

EVALUATION MONITORING REPORT

July 2001 – April 2004

Everett Landfill

HWA Project No. 98165

Prepared for

City of Everett Public Works Department

December 14, 2004



HWA GEOSCIENCES INC.

- *Geotechnical Engineering*
- *Hydrogeology*
- *Geoenvironmental Services*
- *Inspection & Testing*



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Geotechnical Engineering • Hydrogeology • Geoenvironmental Services • Inspection & Testing

December 14, 2004

HWA Project No. 98165-500

City of Everett Public Works Department
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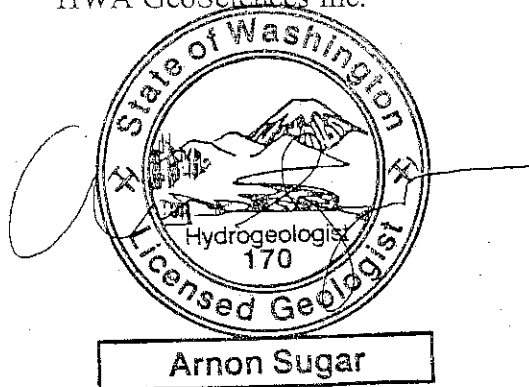
Subject: **EVALUATION MONITORING REPORT, JULY 2001 - APRIL 2004**
EVERETT LANDFILL
EVERETT, WASHINGTON

Dear Mark,

This report summarizes the findings of Evaluation Monitoring performed at the Everett Landfill by HWA GeoSciences, Inc. (HWA). This report also provides a rationale for Performance Monitoring, to be conducted over the next 10 years.

We appreciate the opportunity to provide our services. Please feel free to call me if you have any questions or need additional information.

Sincerely,
HWA GeoSciences Inc.



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**EVALUATION MONITORING REPORT
JULY 2001 - APRIL 2004
EVERETT LANDFILL
EVERETT, WASHINGTON**

1.0 INTRODUCTION

The Everett Landfill site is located west of and adjacent to the Snohomish River, south of 36th Street, in Everett, Washington. Figure 1 shows the site location. Historically the Everett Landfill has been used as a burn dump, a scrap metal recycling and burial yard, and a municipal landfill. The landfill was closed in 1974 in compliance with standards at the time. In 1977 a commercial recycling operation began storing and handling used rubber tires. Two separate fires occurred in 1983 and 1984 in the tire piles. The site was listed in 1989 under the Model Toxics Control Act (MTCA) due the presence of contaminants within the tire ash. Subsequent Interim Actions have occurred between 1995 and 1998 and included regrading of the site and installation of a leachate collection system, in order to minimize and control the generation of leachate from the site.

The *Everett Landfill/Tire Fire Site Clean Up Action Plan*, (CAP) which includes a *Compliance Monitoring and Contingency Plan* (CMCP), outlines monitoring requirements for the site (Floyd & Snider, 2000).

1.1 EVALUATION MONITORING

HWA conducted ten rounds of sampling in 24 ground water monitoring wells, two leachate lift station vaults and six surface sampling locations between July 5, 2001 and April 8, 2004. Sampling was performed quarterly for the first two years of the Evaluation Monitoring period, and then on a semi-annual basis for the third year. The *Everett Landfill/Tire Fire Site Ground Water Sampling and Analysis Plan* (SAP) dated September 6, 2001 describes the sampling and analytical methods used. Appendix A contains the SAP. A sampling report prepared by HWA was submitted to the City for each round of sampling; including a copy to be forwarded to Ecology. Reports summarizing surface water and landfill gas monitoring have been provided under separate cover.

Per the CMCP, the objective of Evaluation Monitoring was to collect data to establish baseline conditions for the shallow (leachate) and deep aquifers. Evaluation monitoring was also intended to support the selection of appropriate wells, analytes and cleanup

levels for long-term Performance and Confirmational Monitoring (Floyd & Snider, 2000). The Evaluation Monitoring period was designed to:

- Evaluate existing conditions at upgradient wells to determine area background concentrations and finalize cleanup levels
- Evaluate existing conditions at point of compliance wells
- Establish a statistically significant database to determine existing contaminant concentrations in each monitoring well
- Define groundwater gradients in the deep and shallow aquifer systems to select the best long-term groundwater monitoring well network

Figure 10 shows the location of the ground water monitoring wells sampled during the Evaluation Monitoring period. HWA submitted the samples to Analytical Resources, Inc. (ARI) for organic analyses, and the Everett Environmental Laboratory (EEL) for inorganic analyses, for the following parameters, as per the CMCP:

- Conventional parameters: nitrate, nitrite, chloride
- Dissolved metals: antimony, arsenic, cadmium, chromium (III), chromium (VI), chromium (sum of III+VI), copper, lead, nickel, selenium, zinc, iron, and manganese
- Pesticides: 4,4-DDD, 4,4-DDT, beta-hexachlorocyclohexane (beta-BHC)
- Polychlorinated biphenyls (PCBs): aroclor 1242, aroclor 1254
- Selected volatile organic compounds (see Table 4 for list)
- Selected semivolatile organic compounds (see Table 5 for list)

Compounds analyzed during the Evaluation Monitoring period were determined based on baseline sampling and analysis performed in 1999 and 2000. HWA also measured ground water levels and produced ground water gradient maps during each monitoring period.

2.0 GROUND WATER ANALYTICAL RESULTS

Copies of the laboratory reports and QA/QC analyses have been previously reported in the quarterly and semi-annual monitoring reports. Table 1 summarizes the analytical results over the entire Evaluation Monitoring Period. Tables 2 to 7 show the detailed results, with a comparison to site specific cleanup levels established in the CAP/CMCP (Floyd & Snider, 2000). Site specific cleanup levels were developed based on the most stringent of drinking water and surface (fresh and salt) water standards. Table 8 summarizes the ground water level data. Tables 9 and 10 summarize exceedances by analyte and by well, respectively. The effects of the Evaluation Monitoring results on the list of Contaminants of Concern (COCs) are discussed in Section 3.2.

Compounds measured at any wells exceeding site specific cleanup levels include:

- Aroclor 1242
- Benzene
- Beta-BHC
- Bis (2-Ethylhexyl) phthalate
- Chloride
- Chromium (VI)
- Ethylbenzene
- m,p-Xylene
- Nickel
- Nitrate
- N-Nitrosodiphenylamine
- o-Xylene
- Zinc

Wells in which any cleanup level exceedance was measured include:

<u>Well</u>	<u>Type</u>	<u>Proposed Status</u>
• MW-05	shallow, interior	to be abandoned
• MW-08	deep, interior	to be abandoned
• MW-11R	deep, network	continue monitoring
• MW-14	shallow, interior	to be abandoned
• MW-17	shallow, interior	to be abandoned
• MW-22	shallow, network	continue monitoring (water level only)
• MW-23	shallow, interior	to be abandoned
• MW-24	shallow, network	continue monitoring (water level only)
• MW-25	shallow, network	continue monitoring (water level only)
• MW-26	shallow, network	continue monitoring (water level only)
• MW-31	deep, network	continue monitoring
• MW-33	shallow, background	continue monitoring
• MW-34	shallow, background	continue monitoring (water level only)
• MW-39	deep, point of compliance	continue monitoring
• LEACH-N	leachate lift station	continue monitoring

The only exceedance of a cleanup level observed in any point of compliance wells (which include MW-36, MW-37, MW-38, and MW-39) during the evaluation monitoring period was bis(2-ethylhexyl)phthalate in MW-39, which was detected at 74 µg/L in the April 2003 sampling round, over the 10 µg/L cleanup level. MW-39 has had no other bis(2-ethylhexyl)phthalate cleanup level exceedances in the three year evaluation monitoring period, with the next highest concentration detected at 7.2 µg/L, and most (215 out of 258) of the shallow and deep well results below detection limits (see Table 5). Although a single cleanup level exceedance does not necessarily constitute a compliance exceedance per the MTCA (based on statistical evaluation), 74 µg/L is greater than twice the cleanup level of 10 µg/L, which is considered to constitute a cleanup level exceedance under MTCA, independent of any statistical evaluation of the rest of the data from that well.

Figure 2 shows bis(2-ethylhexyl)phthalate over time at all wells where detected above laboratory reporting limits. The exceedance in MW-39, as well as occurrences of elevated bis(2-ethylhexyl)phthalate concentrations in other wells (e.g., the isolated measurement of 320 µg/L in MW-31) appear to be singular events, with no observed trends over time. Elevated bis(2-ethylhexyl)phthalate concentrations in several wells were coincident on three sampling events (July 2001, January 2002, April 2003). The elevated concentrations were measured in different wells (shallow and deep) on each

event. These events may coincide with higher precipitation (see Figures 7 or 8), or may represent some anomaly in the sampling or analysis process. Bis(2-ethylhexyl)phthalate is a plasticizer that is found in many products, possibly including some materials used during environmental sampling. It is also a common landfill contaminant, due to the large variety and volume of plastic products in municipal solid waste.

The bis(2-ethylhexyl)phthalate detection in MW-39 does not trigger contingency planning per the CMCP. Contingency plan triggers based on cleanup level exceedances in deep aquifer point of compliance wells, as specified in the CMCP, include exceedance for four consecutive quarters, or statistically established exceedance for eight sampling events, during performance or confirmational monitoring.

2.1 TIME/CONCENTRATION PLOTS

Plots of time versus concentration for each contaminant exceeding the clean up level in three or more sampling events during the Evaluation Monitoring period in a well are shown in Figures 3 to 6, as specified in the CMCP. Clean up levels were exceeded three or more times in three wells (MW-5, MW-24 and MW-34), all of which are completed in the shallow (leachate) aquifer, and one of which is an upgradient background well. The clean up level for benzene and N-nitrosodiphenylamine was exceeded in MW-5. The nickel concentration in MW-24 exceeded the clean up level on three occasions, as did the nitrate concentration in MW-34 (an upgradient background well).

MW-34 Nitrate

Nitrate was detected in MW-34, a shallow background well located about 500 feet west of the landfill, in excess of the cleanup level (10 mg/L) three times during the evaluation monitoring period, and in MW-33 once (see Figure 3). The plot of nitrate concentration versus time did not show any significant long term trends, other than seasonal variation likely attributable to higher ground water or precipitation in the fall. MW-34 is a background well, installed in a shallow sand aquifer, upgradient of the landfill. MW-33 is the adjacent deep aquifer monitoring well. These wells are located within a mixed residential and commercial area. Other urban nitrogen sources are likely, such as sanitary sewer leaks or overuse of lawn fertilizers. The highest nitrate levels within the deep aquifer were encountered in the upgradient background wells MW-33 and MW-35, which are also located near residential or landscaped properties.

MW-5 Benzene

Benzene was detected in MW-5 in excess of the cleanup level (5 µg/L) three times during the evaluation monitoring period (see Figure 4). MW-5 is a shallow interior well, which is installed in waste, and indicates the levels of contaminants within the leachate. It is scheduled for abandonment and will not be sampled during the Performance Monitoring. The plot of benzene concentration versus time did not show any significant long term trends, other than a seasonal increase in concentration during two of the fall sampling rounds. Benzene has also been detected at concentrations below the clean up levels in six other shallow interior wells. Benzene was only detected once in a deep well (MW-11R), at a concentration below the clean up level.

MW-5 N-Nitrosodiphenylamine

N-Nitrosodiphenylamine was detected in MW-5 at, or above the clean up level of 10 µg/L in all ten sampling events (see Figure 5). It was detected in only one other well (MW-24), which is also a shallow interior well, at concentrations below the clean up level. MW 5 is proposed for abandonment; MW 24 is planned to be a piezometric monitoring well. N-nitrosodiphenylamine is an industrial chemical that was used in manufacturing rubber products, such as tires, prior to 1980. The plot of n-nitrosodiphenylamine versus time did not show any significant trends.

MW-24 Nickel

The nickel concentration in MW-24 exceeded the clean up level on four occasions (see Figure 4). MW-24 is a shallow network well, installed just outside the boundaries of waste (200-250 feet). The plot of nickel concentration versus time did not show any significant trends. Exceedances of nickel have been found in previous studies (HWA, 2004) throughout the interior of the landfill and in areas to the south of the landfill (HWA, 2003). The cleanup level for nickel (10 µg/L) established in the CMCP was based on the chronic toxicity clean up level for marine surface water (in the Snohomish River). For comparison, the MTCA Method B standard formula value cleanup level for nickel in ground water is 320 µg/L, and the EPA maximum contaminant level (MCL) for drinking water is 100 µg/L. The highest concentration measured during evaluation monitoring was 23.8 µg/L. The highest concentration measured within the landfill in the shallow zone during the Shallow Aquifer Characterization study was 55.8 µg/L (HWA, 2004).

2.2 BACKGROUND CLEANUP LEVELS

No cleanup levels for iron, manganese, or arsenic had been established for Evaluation Monitoring. These compounds were known to exist at elevated concentrations at and near the landfill, therefore the CMCP specified determination of area background concentrations after the evaluation monitoring period, for subsequent use as clean up levels during Performance Monitoring. Three up gradient wells (MW-33, MW-34, and MW-35) were installed with the aim of establishing area background concentrations.

2.2.1 Iron, Manganese

Review of the well logs, ground water quality data and additional investigations conducted during the Evaluation Monitoring period indicate that the deep background monitoring wells (MW-33 and MW-35), although thought to be hydraulically connected to the deep aquifer beneath the landfill, are installed in a different hydrogeologic formation than the deep aquifer wells within and down gradient of the landfill. The upgradient deep wells MW-33 and MW-35 are installed in dense glacial sand, overlain by a stiff silt layer (Transitional Beds). The deep monitoring wells within and down gradient of the landfill are installed in loose alluvial sand, overlain by soft alluvial silt and peat. In some locations wood waste and naturally occurring woody debris was also encountered above the loose sand. The presence of large amounts of naturally occurring organic material (peat and woody debris) and wood waste produces a low oxygen (anaerobic) environment with reducing conditions. This type of environment tends to mobilize metals, such as iron, manganese, and arsenic, which would otherwise remain insoluble. Reducing conditions, caused by the anaerobic decomposition of organic material, are also often encountered within and down gradient of landfills. In general, the shallow wells contain higher concentrations of iron and manganese than the deep aquifer wells, likely due to the presence of more organic material (peat, woody debris and landfill refuse) in the shallow aquifer (see Table 2).

The reducing conditions encountered within and down gradient of the Everett Landfill are encountered area-wide in the alluvial sediments east and south of the landfill. Analytical results from investigations at the Simpson Site (HWA, 2003 and ERM, 1993), given in Table 11, indicate that high iron and manganese concentrations are present throughout the low-lying areas adjacent to the Snohomish River. Concentrations of iron and manganese in some locations to the south (across gradient) of the landfill are higher than in the landfill and leachate collection system. Given the area-wide high concentrations of iron and manganese, the effects of the reducing conditions caused by the landfill are

difficult to distinguish from those caused by the wood waste fill and naturally occurring peat deposits throughout the area.

Iron and manganese concentrations in the upgradient background monitoring wells (MW-33, MW-34, and MW-35) are one to three orders of magnitude less than the concentrations measured in wells at and downgradient of the landfill. Calculation of area background values from the upgradient wells for use as cleanup levels would be inappropriate. There is insufficient existing data to establish meaningful area background values for iron and manganese at and near the landfill, due to the absence of suitable ground water monitoring locations in alluvial geology upgradient of the landfill, and a paucity of iron and manganese analytical data south (side-gradient) of the landfill at the Simpson Site.

The deep point of compliance wells MW-36, MW-37, MW-38, and MW-39 do not appear to be impacted by landfill leachate based on other analytical parameters, therefore these wells may be assumed to represent area background conditions for iron and manganese in this area. Using this assumption it would be impossible to determine past or current impacts from the landfill to the deep aquifer at these wells, although area background values for the point of compliance wells could be used to evaluate future impacts.

Statistical calculation of area background values per Ecology guidance (Ecology, 1992) for all of the point of compliance wells was hampered by non-standard distributions and high coefficients of variation in the iron and manganese sample populations. High variability of iron and manganese concentrations among point of compliance wells suggests some localized redox conditions across the downgradient edge of the landfill, therefore impacts from the landfill can not be ruled out. A summary of point of compliance well iron and manganese concentrations, including statistical calculation of area background values for each well, is shown below:

**Point of Compliance Wells
Iron & Manganese Concentrations (µg/l)**

	MW-36		MW-37		MW-38		MW-39	
	Fe	Mn	Fe	Mn	Fe	Mn	Fe	Mn
Minimum	12,067	543	16,182	598	1,560	219	420	206
Maximum	24,681	778	26,800	724	4,200	384	3,730	430
Average (mean)	16,250	684	23,054	667	3,369	278	2,197	346
Background value*	24,681 M	778 M	26,727	727	4,200 M	384 M	3,209	430 M

* - Based on upper 90th percentile for lognormal populations, and upper 80th percentile for normally distributed populations

M - Nonparametric distribution, use highest concentration as background value

In general, it appears iron and manganese may not be reliable indicators of landfill impacts to ground water in this vicinity, due to elevated and variable area background conditions, and the landfill's unique geologic position (occupying the entire width of alluvial valley between the river and glacial uplands). HWA recommends continued monitoring for these parameters, but no cleanup level or compliance criteria established at this time.

Additional monitoring wells representing area background conditions will be sampled for iron, manganese and arsenic during performance monitoring, with establishment of background-based cleanup levels deferred until sufficient data is gathered. Typically, at least eight rounds of sampling are required to obtain a statistically significant sample size.

Future (Performance Monitoring) analytical results will be also evaluated with respect to the Evaluation Monitoring results, with particular attention to changes or trends over time at each well. Any observed trends over time will be correlated to precipitation or ground water levels to account for potential confounding variables. Control charts may also be used for appropriate sample populations.

Iron and manganese data for the point of compliance wells did not generally exhibit significant trends over the Evaluation Monitoring period. Using the *Statistical Guidance for Ecology Site Managers* (Ecology 1992), only one of the four point of compliance wells (MW-39) displayed a slope (of concentration vs. time) significantly different from zero for iron, and one well (MW-36) for manganese. Both cases were apparent increases over time, but the apparent increase of different compounds in different wells suggests there is no real trend.

2.2.2 Arsenic

Arsenic has been detected in three interior wells, seven network wells, three compliance wells, and the two leachate lift station vaults, at concentrations ranging from 3 to 16 µg/L. Laboratory detection limits have varied from 2 to 6 µg/L, due to analytical method and instrument performance variation over time. Arsenic detection limits have decreased over the three year evaluation monitoring period, reflecting improvements in analytical methods. Elevated arsenic concentrations (above 6 µg/L, the highest detection limit used), have been limited to the easternmost wells (MW-24, MW-28, MW-30, MW-32, MW-36, MW-37, and MW-39), which include the point of compliance wells (MW-36, MW-37, and MW-39) in which arsenic has been detected at concentrations up to 15 µg/L. Elevated arsenic concentrations (above 6 µg/L) have not been detected in the leachate lift station vaults, suggesting its occurrence other wells is the result of mobilization from soils / increased solubility due to reducing conditions in ground water. In two shallow/deep monitoring well pairs, arsenic concentrations were generally higher in the deep well than in the shallow well (MW27/MW-28 and MW-25/MW-30), suggesting a source (including reducing conditions) not associated with the landfill. Arsenic was not detected in any of the upgradient background wells (MW-33, MW-34, and MW-35).

Arsenic Concentrations Shallow/Deep Monitoring Well Pairs

shallow wells	arsenic (µg/L)	deep wells	arsenic (µg/L)
MW-27	ND*	MW-28	10 detects, 7-13
MW-26	ND*	MW-29	ND*
MW-25	ND*	MW-30	8 detects, 8-11
MW-24	5 detects, 5-11	MW-31	ND*

ND - No arsenic detected above laboratory reporting limits, which ranged for 2 to 6 µg/L

These arsenic concentrations are consistent with concentrations found at other locations during investigations at the adjacent Simpson Site (HWA, 2003 and ERM, 1993). Arsenic was detected in ground water at the Simpson site at concentrations up to 31 µg/L in the HWA study; and at concentrations up to 15 µg/L in the ERM study, after which an Ecology No Further Action letter was issued (Ecology, 1994).

The site is in the floodplain of the Snohomish River. Ecology has documented elevated concentrations of arsenic in Washington rivers and sediments as the basis for the state to recommend delisting of certain 303(d) listed rivers for arsenic, including the Snohomish (Ecology, 2002). The widely spaced occurrence of arsenic in ground water near the river, Simpson Site, and eastern portions of the landfill, along with the absence of a detected soil source or arsenic in the leachate lift stations, suggest the arsenic results may be associated with an area-wide condition relating to the Snohomish River and adjacent historical land uses (e.g., emplaced river dredge spoils fill) or natural processes (e.g., floodplain deposits, river / ground water mixing), as well as increased mobilization of arsenic from soils due to reducing conditions, as described in Section 2.2.1.

As with iron and manganese, there is insufficient data to establish a reliable area background concentration for arsenic in the deep aquifer. HWA recommends continued monitoring for arsenic, but not establishing a cleanup level or compliance criterion at this time. Future analytical results will be evaluated with respect to the Evaluation Monitoring period results, with particular attention to changes or trends over time. Additional monitoring wells representing area background conditions will be sampled, as described in Section 2.2.1, with establishment of background-based cleanup levels deferred until sufficient data is gathered.

2.2.3 Nitrate

As detailed in Section 3.1, nitrate was detected in shallow and deep upgradient background wells (MW-33, MW-34) at concentrations exceeding the cleanup level of 10 µg/L. For the same reasons these wells may not adequately represent area background conditions for iron, manganese, and arsenic, we do not recommend raising the cleanup level for nitrate in the downgradient point of compliance wells.

2.3 CONTAMINANTS OF CONCERN

The results of the Evaluation Monitoring were used to refine the list of analytes for the subsequent Performance Monitoring to those compounds that are identified as compounds of concern (COCs) per the CMCP. Compounds that were not detected in any deep wells more than once were considered insignificant and excluded from the list of potential Performance Monitoring analytes. The results for the remaining compounds were statistically analyzed to determine if they met the criteria for a COC. A COC is defined in the CMCP (Floyd & Snider, 2000), as a remaining compound detected more than once in a shallow or deep well during the Evaluation Monitoring period where:

- A. The average concentration at any well exceeded the cleanup levels,
- B. A single detected concentration of the compound exceeded the cleanup levels by a factor of 2, or
- C. Two or more single detections of the compound at a well exceeded the cleanup level.

The statistical methods used to calculate the average concentrations of selected sample groups (with enough detections to analyze) consisted of determining the sample distribution type, and calculating the 95% upper confidence limit (UCL) of the mean, as per the Ecology *Statistical Guidance for Ecology Site Managers* (Ecology, 1992). The following sections summarize the COCs and selection criteria. Table 1 summarizes the COCs and selection criteria in tabular form.

2.3.1 Metals

Based on less than two detections in each deep well, the metals antimony, chromium (III), and lead were eliminated from the potential COC list. Following application of the three above-listed criteria (e.g., maximum and average concentrations), cadmium, chromium (VI), chromium (III+VI), copper, and selenium were also eliminated. Many of the chromium (VI) results have had raised laboratory detection limits (above the cleanup level in some cases) or have been "F" flagged by the laboratory as subject to interference by iron, where chromium (III+VI) results for the same sample are below detection limits. The colorimetric method used to detect chromium (VI) is generally unreliable in samples with high iron concentrations or color. No commercially viable alternative analytical methods are currently available. No exceedances of the chromium (VI) cleanup level have been detected in the more reliable chromium (III+VI) analyses, confirming that chromium (VI) is not a COC. The metals nickel and zinc are considered COCs based on meeting one or more of the COC criteria. Iron, manganese, and arsenic are also recommended COCs as discussed in Section 3.2.

2.3.2 Conventional Analytes

Nitrite was eliminated as being considered a COC based on results not meeting any of the three criteria. Nitrate would be considered a COC due to two exceedances in one well, and the average value in a well exceeding the cleanup level, however the exceedances are all in the upgradient background wells (see Section 2.1). Nitrate is therefore not recommended as a COC.

Chloride is considered a COC due to detections exceeding the clean up level by a factor of two, and the average value in a well exceeding the cleanup level.

2.3.3 VOCs

All VOCs, except acetone and cis-1,2-dichloroethene, were eliminated as COCs based on less than two detections in any deep wells. Chloromethane, cis-1,2-dichloroethene, and acetone were eliminated based on results not meeting any of the three COC criteria. Many of the acetone, chloromethane, and 2-butanone detections were "B" flagged by the laboratory as subject to likely laboratory contamination, where the analyte was detected in a blank sample. Qualified laboratory data, including "B" flagged values, were not included in the COC evaluation.

2.3.4 SVOCs

All SVOCs, except bis(2-ethylhexyl)phthalate and diethylphthalate, were eliminated as COCs based on less than two detections in any deep wells. Diethylphthalate was eliminated based on results not meeting any of the three COC criteria.

Bis(2-Ethylhexyl)phthalate is considered a COC, as the cleanup level was exceeded by at least a factor of two on seven occasions, and multiple times in the same well.

2.3.5 TPH Constituents

No TPH-constituent VOCs or SVOCs were detected in any of the deep wells and can be dropped from the list of COCs.

2.3.6 Pesticides and PCBs

No pesticides or PCBs were detected in any of the deep wells and can be dropped from the list of COCs.

2.3.7 COC Summary

The list of recommended COCs for Performance Monitoring includes:

- Metals: nickel, zinc, iron, manganese, arsenic
- Conventional Analytes: chloride
- SVOCs: bis(2-ethylhexyl)phthalate

2.4 STATISTICAL METHODS

As stated in Section 2.3, the statistical parameter used to calculate the average concentrations of selected sample groups for determination of COCs was the 95% UCL of the mean, as per the *Ecology Statistical Guidance for Ecology Site Managers* (Ecology, 1992). Background values were evaluated using the upper 90th percentile for lognormal populations, and the upper 80th percentile for normally distributed populations, although no background values were established, as discussed in Section 2.2.1. Time trends for selected compounds and wells were also evaluated using variance (ANOVA) analysis per the Ecology guidance (Sections 2.1, 2.2.1). Due to the presence of only one numerical compliance exceedance (Section 3.0), no other statistical evaluations of Evaluation Monitoring Data were performed. Determination of specific statistical methodologies to establish compliance during Performance Monitoring should be deferred until needed, based on the sample population distribution characteristics (e.g., normal, lognormal, variance, etc.), although methods used will be in accordance with the Ecology Guidance (Ecology, 1992).

2.5 PERFORMANCE MONITORING

The objective of Performance Monitoring is to evaluate the effectiveness of site remedial actions, detect deep aquifer migration of site contaminants towards surface water, assess the potential impact of pile installation on the deep aquifer, and establish the site's regulatory compliance with respect to surface water quality protection. Shallow aquifer Performance Monitoring may consist only of water level monitoring of shallow wells and leachate trench water to demonstrate that hydraulic gradients are toward the leachate collection system (Floyd & Snider, 2000).

Performance monitoring will be conducted semi-annually for a minimum of ten years. The ten-year minimum Performance Monitoring period will be reset or reinstated after the first significant pile installation activity occurs on the site, and after any additional pile installation activities in a zone identified for pile restrictions (Floyd & Snider, 2000).

All phases of Performance Monitoring will occur semi-annually during periods of seasonal high and low groundwater levels (January-April and July-October). The recommended wells for semi annual Performance Monitoring include:

- Six deep aquifer network wells: MW-11R, MW-21, MW-28, MW-29, MW-30, MW-31
- Four deep point of compliance wells: MW-36, MW-37, MW-38, MW-39
- Two deep background wells: MW-33, MW-35

MW-21 may need to be abandoned and replaced with a new well at a nearby location due to planned railroad track relocation.

Ground water elevations will be measured in the above-listed wells, all shallow monitoring wells and leachate lift station vaults, including:

- Five remaining shallow network wells: MW-22, MW-24, MW-25, MW-26, MW-27
- One shallow background well: MW-34
- LEACH-N (north leachate lift station vault), and LEACH-S (south leachate vault)

Six interior shallow wells MW-5, MW-8, MW-14, MW-17R2, MW-23, and MW-32 will be properly abandoned according to Chapter 173-160 WAC.

3.0 SITE HYDROGEOLOGY

Previous studies indicate a shallow water-bearing zone, perched on a silty peat aquitard that is present under the eastern two-thirds of the landfill site. The shallow leachate aquifer flows to the east through the waste and is intercepted by the leachate collection system along the eastern boundary of the site. A deeper aquifer flows under the entire site through the dense glacial soils. The deep aquifer discharges east to the Snohomish River. The HWA Shallow Aquifer Characterization study (HWA, 2004) discusses site geology in greater detail.

Table 8 includes the ground water level measurements and elevations. Water levels in the Snohomish River and drainage ditches adjacent to the landfill were not measured during the Evaluation Monitoring sampling events based on the results of previous studies which examined the relationships between surface water and ground water, using continuously recorded pressure transducer data. Spot measurements of surface water levels would be difficult to interpret, due to short term tidal and precipitation effects. River stage is continuously monitored and recorded at the Everett wastewater treatment plant. This data is available, and was used in the previous HWA studies. Similarly, water levels in the leachate lift station vaults were not measured during the sampling events. Pumps in the leachate vaults are operated by float switches, causing rapid water level variations of up to two feet.

Figures 7 and 8 show shallow and deep ground water elevations over time, along with monthly precipitation data. The ground water gradient in the shallow aquifer was measured at over 30 temporary well points in February 2003, as part of the Shallow Aquifer Characterization study (HWA, 2004), and is shown in Figure 9. A representative ground water elevation contour map for the deep aquifer in January 2003 is shown in Figure 10.

The deep aquifer wells located near the Snohomish River are tidally influenced, and can exhibit diurnal water level fluctuations of up to ten feet. The strongest tidal influence observed in a previous study (HWA, 2000a) was in the deep wells closest to the river (MW-30 and MW-31). This relationship likely holds for the newer deep wells near the river (MW-36, MW-37, and MW-38). For this reason, manually measured water levels in these wells may not be reliable, and may account for irregularities in inferred gradients or seasonal trends (Figures 8 and 10).

3.1 HORIZONTAL GRADIENTS

The ground water gradient in the deep aquifer was relatively constant throughout the Evaluation Monitoring period, with the gradient averaging 0.015 ft/ft to the east. The ground water gradient in the shallow aquifer had a similar gradient direction and magnitude, with ground water levels five to ten feet above the deep aquifer potentiometric surface in most areas.

3.2 VERTICAL GRADIENTS

As described above, ground water elevations in the shallow aquifer are generally higher than in the deep aquifer. Elevations in the shallow aquifer were generally lower than in the deep aquifer (upward potential gradient) inside the landfill (MW-17 / MW-32) and higher than in the deep aquifer (downward potential gradient) in most of the well pairs along the eastern boundary of the landfill and in the upgradient background wells. Actual vertical flow is likely very minimal, due to the low permeability aquitard and transitional beds separating the two systems over much of the landfill, and natural horizontal:vertical anisotropy in layered sediments (typically on the order of 10:1).

3.3 SEASONAL VARIATION

Ground water elevations in the deep aquifer exhibited seasonal variation (Figure 8), with higher elevations in the winter, and lower elevations in late summer. These trends were more pronounced in the monitoring wells located along the eastern boundary of the landfill. The compliance wells MW-36, MW-37, and MW-39 exhibited some deviation from this trend. This could be due to tidal influences, or seasonal variations in river level. The background wells (MW-33 and MW-35) and upgradient well (MW-21) did not show as great a fluctuation in levels as the other deep aquifer wells. Ground water elevations in most of the shallow aquifer wells (Figure 7) exhibited similar seasonal variation.

3.4 LEACHATE TRENCH EFFECTIVENESS

The leachate collection trench lift stations operate at elevations of zero to three feet, which is three to 15 feet lower than ground water elevations measured in the shallow aquifer during the Evaluation Monitoring period (Figure 7). HWA performed a study to evaluate the effectiveness of the leachate collection trench in 2000 (HWA, 2000b). The results of this study demonstrated hydraulic control of the shallow aquifer by the leachate

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collection system. Pumping of the leachate collection trench prevents the movement of shallow ground water from beneath the landfill toward surface water to the east. Some shallow ground water to the east of the trench is also drawn into the leachate collection system.

4.0 REFERENCES

- ERM-Northwest, Inc., February 1993. *Phase I and II Environmental Site Investigation, Everett Simpson Site, Everett Washington, Volume I and Volume III*, Prepared for Washington Department of Ecology on behalf of City of Everett Public Works Department and Simpson Paper Company.
- Floyd & Snider, Inc., November 20, 2000. *Cleanup Action Plan, including Compliance Monitoring and Contingency Plan, Everett Landfill/Tire Fire Site*, Prepared for the City of Everett.
- HWA GeoSciences, Inc., January 31, 2000a, *Hydraulic Gradient Analysis, Everett Landfill, Everett, Washington*, Prepared for City of Everett. Included as Appendix R of Floyd & Snider, Inc., November 20, 2000 *Brownfield Feasibility Study, Everett Landfill and Tire Fire Site, Everett, Washington*.
- HWA GeoSciences, Inc., September 14, 2000b, *Leachate Collection System Hydraulic Analysis, Everett Landfill and Tire Fire Site, Everett, Washington*, Prepared for City of Everett. Included as Appendix S of Floyd & Snider, Inc, November 20, 2000 *Brownfield Feasibility Study, Everett Landfill and Tire Fire Site, Everett, Washington*.
- HWA GeoSciences, Inc., unpublished, 2004, *Shallow Aquifer Characterization Study, Everett Landfill and Tire Fire Site, Everett, Washington*, Prepared for City of Everett.
- HWA GeoSciences, Inc., August 22, 2003, *Brownfields Riverfront Stormwater Site Selection Study, Simpson Site, Everett, Washington*, Prepared for City of Everett.
- Washington State Department of Ecology, December 5, 1994. *Everett Simpson Site Main Parcel No Further Action Letter*.
- Washington State Department of Ecology Toxics Cleanup Program, 1992, *Statistical Guidance for Ecology Site Managers (& MTCASat 3.0 Software, revised 1997)*, Publication 92-54, August, 1992.
- Washington State Department of Ecology, October 2002. *Results and Recommendations from Monitoring Arsenic Levels in 303(d) Listed Rivers in Washington*, Publication No. 02-03-045.

TABLE 1
EVALUATION MONITORING RESULTS SUMMARY
COC DETERMINATION OF
COMPOUNDS DETECTED MORE THAN ONCE IN DEEP WELLS
(all values in µg/L)

Analyte	Clean Up Levels	Deep Wells Detects	Total Exceeds	Max. Concs	Max UCL	COC Criteria			COC
						A	B	C	
Metals									
Arsenic	BKGD	44	N/A	16	15.12	N/A	N/A	N/A	Yes
Cadmium	5	2	0	0.3	0.3	No	No	No	No
Chromium (III+VI)	50	3	0	6	6	No	No	No	No
Chromium (VI)	11	6	0	7	7	No	No	No	No
Copper	10	5	0	10	9.04	No	No	No	No
Iron	BKGD	119	N/A	102260	N/A	N/A	N/A	N/A	Yes
Nickel	10	23	0	23.8	16.7	Yes	Yes	Yes	Yes
Manganese	BKGD	129	N/A	2590	N/A	N/A	N/A	N/A	Yes
Selenium	20	4	0	8	8	No	No	No	No
Zinc	76.6	16	1	463	224.1	Yes	Yes	No	Yes
Conventionals									
Chloride	230	all	1	492	574.8	Yes	Yes	No	Yes
Nitrate	10	105	3	12.7	56.6	Yes	No	Yes	Yes
Nitrate (w/o BKGD)	10	84	0	4.25	3.82	No	No	No	No
Nitrite	1	77	0	0.154	0.147	No	No	No	No
VOCs									
Acetone	800	8	0	110	615	No	No	No	No
cis-1,2-Dichloroethene	70	4	0	1.7	1.7	No	No	No	No
SVOCs									
bis (2-Ethylhexyl) phthalate	10	17	3	320	N/A	N/A	Yes	Yes	Yes
Diethylphthalate	12800	6	0	150	150	No	No	No	No

A - Average concentration in any well exceeds the cleanup level

B - single concentration exceeds twice the cleanup level

C - Two or more cleanup level exceedances in one well

COC - Contaminants of Concern

UCL - 95% upper confidence limit of the mean

BKGD = background

N/A - Not calculated to due no established background concentration or other criteria already met

Table 2
Dissolved Metals Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Dissolved metals												
			Antimony	Arsenic	Cadmium	Chrom+3	Chrom+6	Chrom3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Sample Location	Sample Type	Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
		C.L.	30	BKG	5	16000	11	50	10	BKG	10	BKG	10	20	76.6
MW-05	S, INT	7/9/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	46782	1 U	1284	5 U	2 U	8 U
MW-05		10/5/2001	2 U	6 U	0.4 U	6 U	6 U	6 U	2 U	35505	2 U	1009	2 U	2 U	8 U
MW-05		1/24/2002	2 U	6 U	0.2 U	6 U	7 F	6 U	2 U	57968	1 U	1295	3.26	2 U	10.3
MW-05		4/16/2002	2 U	6 U	0.2 U	6 U	15 Y	6 U	2 U	59133	1 U	1234	4 U	2 U	8 U
MW-05		7/10/2002	2 U	4 U	0.2 U	12 Y	12 Y	6 U	2 U	38600	2 U	1410	4 U	2 U	8 U
MW-05		10/14/2002	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	61300	2 U	1520	4 U	2 U	8 U
MW-05		1/17/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	57600	2 U	1170	4 U	2 U	8 U
MW-05		4/28/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	55300	2 U	1070	4 U	2 U	8 U
MW-05		10/10/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	57900	2 U	1270	4 U	2 U	8 U
MW-05	4/7/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	61200	1 U	1310	2 U	1 U	8 U	
MW-08	INT	7/9/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	440	1 U	142	5 U	2 U	8 U
MW-08		10/5/2001	2 U	6 U	0.4 U	6 U	2	6 U	2 U	14 U	2 U	18	2 U	2 U	8 U
MW-08		1/24/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	634	1 U	135	2 U	2 U	8 U
MW-08		4/16/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	765	1 U	134	4 U	2 U	8 U
MW-08		7/10/2002	2 U	4	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	6	4 U	2 U	8 U
MW-08		10/11/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	638	2 U	126	4 U	2 U	8 U
MW-08		1/17/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	742	2 U	131	4 U	2 U	8 U
MW-08		4/25/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	388	2 U	116	4 U	2 U	8 U
MW-08		10/10/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	526	2 U	126	4 U	2 U	8 U
MW-08	4/9/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	467	1 U	140	2 U	1 U	8 U	
MW-11R	NET	7/9/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	9223	1 U	1430	5 U	2 U	8 U
MW-11R		10/3/2001	2 U	6 U	0.4 U	6 U	2	6 U	2 U	7945	2 U	1553	2 U	2 U	8 U
MW-11R		1/18/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	9439	1 U	1910	2 U	2 U	10.5
MW-11R		4/10/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	8742	1 U	2025	4 U	2 U	8 U
MW-11R		7/11/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	32	2 U	440	4 U	2 U	8 U
MW-11R		10/9/2002	2 U	4	0.2 U	6 U	6 U	6 U	2 U	12400	2 U	2210	4 U	2 U	8 U
MW-11R		1/13/2003	2 U	4 U	0.2 U	12 Y	12 Y	6 U	2 U	3970	2 U	97	4.6	2 U	8
MW-11R		4/23/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	11000	2 U	1810	4 U	2 U	8 U
MW-11R		10/9/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	12800	2 U	1860	4 U	2 U	8 U
MW-11R	4/6/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	10200	1 U	1260	2 U	1 U	8 U	
MW-14	S, INT	7/9/2001	2 U	6 U	0.2 U	50 U	50 Y	6 U	2 U	36395	1 U	987	5 U	2 U	8 U
MW-14		10/5/2001	2 U	6 U	0.4 U	6 U	15 Y	6 U	2 U	25122	2 U	799	3.4	2 U	8 U
MW-14		1/24/2002	2 U	6 U	0.2 U	6 U	2 F	6 U	2 U	43339	1 U	1088	5.56	2 U	8 U
MW-14		4/16/2002	2 U	6 U	0.2 U	6 U	12 Y	6 U	2 U	37562	1 U	940	4.86	2 U	8 U
MW-14		7/10/2002	2 U	4 U	0.2 U	30 Y	30 Y	6 U	2 U	36900	2 U	1010	4.7	2 U	8 U
MW-14		10/14/2002	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	36500	2 U	985	4.7	2 U	8 U
MW-14		1/21/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	44900	2 U	1210	4 U	2 U	8 U
MW-14		4/28/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	39100	2 U	928	6.5	2 U	8 U
MW-14		10/10/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	35100	2 U	984	5.6	2 U	8 U
MW-14	4/9/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	38400	1 U	1040	5.9	1 U	8 U	
MW-17	S, INT	7/3/2001	2 U	6 U	0.2 U	6 U	10 U	6 U	0.5 U	1108	2 U	62	5 U	2 U	8 U
MW-17		10/2/2001	2 U	6 U	0.4 U	6 U	3	6 U	2 U	336	2 U	20	2 U	2 U	8 U
MW-17		1/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/16/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		7/10/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		10/14/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		1/21/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/25/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	34500	2 U	950	9.8	2 U	8 U
MW-17		10/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	20500	2 U	300	4 U	2 U	8 U
MW-17	4/7/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	36100	1 U	476	5.3	1 U	8 U	

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Everett Landfill**

Chemical Name			Dissolved metals												
			Antimony	Arsenic	Cadmium	Chrom+3	Chrom+6	Chrom+3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Sample Location	Sample Type	Date	Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			30	BKG	5	16000	11	50	10	BKG	10	BKG	10	20	76.6
MW-21	NET	7/3/2001	2 U	6 U	0.2 U	6 U	10 U	6 U	2 U	15	2 U	234	5 U	2 U	8 U
MW-21		10/2/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	25	2 U	147	7.8	2 U	8 U
MW-21		1/18/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	49	1 U	199	9.06	2 U	8 U
MW-21		4/9/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	37	1 U	222	8.82	2 U	8 U
MW-21		7/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	17	2 U	166	7.6	2 U	8 U
MW-21		10/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	15	2 U	241	8.2	2 U	8 U
MW-21		1/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	22	2 U	205	8.3	2 U	8 U
MW-21		4/22/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	25	2 U	159	8.4	2 U	8 U
MW-21		10/9/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	17	2 U	245	9.1	2 U	8 U
MW-21		4/5/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	36	1 U	293	9.9	1 U	8 U
MW-22	S, NET	7/3/2001	2 U	6 U	0.2 U	6 U	10 U	6 U	2 U	14 U	2 U	1325	5 U	2 U	8 U
MW-22		10/2/2001	2 U	6 U	0.4 U	6 U	6 U	6 U	2 U	14 U	2 U	882	2 U	2 U	8 U
MW-22		1/18/2002	2 U	6 U	0.2 U	6 U	6 U	2 U	6 U	14 U	1 U	1342	2.86	2 U	8 U
MW-22		4/10/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	14 U	1 U	1295	4 U	2 U	8 U
MW-22		7/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1320	4 U	2 U	8 U
MW-22		10/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1280	4 U	2 U	8 U
MW-22		1/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1300	4 U	2 U	8 U
MW-22		4/22/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1310	4 U	2 U	8 U
MW-22		10/9/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1410	4 U	2 U	8 U
MW-22		4/7/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	14 U	1 U	1500	2 U	1 U	8 U
MW-23	S, INT	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	1119	2 U	15	5 U	2 U	8 U
MW-23		10/5/2001	2 U	6 U	0.4 U	6 U	6 U	6 U	2 U	370	2 U	5	3.2	2 U	8 U
MW-23		1/22/2002	2 U	6 U	0.2 U	6 U	13 F	6 U	2 U	11242	1 U	142	3.7	2 U	8 U
MW-23		4/11/2002	2 U	6 U	0.2 U	6 U	12 Y	6 U	2 U	7992	1 U	77	4 U	2 U	8 U
MW-23D		4/11/2002	2 U	6 U	0.2 U	6 U	14 Y	6 U	2 U	7810	1 U	76	4 U	2 U	8 U
MW-23		7/11/2002	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	911	2 U	9	4 U	2 U	8 U
MW-23		10/10/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	639	2 U	8	4.2	2 U	8 U
MW-23		1/13/2003	2 U	6 U	0.2 U	60 U	60 Y	6 U	2 U	93600	2 U	2590	7.1	2 U	8 U
MW-23		4/28/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	10360	2 U	94	4 U	2 U	8 U
MW-23		10/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	514	2 U	21	4 U	2 U	8 U
MW-23		4/9/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	604	1 U	25	3.5	1 U	8 U
MW-24	S, NET	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	69384	2 U	2314	5 U	2 U	8 U
MW-24		10/3/2001	2 U	6 U	0.4 U	6 U	15 Y	6 U	2 U	44325	2 U	1871	4	2 U	8 U
MW-24		1/22/2002	2 U	6 U	0.2 U	6 U	26 F	6 U	2 U	90231	1 U	2101	9.55	2 U	8 U
MW-24		4/11/2002	2 U	6 U	0.2 U	6 U	30 Y	6 U	2 U	102260	1 U	2522	11.26	2 U	8 U
MW-24		7/11/2002	2 U	8	0.2 U	60 U	60 Y	6 U	2 U	77500	2 U	2000	10.5	2 U	8 U
MW-24		10/10/2002	2 U	8	0.2 U	24 U	24 Y	6 U	2 U	83866	2 U	2170	4.6	2 U	8 U
MW-24		1/13/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	11700	2 U	2030	4 U	2 U	8 U
MW-24		4/29/2003	2 U	5	0.2 U	6 U	6 U	6 U	2 U	73300	2 U	1910	4.7	2 U	8 U
MW-24		10/15/2003	2 U	1	0.2 U	6 U	6 U	6 U	2 U	63100	2 U	1630	23.8	2 U	10
MW-24		4/8/2004	1 U	7	0.2 U	6 U	6 U	6 U	1 U	80600	1 U	1600	12.3	1 U	8 U
MW-25	S, NET	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	32738	2 U	1377	5 U	2 U	51.1
MW-25		10/3/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	10324	2 U	780	2 U	2 U	9
MW-25		1/25/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	1 U	604	1 U	751	5.9	2 U	71.2
MW-25		4/12/2002	2 U	6 U	0.2 U	6 U	15 Y	6 U	3.48	30688	1 U	1407	6.98	2 U	39.3
MW-25		7/10/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	4	17500	2 U	849	4 U	2 U	42
MW-25		10/10/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	12600	2 U	867	4 U	2 U	21
MW-25		1/16/2003	2 U	4 U	0.2	30 U	30 Y	6 U	10	10300	2 U	1010	7.7	2 U	368
MW-25		4/29/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	5	32200	2 U	1270	7.3	2 U	41
MW-25		10/13/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	16100	2 U	1130	4 U	2 U	38
MW-25		4/8/2004	1 U	3	0.2 U	6 U	6 U	6 U	1 U	40200	1 U	1410	7.9	1 U	8 U

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Everett Landfill

Chemical Name			Dissolved metals												
			Antimony	Arsenic	Cadmium	Chrom+3	Chrom+6	Chrom+3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Sample Location	Sample Type	Date	Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			C.L.	30	BKG	5	16000	11	50	10	BKG	10	BKG	10	20
MW-26	S, NET	7/9/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	8052	1 U	374	5 U	2 U	8 U
MW-26		10/3/2001	2 U	6 U	0.4 U	6 U	5	6 U	2 U	7585	2 U	336	2 U	2 U	8 U
MW-26		1/24/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	39837	1 U	1520	4.14	2 U	8 U
MW-26		4/15/2002	2 U	6 U	0.2 U	6 U	12 Y	6 U	2 U	19467	1 U	701	4 U	2 U	8 U
MW-26		7/10/2002	2 U	4 U	0.2 U	6 U	7	6 U	2 U	10200	2 U	439	4 U	2 U	8 U
MW-26		10/10/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	5500	2 U	607	4 U	2 U	8 U
MW-26		1/17/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	14900	2 U	633	4 U	2 U	8 U
MW-26D		1/17/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	14900	2 U	634	4 U	2 U	8 U
MW-26		4/29/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	36900	2 U	1200	4 U	2 U	8 U
MW-26		10/13/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14000	2 U	725	4 U	2 U	8 U
MW-26		4/9/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	9620	1 U	462	2 U	1 U	8 U
MW-27	S, NET	7/6/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	3843	2 U	229	5 U	2 U	8 U
MW-27		10/5/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	51	2 U	38	2 U	2 U	14
MW-27		1/23/2002	2 U	6 U	0.2 U	6 U	6 F	6 U	2 U	30669	1 U	1226	4.42	2 U	8 U
MW-27		4/15/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	8850	1 U	408	4 U	2 U	8 U
MW-27		7/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	5030	2 U	199	4 U	2 U	8 U
MW-27		10/14/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	1910	2 U	248	4 U	2 U	8 U
MW-27		1/16/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	6020	2 U	438	4 U	2 U	8 U
MW-27D		4/24/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	35600	2 U	1310	4 U	2 U	8 U
MW-27		4/24/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	35300	2 U	1300	4 U	2 U	8 U
MW-27		10/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	6270	2 U	821	4 U	2 U	8 U
MW-27		4/12/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	11000	1 U	573	2 U	1 U	8 U
MW-28	NET	7/6/2001	2 U	8	0.2 U	10 U	10 U	6 U	2 U	7972	1 U	247	5 U	2 U	8 U
MW-28		10/5/2001	2 U	8	0.4 U	6 U	4	6 U	2 U	5414	2 U	161	2 U	2 U	8 U
MW-28		1/23/2002	2 U	8.5	0.2 U	6 U	6 F	6 U	2 U	9332	1 U	273	2 U	2 U	8 U
MW-28		4/15/2002	2 U	8.2	0.2 U	6 U	6 U	6 U	2 U	7644	1 U	239	4 U	2 U	8 U
MW-28		7/9/2002	2 U	13	0.2 U	12 U	12 Y	6 U	2 U	8220	2 U	231	4 U	2 U	8 U
MW-28D		7/9/2002	2 U	12	0.2 U	12 U	12 Y	6 U	2 U	8260	2 U	233	4 U	2 U	8 U
MW-28		10/14/2002	2 U	8	0.2 U	12 U	12 Y	6 U	2 U	7490	2 U	217	4 U	2 U	8 U
MW-28		1/16/2003	2 U	8	0.2 U	30 U	30 Y	6 U	2 U	9190	2 U	257	4 U	2 U	8 U
MW-28		4/24/2003	2 U	8	0.2 U	6 U	6 U	6 U	2 U	7350	2 U	239	4 U	2 U	8 U
MW-28		10/14/2003	2 U	8	0.2 U	6 U	6 U	6 U	2 U	8020	2 U	225	4 U	2 U	8 U
MW-28		4/12/2004	1 U	7	0.2 U	6 U	6 U	6 U	1 U	7450	1 U	248	2 U	1 U	8 U
MW-29	NET	7/10/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	3930	1 U	378	5 U	2 U	8 U
MW-29		10/3/2001	2 U	6 U	0.4 U	6 U	3	6 U	2 U	288	2 U	186	2 U	2 U	8 U
MW-29		1/24/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	4472	1 U	376	2 U	2 U	8 U
MW-29		4/12/2002	2 U	6 U	0.2 U	6 U	12 Y	6 U	2 U	4593	1 U	372	4 U	2 U	8 U
MW-29		7/10/2002	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	5240	2 U	361	4 U	2 U	8 U
MW-29		10/11/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	4580	2 U	367	4 U	2 U	8 U
MW-29		1/17/2003	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	4480	2 U	346	4 U	2 U	8 U
MW-29		4/30/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	4800	2 U	356	4 U	2 U	8 U
MW-29		10/13/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	4670	2 U	373	4 U	2 U	8 U
MW-29		4/9/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	5180	1 U	400	2 U	1 U	8 U
MW-30	NET	7/5/2001	2 U	8	0.2 U	10 U	10 U	6 U	2 U	4653	2 U	573.75	5 U	2 U	8 U
MW-30		10/3/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	254	2 U	186	2 U	2 U	8 U
MW-30		1/25/2002	2 U	9.3	0.2 U	6 U	6 U	6 U	2 U	6578	1 U	548.08	2 U	2 U	8 U
MW-30		4/11/2002	2 U	11	0.2 U	6 U	15 Y	6 U	2 U	6253	1 U	506.64	4 U	2 U	8 U
MW-30		7/10/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	222	2 U	324	4 U	2 U	8 U
MW-30		10/10/2002	2 U	11	0.2 U	6 U	6 U	6 U	2 U	5810	2 U	484	4 U	2 U	8 U
MW-30		1/16/2003	2 U	11	0.2 U	6 U	6 U	6 U	2 U	6240	2 U	505	4 U	2 U	8 U
MW-30		4/29/2003	2 U	9	0.2 U	6 U	6 U	6 U	2 U	5850	2 U	500	4 U	2 U	8 U
MW-30		10/13/2003	2 U	10	0.2 U	6 U	6 U	6 U	2 U	5380	2 U	478	4 U	2 U	8 U
MW-30		4/8/2004	1 U	11	0.2 U	6 U	6 U	6 U	1 U	5160	1 U	492	2 U	1 U	8 U

Table 2
Dissolved Metals Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Dissolved metals												
			Antimony	Arsenic	Cadmium	Chromium3	Chromium6	Chromium3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Sample Location	Sample Type	Unit C.L. Date	(ug/L) 30	(ug/L) BKG	(ug/L) 5	(ug/L) 16000	(ug/L) 11	(ug/L) 50	(ug/L) 10	(ug/L) BKG	(ug/L) 10	(ug/L) BKG	(ug/L) 10	(ug/L) 20	(ug/L) 76.6
MW-31	NET	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	43672	2 U	12618	5 U	2 U	8 U
MW-31		10/3/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	29424	2 U	86699	3.9	2 U	8 U
MW-31		1/22/2002	2 U	6 U	0.2 U	6 U	12 P	6 U	2 U	39542	1 U	12062	5.83	2 U	8 U
MW-31		4/10/2002	2 U	6 U	0.2 U	6 U	30 Y	6 U	2 U	38227	1 U	1178	4 U	2 U	8 U
MW-31		7/11/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	41700	2 U	1190	4 U	2 U	8 U
MW-31		10/10/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	42000	2 U	1190	4.3	2 U	8 U
MW-31D		10/10/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	41800	2 U	1180	4 U	2 U	8 U
MW-31		1/16/2003	2 U	4 U	0.2 U	30 U	30 Y	6 U	2 U	38400	2 U	1150	4.5	2 U	8 U
MW-31		4/29/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	38800	2 U	1130	4 U	2 U	8 U
MW-31		10/13/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	41300	2 U	1230	4.4	2 U	8 U
MW-31		4/8/2004	1 U	3	0.2 U	6 U	6 U	6 U	1 U	35600	1 U	1220	4.2	1 U	8 U
MW-32	INT	7/5/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32		10/2/2001	2 U	13	0.4 U	6 U	6 U	6 U	2 U	2447	2 U	175	2 U	2 U	8 U
MW-32		1/23/2002	2 U	14	0.2 U	6 U	6 U	6 U	2 U	3253	1 U	237	2 U	2 U	8 U
MW-32		4/15/2002	2 U	15	0.2 U	6 U	12 Y	6 U	2 U	3200	1 U	229	4 U	2 U	8 U
MW-32		7/9/2002	2 U	16	0.2 U	12 U	12 Y	6 U	2 U	3130	2 U	229	4 U	2 U	8 U
MW-32		10/14/2002	2 U	12	0.2 U	12 U	12 Y	6 U	2 U	2580	2 U	220	4 U	2 U	8 U
MW-32		1/14/2003	2 U	13	0.2 U	12 U	12 Y	6 U	2 U	3430	2 U	244	4 U	2 U	8 U
MW-32		4/25/2003	2 U	16	0.2 U	6 U	6 U	2 U	6 U	3250	2 U	230	4 U	2 U	8 U
MW-32		10/15/2003	2 U	12	0.2 U	6 U	6 U	6 U	2 U	3090	2 U	232	4 U	2 U	8 U
MW-32		4/7/2004	1 U	16	0.2 U	6 U	6 U	6 U	1 U	3280	1 U	250	2 U	1 U	8 U
MW-33	BG	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	14 U	2 U	54	5 U	2 U	8 U
MW-33		10/2/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33		1/17/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	14 U	1 U	27	3.67	2 U	42.9
MW-33		4/9/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2.02	14 U	1 U	20	4.36	2 U	32.1
MW-33		7/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	3.6	14 U	2 U	16	4 U	2.4	463
MW-33		10/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	3	4 U	2 U	23
MW-33		1/21/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1	4 U	2 U	26
MW-33		4/22/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2 U	48
MW-33		10/7/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2 U	19
MW-33		4/5/2004	1 U	2 U	0.2	6 U	6 U	6 U	1 U	14 U	1 U	1 U	3	2 U	15
MW-34	S, BG	7/3/2001	2 U	6 U	0.2 U	6 U	20 F	6 U	2 U	14 U	2 U	131	5 U	2 U	8 U
MW-34		10/2/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	14 U	2 U	77	5.9	2 U	8 U
MW-34		1/17/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	14 U	1 U	72	3.85	2.94	8 U
MW-34		4/9/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2.52	14 U	1 U	2	4 U	2 U	8 U
MW-34		7/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	47	4 U	3.24	8 U
MW-34		10/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	42	4 U	2 U	8 U
MW-34		1/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	42	4 U	2 U	8 U
MW-34		4/22/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2	14 U	2 U	27	4.4	2 U	8 U
MW-34		10/7/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	50	5.9	8	8 U
MW-34		4/5/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	14 U	1 U	10	2.3	5	8 U
MW-35	BG	7/5/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	14 U	2 U	109	5 U	2 U	8 U
MW-35		10/2/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	14 U	2 U	19	2.3	2 U	48.8
MW-35		1/17/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	14 U	1 U	6	2.97	2 U	8 U
MW-35		4/9/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	47	1 U	2	4 U	2 U	8 U
MW-35		7/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2.66	8 U
MW-35		10/8/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2 U	8 U
MW-35		1/14/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2 U	8 U
MW-35		4/22/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	14 U	2 U	1 U	4 U	2 U	8 U
MW-35		10/7/2003	2 U	4 U	0.3	6 U	6 U	6 U	2 U	25	2 U	1 U	4 U	2 U	8 U
MW-35		4/5/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	14 U	1 U	1 U	2 U	2 U	8 U

Table 2
Dissolved Metals Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Dissolved metals												
			Antimony	Arsenic	Cadmium	Chrom+3	Chrom+6	Chrom+3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Sample Location	Sample Type	Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
		C.L.	30	BKG	5	16000	11	50	10	BKG	10	BKG	10	20	76.6
MW-36	POC	7/6/2001	2 U	15	0.2 U	20 U	20 Y	6 U	2 U	12552	2 U	728	5 U	2 U	8 U
MW-36		10/8/2001	2 U	9	0.4 U	6 U	2 U	6 U	2 U	12067	2 U	543	2 U	2 U	8 U
MW-36		1/22/2002	2 U	8.5	0.2 U	6 U	12 F	6 U	2 U	15896	1 U	648	2.85	2 U	8 U
MW-36		4/10/2002	2 U	6 U	0.2 U	6 U	8 U	6 U	2 U	24681	1 U	663	4 U	2 U	8 U
MW-36		7/11/2002	2 U	10	0.2 U	24 U	24 Y	6 U	2 U	15300	2 U	670	4 U	2 U	8 U
MW-36		10/9/2002	2 U	9	0.2 U	12 U	12 Y	6 U	2 U	16500	2 U	687	4 U	2 U	8 U
MW-36		1/15/2003	2 U	8	0.2 U	30 U	30 Y	6 U	2 U	17300	2 U	705	4 U	2 U	8 U
MW-36		4/23/2003	2 U	6	0.2 U	6 U	6 U	6 U	2 U	14700	2 U	695	4 U	2 U	8 U
MW-36		10/9/2003	2 U	7	0.2 U	6 U	6 U	6 U	2 U	16400	2 U	728	4 U	2 U	8 U
MW-36		4/6/2004	1 U	9	0.2 U	6 U	6 U	6 U	1 U	17100	1 U	778	2 U	1 U	8 U
MW-37	POC	7/6/2001	2 U	6 U	0.2 U	20 U	20 Y	6 U	2 U	22907	2 U	700	5 U	2 U	8 U
MW-37		10/8/2001	2 U	6 U	0.4 U	6 U	8 F	6 U	2 U	20327	2 U	599	2 U	2 U	8 U
MW-37		1/22/2002	2 U	6 U	0.2 U	6 U	9 F	6 U	2 U	22525	1 U	678	2.87	2 U	8 U
MW-37		4/10/2002	2 U	9.4	0.2 U	6 U	6 U	6 U	2 U	16182	1 U	665	4 U	2 U	8 U
MW-37		7/11/2002	2 U	4 U	0.2 U	24 U	24 Y	6 U	2 U	25400	2 U	688	4 U	2 U	8 U
MW-37		10/9/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	25500	2 U	664	4 U	2 U	8 U
MW-37		1/15/2003	2 U	4 U	0.2 U	30 U	30 Y	6 U	2 U	26800	2 U	694	4 U	2 U	8 U
MW-37		4/23/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	23100	2 U	598	4 U	2 U	8 U
MW-37		10/8/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	22700	2 U	651	4 U	2 U	8 U
MW-37		4/6/2004	1 U	3	0.2 U	6 U	6 U	6 U	1 U	25100	1 U	724	2 U	1 U	8 U
MW-38	POC	7/6/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	3022	2 U	384	5 U	2 U	8 U
MW-38		10/8/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	4066	2 U	287	2 U	2 U	8 U
MW-38		1/23/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	3653	1 U	272	2 U	2 U	8.3
MW-38		4/12/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	3665	1 U	263	4 U	2 U	8 U
MW-38		7/11/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	3480	2 U	262	4 U	2 U	8 U
MW-38		10/15/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	2290	2 U	234	4 U	2 U	8 U
MW-38		1/15/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	4200	2 U	284	4 U	2 U	8 U
MW-38		4/23/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	1560	2 U	219	4 U	2 U	8 U
MW-38		10/8/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	4070	2 U	296	4 U	2 U	8 U
MW-38		4/6/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	3690	1 U	279	2 U	1 U	8 U
MW-39	POC	7/6/2001	2 U	6 U	0.2 U	10 U	10 U	6 U	2 U	420	2 U	206	5 U	2 U	30
MW-39		10/8/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	916	2 U	236	2 U	2 U	8 U
MW-39		1/23/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	1365	1 U	398	2 U	2 U	8 U
MW-39		4/12/2002	2 U	6 U	0.2 U	6 U	12 Y	6 U	2 U	1638	1 U	384	4 U	2 U	8 U
MW-39		7/9/2002	2 U	8	0.2 U	12 U	12 Y	6 U	2 U	2520	2 U	430	4 U	2 U	12
MW-39		10/15/2002	2 U	4	0.2 U	12 U	12 Y	6 U	2 U	2740	2 U	398	4 U	2 U	8 U
MW-39		1/15/2003	2 U	4 U	0.2 U	30 U	30 Y	6 U	2 U	2870	2 U	353	4 U	2 U	8 U
MW-39		4/24/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	2080	2 U	363	4 U	2 U	8 U
MW-39		10/8/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	3690	2 U	366	4 U	2 U	8 U
MW-39		4/6/2004	1 U	4	0.2 U	6 U	6 U	6 U	1 U	3730	1 U	323	2 U	1 U	8 U
LEACH-N	Leachate	7/10/2001	2 U	6 U	0.2 U	60 U	60 Y	6 U	2 U	28014	1 U	500.5	5 U	2 U	8 U
LEACH-N		10/8/2001	2 U	6 U	0.4 U	6 U	2 U	6 U	2 U	39219	2 U	702.0	4.3	2 U	8 U
LEACH-N		1/25/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	2 U	10643	1 U	996.43	8.14	2 U	8 U
LEACH-N		4/17/2002	2 U	6 U	0.2 U	6 U	30 Y	6 U	2 U	6957	1 U	348.8	4.3	2 U	26
LEACH-N		7/11/2002	2 U	5	0.2 U	12 U	12 Y	6 U	2 U	5590	2 U	590	4 U	2 U	10
LEACH-N		10/15/2002	2 U	4 U	0.2 U	12 U	12 Y	6 U	2 U	37200	2 U	674	5.8	2 U	9
LEACH-N		1/21/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	89	2 U	825	18.6	2 U	43
LEACH-N		4/30/2003	2 U	5	0.2 U	6 U	6 U	6 U	2 U	22600	2 U	1390	10.4	2 U	8 U
LEACH-N		10/15/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	35400	2 U	676	5.3	2 U	8 U
LEACH-N		4/12/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	7240	1 U	195	4.9	1 U	8 U

Table 2
Dissolved Metals Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Dissolved metals													
Sample Location	Sample Type	Date	Unit	Antimony	Arsenic	Cadmium	Chrome+3	Chrome+6	Chrome3+6	Copper	Iron	Lead	Manganese	Nickel	Selenium	Zinc
			C.L.	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			30	BKG	5	16000	11	50	10	BKG	10	BKG	10	20	76.6	
LEACH-S	Leachate	7/10/2001	2 U	6 U	0.2 U	20 U	20 Y	6 U	2 U	12048	1 U	534	5 U	2 U	21	
LEACH-S		10/8/2001	2 U	6 U	0.4 U	6 U	2	6 U	2 U	4838	2 U	285	2 U	2 U	9	
LEACH-S		1/25/2002	2 U	6 U	0.2 U	6 U	6 U	6 U	5.7 U	193	1 U	13	5.39	2 U	24	
LEACH-S		4/17/2002	2 U	6 U	0.2 U	6 U	7 U	6 U	2.56	20546	2.2	1130	6.78	2 U	28.9	
LEACH-S		7/11/2002	2 U	5	0.2 U	30 U	30 Y	6 U	2 U	23600	2 U	507	5.4	2 U	8 U	
LEACH-S		10/15/2002	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	11600	2 U	537	4 U	2 U	10	
LEACH-S		1/21/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	3	1300	2 U	458	4 U	2 U	254	
LEACH-S		4/30/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	30300	2 U	1200	7.1	2 U	8 U	
LEACH-S		10/15/2003	2 U	4 U	0.2 U	6 U	6 U	6 U	2 U	15200	2 U	1230	4 U	2 U	8 U	
LEACH-S		4/12/2004	1 U	2 U	0.2 U	6 U	6 U	6 U	1 U	15200	1 U	1050	2.8	1 U	8 U	

NOTES:

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and Confirmational Monitoring groundwater monitoring well network

BG = Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

ug/L = micrograms per liter

U = not detected at reporting limit shown

Y = raised reporting limit due to matrix interference, compound not detected at raised limit

BKG = background (established after 3 year evaluation monitoring period)

NS = not sampled, water-level below pump (MW-17 well head damaged)

F = Hexavalent Chrome detection likely due to interference by iron, not detected in Chrome VI + III analysis.

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters		
Sample Location	Sample Type	C.L. Date	Chloride	Nitrate	Nitrite
			(mg/L)	(mg/L)	(mg/L)
			230	10	1
MW-05	S, INT	7/9/2001	28	0.104	0.019
MW-05		10/5/2001	40	0.257	0.003
MW-05		1/24/2002	4	0.123	0.010
MW-05		4/16/2002	45	0.125	0.017
MW-05		7/10/2002	46	0.215	0.018
MW-05		10/14/2002	47	0.254	0.047
MW-05		1/17/2003	23	0.073	0.056
MW-05		4/28/2003	19	0.12	0.029
MW-05		10/10/2003	23	0.016 U	0.034
MW-05		4/7/2004	26	0.031 U	0.019
MW-08	INT	7/9/2001	11	0.381	0.006
MW-08		10/5/2001	12	1.353	0.002 U
MW-08		1/24/2002	13	0.002 U	0.003
MW-08		4/16/2002	14	0.017	0.002 U
MW-08		7/10/2002	12	1.88	0.002 U
MW-08		10/11/2002	14	0.006	0.002
MW-08		1/17/2003	13	0.002	0.002
MW-08		4/25/2003	11	0.273	0.003
MW-08		10/10/2003	9	0.053	0.002 U
MW-08		4/9/2004	9	0.023	0.002 U
MW-11R	NET	7/9/2001	12	0.05 U	0.004
MW-11R		10/3/2001	18	0.115	0.004
MW-11R		1/18/2002	12	0.002 U	0.006
MW-11R		4/10/2002	14	0.095	0.006
MW-11R		7/11/2002	13	0.748	0.002 U
MW-11R		10/9/2002	20	0.08	0.003
MW-11R		1/13/2003	40	0.002	0.029
MW-11R		4/23/2003	20	0.05	0.009
MW-11R		10/9/2003	38	0.002 U	0.007
MW-11R		4/6/2004	9	0.05 U	0.050 U
MW-14	S, INT	7/9/2001	99	0.107	0.009
MW-14		10/5/2001	74	0.215	0.008
MW-14		1/24/2002	88	0.002 U	0.002
MW-14		4/16/2002	116	0.087	0.012
MW-14		7/10/2002	122	0.067	0.011
MW-14		10/14/2002	93	0.289	0.025
MW-14		1/21/2003	72	0.025	0.025
MW-14		4/28/2003	129	0.058	0.005
MW-14		10/10/2003	88	0.068	0.022
MW-14		4/9/2004	106	0.036	0.021
MW-17	S, INT	7/3/2001	13	0.005	0.002 U
MW-17		10/2/2001	12	0.006	0.002 U
MW-17		1/24/2002	NS	NS	NS
MW-17		4/16/2002	NS	NS	NS
MW-17		7/10/2002	NS	NS	NS
MW-17		10/14/2002	NS	NS	NS
MW-17		1/21/2003	NS	NS	NS
MW-17		4/25/2003	129	0.049	0.003
MW-17		10/14/2003	25	0.024	0.007
MW-17		4/7/2004	45	0.003 U	0.017

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters		
			Chloride	Nitrate	Nitrite
Unit			(mg/L)	(mg/L)	(mg/L)
Sample Location	Sample Type	C.L. Date	230	10	1
MW-21	NET	7/3/2001	18	0.332	0.002
MW-21		10/2/2001	20	3.72	0.017
MW-21		1/18/2002	20	3.366	0.002
MW-21		4/9/2002	18	3.687	0.002 U
MW-21		7/9/2002	21	3.13	0.002 U
MW-21		10/9/2002	16	4.25	0.011
MW-21		1/14/2003	20	3.36	0.011
MW-21		4/22/2003	20	3.08	0.002 U
MW-21		10/9/2003	16	3.97	0.003
MW-21		4/5/2004	18	3.58	0.005
MW-22	S, NET	7/3/2001	8	3.773	0.002 U
MW-22		10/2/2001	8	0.002 U	0.002 U
MW-22		1/18/2002	9	0.368	0.002 U
MW-22		4/10/2002	8	0.358	0.002 U
MW-22		7/9/2002	8	0.422	0.002 U
MW-22		10/9/2002	8	0.472	0.002 U
MW-22		1/14/2003	9	0.596	0.002 U
MW-22		4/22/2003	8	0.582	0.002 U
MW-22		10/9/2003	8	0.745	0.002 U
MW-22		4/7/2004	8	0.51	0.002 U
MW-23	S, INT	7/5/2001	123	0.003	0.002
MW-23		10/5/2001	137	0.002 U	0.002 U
MW-23		1/22/2002	83	0.099 U	0.002 U
MW-23		4/11/2002	118	0.074	0.002 U
MW-23D		4/11/2002	120	0.072	0.002 U
MW-23		7/11/2002	128	0.021	0.002 U
MW-23		10/10/2002	131	0.006	0.002 U
MW-23		1/13/2003	21	0.566	0.010 U
MW-23		4/28/2003	101	0.012	0.002 U
MW-23		10/14/2003	122	0.002 U	0.002
MW-23		4/9/2004	57	0.002 U	0.002
MW-24	S, NET	7/5/2001	17	0.117	0.014
MW-24		10/3/2001	21	0.26	0.020
MW-24		1/22/2002	18	0.074	0.084
MW-24		4/11/2002	20	0.198	0.022
MW-24		7/11/2002	19	0.1-0.282 R	0.100 U
MW-24		10/11/2002	25	0.369	0.059
MW-24		1/13/2003	27	0.039	0.009
MW-24		4/29/2003	13	0.03	0.028
MW-24		10/16/2003	22	0.1 U	0.100 U
MW-24		4/8/2004	14	0.004	0.014
MW-25	S, NET	7/5/2001	11	0.002	0.011
MW-25		10/3/2001	25	0.002 U	0.004
MW-25		1/25/2002	5	0.009 U	0.011
MW-25		4/12/2002	8	0.157	0.018
MW-25		7/10/2002	12	0.053	0.015
MW-25		10/10/2002	18	0.073	0.050
MW-25		1/16/2003	129	0.002	0.010 U
MW-25		4/29/2003	37	0.007	0.020
MW-25		10/13/2003	139	0.006	0.008
MW-25		4/8/2004	17	0.013	0.020

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters			
			Chloride	Nitrate	Nitrite	
Sample Location	Sample Type	Unit	(mg/L)	(mg/L)	(mg/L)	
		C.L.	230	10	1	
MW-26	S, NET	7/9/2001	65	0.002 U	0.005	
MW-26		10/3/2001	101	0.096	0.006	
MW-26		1/24/2002	6	0.098	0.007	
MW-26		4/15/2002	33	0.115	0.009	
MW-26		7/10/2002	37	0.014	0.008	
MW-26		10/10/2002	192	0.115	0.014	
MW-26		1/17/2003	126	0.02	0.006	
MW-26D		1/17/2003	122	0.01 U	0.007	
MW-26		4/29/2003	80	0.103	0.018	
MW-26		10/13/2003	492	0.007	0.010	
MW-26		4/9/2004	89	0.003	0.004	
MW-27		S, NET	7/6/2001	27	0.007	0.003
MW-27			10/5/2001	6	0.156	0.012
MW-27	1/23/2002		5	0.008 U	0.002	
MW-27	4/15/2002		18	0.156	0.003	
MW-27	7/9/2002		12	0.002	0.002 U	
MW-27	10/14/2002		12	0.018	0.002 U	
MW-27	1/16/2003		109	0.002 U	0.041	
MW-27	4/24/2003		49	0.032	0.025	
MW-27D	4/24/2003		49	0.07 U	0.030	
MW-27	10/14/2003		12	0.004	0.002 U	
MW-27	4/12/2004		10	0.002 U	0.002 U	
MW-28	NET	7/6/2001	5	0.01	0.002	
MW-28		10/5/2001	5	0.009	0.005	
MW-28		1/23/2002	5	0.004 U	0.006	
MW-28		4/15/2002	5	0.056	0.002	
MW-28		7/9/2002	5	0.002 U	0.003	
MW-28D		7/9/2002	5	0.002 U	0.003	
MW-28		10/14/2002	5	0.029	0.006	
MW-28		1/16/2003	5	0.004	0.010 U	
MW-28		4/24/2003	5	0.006	0.004	
MW-28		10/14/2003	5	0.009	0.003	
MW-28		4/12/2004	5	0.002 U	0.002 U	
MW-29	NET	7/10/2001	10	0.105	0.002	
MW-29		10/3/2001	10	1.548	0.002 U	
MW-29		1/24/2002	10	0.002	0.002 U	
MW-29		4/12/2002	10	0.054	0.003	
MW-29		7/10/2002	10	0.009	0.003	
MW-29		10/11/2002	11	0.015	0.002 U	
MW-29		1/17/2003	11	0.003	0.002 U	
MW-29		4/30/2003	10	0.011	0.002	
MW-29		10/13/2003	10	0.005	0.002 U	
MW-29		4/9/2004	12	0.002	0.002 U	
MW-30	NET	7/5/2001	27	0.002	0.003	
MW-30		10/3/2001	26	0.39	0.008	
MW-30		1/25/2002	24	0.016 U	0.004	
MW-30		4/11/2002	23	0.15	0.005	
MW-30		7/10/2002	24	0.086	0.005	
MW-30		10/10/2002	19	0.108	0.010 U	
MW-30		1/16/2003	20	0.002	0.010 U	
MW-30		4/29/2003	20	0.031	0.004	
MW-30		10/13/2003	17	0.022	0.002 U	
MW-30		4/8/2004	18	0.26	0.002	

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters		
			Chloride (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)
Sample Location	Sample Type	C.L. Date	Unit		
			230	10	1
MW-31	NET	7/5/2001	150	0.003	0.003
MW-31		10/3/2001	150	0.223	0.017
MW-31		1/22/2002	137	0.065	0.045
MW-31		4/10/2002	137	0.174	0.009
MW-31		7/11/2002	132	0.1-0.142 R	0.100 U
MW-31		10/10/2002	150	0.157	0.050 U
MW-31D		10/10/2002	151	0.167	0.050 U
MW-31		1/16/2003	14	0.074	0.011
MW-31		4/29/2003	131	0.013	0.022
MW-31		10/13/2003	147	0.002 U	0.032
MW-31		4/8/2004	120	0.002 U	0.017
MW-32	INT	7/5/2001	NS	NS	NS
MW-32		10/2/2001	5	0.003	0.003
MW-32		1/23/2002	5	0.002 U	0.010
MW-32		4/15/2002	5	0.026	0.002 U
MW-32		7/9/2002	6	0.004	0.002 U
MW-32		10/14/2002	6	0.005	0.002 U
MW-32		1/14/2003	7	0.007	0.002 U
MW-32		4/25/2003	5	0.004	0.002 U
MW-32		10/15/2003	5	0.002 U	0.002 U
MW-32		4/7/2004	5	0.002 U	0.002 U
MW-33	BG	7/5/2001	20	6.27	0.009
MW-33		10/2/2001	NS	NS	NS
MW-33		1/17/2002	9	6.584	0.002 U
MW-33		4/9/2002	8	6.378	0.002 U
MW-33		7/8/2002	5	3.647	0.002 U
MW-33		10/8/2002	8	5.89	0.002 U
MW-33		1/21/2003	8	5.66	0.002 U
MW-33		4/22/2003	7	6.08	0.002 U
MW-33		10/7/2003	9	8.59	0.002 U
MW-33		4/5/2004	8	10.3	0.002 U
MW-34	S, BG	7/3/2001	21	6.37	0.030
MW-34		10/2/2001	13	12.686	0.003
MW-34		1/17/2002	10	6.629	0.002 U
MW-34		4/9/2002	6	3.74	0.022
MW-34		7/8/2002	9	5.093	0.002 U
MW-34		10/8/2002	8	3.89	0.002 U
MW-34		1/14/2003	8	5.32	0.002 U
MW-34		4/22/2003	10	10.2	0.002 U
MW-34		10/7/2003	14	12.2	0.002 U
MW-34		4/5/2004	8	4.9	0.002 U
MW-35	BG	7/5/2001	46	2.779	0.026
MW-35		10/2/2001	47	2.828	0.002 U
MW-35		1/17/2002	43	2.466	0.002 U
MW-35		4/9/2002	43	2.429	0.002 U
MW-35		7/8/2002	42	2.444	0.002 U
MW-35		10/8/2002	44	2.69	0.002 U
MW-35		1/14/2003	49	2.6	0.002 U
MW-35		4/22/2003	44	2.58	0.002 U
MW-35		10/7/2003	45	2.77	0.002 U
MW-35		4/5/2004	45	2.9	0.002 U

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters		
			Chloride (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)
Sample Location	Sample Type	C.L. Date	Unit	Unit	Unit
			230	10	1
MW-36	POC	7/6/2001	69	0.593	0.154
MW-36		10/8/2001	59	0.002 U	0.005
MW-36		1/22/2002	42	0.074 U	0.026
MW-36		4/9/2002	96	0.149	0.011
MW-36		7/11/2002	45	0.165	0.005
MW-36		10/9/2002	44	0.081	0.002 U
MW-36		1/15/2003	40	0.018 U	0.002
MW-36		4/23/2003	41	0.018	0.006
MW-36		10/9/2003	37	0.002 U	0.004
MW-36		4/6/2004	53	0.02 U	0.020 U
MW-37	POC	7/6/2001	84	0.002 U	0.012
MW-37		10/8/2001	87	0.002 U	0.009
MW-37		1/22/2002	92	0.077 U	0.023
MW-37		4/9/2002	48	0.143	0.005
MW-37		7/11/2002	92	0.19	0.007
MW-37		10/9/2002	112	0.077	0.008
MW-37		1/15/2003	114	0.013	0.017
MW-37		4/23/2003	117	0.033 U	0.017
MW-37		10/8/2003	190	0.002 U	0.014
MW-37		4/6/2004	157	0.05 U	0.050 U
MW-38	POC	7/6/2001	17	0.005	0.002
MW-38		10/8/2001	21	0.007	0.003
MW-38		1/23/2002	15	0.007 U	0.003
MW-38		4/12/2002	15	0.06	0.003
MW-38		7/11/2002	19	0.047	0.003
MW-38		10/15/2002	19	0.484	0.042
MW-38		1/15/2003	21	0.018 U	0.002
MW-38		4/23/2003	16	0.012	0.002
MW-38		10/8/2003	24	0.002 U	0.003
MW-38		4/6/2004	22	0.244	0.020 U
MW-39	POC	7/6/2001	50	0.004	0.002 U
MW-39		10/8/2001	46	0.002 U	0.002 U
MW-39		1/23/2002	8	0.009 U	0.002 U
MW-39		4/12/2002	7	0.024	0.002 U
MW-39		7/9/2002	6	0.003	0.002 U
MW-39		10/15/2002	6	0.005	0.002 U
MW-39		1/15/2003	7	0.02 U	0.002 U
MW-39		4/24/2003	5	0.002 U	0.002 U
MW-39		10/8/2003	6	0.002 U	0.002 U
MW-39		4/6/2004	5	0.048	0.020 U
LEACH-N	Leachate	7/10/2001	161	0.1 U	0.003
LEACH-N		10/8/2001	113	0.002 U	0.010
LEACH-N		1/25/2002	95	0.02	0.005
LEACH-N		4/17/2002	176	0.07	0.003
LEACH-N		7/11/2002	11	0.154	0.006
LEACH-N		10/15/2002	186	0.215	0.019
LEACH-N		1/21/2003	39	4.72	0.153
LEACH-N		4/30/2003	146	0.022	0.007
LEACH-N		10/15/2003	252	0.039	0.002 U
LEACH-N		4/12/2004	150	0.161	0.009

Table 3
Conventional Parameters/Nutrients
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Conventional parameters		
Unit			Chloride	Nitrate	Nitrite
Sample Location	Sample Type	C.L. Date	(mg/L) 230	(mg/L) 10	(mg/L) 1
LEACH-S	Leachate	7/10/2001	9	0.002 U	0.004
LEACH-S		10/8/2001	12	0.036	0.006
LEACH-S		1/25/2002	4	0.137	0.002
LEACH-S		4/17/2002	69	0.259	0.005
LEACH-S		7/11/2002	141	0.253	0.007
LEACH-S		10/15/2002	15	0.11	0.010
LEACH-S		1/21/2003	18	0.002	0.002
LEACH-S		4/30/2003	113	0.093	0.016
LEACH-S		10/15/2003	106	0.025	0.002 U
LEACH-S		4/12/2004	30	0.019	0.003

NOTES:

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after E

NET = Network, existing well anticipated to remain a part of the Perform

Monitoring groundwater monitoring well network

BG =Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

mg/L = milligrams per liter

U = not detected at reporting limit shown

BKG = background (established after 3 year evaluation monitoring perio

NS = not sampled, water-level below pump (MW-17 well head damaged

R - Nitrate is a calculated by subtraction of NO₂ from NO₂+NO₃. When

NO₂ results are non-detect, NO₂ results are given as a range

(NO₂ DL to NO₂+NO₃ result)

Table 4
Volatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Sample Location	Sample Type	C.L. Date	1,1-Di-chloro-ethane	1,2,4-Tri-chloro-benzene	1,2-Di-chloro-benzene	1,4-Di-chloro-benzene	2-Butanone	Acerone	Benzene	Chloro-benzene	Chloro-form	Chloro-methane	cis-1,2-Dichloro-ethene	Ethyl-benzene	Iso-propyl-benzene	m,p-Xylene	Methylene Chloride	Naphthalene	o-Xylene	Toluene	Trichloro-fluoro-methane	Vinyl Chloride
			Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			5	70	600	10	4800	800	5	100	7	10	70	30	640	20	5	320	20	40	2400	10
LEACH-S	Leachate	7/10/2001	0.2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
LEACH-S		10/8/2001	0.6 U	1 U	1 U	1 U	3 U	3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	1.2 U	0.9 U	1 U	0.6 U	0.6 U	0.6 U	0.6 U
LEACH-S		1/25/2002	3 U	15 U	3 U	3 U	15 U	15 U	3.0 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	15 U	3 U	3 U	3 U	3 U
LEACH-S		4/17/2002	1 U	5 U	1 U	1 U	5 U	2.2 B	2.4	3.3	1 U	1 U	1 U	1 U	1.6	1 U	2 U	3.9	1 U	1 U	1 U	1 U
LEACH-S		7/11/2002	1 U	5 U	1 U	1 U	5 U	28	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	1 U	1 U	1 U	1 U
LEACH-S		10/15/2002	1 U	5 U	1 U	1 U	5 U	5 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U	2 U	5 U	1 U	1 U	1 U	1 U
LEACH-S		1/21/2003	0.2 U	0.5 U	0.2 U	0.7	1 U	12	0.2 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.4 U	0.3 U	0.9	0.2 U	0.2 U	0.2 U	0.2 U
LEACH-S		4/30/2003	0.2 U	0.5 U	0.4	1.7	1 U	5.5 B	2.1	6.4	0.2 U	0.2 U	0.2 U	0.2 U	1.7	0.4 U	0.3 U	6.2	0.2 U	0.4	0.2 U	0.3
LEACH-S		10/15/2003	0.2 U	0.5 U	0.2 U	0.5	1 U	3.5 B	1.5	1.3	0.2 U	0.2 U	0.2 U	0.2 U	0.8	0.4 U	0.3 U	5.5	0.2 U	0.2 U	0.2 U	0.2 U
LEACH-S		4/12/2004	1 U	2.5 U	1 U	1 U	5 U	7.8	2.4	2.8	1 U	1 U	1 U	1 U	1.4	2 U	1.5 U	3.6	1 U	1 U	1 U	1 U

NOTES:

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and Confirmational Monitoring groundwater monitoring well network

BG = Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

ug/L = micrograms per liter

NS = not sampled, water-level below pump (MW-17 well head damaged)

M = Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match

B = likely laboratory contamination, analyte detected in blank

E = analytical result exceeded calibration range and should be taken as the result from the 8260 analysis

U = not detected at reporting limit shown

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Chemical Name			1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	Acenaphthene	Anthracene	Benzoic Acid	bis (2-Ethylhexyl) phthalate	Butylbenzylphthalate	Carbazole	Diethylphthalate	Di-n-Butylphthalate	Fluoranthene	Fluorene	N-Nitrosodiphenylamine	Naphthalene	Phenol	Pyrene
Sample Location	Sample Type	Unit Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-05	S, INT	7/9/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	26	2 U	1 U
MW-05		10/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10	2 U	1 U
MW-05		1/24/2002	1 U	1 U	1 U	3 U	7.0	1 U	50 U	4 U	1 U	8.2	1 U	1 U	1 U	1 U	1 U	15	2 U	1 U
MW-05		4/16/2002	1 U	1 U	1 U	3 U	3.9	1 U	50 U	4 U	1 U	7.6	2.6	1 U	1 U	1 U	1 U	10	2 U	1 U
MW-05		7/10/2002	1 U	1 U	2.3	3 U	4.8	1 U	50 U	4 U	1 U	4.5	1 U	1 U	1 U	1 U	1 U	18	2 U	1 U
MW-05		10/14/2002	1 U	1 U	3.6	3 U	3.5	1 U	50 U	4 U	1 U	3.6	1 U	1 U	1 U	1 U	1 U	12	2 U	1 U
MW-05		1/17/2003	1 U	1 U	1.1	3 U	5.6	1 U	50 U	1 U	4.3	1 U	1 U	1 U	1 U	1 U	1 U	21	2 U	1 U
MW-05		4/28/2003	1 U	1 U	1 U	3 U	6.2	1 U	50 U	2.6	1 U	7.1	1.4 B	1 U	1 U	1 U	1 U	15	2 U	1 U
MW-05		10/10/2003	1 U	1 U	3.4	3 U	4.9	1 U	10 U	2.5 B	1 U	6.9	1 U	1 U	1 U	1 U	1 U	58	2 U	1 U
MW-05		4/7/2004	1 U	1 U	2.4	3 U	4.4	1 U	10 U	1.9 B	1 U	3.9	1 U	1 U	1 U	1 U	1 U	17	2 U	1 U
MW-08	INT	7/9/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	5.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		10/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		1/24/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		4/16/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		7/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		10/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		1/17/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		4/25/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		10/10/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	2.3 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-08		4/9/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R	NET	7/9/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		10/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		1/18/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		4/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		10/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		1/13/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		4/23/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		10/9/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	2.8 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-11R		4/6/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-14	S, INT	7/9/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-14		10/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-14		1/24/2002	1 U	1 U	1 U	3 U	2.2	1 U	50 U	3.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-14		4/16/2002	1 U	1 U	1 U	3 U	2.2	1 U	50 U	6.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5	1 U	1 U
MW-14		7/10/2002	1 U	1 U	1 U	3 U	1.7	1 U	50 U	7.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.6	1 U	1 U
MW-14		10/14/2002	1 U	1 U	1 U	3 U	1.7	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U
MW-14		1/21/2003	1 U	1 U	3	3 U	2.8	1 U	50 U	4.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1 U	1 U
MW-14		4/28/2003	1 U	1 U	1 U	3 U	3.1	1 U	50 U	1 U	1 U	1 U	3.9 B	1 U	1 U	1 U	1 U	1.4	1 U	1 U
MW-14		10/10/2003	1 U	1 U	1 U	3 U	2.4	1 U	10 U	2.3 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.7	1 U	1 U
MW-14		4/9/2004	1 U	1 U	1 U	3 U	1.7	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1 U	1 U
MW-17	S, INT	7/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-17		10/2/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-17		1/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/16/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		7/10/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		10/14/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		1/21/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/25/2003	1 U	1 U	1 U	3 U	4.3	1 U	50 U	1.8	1 U	1.5	3.6 B	1 U	1 U	1 U	1 U	3	1 U	1 U
MW-17		10/14/2003	1 U	1 U	1 U	3 U	1.0	1 U	10 U	8.9	1 U	4.9	1 U	1 U	1 U	1 U	1 U	7.6	1 U	1 U
MW-17		4/7/2004	1 U	1 U	1 U	3 U	1.0	1 U	10 U	1 U	3.1	1.2	2.3	1 U	1 U	1 U	1 U	6.8	2 U	1 U

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Sample Location	Sample Type	Unit C.L. Date	Chemical Name	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dichloromethylphenol	Acenaphthene	Anthracene	Benzoic Acid	bis (2-Ethylhexyl) phthalate	Butylbenzylphthalate	Carbazole	Diethylphthalate	Di-n-Butylphthalate	Fluoranthene	Fluorene	N-Nitrosodiphenylamine	Naphthalene	Phenol	Pyrene	
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-21	NET	7/3/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		10/2/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		1/18/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		4/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		7/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		10/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		1/14/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		4/22/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		10/9/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-21		4/5/2004		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22	S, NET	7/3/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		10/2/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		1/18/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		4/10/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		7/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		10/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		1/14/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		4/22/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		10/9/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-22		4/7/2004		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23	S, INT	7/5/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		10/5/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		1/22/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		4/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23D		4/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		7/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		10/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		1/13/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		4/28/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-23		10/14/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24	S, NET	7/5/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		10/3/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		1/22/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		4/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		7/11/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		10/10/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		1/13/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		4/29/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		10/13/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-24		4/8/2004		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-25	S, NET	7/5/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-25		10/3/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-25		1/25/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-25		4/12/2002		1 U	1 U	1 U	3 U	2.6	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5	2 U	1 U
MW-25		7/10/2002		1 U	1 U	1 U	3 U	2.8	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	2 U	1 U
MW-25		10/10/2002		1 U	1 U	1 U	3 U	3.3	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	2 U	1 U
MW-25		1/16/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	2 U	1 U
MW-25		4/29/2003		1 U	1 U	1 U	3 U	2	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	2 U	1 U
MW-25		10/13/2003		1 U	1 U	1 U	3 U	1.9	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	2 U	1 U
MW-25		4/8/2004		1 U	1 U	1 U	3 U	1.6	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	2 U	1 U

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Chemical Name		1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	Acenaphthene	Anthracene	Benzoic Acid	bis(2-Ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole	Diethylphthalate	Di-n-Butylphthalate	Fluoranthene	Floorene	N-Nitrosodiphenylamine	Naphthalene	Phenol	Pyrene	
Sample Location	Sample Type	Unit	70	600	10	320	643	4800	64000	10	1252	10	12800	1600	90	640	10	320	9600	480
		C.L.	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-26	S, NET	7/9/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-26		10/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26		1/24/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-26		4/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-26		7/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-26		10/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26		1/17/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26D		1/17/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26		4/29/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26		10/13/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-26	4/9/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-27	S, NET	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-27		10/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		1/23/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		4/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		7/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		10/14/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		1/16/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		4/24/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27D		4/24/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27		10/14/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-27	4/12/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-28	NET	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-28		10/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		1/23/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		4/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		7/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28D		7/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		10/14/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		1/16/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		4/24/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28		10/14/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-28	4/12/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-29	NET	7/10/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-29		10/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		1/24/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		4/12/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		7/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		10/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		1/17/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		4/30/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		10/13/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-29		4/9/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30	NET	7/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-30		10/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		1/25/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		4/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		7/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		10/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		1/16/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		4/29/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		10/13/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-30		4/8/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Sample Location	Sample Type	Unit C.L. Date	1,2,4-Tri-chloro-benzene	1,2-Di-chloro-benzene	1,4-Di-chloro-benzene	2,4-Di-methyl-phenol	Acena-phthene	Anthra-cene	Benzoic Acid	bis (2-Ethylhexyl)-phthalate	Buty-lbenzyl-phthalate	Car-bazole	Diethyl-phthalate	Di-n-Butyl-phthalate	Fluor-anthene	Fluorene	N-Nitro-sodiphenyl-amine	Naph-thalene	Phenol	Pyrene	
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-31	NET	7/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	
MW-31		10/3/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		1/22/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		4/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		10/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31D		10/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		1/16/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		4/29/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		10/13/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-31		4/8/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32		INT	7/5/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32	10/2/2001		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	1/23/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	4/15/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	7/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	6.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	10/14/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	1/14/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	4/25/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	10/15/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-32	4/7/2004		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33	BG		7/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33			10/2/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33		1/17/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		4/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		7/8/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		10/8/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		1/21/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		4/22/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		10/7/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-33		4/5/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34		S, BG	7/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34			10/2/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
MW-34	1/17/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	4/9/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	7/8/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	10/8/2002		1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	1/14/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	4/22/2003		1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	10/7/2003		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-34	4/5/2004		1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35	BG		7/5/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35			10/2/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
MW-35		1/17/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		4/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		7/8/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		10/8/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		1/14/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		4/22/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		10/7/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-35		4/5/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Chemical Name		Unit	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,4-Dichloro-benzene	2,4-Dimethyl-phenol	Acena-phenylene	Anthra-cene	Benzoic Acid	bis (2-Ethylhexyl)-phthalate	Butyl-benzyl-phthalate	Car-bazole	Diethyl-phthalate	Di-n-Butyl-phthalate	Fluor-anthene	Fluorene	N-Nitro-sodiphenyl-amine	Naph-thalene	Phenol	Pyrene
Sample Location	Sample Type	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			70	600	10	320	643	4800	64000	10	1252	10	12800	1600	90	640	10	320	9600	480
MW-36	POC	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		1/22/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		4/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		10/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		1/15/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		4/23/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		10/9/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	2.9 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-36		4/6/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37	POC	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		1/22/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		4/10/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		10/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		1/15/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		4/23/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		10/8/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-37		4/6/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38	POC	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		1/23/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		4/12/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	5.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		10/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		1/15/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		4/23/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-38		10/8/2003	1 U	1 U	1 U	3.1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.1 U	1 U
MW-38		4/6/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39	POC	7/6/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		1/23/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	6.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		4/12/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	7.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		7/9/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		10/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		1/15/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		4/24/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		10/8/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	7.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
MW-39		4/6/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N	Leachate	7/10/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		1/25/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		4/17/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		10/15/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		1/21/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	180	2.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		4/30/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		10/15/2003	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-N		4/12/2004	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U

Table 5
Semi-Volatile Organic Compounds in Ground Water
Everett Landfill

Chemical Name			1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dimethylphenol	Acenaphthene	Anthracene	Benzoic Acid	bis (2-Ethylhexyl) phthalate	Butylbenzylphthalate	Carbazole	Diethylphthalate	Di-n-Butylphthalate	Fluoranthene	Fluorene	N-Nitrosodiphenylamine	Naphthalene	Phenol	Pyrene
Sample Location	Sample Type	Unit	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
		C.L.	70	600	10	320	643	4800	64000	10	1252	10	12800	1600	90	640	10	320	9600	480
LEACH-S	Leachate	7/10/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		10/8/2001	1 U	1 U	1 U	3 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		1/25/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		4/17/2002	1 U	1 U	1 U	3 U	2.8	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		7/11/2002	1 U	1 U	1 U	3 U	1 U	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		10/15/2002	1 U	1 U	1 U	3 U	1.3	1 U	50 U	4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		1/21/2003	1 U	1 U	1 U	3 U	1 U	1 U	50 U	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		4/30/2003	1 U	1 U	1 U	3 U	2.3	1 U	50 U	3.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		10/15/2003	1 U	1 U	1 U	3 U	3.8	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U
LEACH-S		4/12/2004	1 U	1 U	1 U	3 U	3.1	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U

NOTES:

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and Confirmational Monitoring groundwater monitoring well network

BG =Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

ug/L = micrograms per liter

B = likely laboratory contamination, analyte detected in field blank

U = not detected at reporting limit shown

NS = not sampled, water-level below pump (MW-17 well head damaged)

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Pesticides			PCBs	
Unit			4,4'-DDD	4,4'-DDT	beta-BHC	Aroclor 1242	Aroclor 1254
Sample Location	Sample Type	C.L. Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
			0.36	0.1	0.06	0.65	1.3
MW-05	S, INT	7/9/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-05		10/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-05		1/24/2002	0.1 U	0.1 U	0.09 Y	0.5 UJ	1 U
MW-05		4/16/2002	0.1 U	0.1 U	0.12 Y	0.5 UJ	1 U
MW-05		7/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-05		10/14/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-05		1/17/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-05		4/28/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-05		10/10/2003	0.1 U	0.1 U	0.22 P	0.5 UJ	1 U
MW-05		4/7/2004	0.045 P	0.021 U	0.01 Y	0.21 U	0.21 U
MW-08	INT	7/9/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-08		10/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-08		1/24/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		4/16/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		7/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		10/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		1/17/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		4/25/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		10/10/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-08		4/9/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-11R	NET	7/9/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-11R		10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-11R		1/18/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		10/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		1/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		4/23/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		10/9/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-11R		4/6/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-14	S, INT	7/9/2001	0.05 U	0.05 U	0.02 U	0.74	0.5 U
MW-14		10/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-14		1/24/2002	0.1 U	0.1 U	0.11 Y	0.5 UJ	1 U
MW-14		4/16/2002	0.1 U	0.1 U	0.15 Y	0.5 UJ	1 U
MW-14		7/10/2002	0.1 U	0.1 U	0.056 U	0.5 UJ	1 U
MW-14		10/14/2002	0.1 U	0.1 U	0.060 U	0.5 UJ	1 U
MW-14		1/21/2003	0.1 U	0.1 U	0.2	0.5 UJ	1 U
MW-14		4/28/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-14		10/10/2003	0.1 U	0.1 U	0.41 P	0.5 UJ	1 U
MW-14		4/9/2004	0.02 U	0.02 U	0.28 Y	0.2 U	0.2 U
MW-17	S, INT	7/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-17		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-17		1/18/2002	NS	NS	NS	NS	NS
MW-17		1/18/2002	NS	NS	NS	NS	NS
MW-17		7/9/2002	NS	NS	NS	NS	NS
MW-17		10/14/2002	NS	NS	NS	NS	NS
MW-17		1/21/2003	NS	NS	NS	NS	NS
MW-17		4/25/2003	0.43 Y	0.1 U	0.05 U	1 Y	1 U
MW-17		10/14/2003	0.1 U	0.1 U	0.14 Y	0.5 UJ	1 U
MW-17		4/7/2004	0.1 U	0.1 U	0.05 Y	1 Y	1 U

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Pesticides			PCBs	
Sample Location	Sample Type	C.L. Date	4,4'-DDD	4,4'-DDT	beta-BHC	Aroclor 1242	Aroclor 1254
			Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)
			0.36	0.1	0.06	0.65	1.3
MW-21	NET	7/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-21		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-21		1/18/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		10/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		1/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		4/22/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		10/9/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-21		4/5/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-22	S, NET	7/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-22		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-22		1/18/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		10/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		1/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		4/22/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		10/9/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-22		4/7/2004	0.022 U	0.022 U	0.011 U	0.22 U	0.22 U
MW-23	S, INT	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-23		10/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-23		1/22/2002	0.1 U	0.1 U	0.06 U	0.5 UJ	1 U
MW-23		4/11/2002	0.1 U	0.1 U	0.063 Y	0.5 UJ	1 U
MW-23D		4/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-23		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-23		10/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-23		1/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-23		4/28/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-23		10/14/2003	0.1 U	0.1 U	0.19 P	0.5 UJ	1 U
MW-23		4/9/2004	0.02 U	0.02 U	0.16 Y	0.2 U	0.2 U
MW-24	S, NET	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-24		10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-24		1/22/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		4/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		1/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		4/29/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-24		10/13/2003	0.11 U	0.11 U	0.054 U	0.5 UJ	1.1 U
MW-24		4/8/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-25	S, NET	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-25		10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-25		1/25/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		4/12/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		7/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		1/16/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		4/29/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		10/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-25		4/8/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			4,4'-DDD	Pesticides 4,4'-DDT	beta-BHC	PCBs Aroclor 1242 Aroclor 1254		
Sample Location	Sample Type	Unit C.L. Date	(ug/L) 0.36	(ug/L) 0.1	(ug/L) 0.06	(ug/L) 0.65	(ug/L) 1.3	
MW-26	S, NET	7/9/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U	
MW-26		10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U	
MW-26		1/24/2002	0.1 U	0.1 U	0.06 U	0.5 UJ	1 U	
MW-26		4/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		7/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		1/17/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26D		1/17/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		4/29/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		10/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-26		4/9/2004	0.02 U	0.02 U	0.01 Y	0.2 U	0.2 U	
MW-27		S, NET	7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-27	10/5/2001		0.05 U	0.05 U	0.02 U	0.5 U	0.5 U	
MW-27	1/23/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	4/15/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	7/9/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	10/14/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	1/16/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	4/24/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27D	4/24/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	10/14/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-27	4/12/2004		0.02 U	0.02 U	0.045 Y	0.2 U	0.2 U	
MW-28	NET		7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-28		10/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U	
MW-28		1/23/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		4/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28D		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		10/14/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		1/16/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		4/24/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		10/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-28		4/12/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U	
MW-29		NET	7/10/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-29	10/3/2001		0.05 U	0.05 U	0.02 U	0.5 U	0.5 U	
MW-29	1/24/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	4/12/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	7/10/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	10/11/2002		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	1/17/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	4/30/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	10/13/2003		0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-29	4/9/2004		0.02 U	0.02 U	0.01 U	0.2 U	0.2 U	
MW-30	NET		7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-30			10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-30		1/25/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		4/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		7/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		1/16/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		4/29/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		10/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U	
MW-30		4/8/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U	

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Pesticides			PCBs	
Sample Location	Sample Type	C.L. Date	4,4'-DDD (ug/L)	4,4'-DDT (ug/L)	beta-BHC (ug/L)	Aroclor 1242 (ug/L)	Aroclor 1254 (ug/L)
			0.36	0.1	0.06	0.65	1.3
MW-31	NET	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-31		10/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-31		1/22/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31D		10/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		1/16/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		4/29/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		10/13/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-31		4/8/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-32	INT	7/5/2001	NS	NS	NS	NS	NS
MW-32		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-32		1/23/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		4/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		10/14/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		1/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		4/25/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		10/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-32		4/7/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-33	BG	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-33		10/2/2001	NS	NS	NS	NS	NS
MW-33		1/17/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		4/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		7/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		10/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		1/21/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		4/22/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-33		10/7/2003	0.1 U	0.1 U	0.052 U	0.5 UJ	1 U
MW-33		4/5/2004	0.021 U	0.021 U	0.01 U	0.21 U	0.21 U
MW-34	S, BG	7/3/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-34		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-34		1/17/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		4/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		7/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		10/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		1/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		4/22/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-34		10/7/2003	0.1 U	0.1 U	0.051 U	0.5 UJ	1 U
MW-34		4/5/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-35	BG	7/5/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-35		10/2/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-35		1/17/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		4/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		7/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		10/8/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		1/14/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		4/22/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-35		10/7/2003	0.1 U	0.1 U	0.051 U	0.5 UJ	1 U
MW-35		4/5/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Pesticides			PCBs	
Unit			4,4'-DDD	4,4'-DDT	beta-BHC	Aroclor 1242	Aroclor 1254
Sample Location	Sample Type	C.L.	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
		Date	0.36	0.1	0.06	0.65	1.3
MW-36	POC	7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-36		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-36		1/22/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		10/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		1/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		4/23/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		10/9/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-36		4/6/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-37	POC	7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-37		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-37		1/22/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		4/10/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		10/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		1/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		4/23/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		10/8/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-37		4/6/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-38	POC	7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-38		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-38		1/23/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		4/12/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		10/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		1/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		4/23/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		10/8/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-38		4/6/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
MW-39	POC	7/6/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-39		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
MW-39		1/23/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		4/12/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		7/9/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		10/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		1/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		4/24/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
MW-39		10/8/2003	0.1 U	0.1 U	0.051 U	0.5 UJ	1 U
MW-39		4/6/2004	0.02 U	0.02 U	0.01 U	0.2 U	0.2 U
LEACH-N	Leachate	7/10/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
LEACH-N		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
LEACH-N		1/25/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-N		4/17/2002	0.1 U	0.1 U	0.084 Y	0.5 UJ	1 U
LEACH-N		7/11/2002	0.1 U	0.1 U	0.06	0.5 UJ	1 U
LEACH-N		10/15/2002	0.1 U	0.1 U	0.07 Y	1 Y	1 U
LEACH-N		1/21/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-N		4/30/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-N		10/15/2003	0.1 U	0.1 U	0.24	1 Y	1 U
LEACH-N		4/12/2004	0.02 U	0.02 U	0.071 P	0.2 U	0.2 U

Table 6
PCB and Pesticide
Analytical Results in Ground Water and Leachate
Everett Landfill

Chemical Name			Pesticides			PCBs	
Sample Location	Sample Type	C.L. Date	4,4'-DDD (ug/L)	4,4'-DDT (ug/L)	beta-BHC (ug/L)	Aroclor 1242 (ug/L)	Aroclor 1254 (ug/L)
			0.36	0.1	0.06	0.65	1.3
LEACH-S	Leachate	7/10/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
LEACH-S		10/8/2001	0.05 U	0.05 U	0.02 U	0.5 U	0.5 U
LEACH-S		1/25/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		4/17/2002	0.1 U	0.1 U	0.09 Y	0.5 UJ	1 U
LEACH-S		7/11/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		10/15/2002	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		1/21/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		4/30/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		10/15/2003	0.1 U	0.1 U	0.05 U	0.5 UJ	1 U
LEACH-S		4/12/2004	0.02 U	0.02 U	0.065 Y	0.2 U	0.2 U

NOTES:

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and Confirmation

Monitoring groundwater monitoring well network

BG = Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

ug/L = micrograms per liter

P = indicates a high RPD without obvious interference

U = not detected at reporting limit shown

Y = raised reporting limit due to matrix interference, compound not detected at raised limit

UJ - not detected at detection limit shown, confirmed by analyst

NS = not sampled, water-level below pump (MW-17 well head damaged)

Table 7
TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs						SVOCs		TOTAL ^a
			4-isopropyl- toluene	n-butyl- benzene	n-propyl- benzene	sec-butyl- benzene	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	2-methyl- naphthalene	4-methyl- phenol	
Sample Location	Sample Type	Unit C.L. Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
			-	-	-	-	-	-	-	100	
MW-05	S, INT	7/10/2001	0.2 U	0.2 U	32	0.2 U	0.2 U	0.2 U	1 U	1 U	35.5
MW-05		10/5/2001	0.2 U	0.2 U	12	0.2 U	0.2 U	0.2 U	1 U	1 U	13.5
MW-05		1/24/2002	1 U	1 U	6.2	1 U	1 U	1 U	12	1 U	21.7
MW-05		4/16/2002	1 U	1 U	7.5	1 U	1 U	1 U	8.7	1 U	19.2
MW-05		7/10/2002	1 U	2.9	38	1	6.5	5.5	4.3	1 U	61.2
MW-05		10/14/2002	1 U	3.8	49	3.8	8.1	7.4	3.3	1 U	76.1
MW-05		1/17/2003	0.3	2.7	12	2.2	1	0.5	9.9	1 U	29.1
MW-05		4/28/2003	0.3	1.2	6.7	0.8	1.8	0.2 U	13	1 U	24.2
MW-05		10/10/2003	0.5	2.9	14	2.3	2.3	0.6	7.2	1 U	30.3
MW-05		4/7/2004	0.4	2.1	13	1.9	1.8	0.4	4.7	1 U	
MW-08	INT	7/9/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-08		10/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-08		1/24/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-08		4/16/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-08		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-08		10/14/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-08		1/17/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-08		4/25/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-08		10/10/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-08		4/9/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R	NET	7/9/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R		1/18/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-11R		4/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-11R		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-11R		10/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-11R		1/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R		4/23/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R		10/9/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-11R		4/6/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-14	S, INT	7/9/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-14		10/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-14		1/24/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-14		4/16/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-14		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-14		10/14/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-14		1/21/2003	0.2 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	1 U	1 U	1.9
MW-14		4/28/2003	0.2 U	0.2 U	0.4	0.3	0.2 U	0.2 U	1 U	1 U	2.1
MW-14		10/10/2003	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	1 U	1 U	1.7
MW-14		4/9/2004	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	1 U	1 U	1.7
MW-17	S, INT	7/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-17		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-17		1/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/17/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		7/10/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		10/14/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		1/21/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17		4/25/2003	3 U	3 U	3 U	3 U	10	3.6	5.8	3.2	28.6
MW-17		10/14/2003	2.1	0.2 U	0.2 U	0.2 U	0.8	0.2 U	1.1	1.1	15.4
MW-17		4/7/2004	0.9	0.2 U	0.5	0.2 U	2.3	0.5	1.2	1 U	16.9

Table 7
TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs					SVOCs		TOTAL ^a	
			4-isopropyl- toluene (ug/L)	n-butyl- benzene (ug/L)	n-propyl- benzene (ug/L)	sec-butyl- benzene (ug/L)	1,2,4-trimethyl- benzene (ug/L)	1,3,5-trimethyl- benzene (ug/L)	2-methyl- naphthalene (ug/L)		4-methyl- phenol (ug/L)
Sample Location	Sample Type	C.L. Date	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	
			-	-	-	-	-	-	-	100	
MW-21	NET	7/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-21		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-21		1/18/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-21		4/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-21		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-21		10/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-21		1/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-21		4/22/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-21		10/9/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-21		4/5/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22	S, NET	7/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22		1/18/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-22		4/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-22		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-22		10/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-22		1/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22		4/22/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22		10/9/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-22		4/7/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-23	S, INT	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-23		10/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-23		1/22/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-23		4/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-23D		4/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-23		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-23		10/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-23		1/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-23		4/28/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-23		10/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.5	0.2 U	1 U	1 U	2.5
MW-23	4/9/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.2 U	1 U	1 U	1.8	
MW-24	S, NET	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-24		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-24		1/22/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	16.5
MW-24		4/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-24		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-24		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-24		1/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	57	58
MW-24		4/29/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	12	2.5
MW-24		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-24		4/8/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25	S, NET	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25		1/25/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-25		4/12/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-25		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-25		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-25		1/16/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25		4/29/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-25		4/8/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U

Table 7
TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs						SVOCs		TOTAL ^a
			4-isopropyl- toluene (ug/L)	n-butyl- benzene (ug/L)	n-propyl- benzene (ug/L)	sec-butyl- benzene (ug/L)	1,2,4-trimethyl benzene (ug/L)	1,3,5-trimethyl benzene (ug/L)	2-methyl- naphthalene (ug/L)	4-methyl- phenol (ug/L)	
Sample Location	Sample Type	C.L. Date	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	
			-	-	-	-	-	-	-	100	
MW-26	S, NET	7/9/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-26		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-26		1/24/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.7 U
MW-26		4/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.5 U
MW-26		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-26		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-26		1/17/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5.3 U
MW-26D		1/17/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	4.9 U
MW-26		4/29/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.8 U
MW-26		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-26		4/9/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27	S, NET	7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27		10/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27		1/23/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-27		4/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-27		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-27		10/14/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-27		1/16/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27D		4/24/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27		4/24/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27		10/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-27		4/12/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28	NET	7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28		10/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28		1/23/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-28		4/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-28		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-28D		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-28		10/14/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-28		1/16/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28		4/24/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28		10/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-28		4/12/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29	NET	7/10/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29		1/24/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-29		4/12/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-29		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-29		10/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-29		1/17/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29		4/30/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-29		4/9/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30	NET	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30		1/25/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-30		4/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-30		7/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-30		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-30		1/16/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30		4/29/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-30		4/8/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U

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TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs					SVOCs		TOTAL ^a	
			4-isopropyl- toluene	n-butyl- benzene	n-propyl- benzene	sec-butyl- benzene	1,2,4-trimethyl benzene	1,3,5-trimethyl benzene	2-methyl- naphthalene		4-methyl- phenol
Sample Location	Sample Type	Unit C.L. Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
			-	-	-	-	-	-	-	100	
MW-31	NET	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-31		10/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-31		1/22/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-31		4/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-31		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-31		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-31D		10/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-31		1/16/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-31		4/29/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-31		10/13/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-31		4/8/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-32	ENT	7/5/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-32		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-32		1/23/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-32		4/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-32		7/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-32		10/14/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-32		1/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-32		4/25/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-32		10/15/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-32		4/7/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-33	BG	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-33		10/2/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-33		1/17/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-33		4/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-33		7/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-33		10/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-33		1/21/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-33		4/22/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-33		10/7/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-33		4/5/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34	S, BG	7/3/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34		1/17/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-34		4/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-34		7/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-34		10/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-34		1/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34		4/22/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34		10/7/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-34		4/5/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35	BG	7/5/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35		10/2/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35		1/17/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-35		4/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-35		7/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-35		10/8/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
MW-35		1/14/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35		4/22/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35		10/7/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-35		4/5/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U

Table 7
TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs						SVOCs		TOTAL ^a	
			4-isopropyl- toluene (ug/L)	n-butyl- benzene (ug/L)	n-propyl- benzene (ug/L)	sec-butyl- benzene (ug/L)	1,2,4-trimethyl- benzene (ug/L)	1,3,5-trimethyl- benzene (ug/L)	2-methyl- naphthalene (ug/L)	4-methyl- phenol (ug/L)		
Sample Location	Sample Type	C.L. Date	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit		
			-	-	-	-	-	-	-	100		
MW-36	POC	7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-36		10/8/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-36		1/22/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-36		4/10/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-36		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-36		10/9/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-36		1/15/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-36		4/23/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-36		10/9/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-36		4/6/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-37		POC	7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-37			10/8/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-37	1/22/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-37	4/10/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-37	7/11/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-37	10/9/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-37	1/15/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-37	4/23/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-37	10/8/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-37	4/6/2004		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-38	POC		7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-38			10/8/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-38		1/23/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-38		4/12/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-38		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-38		10/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-38		1/15/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-38		4/23/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-38		10/8/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-38		4/6/2004	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-39		POC	7/6/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-39			10/8/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
MW-39	1/23/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-39	4/12/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-39	7/9/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-39	10/15/2002		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
MW-39	1/15/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-39	4/24/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-39	10/8/2003		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
MW-39	4/6/2004		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U	
LEACH-N	Leachate		7/10/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
LEACH-N			10/8/2001	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	1 U	1 U	2.8 U
LEACH-N		1/25/2002	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	11.3 U	
LEACH-N		4/17/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
LEACH-N		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
LEACH-N		10/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	
LEACH-N		1/21/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.2 U	
LEACH-N		4/30/2003	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	1 U	1 U	2.7 U	
LEACH-N		10/15/2003	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	1 U	1 U	3.3 U	
LEACH-N		4/12/2004	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	

Table 7
TPH as Sum of Selected Volatile and Semivolatile Organic Compounds in Ground Water and Leachate
Everett Landfill

Chemical Name			VOCs					SVOCs		TOTAL ^a	
			4-isopropyl- toluene (ug/L)	n-butyl- benzene (ug/L)	n-propyl- benzene (ug/L)	sec-butyl- benzene (ug/L)	1,2,4-trimethyl- benzene (ug/L)	1,3,5-trimethyl- benzene (ug/L)	2-methyl- naphthalene (ug/L)		4-methyl- phenol (ug/L)
Sample Location	Sample Type	C.L. Date	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	Unit (ug/L)	
			-	-	-	-	-	-	-	100	
LEACH-S	Leachate	7/10/2001	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.6 U
LEACH-S		10/8/2001	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	1 U	1 U	2.8 U
LEACH-S		1/25/2002	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	10 U
LEACH-S		4/17/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6.5 U
LEACH-S		7/11/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
LEACH-S		10/15/2002	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U
LEACH-S		1/21/2003	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	4 U
LEACH-S		4/30/2003	0.2 U	0.2 U	0.7 U	0.3 U	0.3 U	0.2 U	1 U	1 U	3.1 U
LEACH-S		10/15/2003	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1.9 U
LEACH-S		4/12/2004	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U

NOTES:

^a= Totals represent the sum of one half the detection limit for non-detects and any detected amounts for each compound.

Exceedance results in bold, detections shaded

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and Confirmational Monitoring groundwater monitoring well n

BG =Upgradient background well

POC = deep aquifer point of compliance monitoring well

C.L. = cleanup level

ug/L = micrograms per liter

U = not detected at reporting limit shown

NS = not sampled, water-level below pump (MW-17 well head damaged)

Table 8
Ground Water Elevations
Everett Landfill

Well	Type	Date	Water Depth	Water Elevation
MW-05	S, INT	7/2/2001	13.57	11.71
MW-05		10/1/2001	12.44	12.84
MW-05		1/16/2002	10.75	14.53
MW-05		4/8/2002	10.97	14.31
MW-05		7/3/2002	14.15	11.13
MW-05		10/7/2002	14.63	10.65
MW-05		1/16/2003	13.32	11.96
MW-05		4/21/2003	10.97	14.31
MW-05		10/6/2003	15.12	10.16
MW-05		4/2/2004	14.17	11.11
MW-08	INT	7/2/2001	19.42	7.59
MW-08		10/1/2001	22.43	4.58
MW-08		1/16/2002	19.57	7.44
MW-08		4/8/2002	19.74	7.27
MW-08		7/3/2002	21.82	5.19
MW-08		10/7/2002	22.99	4.02
MW-08		1/16/2003	17.24	9.77
MW-08		4/21/2003	20.50	6.51
MW-08		10/6/2003	23.88	3.13
MW-08		4/2/2004	21.45	5.56
MW-11R	NET	7/2/2001	5.72	7.00
MW-11R		10/1/2001	9.59	3.13
MW-11R		1/16/2002	6.25	6.47
MW-11R		4/8/2002	6.60	6.12
MW-11R		7/3/2002	8.68	4.04
MW-11R		10/7/2002	10.56	2.16
MW-11R		1/16/2003	3.12	9.60
MW-11R		4/21/2003	5.77	6.95
MW-11R		10/6/2003	3.61	9.11
MW-11R		4/2/2004	8.62	4.10
MW-14	S, INT	7/2/2001	17.85	11.58
MW-14		10/1/2001	20.38	9.05
MW-14		1/16/2002	18.20	11.23
MW-14		4/8/2002	18.45	7.80
MW-14		7/3/2002	20.36	9.07
MW-14		10/7/2002	20.35	9.08
MW-14		1/16/2003	19.52	9.91
MW-14		4/21/2003	18.16	11.27
MW-14		10/6/2003	20.39	9.04
MW-14		4/2/2004	20.15	9.28
MW-17	S, INT	7/2/2001	11.32	13.89
MW-17		10/1/2001	2.91	22.3
MW-17		1/16/2002	NR	NR
MW-17		4/8/2002	NR	NR
MW-17		7/3/2002	NR	NR
MW-17		10/7/2002	NR	NR
MW-17		1/16/2003	NR	NR
MW-17		4/21/2003	13.91	12.44
MW-17		10/6/2003	17.40	7.76
MW-17		4/2/2004	16.95	9.40

**Table 8
Ground Water Elevations
Everett Landfill**

Well	Type	Date	Water Depth	Water Elevation
MW-21	NET	7/2/2001	17.19	25.33
MW-21		10/1/2001	17.23	24.96
MW-21		1/16/2002	16.51	25.68
MW-21		4/8/2002	16.39	25.80
MW-21		7/3/2002	16.72	25.47
MW-21		10/7/2002	17.19	25.00
MW-21		1/16/2003	17.10	25.09
MW-21		4/21/2003	16.93	25.26
MW-21		10/6/2003	17.78	24.41
MW-21		4/2/2004	17.52	24.67
MW-22	S, NET	7/2/2001	10.98	16.79
MW-22		10/1/2001	10.93	16.84
MW-22		1/16/2002	11.04	16.73
MW-22		4/8/2002	10.94	16.83
MW-22		7/3/2002	11.01	16.76
MW-22		10/7/2002	11.05	16.72
MW-22		1/16/2003	10.99	16.78
MW-22		4/21/2003	10.94	16.83
MW-22		10/6/2003	11.01	16.76
MW-22		4/2/2004	10.95	16.82
MW-23	S, INT	7/2/2001	19.44	12.05
MW-23		10/1/2001	19.70	11.79
MW-23		1/16/2002	18.71	12.78
MW-23		4/8/2002	18.69	12.80
MW-23		7/3/2002	19.58	11.91
MW-23		10/7/2002	19.74	11.75
MW-23		1/16/2003	18.90	12.59
MW-23		4/21/2003	18.42	13.07
MW-23		10/6/2003	19.72	11.77
MW-23		4/2/2004	18.93	12.56
MW-24	S, NET	7/2/2001	8.14	9.76
MW-24		10/1/2001	9.52	8.38
MW-24		1/16/2002	6.66	11.24
MW-24		4/8/2002	7.33	10.57
MW-24		7/3/2002	8.68	9.22
MW-24		10/7/2002	16.73	1.17
MW-24		1/16/2003	7.29	10.61
MW-24		4/21/2003	6.95	10.95
MW-24		10/6/2003	11.14	6.76
MW-24		4/2/2004	7.61	10.29
MW-25	S, NET	7/2/2001	8.46	7.92
MW-25		10/1/2001	8.65	7.73
MW-25		1/16/2002	6.76	9.62
MW-25		4/8/2002	7.57	8.81
MW-25		7/3/2002	8.22	8.16
MW-25		10/7/2002	9.05	7.33
MW-25		1/16/2003	6.98	9.40
MW-25		4/21/2003	7.00	9.38
MW-25		10/6/2003	9.17	7.21
MW-25		4/2/2004	7.94	8.44

**Table 8
Ground Water Elevations
Everett Landfill**

Well	Type	Date	Water Depth	Water Elevation
MW-26	S, NET	7/2/2001	10.31	6.13
MW-26		10/1/2001	10.20	6.24
MW-26		1/16/2002	6.11	10.33
MW-26		4/8/2002	6.35	10.09
MW-26		7/3/2002	10.29	6.15
MW-26		10/7/2002	10.43	6.01
MW-26		1/16/2003	6.55	9.89
MW-26		4/21/2003	6.42	10.02
MW-26		10/6/2003	10.47	5.97
MW-26		4/2/2004	9.81	6.63
MW-27	S, NET	7/2/2001	8.30	8.11
MW-27		10/1/2001	7.77	8.64
MW-27		1/17/2002	9.20	7.21
MW-27		4/8/2002	6.62	9.79
MW-27		7/3/2002	6.81	9.60
MW-27		10/7/2002	6.00	10.41
MW-27		1/16/2003	6.46	9.95
MW-27		4/21/2003	6.75	9.66
MW-27		10/6/2003	7.87	8.54
MW-27		4/2/2004	5.49	10.92
MW-28	NET	7/2/2001	9.98	6.65
MW-28		10/1/2001	10.35	6.28
MW-28		1/17/2002	8.67	7.96
MW-28		4/8/2002	9.01	7.62
MW-28		7/3/2002	10.52	6.11
MW-28		10/7/2002	11.72	4.91
MW-28		1/16/2003	6.46	9.95
MW-28		4/21/2003	9.45	7.18
MW-28		10/6/2003	9.62	7.01
MW-28		4/2/2004	10.15	6.48
MW-29	NET	7/2/2001	8.44	7.52
MW-29		10/1/2001	8.75	7.21
MW-29		1/16/2002	7.36	8.6
MW-29		4/8/2002	7.75	8.21
MW-29		7/3/2002	9.06	6.90
MW-29		10/7/2002	10.21	5.75
MW-29		1/16/2003	5.92	10.04
MW-29		4/21/2003	7.05	8.91
MW-29		10/6/2003	7.60	8.36
MW-29		4/2/2004	8.60	7.36
MW-30	NET	7/2/2001	7.95	7.95
MW-30		10/1/2001	13.29	2.61
MW-30		1/16/2002	9.06	6.84
MW-30		4/8/2002	9.09	6.81
MW-30		7/3/2002	11.70	4.20
MW-30		10/7/2002	12.87	3.03
MW-30		1/16/2003	5.92	9.98
MW-30		4/21/2003	11.07	4.83
MW-30		10/6/2003	6.08	9.82
MW-30		4/2/2004	11.38	4.52

**Table 8
Ground Water Elevations
Everett Landfill**

Well	Type	Date	Water Depth	Water Elevation
MW-31	NET	7/2/2001	11.45	6.96
MW-31		10/1/2001	15.77	2.64
MW-31		1/16/2002	12.32	6.09
MW-31		4/8/2002	12.36	6.05
MW-31		7/3/2002	15.00	3.41
MW-31		10/7/2002	16.61	1.80
MW-31		1/16/2003	8.61	9.80
MW-31		4/21/2003	13.16	5.25
MW-31		10/6/2003	9.08	9.33
MW-31		4/2/2004	14.63	3.78
MW-32	INT	7/2/2001	4.62	17.55
MW-32		10/1/2001	5.55	16.62
MW-32		1/17/2002	2.69	19.48
MW-32		4/8/2002	2.80	19.37
MW-32		7/3/2002	4.54	17.63
MW-32		10/7/2002	4.85	17.32
MW-32		1/16/2003	3.72	18.45
MW-32		4/21/2003	2.54	19.63
MW-32		10/6/2003	4.52	17.65
MW-32		4/2/2004	5.10	17.07
MW-33	BG	7/2/2001	48.54	25.76
MW-33		10/1/2001	NR	NR
MW-33		1/16/2002	48.34	25.96
MW-33		4/8/2002	48.16	26.14
MW-33		7/3/2002	48.43	25.87
MW-33		10/7/2002	NR	---
MW-33		1/17/2003	49.06	25.24
MW-33		4/21/2003	48.67	25.63
MW-33		10/6/2003	47.20	27.10
MW-33		4/2/2004	49.25	25.05
MW-34	S, BG	7/2/2001	17.18	57.19
MW-34		10/1/2001	17.59	56.78
MW-34		1/16/2002	16.78	57.59
MW-34		4/8/2002	16.46	57.91
MW-34		7/3/2002	16.74	57.63
MW-34		10/7/2002	17.17	57.20
MW-34		1/16/2003	17.04	57.33
MW-34		4/21/2003	16.92	57.45
MW-34		10/6/2003	17.76	56.61
MW-34		4/2/2004	16.97	57.40
MW-35	BG	7/2/2001	48.43	24.82
MW-35		10/1/2001	48.89	24.36
MW-35		1/16/2002	48.32	24.93
MW-35		4/8/2002	48.11	25.14
MW-35		7/3/2002	48.46	24.79
MW-35		10/7/2002	48.85	24.40
MW-35		1/16/2003	48.89	24.36
MW-35		4/21/2003	48.77	24.48
MW-35		10/6/2003	49.38	23.87
MW-35		4/2/2004	49.24	24.01

**Table 8
Ground Water Elevations
Everett Landfill**

Well	Type	Date	Water Depth	Water Elevation
MW-36	POC	7/2/2001	9.79	1.13
MW-36		10/1/2001	9.98	0.94
MW-36		1/16/2002	5.10	5.82
MW-36		4/8/2002	4.92	6.00
MW-36		7/3/2002	6.95	3.97
MW-36		10/7/2002	9.11	1.81
MW-36		1/16/2003	1.78	9.14
MW-36		4/21/2003	8.10	2.82
MW-36		10/6/2003	9.97	0.95
MW-36		4/2/2004	7.46	3.46
MW-37	POC	7/2/2001	12.41	1.87
MW-37		10/1/2001	13.77	0.51
MW-37		1/16/2002	8.30	5.98
MW-37		4/8/2002	7.99	6.29
MW-37		7/3/2002	10.12	4.16
MW-37		10/7/2002	12.55	1.73
MW-37		1/16/2003	5.27	9.01
MW-37		4/21/2003	12.10	2.18
MW-37		10/6/2003	12.89	1.39
MW-37		4/2/2004	10.82	3.46
MW-38	POC	7/2/2001	10.16	3.46
MW-38		10/1/2001	12.49	1.13
MW-38		1/16/2002	7.91	5.71
MW-38		4/8/2002	7.18	6.44
MW-38		7/3/2002	9.71	3.91
MW-38		10/7/2002	9.34	4.28
MW-38		1/16/2003	5.00	8.62
MW-38		4/21/2003	11.25	2.37
MW-38		10/6/2003	5.55	8.07
MW-38		4/2/2004	10.19	3.43
MW-39	POC	7/2/2001	6.91	6.99
MW-39		10/1/2001	9.02	4.88
MW-39		1/16/2002	6.69	7.21
MW-39		4/8/2002	7.48	6.42
MW-39		7/3/2002	8.72	5.18
MW-39		10/7/2002	9.90	4.00
MW-39		1/16/2003	6.31	7.59
MW-39		4/21/2003	7.85	6.05
MW-39		10/6/2003	10.44	3.46
MW-39		4/2/2004	8.34	5.56

NOTES:

- NR = no reading, water-level below pump, or well (MW-17)
- S = shallow well (all others are in deep aquifer)
- INT = Interior, well located in interior of site; will be
- NET = Network, existing well anticipated to remain a part of
Monitoring groundwater monitoring well network
- BG = Upgradient background well
- POC = deep aquifer point of compliance monitoring well

TABLE 9
EVALUATION MONITORING RESULTS SUMMARY
CLEANUP LEVEL EXCEDANCES SORTED BY ANALYTE

Sample Location	Sample Type	Date	Analyte	Unit	Result	Action Level
MW-14	S, INT	7/9/2001	Aroclor 1242	ug/l	0.74	0.65
MW-05	S, INT	10/14/2002	Benzene	mg/l	0.066	0.05
MW-05	S, INT	7/9/2001	Benzene	ug/l	5.2	5
MW-05	S, INT	10/8/2001	Benzene	ug/l	5.6	5
LEACH-N	leachate	10/15/2003	beta-BHC	ug/L	0.24	0.06
MW-05	S, INT	10/10/2003	beta-BHC	ug/L	0.22	0.06
MW-14	S, INT	10/10/2003	beta-BHC	ug/L	0.41	0.06
MW-23	S, INT	10/14/2003	beta-BHC	ug/L	0.19	0.06
MW-05	S, INT	4/28/2003	bis (2-Ethylhexyl) phthalate	ug/l	26	10
MW-08	INT	7/9/2001	bis (2-Ethylhexyl) phthalate	ug/l	51	10
MW-14	S, INT	7/9/2001	bis (2-Ethylhexyl) phthalate	ug/l	11	10
MW-14	S, INT	1/24/2002	bis (2-Ethylhexyl) phthalate	ug/l	33	10
MW-22	S, NET	4/7/2004	bis (2-Ethylhexyl) phthalate	ug/L	15	10
MW-22	S, NET	1/18/2002	bis (2-Ethylhexyl) phthalate	ug/l	51	10
MW-31	NET	4/29/2003	bis (2-Ethylhexyl) phthalate	ug/l	320	10
MW-34	S, BG	7/3/2001	bis (2-Ethylhexyl) phthalate	ug/l	17	10
MW-39	POC	4/24/2003	bis (2-Ethylhexyl) phthalate	ug/l	74	10
LEACH-N	leachate	10/15/2003	Chloride	mg/L	252	230
MW-26	S, NET	10/13/2003	Chloride	mg/L	492	230
MW-14	S, INT	1/24/2002	Chromium+6	ug/l	22*	11
MW-23	S, INT	1/22/2002	Chromium+6	ug/l	13*	11
MW-24	S, NET	1/22/2002	Chromium+6	ug/l	26*	11
MW-31	NET	1/22/2002	Chromium+6	ug/l	12*	11
MW-34	S, BG	7/3/2001	Chromium+6	ug/l	20	11
MW-36	POC	1/22/2002	Chromium+6	ug/l	12*	11
MW-05	S, INT	1/17/2003	Copper	ug/l	12	10
MW-11R	NET	1/13/2003	Copper	ug/l	12	10
MW-05	S, INT	7/10/2002	Ethylbenzene	mg/l	0.031	0.03
MW-05	S, INT	7/10/2002	m,p-Xylene	mg/l	0.13	0.02
MW-05	S, INT	10/14/2002	m,p-Xylene	mg/l	0.13	0.02
MW-24	S, INT	4/11/2002	Nickel	ug/l	11.26	10
MW-24	S, INT	7/11/2002	Nickel	mg/l	0.0105	0.01
MW-24	S, NET	10/15/2003	Nickel	ug/L	23.8	10
MW-24	S, NET	4/8/2004	Nickel	ug/L	12.3	10

TABLE 9 (continued)

MW-33	S, BG	4/5/2004	Nitrate	mg/L	10.3	10
MW-34	S, BG	10/8/2001	Nitrate	mg/L	12.686	10
MW-34	S, BG	4/22/2003	Nitrate	ug/l	10.2	10
MW-34	S, BG	10/7/2003	Nitrate	mg/L	12.2	10
MW-05	S, INT	1/17/2003	N-Nitrosodiphenylamine	ug/l	15	10
MW-05	S, INT	7/10/2002	N-Nitrosodiphenylamine	mg/l	0.018	0.01
MW-05	S, INT	10/14/2002	N-Nitrosodiphenylamine	mg/l	0.021	0.01
MW-05	S, INT	4/28/2003	N-Nitrosodiphenylamine	ug/l	58	10
MW-05	S, INT	7/9/2001	N-Nitrosodiphenylamine	ug/l	17	10
MW-05	S, INT	1/24/2002	N-Nitrosodiphenylamine	ug/l	11	10
MW-05	S, INT	10/10/2003	N-nitrosodiphenylamine	ug/L	17	10
MW-05	S, INT	4/7/2004	N-nitrosodiphenylamine	ug/L	11	10
MW-17	S, INT	4/25/2003	N-Nitrosodiphenylamine	ug/l	33	10
MW-05	S, INT	7/10/2002	o-Xylene	mg/l	0.035	0.02
MW-05	S, INT	10/14/2002	o-Xylene	mg/l	0.04	0.02
MW-25	S, NET	1/16/2003	Zinc	ug/l	368	76.6
MW-33	S, INT	7/8/2002	Zinc	mg/l	0.46259	0.0766

NOTES:

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and
Confirmational Monitoring groundwater monitoring well network

BG = upgradient background well

POC - Point of compliance well

ug/L = micrograms per liter

mg/L = milligrams per liter

* Total (3+6) dissolved chromium values (measured by Method 200.7, ICP) for all these samples were below the detection limit of 6 ug/L. The elevated chromium+6 detections (measured by Method 3500D-Cr, a colorimetric method) are likely the result of interference caused by high iron or color in the water samples.

TABLE 10
EVALUATION MONITORING RESULTS SUMMARY
CLEANUP LEVEL EXCEDANCES SORTED BY WELL

Sample Location	Sample Type	Date	Analyte	Unit	Result	Action Level
LEACH-N	leachate	10/15/2003	beta-BHC	ug/L	0.24	0.06
LEACH-N	leachate	10/15/2003	Chloride	mg/L	252	230
MW-05	S, INT	10/14/2002	Benzene	mg/l	0.066	0.05
MW-05	S, INT	4/28/2003	bis (2-Ethylhexyl) phthalate	ug/l	26	10
MW-05	S, INT	1/17/2003	Copper	ug/l	12	10
MW-05	S, INT	7/10/2002	Ethylbenzene	mg/l	0.031	0.03
MW-05	S, INT	7/10/2002	m,p-Xylene	mg/l	0.13	0.02
MW-05	S, INT	10/14/2002	m,p-Xylene	mg/l	0.13	0.02
MW-05	S, INT	1/17/2003	N-Nitrosodiphenylamine	ug/l	15	10
MW-05	S, INT	7/10/2002	N-Nitrosodiphenylamine	mg/l	0.018	0.01
MW-05	S, INT	10/14/2002	N-Nitrosodiphenylamine	mg/l	0.021	0.01
MW-05	S, INT	4/28/2003	N-Nitrosodiphenylamine	ug/l	58	10
MW-05	S, INT	7/10/2002	o-Xylene	mg/l	0.035	0.02
MW-05	S, INT	10/14/2002	o-Xylene	mg/l	0.04	0.02
MW-05	S, INT	7/9/2001	Benzene	ug/l	5.2	5
MW-05	S, INT	10/8/2001	Benzene	ug/l	5.6	5
MW-05	S, INT	10/10/2003	beta-BHC	ug/L	0.22	0.06
MW-05	S, INT	7/9/2001	N-Nitrosodiphenylamine	ug/l	17	10
MW-05	S, INT	1/24/2002	N-Nitrosodiphenylamine	ug/l	11	10
MW-05	S, INT	10/10/2003	N-nitrosodiphenylamine	ug/L	17	10
MW-05	S, INT	4/7/2004	N-nitrosodiphenylamine	ug/L	11	10
MW-08	INT	7/9/2001	bis (2-Ethylhexyl) phthalate	ug/l	51	10
MW-11R	NET	1/13/2003	Copper	ug/l	12	10
MW-14	S, INT	7/9/2001	Aroclor 1242	ug/l	0.74	0.65
MW-14	S, INT	10/10/2003	beta-BHC	ug/L	0.41	0.06
MW-14	S, INT	7/9/2001	bis (2-Ethylhexyl) phthalate	ug/l	11	10
MW-14	S, INT	1/24/2002	bis (2-Ethylhexyl) phthalate	ug/l	33	10
MW-14	S, INT	1/24/2002	Chromium+6	ug/l	22*	11
MW-17	S, INT	4/25/2003	N-Nitrosodiphenylamine	ug/l	33	10
MW-22	S, NET	4/7/2004	bis (2-Ethylhexyl) phthalate	ug/L	15	10
MW-22	S, NET	1/18/2002	bis (2-Ethylhexyl) phthalate	ug/l	51	10
MW-23	S, INT	10/14/2003	beta-BHC	ug/L	0.19	0.06
MW-23	S, INT	1/22/2002	Chromium+6	ug/l	13*	11

TABLE 10 (continued)

MW-24	S, NET	1/22/2002	Chromium+6	ug/l	26*	11
MW-24	S, INT	4/11/2002	Nickel	ug/l	11.26	10
MW-24	S, INT	7/11/2002	Nickel	mg/l	0.0105	0.01
MW-24	S, NET	10/15/2003	Nickel	ug/L	23.8	10
MW-24	S, NET	4/8/2004	Nickel	ug/L	12.3	10
MW-25	S, NET	1/16/2003	Zinc	ug/l	368	76.6
MW-26	S, NET	10/13/2003	Chloride	mg/L	492	230
MW-31	NET	4/29/2003	bis (2-Ethylhexyl) phthalate	ug/l	320	10
MW-31	NET	1/22/2002	Chromium+6	ug/l	12*	11
MW-33	S, BG	4/5/2004	Nitrate	mg/L	10.3	10
MW-33	S, INT	7/8/2002	Zinc	mg/l	0.46259	0.0766
MW-34	S, BG	7/3/2001	bis (2-Ethylhexyl) phthalate	ug/l	17	10
MW-34	S, BG	7/3/2001	Chromium+6	ug/l	20	11
MW-34	S, BG	10/8/2001	Nitrate	mg/L	12.686	10
MW-34	S, BG	4/22/2003	Nitrate	ug/l	10.2	10
MW-34	S, BG	10/7/2003	Nitrate	mg/L	12.2	10
MW-36	POC	1/22/2002	Chromium+6	ug/l	12*	11
MW-39	POC	4/24/2003	bis (2-Ethylhexyl) phthalate	ug/l	74	10

NOTES:

S = shallow well (all others are in deep aquifer)

INT = Interior, well located in interior of site; will be abandoned after Evaluation Monitoring

NET = Network, existing well anticipated to remain a part of the Performance and
Confirmational Monitoring groundwater monitoring well network

BG = upgradient background well

POC - Point of compliance well

ug/L = micrograms per liter

mg/L = milligrams per liter

* Total (3+6) dissolved chromium values (measured by Method 200.7, ICP) for all these samples were below the detection limit of 6 ug/L. The elevated chromium+6 detections (measured by Method 3500D-Cr, a colorimetric method) are likely the result of interference caused by high iron or color in the water samples.

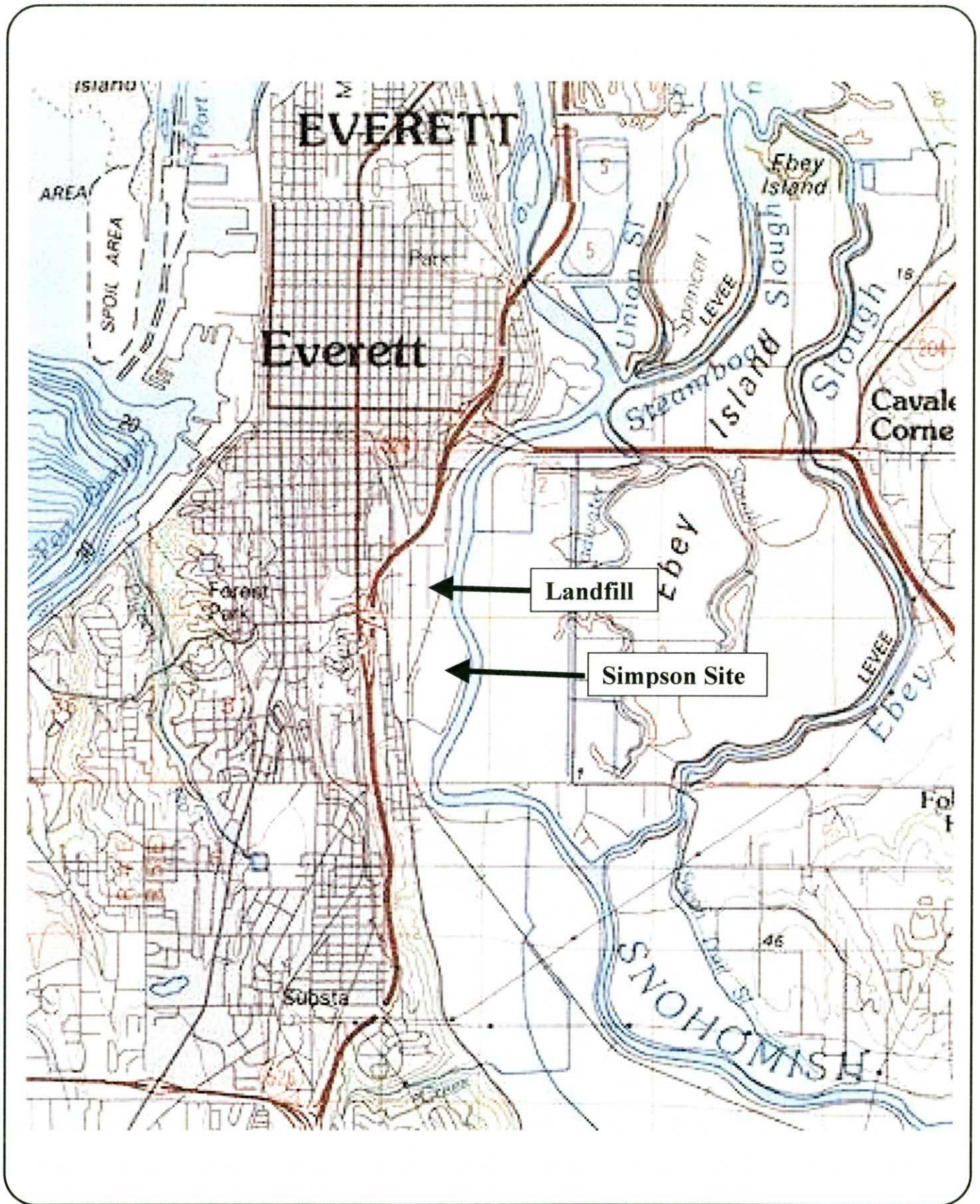
TABLE 11
BROWNFIELDS RIVERFRONT
STORMWATER SITE SELECTION STUDY
GROUND WATER ANALYTICAL RESULTS
(all results in µg/L except as noted)

Analyte	BF1	BF2	BF3	BF4	BF5
TPH					
NWTPH-Gx	<50	<50	<50	<50	<50
NWTPH-Dx	<130	<130	<130	<130	<130
VOCs¹					
P-isopropyltoluene	<2	<2	5	<2	<2
SVOCs¹					
Phenol	<2	<2	<2	3	<2
Pesticides	ND	ND	ND	ND	ND
PCBs	ND	ND	ND	ND	ND
DISSOLVED METALS					
Arsenic	31	31	<4	27	<4
Cadmium	0.3	<0.2	0.3	<0.2	<0.2
Chromium (III)	86	<6	<6	10	<6
Chromium (VI)	<6	<6	<6	<6	<6
Copper	51	<2	4	5	<2
Iron	80500	68400	6730	11300	19600
Manganese	3140	3640	1140	1570	846
Nickel	77.1	18.9	5.7	12.1	<4
Lead	15	<2	5	<2	<2
Antimony	<2	<2	<2	9	<2
Selenium	<2	<2	<2	<2	<2
Zinc	113	14	30	18	<8
CONVENTIONAL PARAMETERS					
Chloride (mg/L)	10.9	17.9	9.9	7.9	5.8
Nitrite (mg/L)	0.018	0.017	0.042	0.007	0.003
Nitrate (mg/L)	0.047	0.057	0.138	0.033	<0.04
FIELD PARAMETERS					
pH	6.4	6.2	6.4	7.2	6.9
Conductivity (µS/cm)	420	560	930	450	760
Temperature (°C)	14.4	16.6	11.2	12.7	10.0
Dissolved Oxygen (mg/L)	0.98	0.64	0.35	0.15	0.10

1 - No other VOCs or SVOCs detected above reporting limits (see Appendix C for list of compounds analyzed)

ND - No Pesticides or PCBs detected above reporting limits (see Appendix C for list of compounds analyzed)

<n - Not detected at the laboratory reporting limit of n



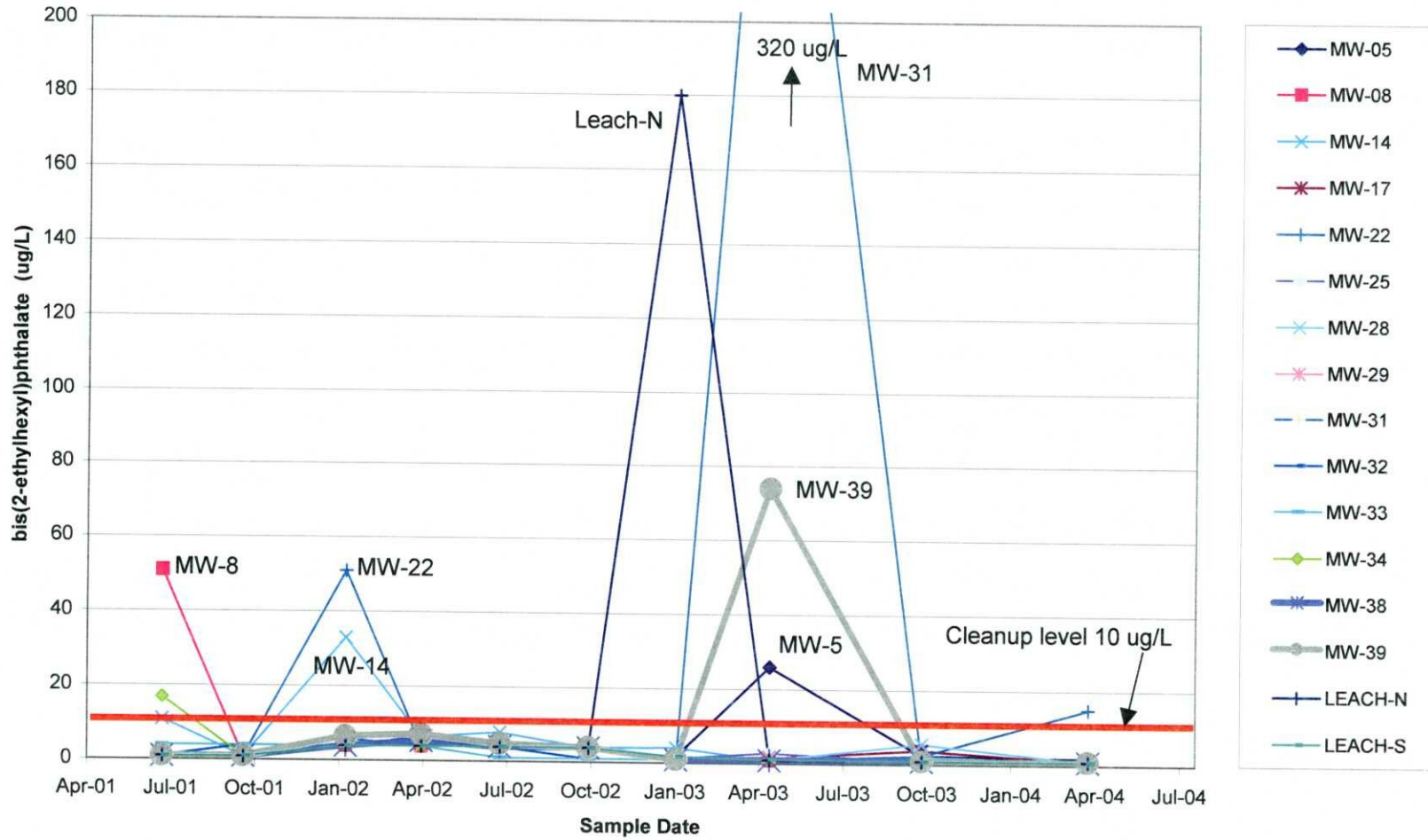
HWA GEOSCIENCES INC.

EVERETT LANDFILL
EVERETT, WASHINGTON

SITE LOCATION

PROJECT NO.: 98165 FIGURE:1

bis(2-ethylhexyl)phthalate



Plot of Time versus Concentration for bis(2-ethylhexyl)phthalate

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Everett Landfill
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FIGURE

2

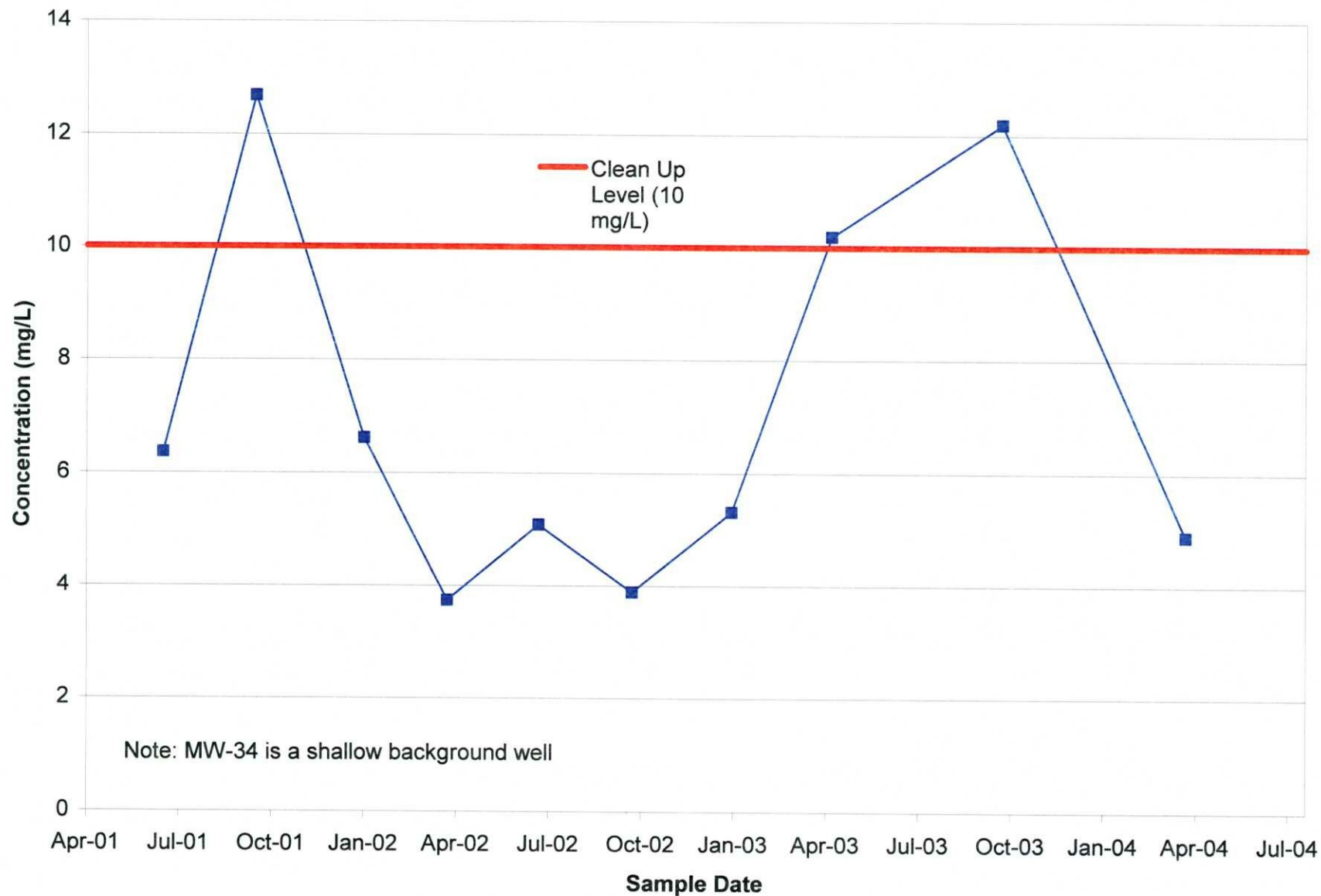
PROJECT

1998-165

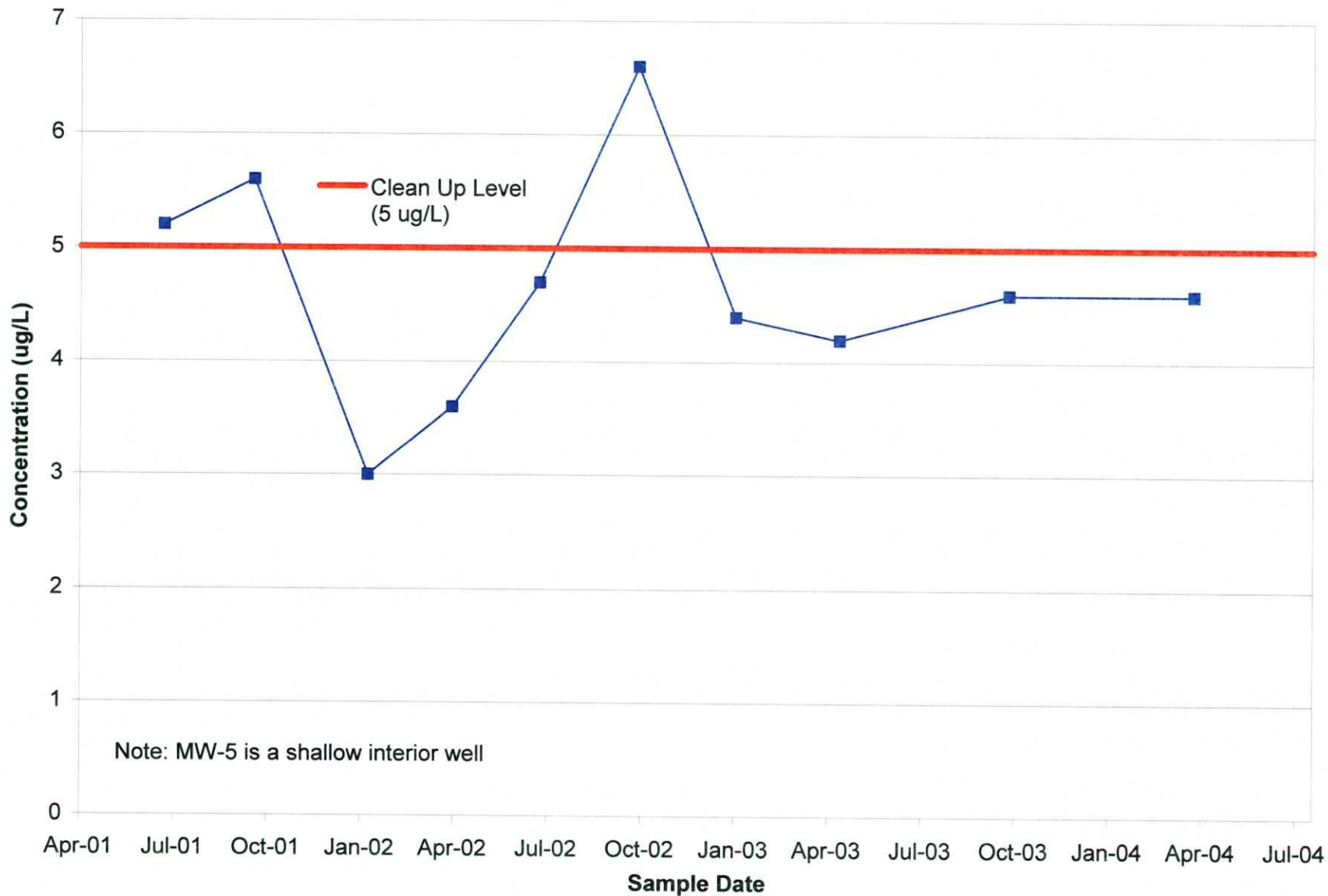


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MW-34 Nitrate Concentration



MW-05 Benzene Concentration



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Plot of Time versus Concentration for Benzene in MW-05

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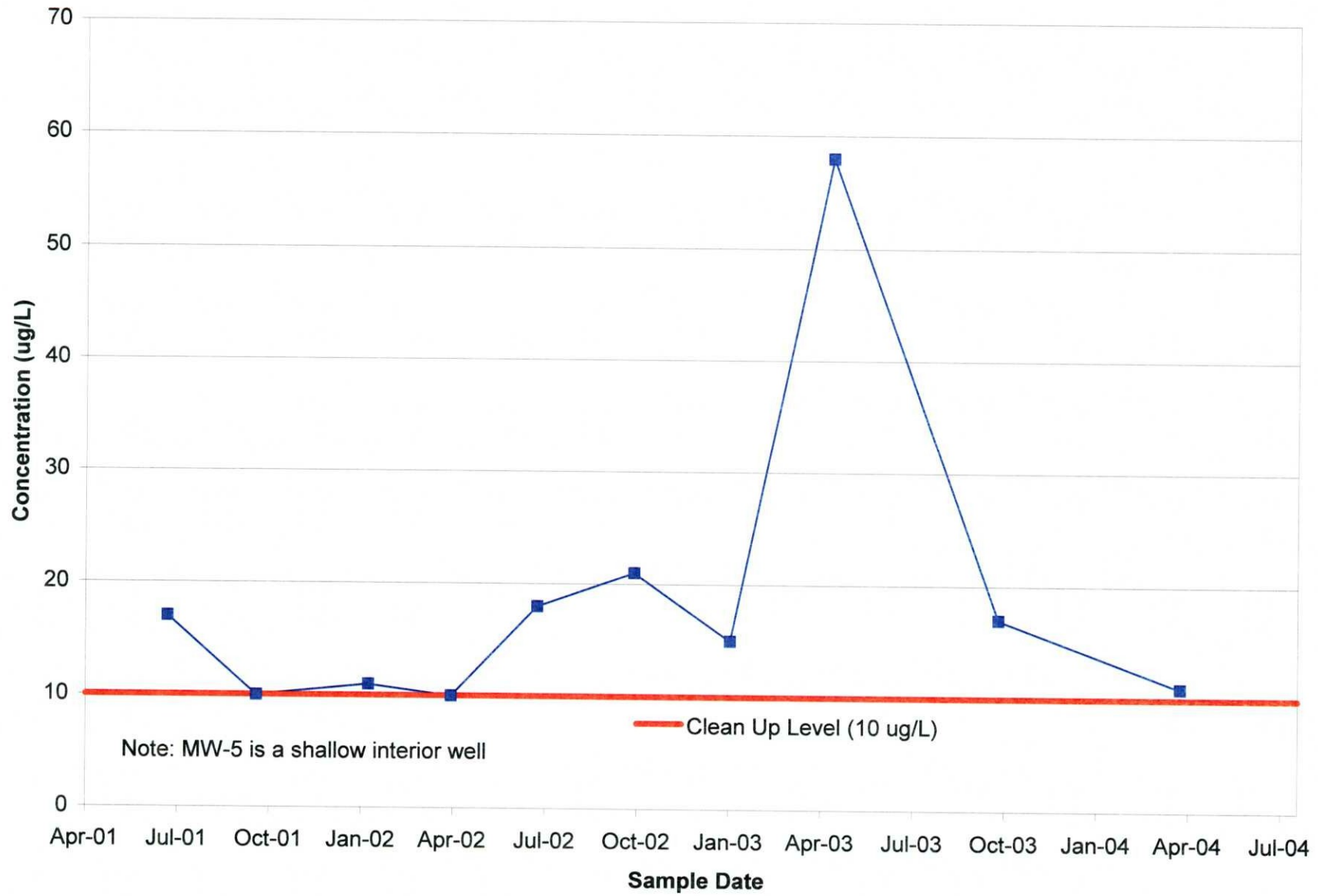
FIGURE

4

PROJECT

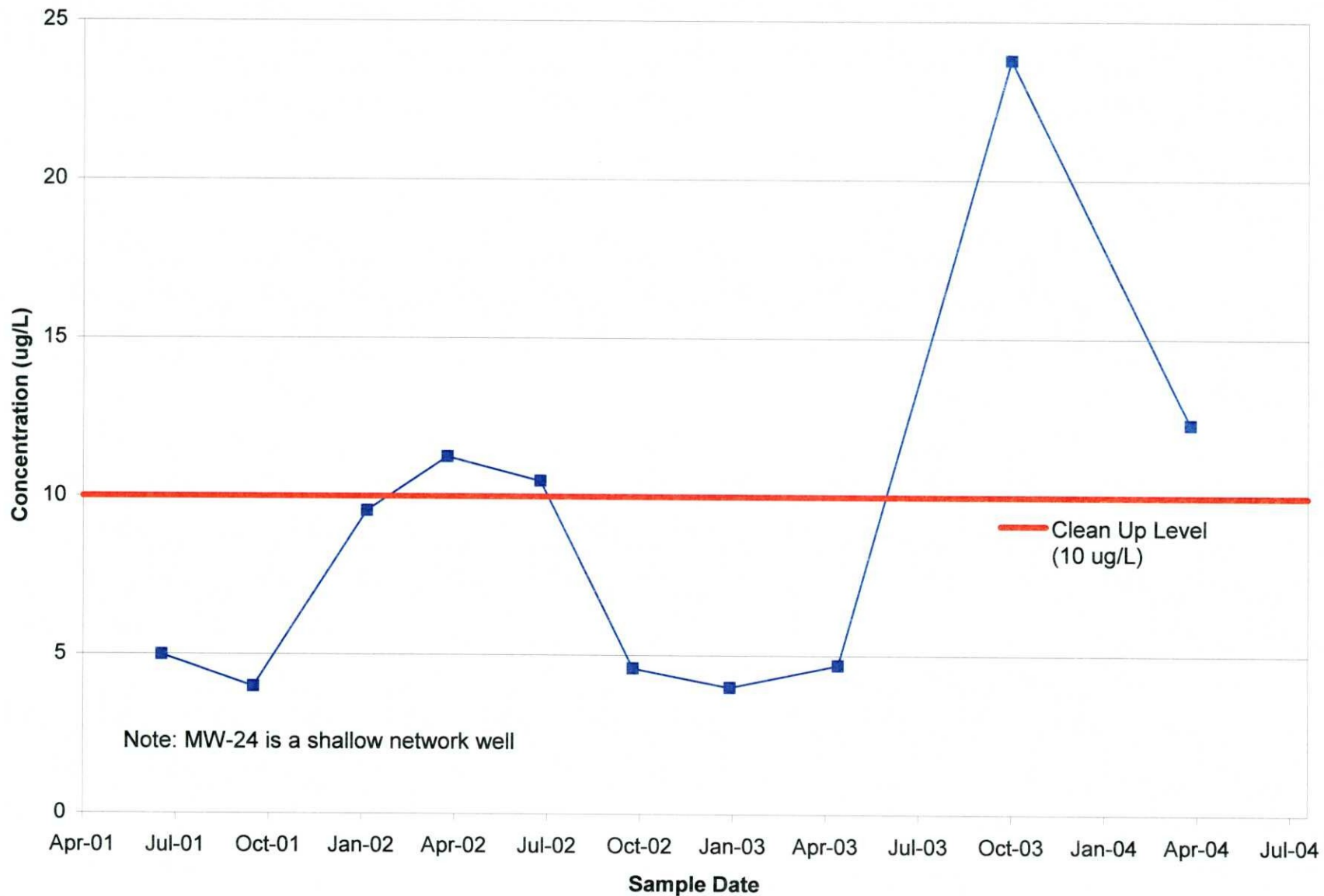
1998-165

MW-05 N-Nitrosodiphenyl-amine Concentration



Plot of Time versus Concentration for N-Nitrosodiphenyl-amine in MW-05

MW-24 Nickel Concentration



Plot of Time versus Concentration for Nickel in MW-24

Evaluation Monitoring Report
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FIGURE NO.

6

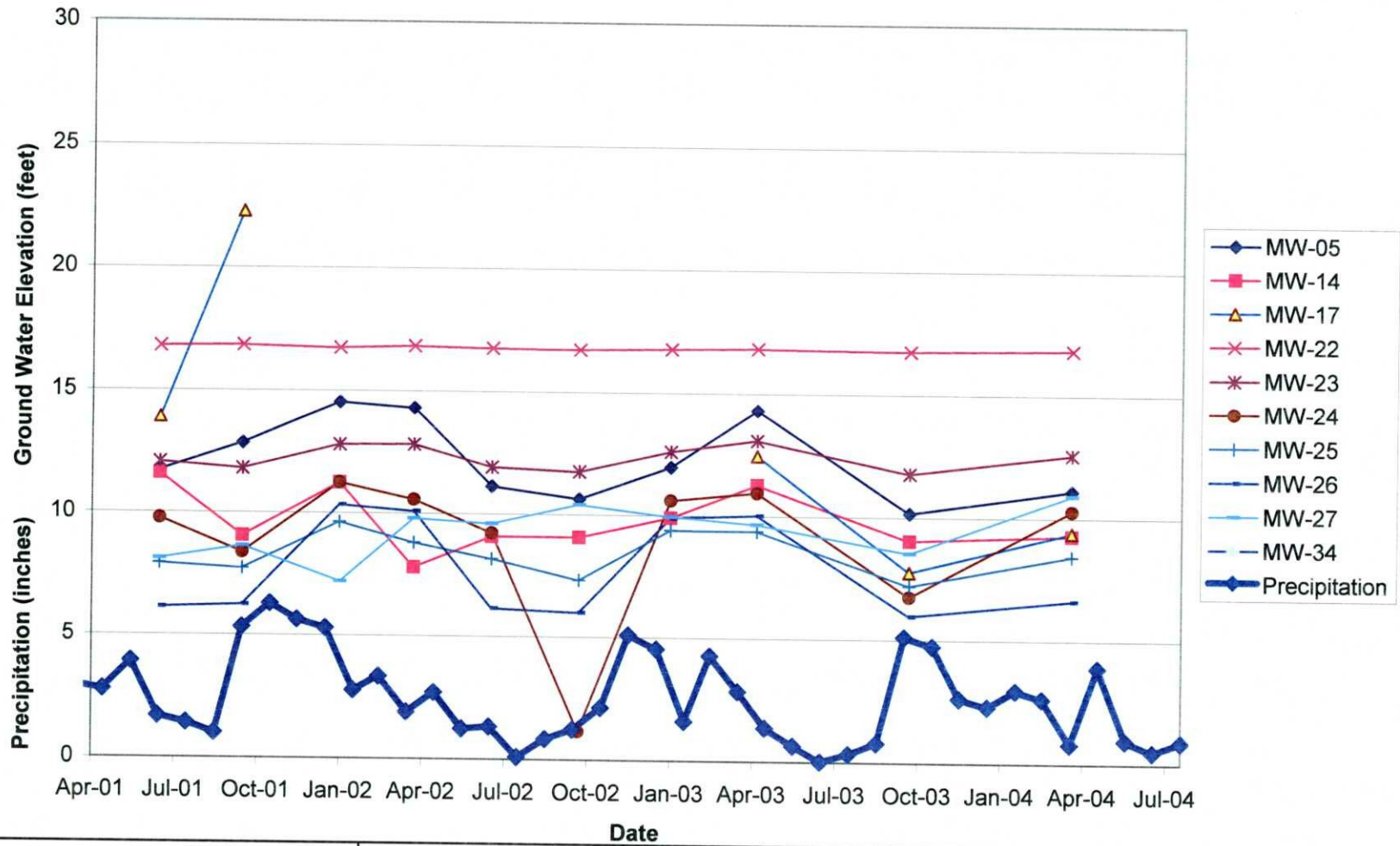
PROJECT NO.

1998-165



HWA GEOSCIENCES INC.

Shallow Aquifer



Shallow Aquifer Ground Water Elevations and Precipitation

Evaluation Monitoring Report
 Everett Landfill
 Everett, Washington

FIGURE

7

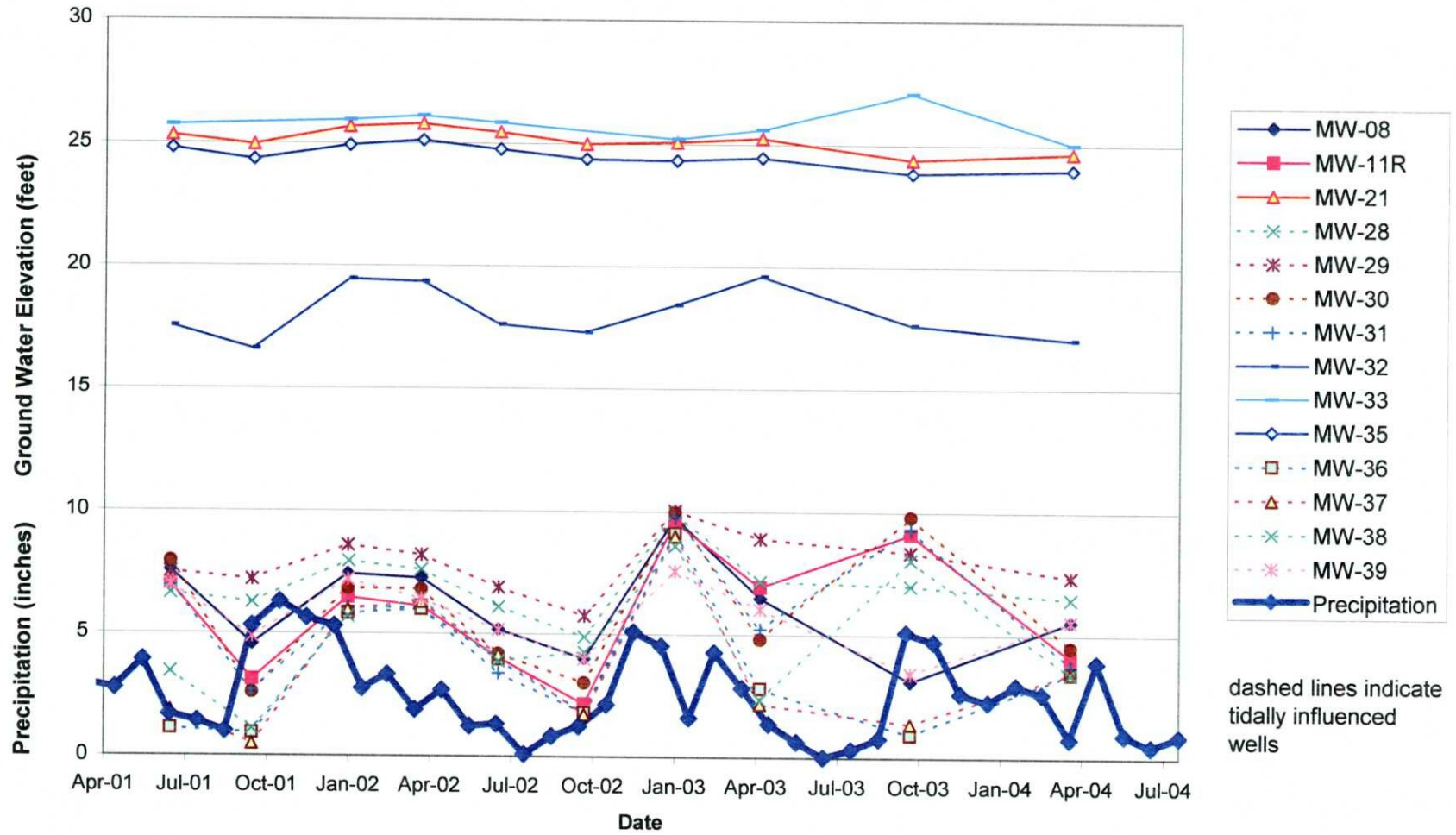
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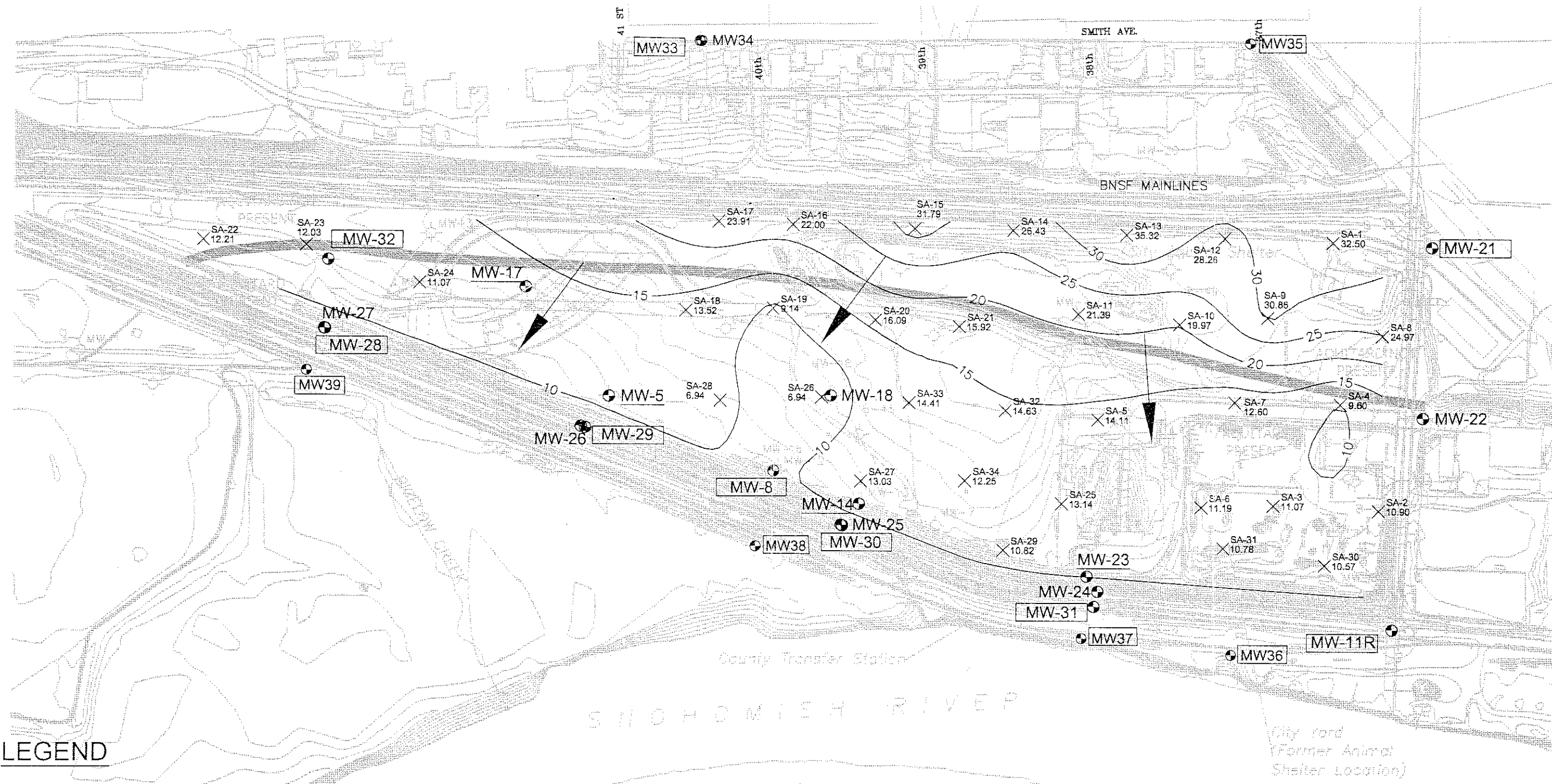
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
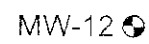
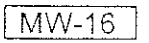
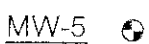
HWA GEOSCIENCES INC.

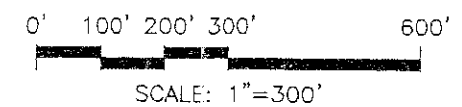
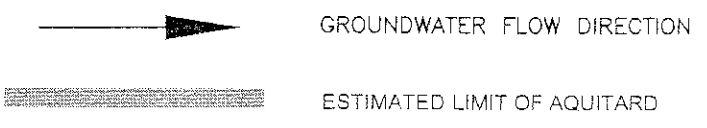
Deep Aquifer






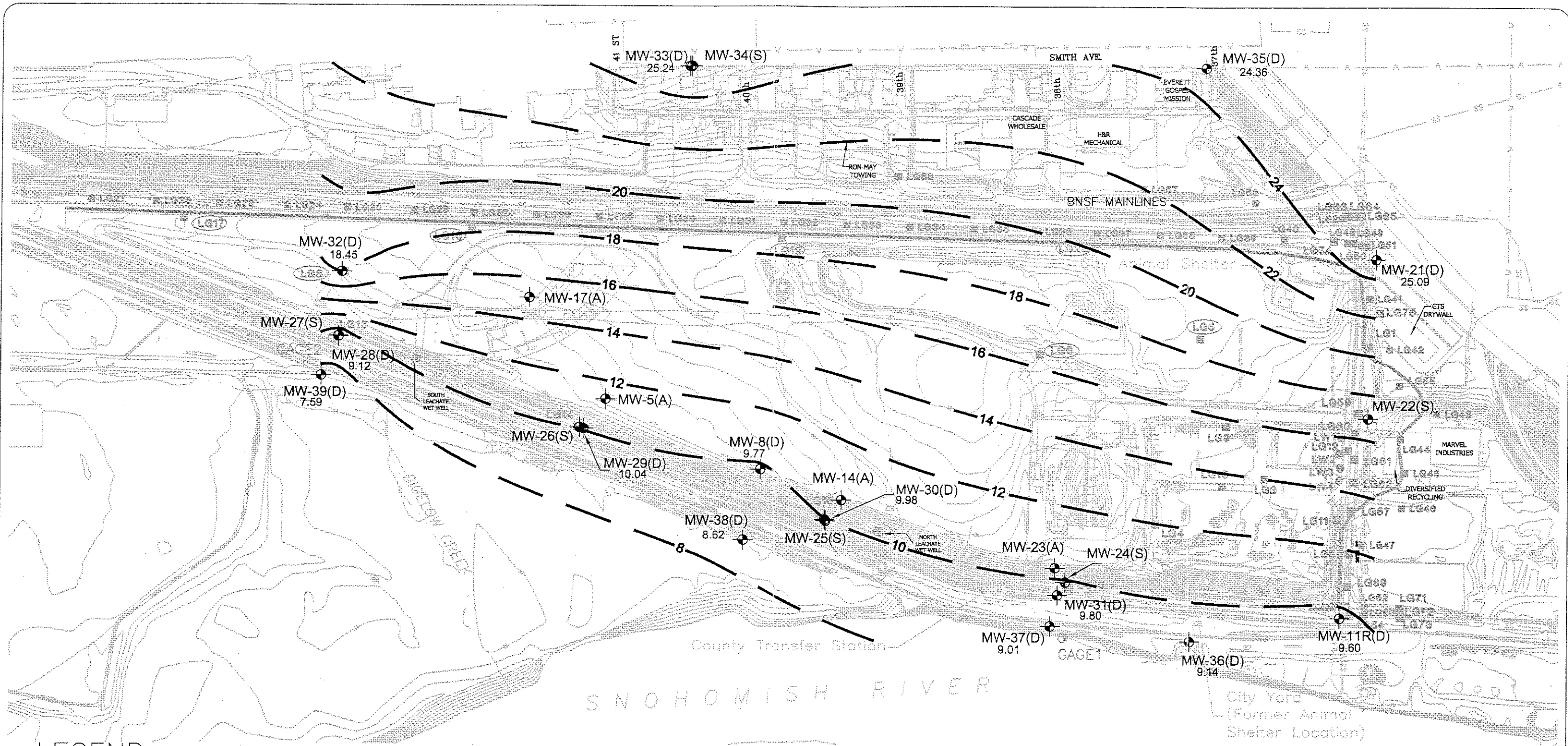
LEGEND

- 
 SHALLOW AQUIFER PROBE NUMBER
 GROUNDWATER ELEVATION
- 
 SHALLOW MONITORING WELLS FOR GROUND WATER QUALITY SAMPLING
- 
 DEEP MONITORING WELLS FOR GROUND WATER QUALITY SAMPLING
- 
 MONITORING WELLS FOR ABANDONMENT AFTER EVALUATION MONITORING



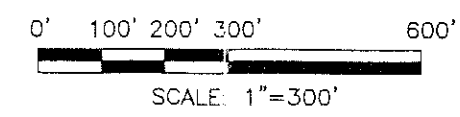
BASE MAP PROVIDED BY: FLOYD & SNIDER INC.
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 HWAGEOSCIENCES INC.	EVERETT LANDFILL EVERETT, WASHINGTON	SHALLOW AQUIFER GROUND WATER ELEVATIONS FEBRUARY 2003	DRAWN BY KS	FIGURE NO.
			CHECKED BY AS	9
			DATE 4.3.03	PROJECT NO. 1998-165



LEGEND

- MW-12(S)** 10.05 SHALLOW (NOT CONTOURED) MONITORING WELLS FOR GROUND WATER QUALITY SAMPLING WITH GROUNDWATER ELEVATION
- MW-16(D)** 18.13 DEEP MONITORING WELLS FOR GROUND WATER QUALITY SAMPLING WITH GROUNDWATER ELEVATION
- MW-5(S,A)** 10.85 MONITORING WELLS FOR ABANDONMENT AFTER EVALUATION MONITORING WITH GROUNDWATER ELEVATION
- GROUND WATER ELEVATION CONTOUR
- GAGE1 SURFACE WATER GAGING POINT
- LG40 EXISTING LFG PROBE
- LW1 GAS EXTRACTION WELL
- LG66 EXISTING LFG PROBE SCHEDULED FOR DECOMMISSIONING
- APPROXIMATE LIMITS OF REFUSE



 HWA GEOSCIENCES INC.	EVERETT LANDFILL EVERETT, WASHINGTON	DEEP AQUIFER GROUND WATER ELEVATIONS JANUARY, 2003	DRAWN BY <u>KS</u> CHECKED BY <u>BR</u> DATE <u>5.14.04</u>	FIGURE NO. <div style="font-size: 2em; font-weight: bold; text-align: center;">10</div> PROJECT NO. 98165-500
				5.14.04 98165-500

REFERENCE : Base map provided by Floyd & Snider Inc.
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APPENDIX A

Sampling And Analysis Plan

Everett Landfill/Tire Fire Site Groundwater Sampling and Analysis Plan

Prepared for:
City of Everett

Prepared By:
The Floyd & Snider Team
83 S. King Street, Suite 614
Seattle, WA 98104

Floyd & Snider Inc.
Landmarc Technologies, Inc.
HWA GeoSciences, Inc.
Kleppe Consulting
MFG, Inc.

September 6, 2001

DRAFT

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Appendix A Sampling Documentation

1.0 Introduction

This Sampling and Analysis Plan (SAP) is prepared in compliance with the requirements of WAC 173-340-410(3)(a) for the Everett Landfill/Tire Fire Site (Site). The SAP is required to be submitted to the Washington State Department of Ecology (Ecology) per the Scope of Work and Schedule, Exhibit D of the Consent Decree for the Site that was entered into Snohomish County Superior Court on April 2, 2001.

The Compliance Monitoring and Contingency Plan (CMCP) (FSI 2001) is an attachment to the Cleanup Action Plan (CAP), previously submitted to and approved by Ecology in association with the Consent Decree. The CMCP defined scope and rationale for groundwater evaluation monitoring to be conducted at the site.

This Sampling and Analysis Plan (SAP) is for groundwater Evaluation Monitoring only. This document:

1. Specifies procedures for field sampling activities.
2. Identifies quality assurance (QA) procedures to be implemented during sampling activities and laboratory analyses.
3. Meets the requirements of WAC 173-340-820, the Model Toxics Control Act (MTCA), for sampling and analysis plans.

Sampling and analysis will be conducted by, or under the direction of, the City of Everett Public Works Department (City). The City will report results to Ecology in accordance with the schedule defined in the CMCP.

1.1 MONITORING REQUIREMENTS

Evaluation Monitoring will occur for the first 3 years to supplement current information regarding baseline conditions at the site. Following the Evaluation Monitoring period, Performance Monitoring will occur for a minimum of 10 years, and as triggered by certain development actions. Confirmational Monitoring is implemented once development conditions are stable, and Performance Monitoring is finished.

Evaluation, performance, and confirmational monitoring are described in the CMCP (FSI 2000).

1.2 PROJECT ORGANIZATION

Individuals responsible for ensuring the quality of the field operations and the collection of data are identified in this section. The City of Everett will provide oversight of all project activities and will be the point of contact with Ecology. Sampling activities, data evaluation, and reporting will be performed by HWA GeoSciences Inc. (HWA). Laboratory analysis will be done by Ecology-certified laboratories, and include the City of Everett Environmental Laboratory (for conventional and some metals analyses) and by Analytical Resources, Inc., Seattle, Washington for all other

parameters.

Contacts for this project include:

Tom Thetford	City of Everett Site Manager (425) 257-8824
Mark Sadler	City of Everett Project Engineer (425) 257-8967
Jim Bailey	HWA Project Manger (206) 774-0106
Arnie Sugar	HWA Task Manager (206) 774-0106
Julie Sklare	Everett Environmental Lab Project Manager (425)257 7208
Jeff Wright	Everett Environmental Lab supervisor (425) 257 8231
Mark Harris	ARI Laboratory Project Manger (206) 621 6490

1.3 PROJECT SCHEDULE

In general, at least 10 sampling events will occur during the 3-year Evaluation Monitoring period, as described in the CMCP (FSI 2001). Sample laboratory analysis will be completed within 3 weeks of sample delivery to the laboratory. Planned sampling, analysis and reporting dates are shown below.

Sampling	Media	Analysis	Reporting
June-2001	GW, SW	July-2001	August-2001
September-2001	GW	October-2001	November-2001
December-2001	GW, SW	January-2002	February-2002
March-2002	GW	April-2002	May-2002
June-2002	GW, SW	July-2002	August-2002
September-2002	GW	October-2002	November-2002
December-2002	GW, SW	January-2003	February-2003
March-2003	GW	April-2003	May-2003
September-2003	GW, SW	October-2003	November-2003
March-2004	GW	April-2004	May-2004 (annual report)

GW - Ground water
 SW - Surface water

2.0 Sampling and Analysis

Planned site sampling includes collection of groundwater from 25 monitoring wells and two leachate samples. The following sections describe the sampling rationale and methods.

2.1 GROUNDWATER SAMPLING

A total of 24 monitoring wells will be sampled during the evaluation period, as described in the CMCP. The proposed and existing monitoring well locations are shown on Figure 4-1 of the CMCP (FSI 2001).

2.2 SAMPLE COLLECTION METHODOLOGY

2.2.1 GROUNDWATER MONITORING WELLS

Monitoring wells will be purged before sample collection to obtain groundwater samples that are representative of the formation water rather than stagnant water from the well casing. Groundwater that has occupied the well casing is often under oxidizing conditions, and thus may be chemically different from true formation water.

Monitoring wells will be purged and sampled using low-flow purging methods (Barcelona et al. 1994). Sampling staff will measure groundwater levels to the nearest 0.01-foot using a decontaminated electronic well probe prior to collection of samples. Prior to collection of groundwater samples, the wells will be purged by pumping a small volume of water to ensure sampled water represents aquifer conditions. The volume pumped will be determined in the field based on stabilization of field parameters: specific conductance, dissolved oxygen, and pH. Wells will be purged by very slowly lowering semi-rigid polyethylene tubing to a depth corresponding to roughly the midpoint of the screen, securing the tubing to prevent vertical movement, connecting it to a peristaltic pump, and then pumping at a rate not to exceed 0.5 liters/minute (0.132 gallons/minute). At a minimum, two pump and tubing volumes will be purged (1/2" I.D. tubing = 0.010 gallon/lineal foot). Wells MW-33 and MW-35 (which are too deep to use a peristaltic pump) will be purged and sampled using dedicated pneumatic bladder pumps, at a rate not to exceed 0.5 liters/minute. Samples from all wells will be collected once the parameter values have stabilized over the course of three sets of measurements as follows:

specific conductance	10 uS
dissolved oxygen	2 mg/L
pH	0.1

If a well can be pumped dry prior to reaching the desired purge volume, it will be allowed to recover prior to sampling, using the minimum time between purging and sampling that would allow collection of sufficient sample volume. Samples will be pumped directly into the appropriate containers, as provided by the laboratory. A Field Data Sampling Sheet (provided in Appendix A) will be filled out for each well. New tubing will be used for each well. All purge water will be collected and discharged to one of the two leachate wet wells.

Leachate samples will be collected from the two wet wells located at the north and south lift stations of the leachate collection trench. Sample collection will occur using disposable polyethylene hand bailers secured with nylon cord, lowered into the "wet well." Sample bottles will be filled directly from the bailers, using a bottom-emptying device. Leachate samples will be collected prior to any disposal of purge water in the wet wells. Purge water from monitoring wells may be stored in drums prior to sampling the wet wells.

Dissolved metals samples will be filtered through a disposable 0.45-micron filter at the time of sample collection. The filters will attach directly to the discharge tube of the sampling pump. Each in-line filter will be used only once.

After collection, all samples will be labeled, chilled in a cooler to 4°C, and shipped to the testing laboratory for analysis. Full chain-of-custody and field documentation procedures will be employed, as described in Section 2.6. The laboratory will analyze the water samples for the constituents listed in the CMCP (FSI 2001). Lab methods and PQLs will be per CMCP (FSI 2001) except for those parameters listed on Table 1, which defines the methods and PQL achievable by the selected laboratories. PQLs listed in Table 1 are equal to or less than those listed in the CMCP.

2.2.2 FIELD FILTERING

Samples collected for dissolved constituent analysis must be filtered through a 0.45-micron filter. The filters will attach directly to the discharge tube of the sampling pump. The filter must be changed between sample points, or more frequently if clogging occurs. If samples are collected with disposable bailers, then vacuum or pressure filters are an acceptable method of filtering. Where in-line filtration is not possible, prefiltration bottles may be used to collect the samples. Prefiltration bottles must be obtained from the laboratory with the sample coolers and identified with the bottle request. Prefiltration bottles, used for vacuum or pressure filtering, will not be used for more than one well. The use of prefiltration bottles must be noted on the Chain-of-Custody form in the comments section. Samples that have been field-filtered or that require laboratory filtering must be noted on the Chain-of-Custody forms in the comments section. The laboratory will note which samples require filtering on the individual bottle labels.

Table 1
Proposed Analytical Methods for Selected Parameters

Analyte	Proposed Analytical Method	Method PQL $\mu\text{g/L}$
Nitrate	300.0 / 353.2	8
Nitrite	300.0 / 354.1	8
Chloride	300.0 / 325.2	800
Dissolved Metals		
Antimony	204.2	30
Arsenic	206.2 / 7060	20
Cadmium	213.2 / 7131	1
Chromium (III&VI)	200.7 / 6010 / 7191	24
Chromium(III)	subtraction	24
Chromium(VI)	7196 / 7197	10
Copper	220.2 / 7211	10
Lead	239.2	10
Nickel	200.8 / 6020 / 249.2 / 7521	10
Selenium	270.2 / 7740	20
Zinc	200.7 / 6010 / 7951	32
Iron	200.7 / 6010	56
Manganese	200.7 / 6010	4

2.2.3 SAMPLE COLLECTION

When filling the sample bottles, the following procedures and precautions will be adhered to:

1. Sample bottles will be filled directly from the bailer, dedicated pump, or filter apparatus, with minimal air contact.
2. Bottle caps will be removed carefully so that the inside of the cap is not touched. Caps must never be put on the ground. Caps for volatile organic compound (VOC) vials will contain a Teflon-lined septum. The Teflon side of the septum must be facing the sample to prevent contamination of the sample through the septum.
3. The sampling team will wear appropriate nonpowdered latex or nitrile gloves (PVC or vinyl gloves can leave trace levels of phthalate or vinyl chloride). Gloves will be changed between wells or more often.
4. Tubing or hoses from the sampling systems must not touch or be placed in the sample bottles.

5. Semivolatile organic compound (SVOC) bottles and VOC vials must be filled so that they are headspace-free. These sample bottles therefore need to be slightly overfilled (water tension will maintain a convex water surface in the bottle). The caps for these bottles will be replaced gently, to eliminate air bubbles in the sample. The bottles must then be checked by inverting them and tapping them sharply with a finger. If air bubbles appear, open the bottle, add more water, and repeat the process until all air bubbles are gone. Do not empty the bottle and refill it, as VOC bottles already contain preservatives.
6. Sample bottles, caps, or septums that fall on the ground before filling will be discarded.
7. Metals sampling will be conducted with "clean technique." Bottles will be bagged in plastic and the cap placed in the bag during sampling.

Table 2 shows sample bottle requirements and preservatives. Samples will be collected in the reverse order shown on Table 2, in the event sample volume is limited. The analytical laboratory will provide the sample containers and necessary preservation.

Table 2
Sample Bottle Requirements

Analytical Parameter	Required Bottle*	Preservative
Nitrate, Nitrite, Chloride	(2) 500 ml poly	
Dissolved metals	(2) 500 ml poly	HNO ₃ to pH<2**
PCBs/Pesticides	1 L amber glass	
VOCs	(2) 40 ml VOA	HCl to pH<2
SVOCs	1 L amber glass	

* Collect one sample in triplicate per sampling event (matrix spike & matrix spike duplicate), and one sample in duplicate (field duplicate), and mark for analysis on Chain of Custody form as separate samples.

** May not be required if samples are delivered to lab same day

2.2.4 WATER LEVEL MONITORING

Groundwater elevations will be measured at all wells in the Evaluation Monitoring well network, in the leachate collection trench, the East Ditch, and the Snohomish River during each monitoring event to determine changes in seasonal or long-term water elevations and groundwater flow directions.

2.3 EQUIPMENT DECONTAMINATION

In order to mitigate the potential for cross-contamination, all nondedicated, sample-contacting, and downhole equipment used in the collection and sampling processes will be decontaminated before sample collection. Included are nondedicated pumps, nondedicated bailers, groundwater-level measurement devices, and nondedicated filtering apparatuses.

A water level probe must be dedicated to groundwater monitoring well use only. Under no circumstance shall this dedicated probe be used to measure other fluid levels (e.g., leachate).

The following steps will constitute the decontamination procedure:

1. Wash items in a solution of non-phosphate (e.g., Alconox) detergent and tap water
2. Rinse with tap water
3. Rinse with deionized water
4. Air-dry in a clean environment

Decontaminated equipment will be stored and transported in clean containers or wrapping.

2.4 SAMPLE PRESERVATION, STORAGE, AND SHIPMENT

2.4.1 SAMPLE PRESERVATION

The sample containers (including preservative, if required) will be prepared and provided by the analytical laboratory. Samples will be preserved consistent with analytical laboratory recommendations. After each bottle is filled and capped, the sample container will be inverted to ensure complete mixing of the sample with the preservative. The sample container should not be shaken.

2.4.2 TEMPERATURE CONTROL

The sample container and samples will be cooled to 4°C, from the time the sample is collected through analysis. Samples will be maintained in temperature-regulated refrigerators, in coolers, or in sample coolers containing double-bagged or commercially frozen icepacks. The icepacks will be frozen solid before use.

2.4.3 SAMPLE PACKING AND STORAGE

Before the sample bottles are packed into the shipment coolers, the sample designations will be recorded in the appropriate spaces on the Chain-of-Custody form. After the samples are collected and the preservatives are added (when applicable), the bottles will be capped and placed in the sample cooler. The frozen icepacks will be placed into the sample cooler such that they are not in direct contact with the sample bottles. Glass containers should not be packed in contact with each other. Bottle holders, cushions, or bubble wrap will be used for glass bottles to protect them from breakage.

Bottles will be wiped clean with paper towels before placement in the sample cooler. The sample cooler must be kept as clean as possible to minimize the potential for cross-contamination. Bottle caps will be checked to ensure they are tight and will not become loose when inserted in the cooler. Bottle caps will not be taped.

The Chain-of-Custody form will be placed in a plastic bag, sealed, and placed inside the sample cooler or taped to the inside lid of the cooler. A copy of the Chain-of-Custody form will be retained for verification.

Samples will be stored at 4°C, in an enclosed cooler or dedicated refrigerator where possible, before shipment to the laboratory. Samples will be shipped daily to the laboratory to ensure proper temperature control and that holding time requirements are met.

2.5 QUALITY ASSURANCE/QUALITY CONTROL

Samples will be collected and analyzed with sufficient quality assurance/quality control (QA/QC) to ensure representative and reliable results. The overall QA objective for this investigation is to ensure that all decisions based on laboratory and field data are technically sound, statistically valid, and properly documented. Specific QA protocols will be executed and are described for all activities related to the collection of samples, the analyses of these samples by the laboratory, and the handling of data generated during the investigation. There are two parts to the QA/QC program for this project: field and laboratory.

2.5.1 FIELD

Field QA/QC includes proper documentation of field activities and sampling/handling procedures, as described in Section 2.6. Field QA/QC samples will consist of the following:

- One duplicate per 24 samples
- One trip blank per sample shipment (VOCs only)
- One field blank per 24 samples (optional analysis based on well sample results)

2.5.1.1 Duplicates and Split Samples

Duplicate samples will be collected from a well with known or suspected contamination.

Duplicates are used to confirm analytical results from a given sample point. Duplicate samples are collected in the field using a matching set of laboratory-supplied bottles and sampling from the selected well, as requested. Each duplicate should be sampled by alternating between the regular and the duplicate sample bottles, proceeding in the designated sampling order (VOCs first). The well where the duplicate is collected must be identified on the field sampling data sheet. All duplicates shall be blind-labeled (i.e., the well designation is not listed on the sample bottle or Chain-of-Custody form). Once a duplicate is collected, it is handled and shipped in the same manner as the rest of the samples. Duplicate results will be reported in the laboratory results as separate samples, using the designation DUP-#).

Split samples are collected when a well is sampled with a third party (e.g., Ecology). Split samples should be collected using the same method as a duplicate, alternating between sample bottles, and proceeding in the designated sampling order. The well at which a split sample is collected must be identified on the field sampling data sheet. Also note the condition of the bottles or preservatives, the sample-collection method (if different from the standard), and the selected agency laboratory.

2.5.1.2 Trip Blanks

Trip blanks are used to detect contamination that may be introduced in bottle preparation, in transit to or from the sampling site, or in the field. Trip blanks are samples of volatile-organic-free, laboratory-quality water (Type II reagent grade) that are prepared at the laboratory. They remain with the sample bottles while in transit to the site, during sampling, and during the return trip to the laboratory. Trip blank sample bottles are not opened at any time during this process. Trip blanks are to be reported in the laboratory results as separate samples, using the designation TB-#. Each sample cooler that includes bottles for VOC analysis must include a trip blank, whether it was requested or not.

2.5.1.3 Field Blanks

Field blanks are used to detect contamination that may be introduced in the field. Field blanks will be prepared in the field by pumping laboratory reagent-quality water through new tubing and into the equipment blank bottles. The well at which the equipment blank is prepared must be identified on the field sampling data sheet.

Field blank results will be reported in the laboratory results as separate samples, using the designation FB-#.

2.5.2 LABORATORY

Laboratory QA/QC samples will consist of the following:

- One matrix spike (MS) per 24 samples
- One matrix spike duplicate (MSD) per 24 samples

Method-specific QA/QC samples may include the following:

- Method blanks
- Duplicates
- Instrument calibration verification standards
- Laboratory control samples
- Surrogate spiked samples
- Performance evaluation QC check samples

2.5.3 DATA EVALUATION

Data evaluation will include checking holding times, method blank results, surrogate recovery results, field and laboratory duplicate results, completeness, detection limits, laboratory control sample results, and Chain-of-Custody forms. After the data has been checked, it will be entered into the project database with any assigned data qualifiers.

2.6 FIELD DOCUMENTATION AND CHAIN-OF-CUSTODY

The following sections describe the recording system for documenting all site field activities, and the sample chain-of-custody procedures.

2.6.1 FIELD DOCUMENTATION

An accurate chronological recording of all field activities is vital to the documentation of any environmental investigation. To accomplish this, field team members will maintain field log books and data sheets providing a daily record of significant events, observations, deviations from the sampling plan and measurements collected during the field activities.

2.6.1.1 Field Sampling Data Sheet

A field sampling data sheet (example in Appendix A) will be filled out for each sample point. This sheet contains information regarding site and well conditions, sampling and purging procedures, and field measurements. At a minimum, the following information must be documented:

1. **Purging Information**, including date, time, well number, casing volume, elapsed time, discharge color (if different than for sampling), water level before and after purging. Note if the well was dry, purged dry, or was otherwise impossible to sample.
2. **Purging and Sampling Equipment**, including pump type and tubing material.
3. **Field Measurements**, including fluid surface elevation (depth to groundwater or to leachate), temperature, pH, dissolved oxygen, and specific conductance.
4. **Additional Field Measurements**, as necessary.

2.6.1.2 Field Observations

The comments section on the field sampling data sheet will include such field observations as the following:

- Weather condition: wind direction, speed, upwind activities (ensure that vehicles or gasoline-engine generators or compressors are not upwind of sampling activities), temperature, and barometric pressure (if required).
- Sample appearance, including odor, color, and turbidity:
 - ◆ **Odor**: (e.g., rotten eggs, earthy, strong, moderate, slight, metallic, landfill gas - *do not sniff sample*).
 - ◆ **Color**: True "color" is the color after turbidity has been removed, if samples are filtered. True color may be caused by metallic ions, humus, peat, or industrial

chemicals. Hold the sample up to the light and describe the true color in as much detail as possible (color charts are acceptable descriptive methods). If samples are not filtered, then color may be a function of turbidity.

- ◆ Turbidity (regardless of whether turbidity measurements are taken):
 - None: sample is clear.
 - Trace: sediment slightly clouds or colors sample; does not accumulate in bottle.
 - Moderate: definite cloudiness, sediment accumulates at bottom of bottle.
 - High: muddy or dark brown appearance.

When a turbidity-measuring device is used, measurements must be provided in nephelometric units.

- Reference point for well measurements (i.e., is it clearly marked on top of casing?).
- Well I.D. where the field blank or duplicate sample is collected.
- Calculations for purge volumes and temperature conversions. Note when wells are purged dry.
- Duplicate field measurement results.
- Other conditions, such as sample splits with regulatory agencies, potential safety or health hazards (e.g., landfill gas in well).

2.6.1.3 Sample Certification

The bottom of the field sampling data sheet must be signed to certify that the sampling procedures were in accordance with those described in this sampling plan. The person certifying the sampling assumes full responsibility that the sampling process satisfied the required criteria.

2.6.1.4 Maintenance Conditions at Well

The condition of the well and its surrounding area must be observed and problems and changes recorded on the field sampling data sheet each time the well is sampled. The following items, at a minimum, will be checked:

- Presence and condition of the well's identification sign
- Whether the well's protective casing is locked and whether the key works
- Well integrity
- Physical surroundings (e.g., high weeds, standing water, cleanliness, nearby activities)
- Condition of the pump and appurtenances
- Obstructions or kinks in the well casing.
- Presence of water in the annular space
- Grease or other unnatural substances on the top of the well or the threaded caps

- Whether the cap fits securely to prevent the introduction of contaminants
- Evidence of natural contamination (e.g., animal or insect parts in the well)
- Condition of well guard post and concrete pad

The condition of flush-mounted well head covers and locks must also be recorded once per year. Other items that will be noted include any physical alterations to the well, any alterations to the surrounding soils and associated drainage, or any other notable changes in conditions near the well.

Notify the project manager immediately of any conditions that would prevent or preclude sampling or affect sample integrity. Any damage to a monitoring device will be reported to Ecology in writing within 14 days of its discovery, along with a description of the proposed repair or replacement measures and a schedule for completion of the work.

2.6.2 SAMPLE IDENTIFICATION

Following sample collection, field personnel will affix labels to each sample container. Samplers will use waterproof ink, plastic bags, or clear tape to ensure labels remain legible even when wet. A sample label form that may be copied on to adhesive label paper is provided in Appendix A. Samplers will record the following information on the labels:

- Project name and number
- Sample identification number
- Date and time of collection
- Required test methods
- Name of sample collector

Sample numbering will follow the following format:

MW-29-0701 = monitoring well MW-29 collected in July 2001

LEACHATE-N-0701 = north leachate sample collected July 2001

SW = surface water

DUP 1, DUP 2, etc. = duplicate (do not indicate which well a duplicate is from)

TB 1, TB 2, etc. = trip blank (indicate matrix for all blanks, e.g., ground water, surface water)

FB 1, FB 2, etc. = field blank

2.6.3 CHAIN-OF-CUSTODY RECORD

The objective of the chain-of-custody procedures is to allow the tracking of possession and handling of individual samples from the time of field collection through laboratory analysis. Once a sample is collected, it becomes part of the chain-of-custody process. A sample is "in custody" when: (1) it is in someone's possession, (2) it is within visual proximity of that person,

(3) it is in that person's possession, but locked up and sealed (e.g., during transport), or (4) it is in a designated secure sample storage area. Sampling staff will complete a Chain-of-Custody form, which will accompany each batch of samples. The record will contain the following information:

- Project name and number
- Names of sampling team members
- Requested testing program
- Required turnaround time
- Sample number
- Date and time collected
- Sample type
- Matrix
- Number of containers
- Special Instructions
- Signatures of persons involved in the chain of possession

When sample custody is transferred to another individual, the samples must be relinquished by the present custodian and received by the new custodian. This will be recorded at the bottom of the Chain-of-Custody form where the persons involved will sign, date and note the time of transfer. An HWA Chain-of-Custody form is provided in Appendix A.

Sampling team members will keep sample coolers in locked vehicles while not in active use or visual range. If couriers are used to transport samples, Chain-of-Custody seals will be affixed to sample coolers.

2.7 INVESTIGATION-DERIVED WASTE

Purge water from the wells will be collected and discharged to the leachate wet wells. Solid waste (e.g., disposable bailers, gloves, etc.) will be disposed of as ordinary municipal waste.

2.8 CALIBRATION AND USE OF METERS

Before being taken to the field, equipment must be cleaned and checked for malfunctions. Meters must be calibrated each morning before they are used in the field, following manufacturers' procedures. Equipment will be calibrated at least daily. All field monitoring equipment will be calibrated consistent with manufacturers' procedures using instrument calibration standards prepared according to the manufacture's specifications. In all cases, proper documentation must be made of all calibration procedures for each sampling event, including calibration methodology (one- or two-point calibration, difference, standard concentration, and expiration date).

Logbooks should be maintained for all field meters. The logbooks must contain the same information as those for permanent laboratory instruments (serial number, name and model of meter, year purchased, etc.). The books also must contain quality control (QC) results, maintenance performed by the factory, and calibration notes for each day the equipment is used. Instruments used to measure pH and electrical conductivity should be calibrated at least once each day of sampling. Temperature-measuring devices should be calibrated against a standardized laboratory thermometer at a frequency recommended by the manufacturer. Additional data (e.g., turbidity, dissolved oxygen) should be calibrated in accordance with manufacturer recommendations and documented.

2.9 FIELD MEASUREMENTS

2.9.1 STATIC WATER LEVEL MEASUREMENTS

The depth-to-water should be recorded to the nearest hundredth of a foot (0.01 ft). Water levels should be measured before and after purging to assess drawdown effects at each well, and to produce a representative static groundwater contour map. To alleviate potential errors, previous water level data should be used for comparison during field activities. Water levels are preferably measured before purging a well and as close in time as possible, to minimize interference from drawdown or barometric pressure effects.

2.9.2 DEPTH-OF-WELL MEASUREMENTS

The total depth of the well will be measured in wells where there is visible or significant turbidity, or when tampering is noted. Also, evaluate and respond to any excessive sediment accumulation.

The well depth measurements should be compared with the pump or tubing intake depths. The intake should be located at the middle of the screen or lower, depending on the screen length and well recharge characteristics, maintaining a minimum of two feet (where possible) between the pump intake and the bottom of the well. If the intake location in a well does not appear appropriate for collecting representative samples, adjust the placement.

3.0 Data Analysis and Reporting

Results of the sampling and laboratory testing will be summarized in a spreadsheet and the data compared to the proposed groundwater cleanup levels. A brief technical memorandum will describe any significant field sampling issues, laboratory QA/QC testing, water level monitoring data and water quality testing results. Reports will be transmitted to Ecology as per the CMCP (FSI, 2001).

4.0 References

Barcelona, Michael J., Wehrmann, H. Allen, and Varljen, Mark D. 1994. Reproducible Well Purging Procedures and VOC stabilization Criteria for Ground Water Sampling. *Ground Water* Vol. 32, No. 1, pp. 12-22. January-February.

Floyd & Snider Inc. (FSI). 2001. Attachment CAP-2 – Compliance Monitoring and Contingency Plan, *Everett Landfill/Tire Fire Site Cleanup Action Plan*. Seattle, Washington. March.