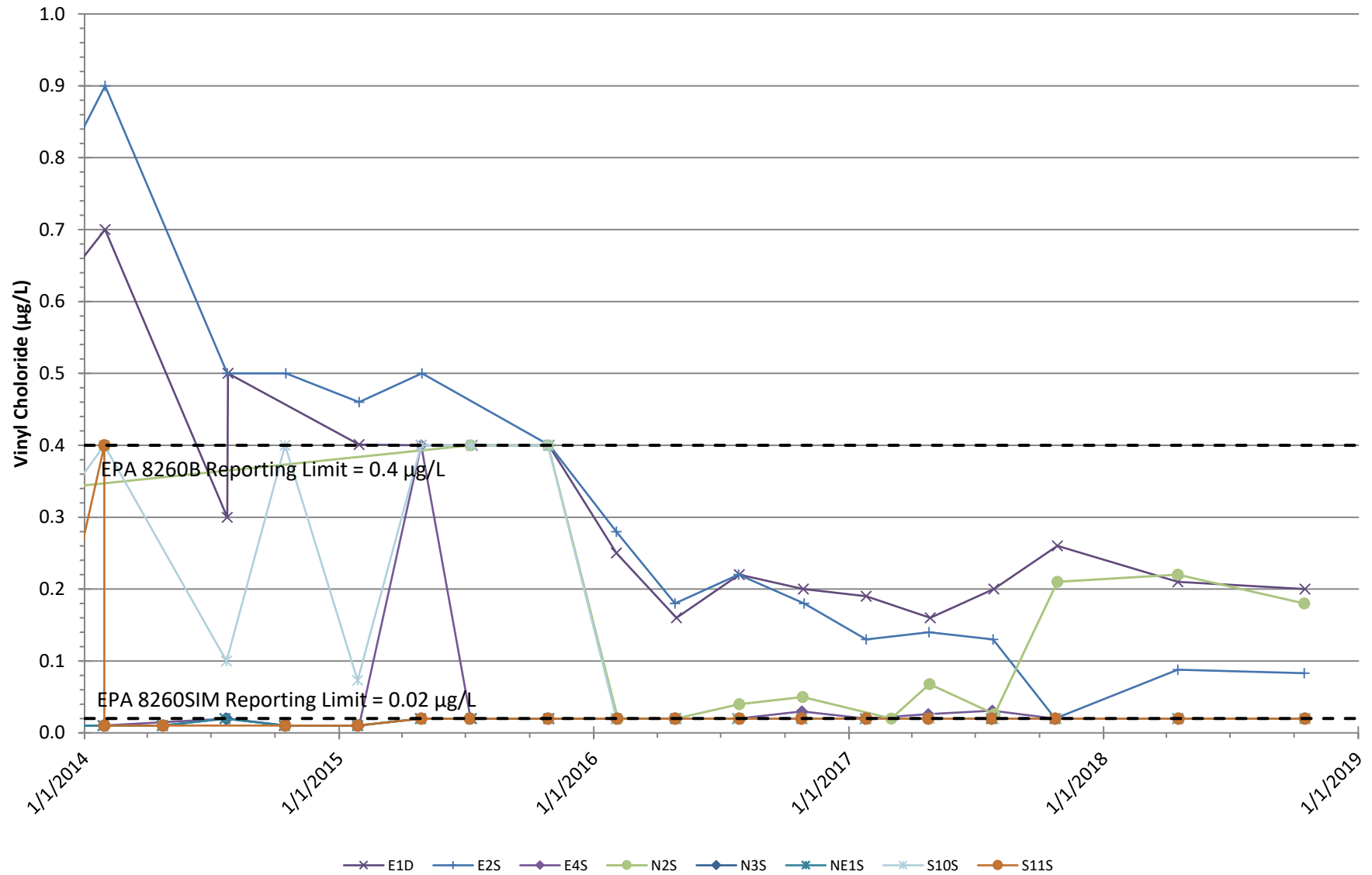


Table C32 - Vinyl Chloride Time Series - Aquifer 2 (High Range)
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

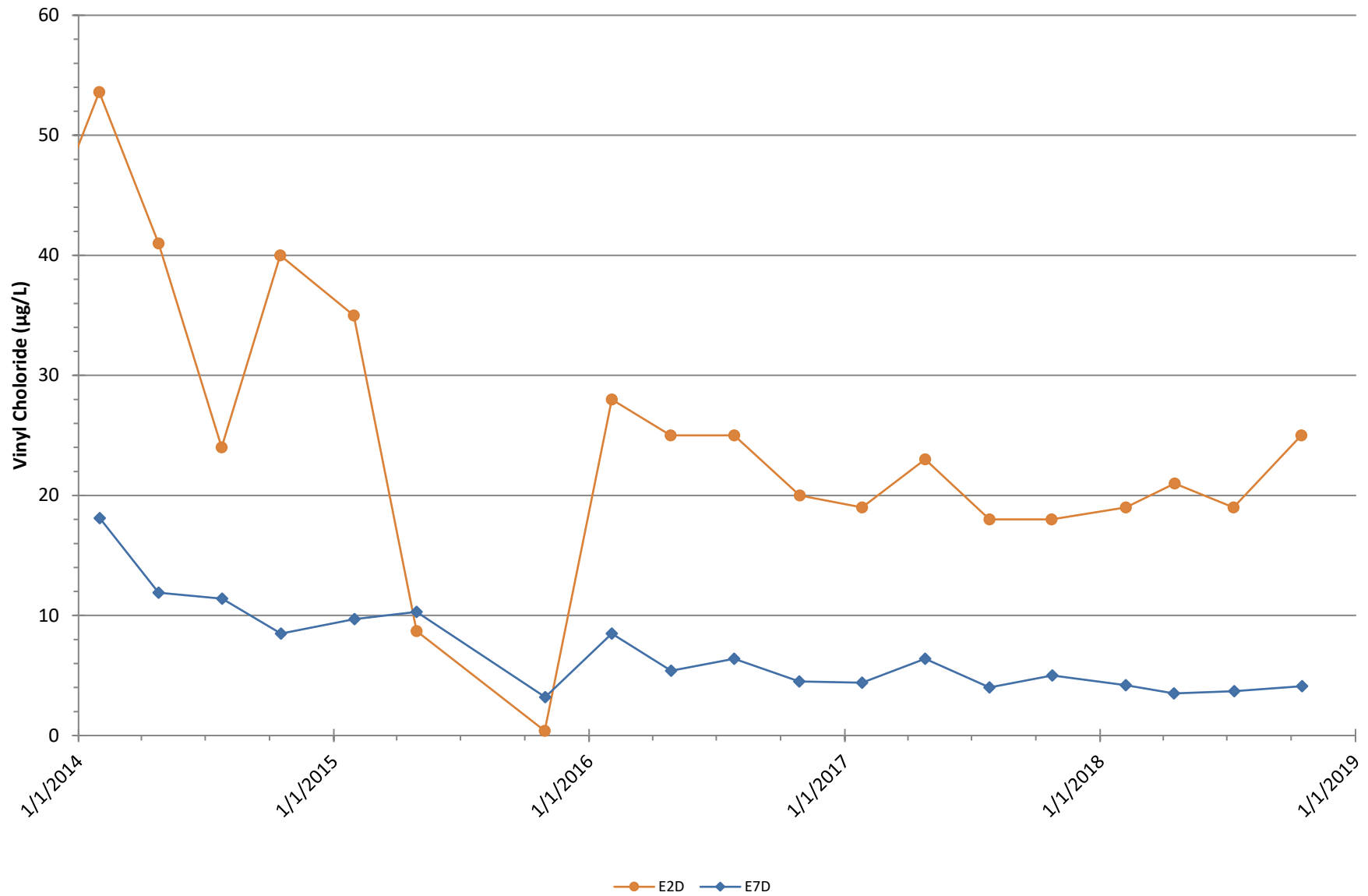


Table C33 - Vinyl Chloride Time Series - Aquifer 2 (Low Range)
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington

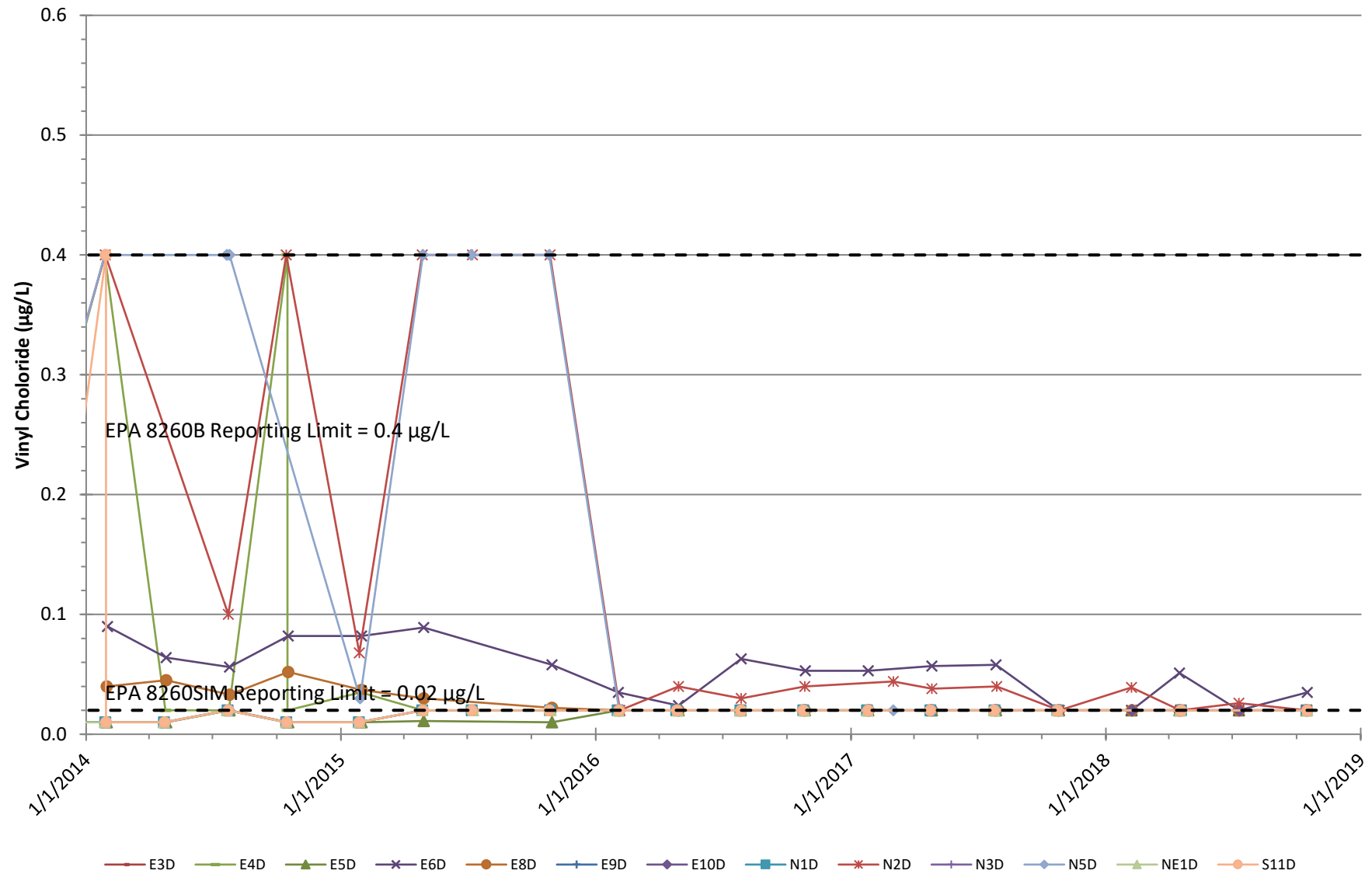
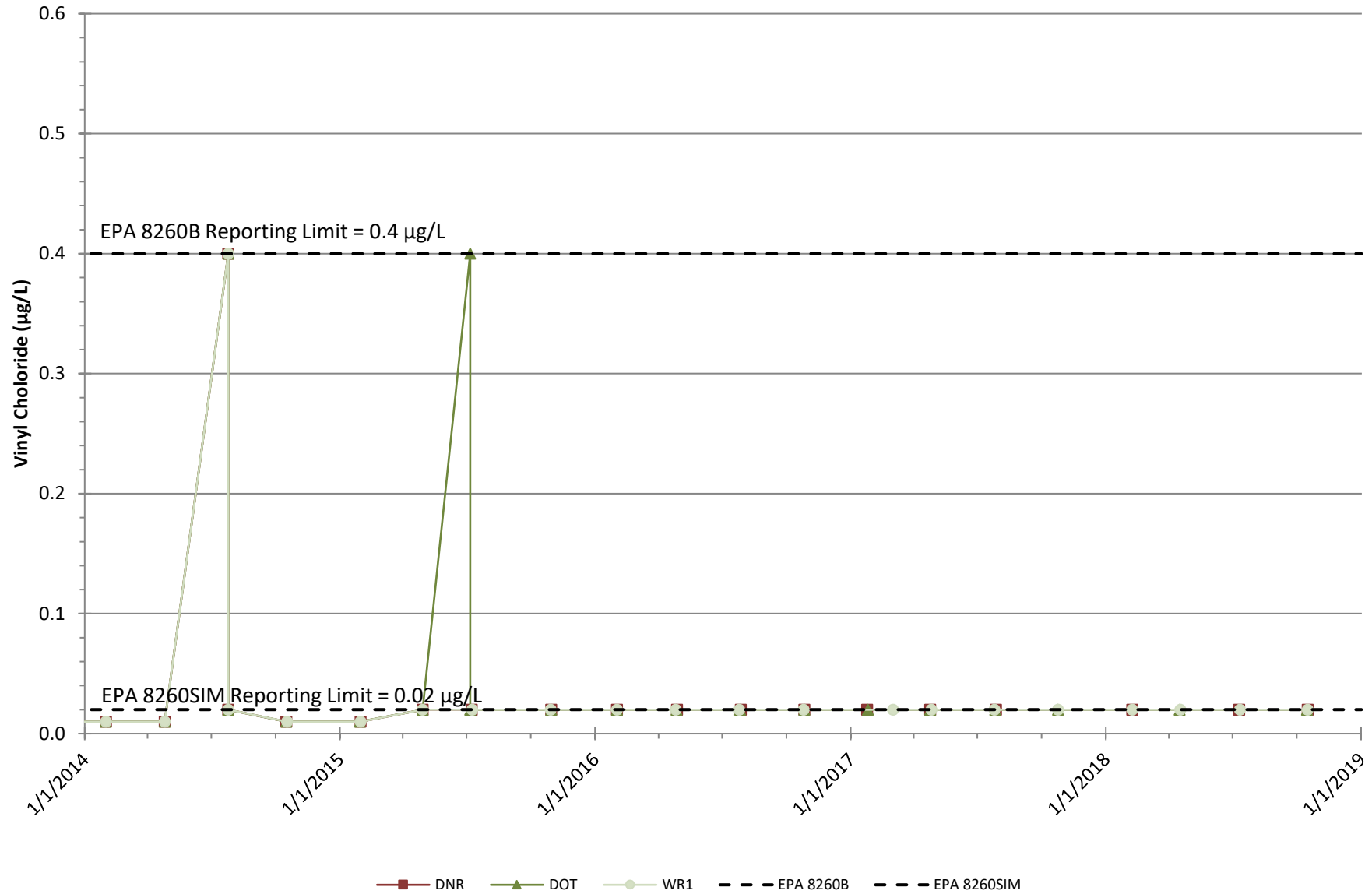


Table C34 - Vinyl ChlorideTime Series - Pumping Wells
2018 Annual Monitoring Report
Coupeville Solid Waste Facility, Island County, Washington





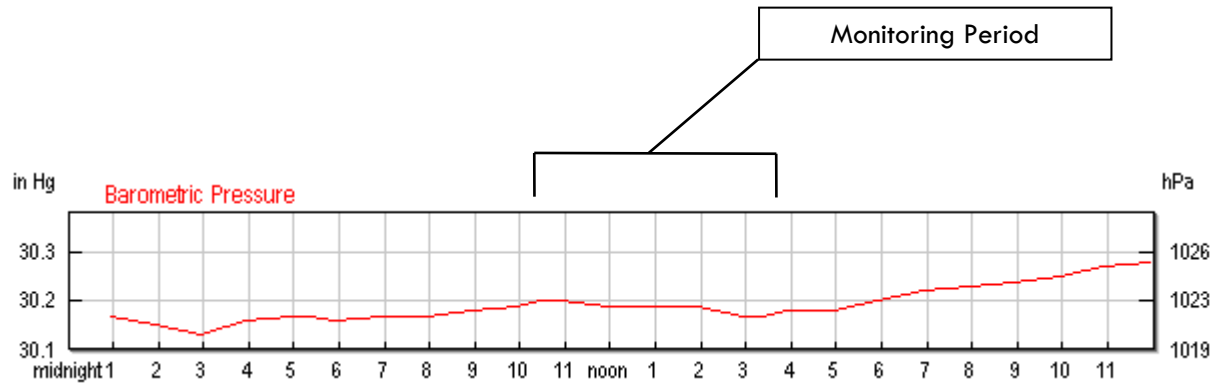
Appendix D

2018 Barometric Pressure Data

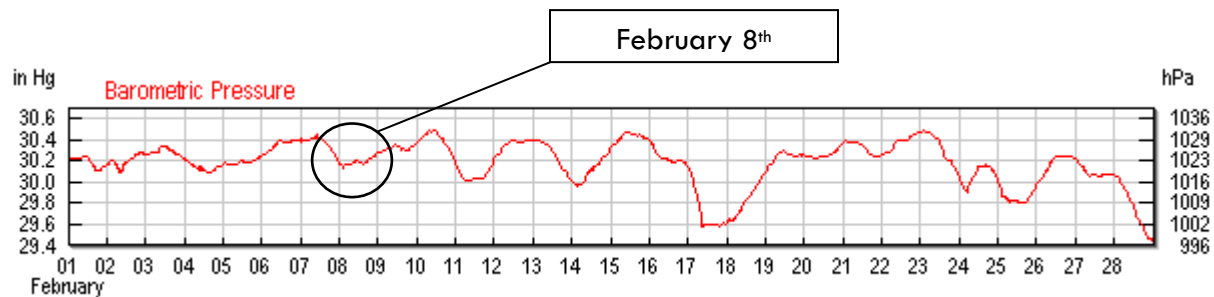


Figure D-1. Barometric Pressure Trends - February 2018
First Quarter 2018 Data Review
Coupeville Solid Waste Facility, Island County, Washington

Barometric Pressure Trend for February 8th, 2018



Barometric Pressure Trend for February 2018

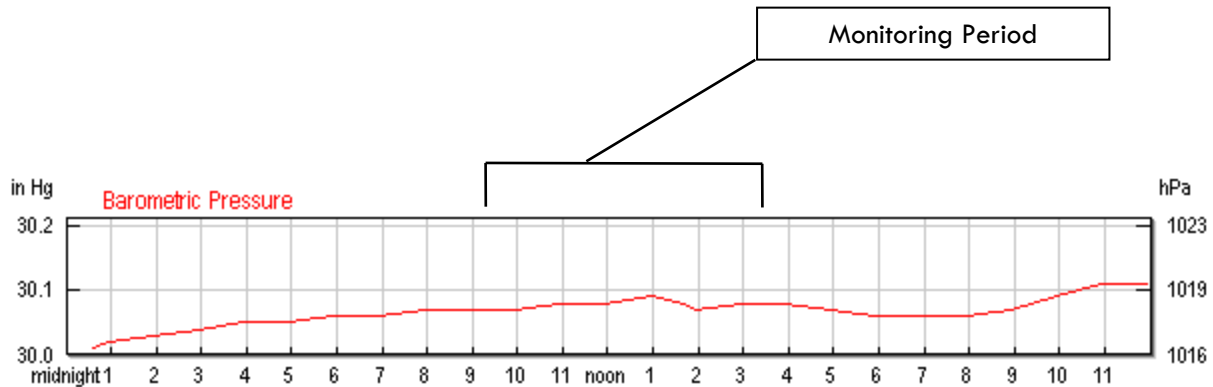


Source: Oak Harbor, Washington

https://www.wunderground.com/history/airport/KNUW/2017/3/1/MonthlyHistory.html?req_city=Oak+Harbor&req_state=WA&req_statename=&reqdb.zip=98277&reqdb.magic=1&reqdb.wmo=99999

Figure D-2. Barometric Pressure Trends - May 2018
Second Quarter 2018 Data Review
Coupeville Solid Waste Facility, Island County, Washington

Barometric Pressure Trend for May 16th, 2018



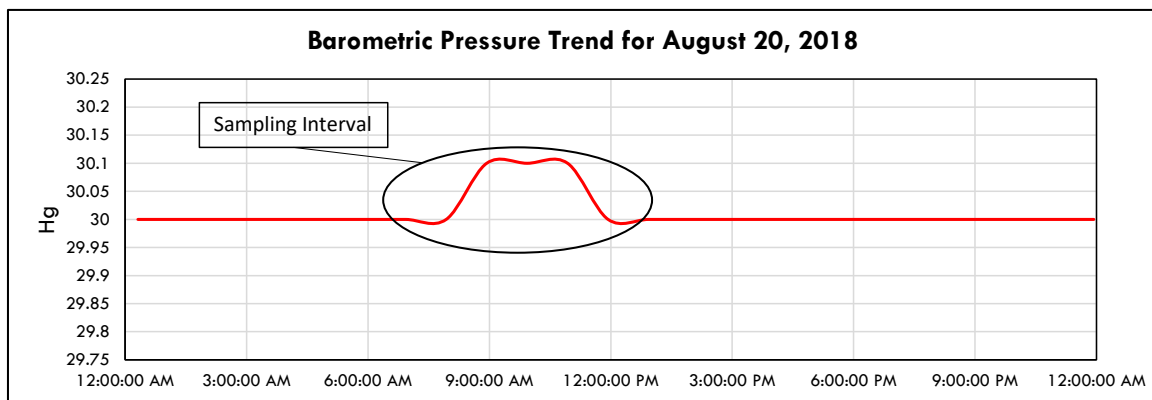
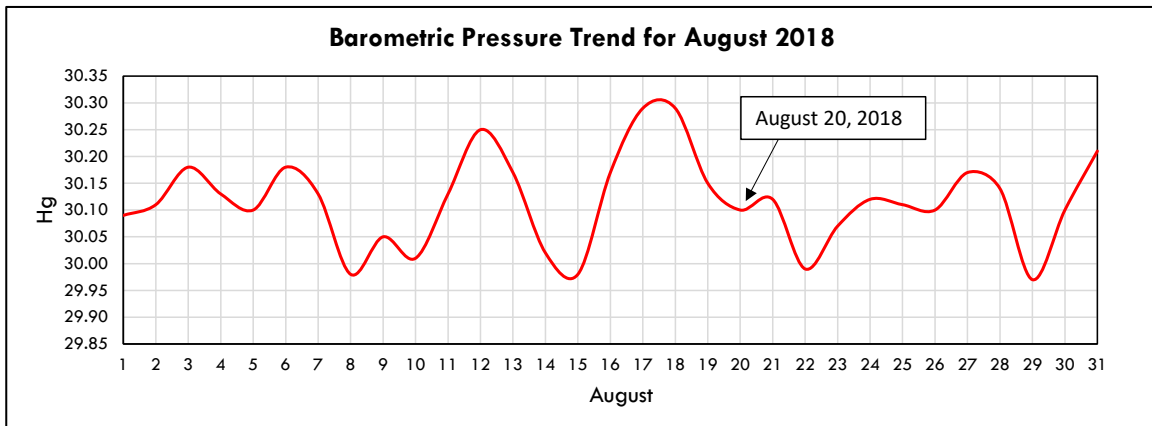
Barometric Pressure Trend for May 2018



Source: Oak Harbor, Washington

https://www.wunderground.com/history/airport/KNUW/2017/3/1/MonthlyHistory.html?req_city=Oak+Harbor&req_state=WA&req_statename=&reqdb.zip=98277&reqdb.magic=1&reqdb.wmo=99999

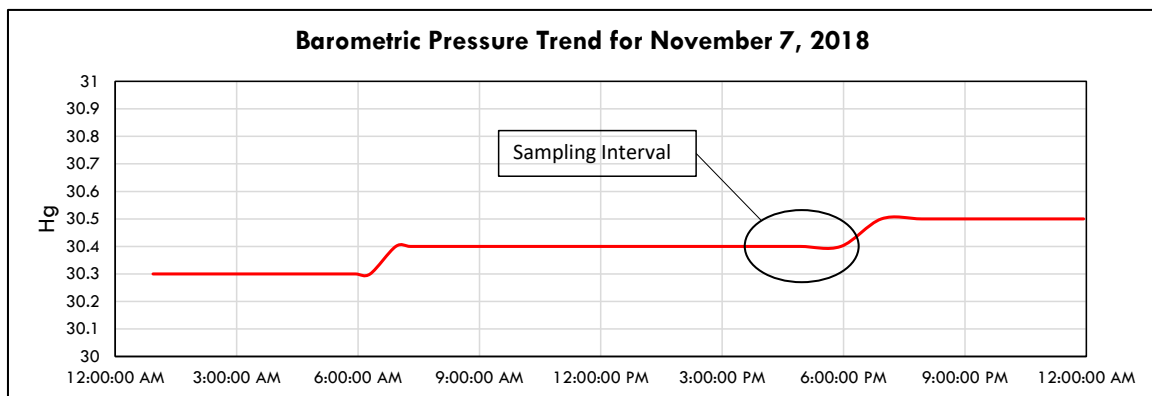
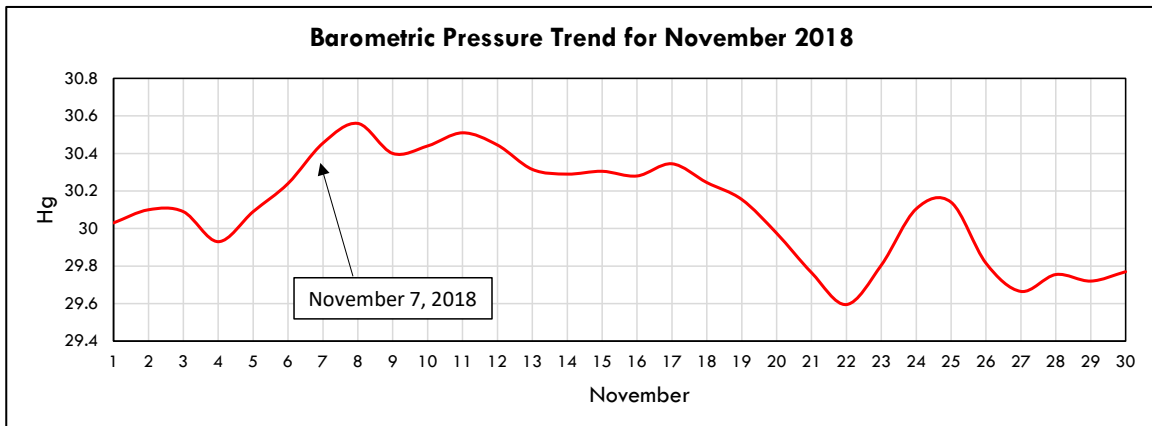
Figure D-3. Barometric Pressure Trends - August 2018
Third Quarter 2018 Data Review
Coupeville Solid Waste Facility, Island County, Washington



Source: Whidbey Island Naval Air Station
Lat: 48.35 Long: 122.66 Elev: 46 ft-AMSL

Data Sources: <https://www.wunderground.com/history/monthly/us/wa/whidbey-island/KNUW/date/2018-8>

Figure D-4. Barometric Pressure Trends - November 2018
Fourth Quarter 2018 Data Review
Coupeville Solid Waste Facility, Island County, Washington



Source: Island County - Sunset Vista Station
Lat: 47.59 Long: 122.62 Elev: 302 ft-AMSL

Data Source: <https://www.wunderground.com/history/monthly/us/wa/bremerton/KWABREME102/date/2018-12>