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2002/2003 Monitored Natural Attenuation Report For The

Onalaska Municipal Landfill Site Onalaska, Wisconsin

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1.0 INTRODUCTION

This annual report for the Onalaska Municipal Landfill (Site) includes monitoring data for the fall 2002 and spring 2003 sampling events. The groundwater monitoring was completed in compliance with the Monitored Natural Attenuation Plan, dated December 4, 2001.

The Monitored Natural Attenuation (MNA) Plan was prepared for Region 5 of the U.S. Environmental Protection Agency (USEPA) per Revision 1 of the Statement of Work dated July 30, 2001. The USEPA decided, at the recommendation of the Wisconsin Department of Natural Resources (WDNR), to temporarily discontinue active groundwater extraction and to evaluate natural attenuation of contaminants in the groundwater. The groundwater extraction system was shut down on November 26, 2001 and remains off during the MNA study. This report discusses the purpose of MNA, background information on the Site, details on the MNA study, a summary of current contaminant concentrations and distribution, and discusses the effect natural attenuation has on controlling the spread of contaminants in groundwater.

1.1 PURPOSE

The MNA program was implemented in the fall of 2001 to replace the original groundwater monitoring program. The primary objectives of the MNA program are to assess:

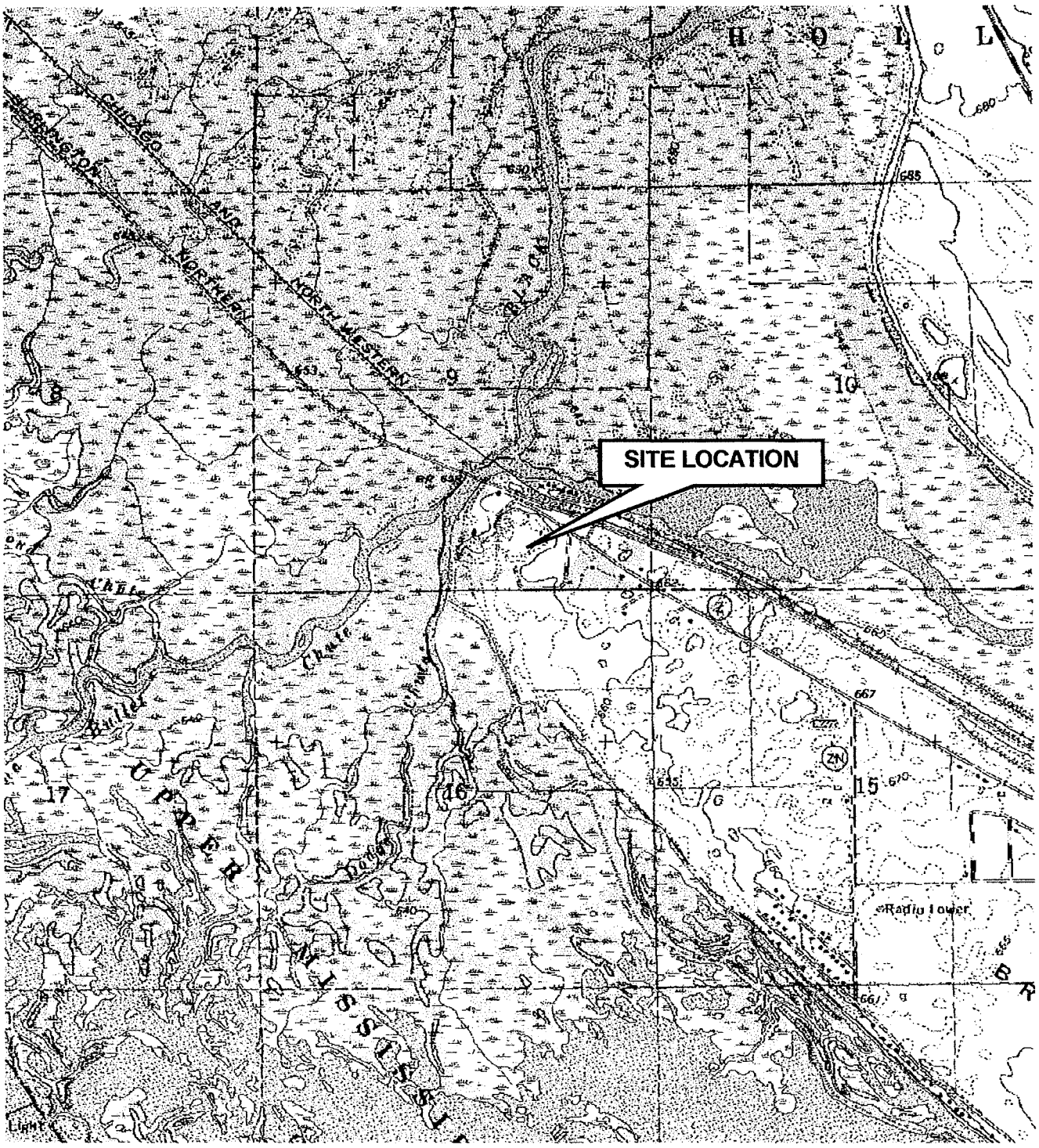
- Whether there are meaningful trends of contaminant mass decreasing over time at appropriate monitoring points.
- Whether there are indicators of active natural attenuation at the site based on hydrogeological and geochemical data.
- Whether natural attenuation is an acceptable modification to the remedy for the Site.

The extraction wells and treatment system have been placed on "stand by" and will remain off for the duration of the MNA study. The study is expected to last several years, while the effectiveness of natural attenuation is evaluated. If it is determined that the natural attenuation will achieve the clean up criteria, then MNA would be implemented, once approved, as a modification to a ROD remedy.

1.2 BACKGROUND

1.2.1 PHYSICAL BACKGROUND

The Site is approximately 10 miles north of the city of La Crosse, Wisconsin, near the confluence of the Mississippi and Black rivers. **Figure 1-1**, attached, illustrates the Site Location. The Site was mined, as a sand and gravel quarry, then used as a municipal and industrial waste landfill, between 1969 and 1980. Unconsolidated deposits at the site are 135 to 142 feet thick and consist primarily of sand and gravel. Beneath the unconsolidated deposits lies sandstone bedrock. Natural groundwater flow direction in the unconsolidated material (documented prior to groundwater extraction) is predominantly south-southwesterly toward the wetlands that border the Black River. During high river stages (i.e. spring), the groundwater flow direction is toward the south-southeast. Average groundwater flow velocity beneath the site was estimated during the Remedial Investigation (RI) to range between 55 and 110 feet per year, with an estimated average of 70 feet per year.



SOURCE: USGS 7½ Minute Topographic Quadrangle Holmen, Wi-Minn., dated 1973, obtained from DeLorme

SCALE

0 1/4 1/2 1 MILE

N

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FIGURE 1-1

SITE LOCATION MAP

Onalaska Landfill
Onalaska, Wisconsin

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1.2.2 CONTAMINANT BACKGROUND

Industrial, commercial, and municipal wastes are reportedly mixed throughout the landfill deposits. For a time, open burning occurred at the site. Until early 1971, when open burning was banned, industrial solvents were burned regularly, at apparently random locations throughout the landfill. Some refuse was also burned periodically. Open burning reportedly continued, even though banned, until as late as 1979.

Previous Site investigations determined that liquid industrial wastes disposed of at the landfill consisted primarily of naphtha-based solvents used in a metal cleaning process and solvent wastes from paint spray gun cleaning and machine shop cleaning fluids. At least two kinds of naphtha were disposed of at the site, high-flash naphtha and VM&P or Stoddard naphtha. These naphthas were probably used in a paint cleaning process at one of the nearby plants and as general solvents.

In September 1982, the DNR sampled and analyzed water from Site monitoring wells and nearby private wells for compliance with drinking water standards for organic and inorganic constituents. The investigations indicated that groundwater contamination had occurred. The barium concentrations in the water from a residential well south of the Site exceeded the drinking water standard, and five organic compounds were detected above background levels.

On May 2,1983, an EPA Potential Hazardous Waste Site inspection report was submitted. In September 1984, the Onalaska Landfill was placed on the National Priorities List.

The original groundwater monitoring program at the Site was implemented in 1995. From 1995 through the 2001 spring monitoring event, groundwater samples were obtained from monitoring wells, extraction wells, and two nearby residential wells. In addition to sampling, groundwater elevations were measured in monitoring wells, air injection wells (i.e. bioventing wells), and piezometers. From March 1995, through December 1996, sampling was conducted quarterly. In 1997, the sampling frequency was reduced from quarterly to semiannually. The wells included in the groundwater monitoring program , as well as the parameters analyzed, have changed on several occasions, since the groundwater monitoring program was implemented in 1995. The rationale for the changes prior to the MNA plan and previous groundwater monitoring results are documented in the Annual Groundwater Quality and Capture Reports. Each change was approved by the USEPA prior to being implemented.

Preliminary investigations conducted at the Site determined that contaminant concentrations in the groundwater at individual monitoring well locations exceeded one or more Federal or State standards or criteria. The Safe Drinking Water Act maximum contaminant levels (MCLs) for arsenic, barium, benzene, 1,1-dichloroethene, toluene, 1,1,1-trichloroethane, trichloroethene, and xylene were exceeded at one or more monitoring well locations. Concentrations of toluene were observed as high as 43,000 ug/L. Of the three chlorinated compounds initially analyzed for, 1,1,1-TCA was the most prevalent, and was found at concentrations as high as 730 ug/L. The majority of the VOCs detected were found in shallow monitoring wells (MW-5S and MW-3S and B4S) and were BTEX compounds. The vertical extent of BTEX and chlorinated compounds contamination was found to be confined to the upper 10 to 20 feet of the aquifer. However, ethylbenzene,1,1-DCA and chloroethane were detected at depths up to 50 to 60 feet below the water table. The vertical extent of semivolatile organic compounds (SVOCs) contamination was also mostly confined to the upper 10 to 20 feet of the aquifer. There were no SVOCs detected in any of the deep monitoring wells.

Monitoring wells along the southwestern edge of the landfill and southwest of the most commonly exhibited inorganic chemicals above background. These wells were primarily shallow and medium wells that included MW-2S, MW-2M, MW-3S, MW-4S, MW-B4S, MW-5S, and MW-8S. Four chemicals: barium, iron, manganese, and sodium, were detected above background with greater frequency than the other inorganic chemicals. The higher concentrations of these four chemical tends to occur in wells along the southwestern edge of the landfill or southwest of the landfill.

1.3 CLEANUP AND CRITERIA

The Record of Decision (ROD), signed August 14,1990, defines the selected remedy and addresses the goals of the remedial action. The selected action for the remedy includes the following remedial actions for groundwater:

- Extraction and treatment of the groundwater contaminant plume to meet Federal Safe Drinking Water Act (SDWA) drinking water standards and State of Wisconsin groundwater quality standards
- Periodic monitoring of the groundwater contaminant plume
- Deed restrictions limiting surface and groundwater use at the Onalaska Municipal Landfill site
- Continued reliance on state institutional controls governing groundwater use within the proximity of landfills

The remedial actions are currently ongoing (e.g. monitoring) or are in place (e.g. institutional controls).

Under the remedy selected in the ROD, the following cleanup standards were adopted:

- The groundwater contaminant plume located at any point beyond the property boundary or design management zone (DMZ) must meet the following criteria:
  - Preventive Action Limits, (PALs) from Wisconsin Administrative Code Chapter NR 140:
- The groundwater contaminant plume located at the landfill waste boundary must meet:
  - Maximum Contaminant Levels (MCLs) from the Safe Drinking Water Act, 40 CFR 141.61 and 40 CFR 143
  - Non-zero Maximum Contaminant Level Goals (MCLGs) from the Safe Drinking Water Act, 40 CFR 141.50

The DMZ defined for the Onalaska site extends 250 feet horizontally from the waste boundary as shown in Figure 1-2. The MCLs and nonzero MCLGs must be met at the landfill waste boundary and the more stringent Wisconsin standards (PALs) must be met at any point beyond the property boundary or the DMZ. The DMZ as defined in NR 140 is a 3-dimensional boundary surrounding a regulated facility and extends from the ground surface through all saturated geological strata.

Specific cleanup standards (i.e., chemical-specific concentrations) were established in the ROD for 11 indicator chemicals. (e.g. Chemicals of Concern (COC)) The USEPA amended the ROD on October 10, 2000, by an Explanation of Significant Differences (ESD) to revise the cleanup standards for these chemicals to the latest NR 140 PALS and Enforcement Standards (ESs). The list of contaminants included in the MNA Plan consists of the original 11 indicator chemicals, other contaminants detected at concentrations above PALs during the Remedial Investigation, and contaminants identified above Wisconsin PALs since the groundwater monitoring program was implemented in 1995. This list and the applicable cleanup standards are presented in Table 1-1.

If it becomes apparent that it is not technically or economically feasible to achieve a PAL, then a Wisconsin Alternative Concentration Limit (WACL) may be established. Except where the background concentration of a compound exceeds the ES, the WACL established may not exceed the ES for that compound. A WACL is calculated using procedures defined by the WDNR.

If it becomes apparent that it is technically impracticable to achieve the groundwater cleanup standards, including potential WACLs, then USEPA in consultation with the WDNR may consider the use of alternate methods to control the groundwater contaminant plume or source to achieve the standards. If those alternate methods cannot attain groundwater cleanup standards, including potential WACLs, then a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) waiver may be considered.

BLACK RIVER

SHORELINE

CANOE LANDING

MW-1 M S

ASPHALT DRIVE

LYTLE ROAD

B.N.S.F. RAILROAD

STATE BIKE TRAIL

COUNTY ROAD "Z"

HUBLEY WELL MW-14S

AW-1

MW-2 D M S

CLARIFIER

AST WITH CONCRETE PIT

PZ-1 AW-9

MW-5S

EW-5

PROCESS BUILDING

AW-13

EW-4

PZ-2

DESIGNATED MANAGEMENT ZONE

EW-3

AW-20

AW-25

EW-2

AW-28

MW-4S

EW-1

PZ-3

PZ-5

PZ-6

MW-6 M S

MW-15M

MW-7M

GRAVEL DRIVE

MW-8 S M D

ACKERMAN WELL

SPORTSMANS CLUB ROAD

MW-12S

GARDEN SPIGOTS

PZ-4

PASTURE

CROPLAND

MW-10M

MW-9M

MW-11M

LEGEND

- ⊕ = Monitoring Well
- ● = Piezometer
- ⊠ = Extraction Well
- O = Air Well
- — · — · — = Approximate Property Boundary
- - - - - - = Approximate extent of landfill cap
- ×—×—×— = Fence line
- u — u — u — u = Utility lines
- = Utility pole
- = Hydrant

Approximate Scale
1 inch = 175 feet

0 175 350

N

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

Figure 1–2
Site Plan
Onalaska Landfill
Onalaska, Wisconsin

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TABLE 1-1
Contaminants Included in the Natural Attenuation Plan
Onalaska Municipal Landfill

Contaminants	Wisconsin NR140 PAL [ug/L]	Wisconsin NR140 ES [ug/L]	Federal MCL [ug/L]
Organic Contaminants			
BETX			
Benzene	0.5	5	5
Ethylbenzene	140	700	700
Toluene	200	1,000	1,000
Total Xylenes	1,000	10,000	10,000
Chlorinated VOCs			
1,1-Dichioroethane	85	850	N.A.
1,1-Dichloroethene	0.7	7	7
1,1,1-Trichloroethane	40	200	200
cis-1,2-Dichloroethene	7	70	70
Trans-1,2-Dichloroethene.	20	100	100
Trichloroethene	0.5	5	5
Tetrachloroethene	0.5	5	5
Methylene Chloride (MW-4 Only)	0.5	5	N.A.
Vinyl Chloride (Chloroethene)	0.02	0.2	2
Other VOCs			
1,2,4 and 1,3,5 Trimethylbenzene	96	480	N.A.
Naphthalene	8	40.	N.A.
Metal Contaminants			
Arsenic	5	50	10
Barium	400	2,000	2,000
Iron	150	300	N.A.
Lead	1.5	15	15
Manganese	25	50	N.A.
Cadmium	0.5	5	5
Cobalt	8	40	N.A.
Mercury	0.2	2	2
Vanadium	6	30	N.A.

2.0 NATURAL ATTENUATION MONITORING PROGRAM

The MNA Plan was developed to address the first two lines of evidence as provided in "Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites" (USEPA, 1999). The first two lines of evidence are:

- The demonstration of meaningful trends of decrease of contaminant mass over time at appropriate monitoring points
- The demonstration of active natural attenuation at the site with hydrogeological and geochemical data and the calculation of degradation rate processes

As recommended in the USEPA document, the third line of evidence, field or bench scale studies, could be done in the future, but is only recommended for consideration, if the first two lines of evidence are inconclusive.

2.1 MONITORING WELL NETWORK

Selected groundwater monitoring wells, piezometers, and air injection wells will be used to monitor groundwater during the natural attenuation study. The wells are separated into two groups based on proximity to the landfill. The two groups of wells are listed below in Table 2-1.

10/29/01 - baseline monitoring

TABLE 2-1
Wells Listed by Group
Onalaska Municipal Landfill

Group 1 Wells			Group 2 Wells	
MW-1 S	MW-5S	AW-9	MW-6S	MW-15M
MW-11M	MW-14S	AW-13	MW-6M	PZ-2
MW-2S	PZ-1	AW-20	MW-8S	PZ-3
MW-2M	PZ-5	AW-25	MW-8M	PZ-4
MW-4S	AW-1	AW-28	MW-12S	a.

a. The Ackerman and Hubley residential wells will be sampled once per year to verify they are not impacted. However, these wells will not be used in the monitored natural attenuation study.

Both Group 1 and 2 wells were monitored for the first MNA sampling event the week of October 29, 2001, to establish baseline conditions at the time the groundwater extraction system was shut down. The system was shut down prior to sampling and was restarted after sampling to use up the remaining treatment chemicals. The system then was put on standby on November 26, 2001 and remains on standby except for the monthly "bumping of the system".

Group 1 wells are sampled and analyzed semiannually. The Group 2 wells are sampled annually. If concentrations in the Group 2 wells increase and begin to approach PALs, or WACLs, in cases where background concentrations exceed PALs, the monitoring frequency will be reviewed and Group 2 wells may be sampled more frequently. Monitoring frequency in Group 1 wells also may be increased as needed to better evaluate whether natural attenuation is occurring for contaminants detected at elevated concentrations.

Groundwater level measurements are gauged semiannually during the sampling events in all the Group 1 and 2 wells.

2.2 MONITORING RATIONALE

As described in the MNA Plan, the following discusses the monitoring rationale. Most of the Group 1 wells were selected to provide approximately equally spaced sampling locations downgradient of the landfill. The wells were selected so that they traverse the entire historical limits of the contaminated groundwater plume from the landfill. As a secondary consideration, wells were selected so that there is a sampling location near each idle extraction well. MW-1S and MW-1M (upgradient wells) are included in the Group 1 wells in order to gather sufficient data for statistical evaluation of background groundwater characteristics. Sampling from these wells may be reduced to once per year (i.e.; these wells will be re-categorized from Group 1 to Group 2 wells) after eight useable results are accumulated for each relevant parameter unless the characteristics in these wells are observed to fluctuate substantially on a semiannual basis. MW-2S and MW-2M were included in the Group 1 wells to provide information about groundwater quality below the landfill. AW-9 was included in the Group 1 wells with two considerations in mind: it will provide information regarding groundwater quality at a distance from the landfill comparable to most of the other selected air wells; and it will also provide information that can be compared to wells MW-5S and AW-1, which are closer to the landfill perimeter. Similarly, PZ-1 was selected to provide an additional monitoring point progressively further from AW-9 and inner wells MW-5S and AW-1. MW-14S was included for comparison to well AW-1 and nearby well PZ-1. Comparison of contaminants between these wells may provide information that can be used to determine whether natural attenuation processes are occurring in the first 300 feet from the landfill.

The Group 2 wells were selected from existing wells located toward the outer periphery of the estimated historical limits of contamination from the landfill. Groundwater data from the Group 2 wells will allow determination of whether natural attenuation processes are resulting in the decrease of contaminant mass when compared to the Group 1 wells. The primary emphasis will be the comparison of contaminant concentrations between Group 1 and Group 2 wells for evaluating the suitability of natural attenuation processes for the site.

Monitoring, piezometer, and air injection wells are 2 inches in diameter but the screen length and elevation relative to the water table vary between wells. The screen length on the monitoring wells and piezometers is 10 feet. The screen length on the air injection wells is 5 feet. Most of the screen intervals for the shallow monitoring points straddle the water table except for two of the piezometers and one monitoring well.

2.3 MONITORING ANALYTES

Analytes for sampling rounds will include the VOCs, metals, and natural attenuation parameters specified in Table 2-2. Currently, at the request of the WDNR, results for 36 VOC are reported by the laboratory and include all of the VOCs identified on Table 2-2. Table 2-2 includes the parameters to be monitored, rationale for inclusion, Wisconsin groundwater PAL and ES criteria.

TABLE 2-2
Parameter List and Relevant Criteria for Monitored Natural Attenuation
Onalaska Municipal Landfill

Parameter	Rationale	State of WI Groundwater Criteria PAL (ug/L)	State of WI Groundwater Criteria WI ES (ug/L)
Organic Constituents			
BETX			
Benzene	COC	0.5	5
Ethylbenzene	COC	140	700
Toluene	COC	200	1,000
Total Xylenes	COC	1,000	10,000
Chlorinated VOCs			
1,1-Dichloroethane	COC	85	850
1,1-Dichloroethene	COC	0.7	7
1,1,1 –Trichloroethane	COC	40	200
cis-1,2-Dichloroethene	COC	7	70
trans-1,2-Dichloroethene	COC	20	100
Trichloroethene	COC	0.5	5
Tetrachloroethene	COC	0.5	5
Methylene Chloride (MW-4S only)	COC	0.5	5
Vinyl Chloride (Chloroethene)	COC	0.02	0.2
Other VOCs			
1,2,4-and 1,3,5-Trimethylbenzene	COC	96	480
SVOCs			
Naphthalene	COC	8	40
Inorganic Constituents			
Arsenic	COC	5	50
Barium	COC	400	2,000
Iron	COC	150	300
Lead	COC	1.5	15
Manganese	COC	25	50
Cadmium	COC	0.5	5
Cobalt	COC	8	40
Mercury	COC	0.2	2
Vanadium	COC	6	30

Table 2-2 Continued
Parameter List and Relevant Criteria for Monitored Nattural Attenuation
Onalaska Municipal Landfill

Parameter	Rationale	State of WI Groundwater Criteria	
		PAL (ug/L)	WI ES (ug/L)
Natural Attenuation Parameters			
Field Parameters			
Oxidation-Reduction Potential	Optimal values of < 50 mV indicate reductive dechlorination may be occurring.		
Dissolved Oxygen	Concentrations in groundwater < 1mg/L dissolved oxygen indicate anaerobic conditions present. > 1mg/L indicate aerobic conditions.		
pH	Optimum range of pH is 5 to 9.		
Temperature			
Specific Conductance			
Laboratory Parameters			
Nitrate	Concentrations in groundwater > 1,000 ug/L nitrate may compete with reductive processes of CVOCs.	2,000	10,000
Sulfate	Can be used as electron acceptor once oxygen, nitrate, and iron have been depleted or reduced. Concentrations > 20,000 ug/L may compete with reductive pathway.	125,000	250,000
Iron (already included above)	Concentrations in groundwater > 1,000 ug/L may indicate iron reduction has occurred and reductive dechlorination of CVOCs is possible.		
Manganese (already included above)	Concentrations in groundwater > 1,000 ug/L may indicate manganese reduction has occurred and reductive dechlorination of CVOCs is possible.		
Methane, ethane, ethene (dissolved gasses)	Higher concentrations of methane may indicate methanogenesis is occurring, ethene and ethane degradation products of vinyl chloride.		
Alkalinity	Reflects higher concentrations of calcium and magnesium, indicating the microbil respiration is releasing CO2 into the groundwater.		
Chloride	A measure of CVOC degradation.	125,000	250,000
Total Organic Carbon	A general measure of organics' concentration, including those naturally occurring.		

a. State of Wisconsin Groundwater Quality Standards as specified in NR 140.
b. Natural Attenuation Parameters recommended in Technical Protocols cited in Final OSWER Directive (USEPA April 1999)

2.4 SAMPLING METHODOLOGY

Groundwater sampling followed the guidelines presented in specific Site documents including the Natural Attenuation Plan, the QAPP, and the Sampling and Analyses Plan, and followed the WDNR Groundwater Sampling Desk Reference. Prior to purging each monitoring point, the depth to groundwater in each monitoring point was gauged and recorded in the project field book and on sample collection data sheets.

Field parameters were measured using a flow-through cell and collected during the purging process. One of three purging techniques was employed; a dedicated Whaler pump and tubing; a peristaltic pump and disposable tubing; or a single use disposable bailer. The wells were purged until all parameters including the more sensitive parameters of dissolved oxygen (DO) and oxidation reduction potential (ORP) stabilized to within 10 percent between two consecutive well volumes of purge water. At a minimum, three well volumes were purged from each monitoring point prior to the collection of groundwater samples. Data collected during the purging process, including specific conductivity, temperature, pH, DO and ORP, were recorded on the sample collection data sheets.

For wells where pumps were used, sampling was completed with the sampling pump intake located approximately half way down the submerged screened interval. The pump rate was reduced to a low level after purging in order to simulate low flow sampling.

The residential wells were sampled from an outside spigot after the well had run for approximately 15 minutes immediately prior to sampling. According to the residential well owners, the wells had been running intermittently throughout the day prior to sampling.

Groundwater samples were collected using the respective purging equipment and directly placed in laboratory-supplied containers. The samples were stored on ice in a cooler and sent overnight under chain-of-custody to Severn Trent Laboratories in Canton, Ohio.

3.0 NATURAL ATTENUATION MONITORING RESULTS

Currently, groundwater samples are collected from 26 monitoring points comprised of six air-injection wells, five piezometers, 13 monitoring wells, and two residential wells. As discussed further below, the monitoring program has shown that two organic contaminants, trimethylbenzene and methylene chloride, remain above the ES established by the State of Wisconsin. Two inorganic metals, manganese and iron remain above their respective criteria however, are not considered by the State of Wisconsin to be substances of public health concern, but rather aesthetic (taste or odor) criteria. The following are the results of the groundwater monitoring completed during the December 2002 and April 2003 monitoring events.

3.1 GROUNDWATER FLOW

Groundwater levels were gauged during the December 2002 and April 2003 monitoring events. Groundwater elevation data from these monitoring events are presented in Table 3-1. The top of casing elevations and locations of each monitoring point were surveyed on April 22, 2003 by Coulee Region Land Surveyors of La Crosse, Wisconsin. Groundwater elevation maps from the December 2002 event for the shallow and medium zone wells are shown on Figures 3-1 and 3-2, respectively. Contours were not included on the December 2002 due to the irregularity of the contour lines. Groundwater elevation contour maps from the April 2003 event for the shallow and medium zone wells are shown in Figures 3-3 and 3-4, respectively. Groundwater elevations, gradients, and flow directions are discussed below.

The inferred direction in the shallow groundwater at the Site is towards the south-southeast. The inferred direction of groundwater flow in the medium zone, using the December 2002 data, was towards the southwest and towards the southeast using the April 2002 gauging data.

Using the April 2002 gauging data the hydraulic gradient in the shallow zone was 0.0016 feet/foot and the hydraulic gradient in the medium zone was 0.0012 feet/foot.

The April 2003 groundwater elevation (both shallow and medium) at the site was approximately 2 to 3 feet higher then the December 2002 groundwater elevation. The groundwater flow at the site may be affected by the water level in the nearby Black River.

3.2 GROUNDWATER QUALITY

Monitoring for Natural Attenuation began in October 2001 (baseline natural attenuation monitoring event). This baseline sampling event was completed immediately after the system was turned off. The system was reactivated (for approximately one month) after the baseline sampling event was completed to use up remaining chemicals used in the treatment process. The following are the findings from the most recent two sampling events (considered the second and third MNA sampling event) completed in December 2002 and April 2003. The VOC and metals results from the December 2002 and April 2003 sampling events are summarized below and contained as **Table 3-2**. Attachment A contians the abbreviated analytical report. The results for the natural attention parameters are discussed in Section 4.0. The complete analytical data packages for the sampling events are stored in ENSR's Minneapolis office.

Table 3-1
Groundwater Elevation Table
Onalaska Landfill
Onalaska, Wisconsin

Date of Water Level Measurements: December 12, 2002			
Well Number	**Elevation Top of Casing**	**Depth to Groundwater**	**Elevation of Groundwater**
Ackerman Well	658.28	NM	NM
AW-01	663.62	20.06	643.56
AW-09	660.12	16.87	643.25
AW-13	658.85	15.25	643.60
AW-20	652.71	9.32	643.39
AW-25	657.26	13.80	643.46
AW-28	660.91	17.44	643.47
EW-1	666.86	NM	NM
EW-2	660.94	NM	NM
EW-3	657.61	NM	NM
EW-4	659.98	NM	NM
EW-5	659.07	NM	NM
Hubley Well	657.20	NM	NM
MW-10m	657.74	NM	NM
MW-11m	658.35	NM	NM
MW-12s	664.22	20.82	643.40
MW-14s	656.05	12.36	643.69
MW-15m	656.98	13.66	643.32
MW-1m	664.67	20.90	643.77
MW-1s	664.79	20.67	644.12
MW-2d	673.9	NM	NM
MW-2m	673.64	30.09	643.55
MW-2s	672.85	29.30	643.55
MW-4s	665.84	22.29	643.55
MW-5s	657.11	13.57	643.54
MW-6m	649.71	6.36	643.35
MW-6s	647.86	4.51	643.35
MW-7m	663.74	NM	NM
MW-8d	660.60	NM	NM
MW-8m	660.71	17.19	643.52
MW-8s	660.74	17.36	643.38
MW-9m	657.32	NM	NM
PZ-01	656.40	12.88	643.52
PZ-02	651.36	7.98	643.38
PZ-03	648.96	5.35	643.61
PZ-04	649.13	5.74	643.39
PZ-05	661.98	18.46	643.52
PZ-06	660.78	NM	NM

Notes:

1. Top of Casing elevation surveyed by Coulee Region Land Surveyors, Inc. on April 22, 2003.

2. NM = Water level was not measured.

Table 3-1
Groundwater Elevation Table
Onalaska Landfill
Onalaska, Wisconsin

Date of Water Level Measurements: April 22, 2003			
Well Number	**Elevation Top of Casing**	**Depth to Groundwater**	**Elevation of Groundwater**
Ackerman Well	658.28	NM	NM
AW-01	663.62	17.06	646.56
AW-09	660.12	13.66	646.46
AW-13	658.85	12.72	646.13
AW-20	652.71	6.81	645.90
AW-25	657.26	11.27	645.99
AW-28	660.91	15.21	645.70
EW-1	666.86	NM	NM
EW-2	660.94	NM	NM
EW-3	657.61	NM	NM
EW-4	659.98	NM	NM
EW-5	659.07	NM	NM
Hubley Well	657.20	NM	NM
MW-10m	657.74	12.28	645.46
MW-11m	658.35	13.36	644.99
MW-12s	664.22	18.81	645.41
MW-14s	656.05	9.40	646.65
MW-15m	656.98	11.27	645.71
MW-1m	664.67	17.29	647.38
MW-1s	664.79	17.06	647.73
MW-2d	673.90	27.49	646.41
MW-2m	673.64	27.28	646.36
MW-2s	672.85	26.57	646.28
MW-4s	665.84	20.06	645.78
MW-5s	657.11	10.71	646.40
MW-6m	649.71	3.78	645.93
MW-6s	647.86	1.95	645.91
MW-7m	663.74	18.39	645.35
MW-8d	660.60	14.98	645.62
MW-8m	660.71	15.11	645.60
MW-8s	660.74	15.17	645.57
MW-9m	657.32	12.18	645.14
PZ-01	656.40	9.90	646.50
PZ-02	651.36	4.76	646.60
PZ-03	648.96	2.71	646.25
PZ-04	649.13	3.24	645.89
PZ-05	661.98	16.31	645.67
PZ-06	660.78	15.25	645.53

Notes:

1. Top of Casing elevation surveyed by Coulee Region Land Surveyors, Inc. on April 22, 2003.

2. NM = Water level was not measured.

BLACK RIVER

SHORELINE

CANOE LANDING

MW-1S 644.12

MW-1M

ASPHALT DRIVE

LYTLE ROAD

B.N.S.F. RAILROAD

STATE BIKE TRAIL

SPLIT RAIL FENCE

COUNTY ROAD "Z"

SHORELINE

RIVER

BLACK

AW-1 643.56

HUBLEY WELL

MW-14S 643.69

CLARIFIER

MW-2M

MW-2D

MW-2S 643.55

PZ-1 643.52

AW-9 643.25

MW-5S 643.54

CONCRETE PIT

EW-5 NM

INFERRED GROUNDWATER FLOW DIRECTION

PROCESS BUILDING

AW-13 643.60

EW-4

TREES

PZ-2 643.38

AW-20

EW-3

643.39

AW-25 643.46

EW-2

AW-28 643.47

MW-4S 643.55

EW-1

TREES

PZ-3 643.61

MW-6S 643.35

MW-6M

PZ-5 643.52

PZ-6 NM

MW-7M

MW-15M

GRAVEL DRIVE

MW-8M

SPORTSMANS CLUB ROAD

ACKERMAN WELL

MW-8S

MW-8D 643.38

MW-12S 643.40

GARDEN SPIGOTS

PZ-4 643.39

CROPLAND

PASTURE

MW-9M

MW-11M

MW-10M

N

LEGEND

- ⊕ = Monitoring Well with water level in feet above mean sea level
- ● = Piezometer with water level in feet above mean sea level
- × = Extraction Well
- O = Air Well with water level in feet above mean sea level
- = Approximate Property Line
- = Centerline
- = Fence line
- = Utility lines
- = Utility pole
- = Hydrant
- NM = Water level not measured

Approximate Scale
1 inch = 175 feet

0 175 350

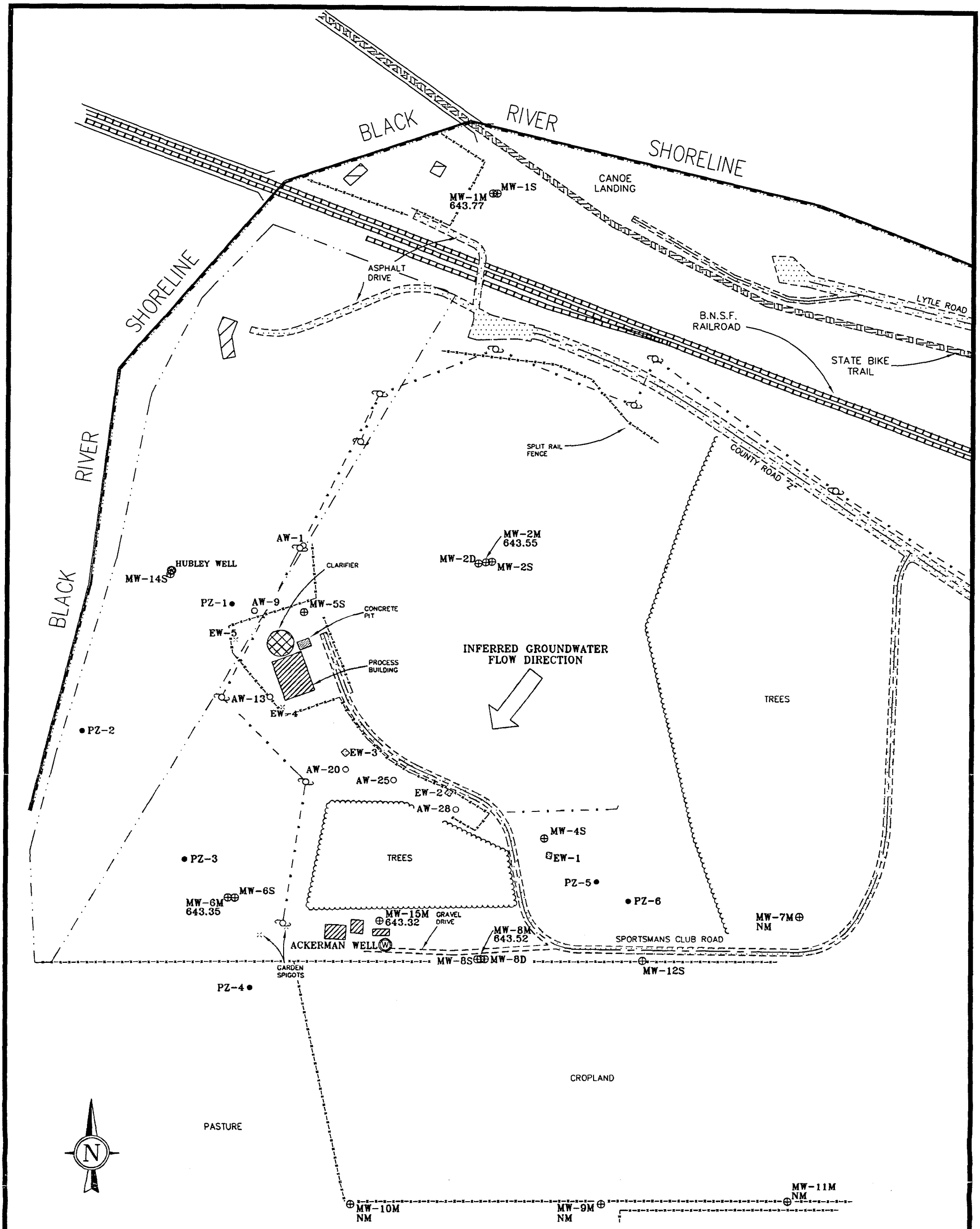
Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

ENSR water level gauging data, collected 12/12/02.

Figure 3-1
December 12, 2002
Shallow Groundwater Elevation Map
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.: water.dwg	CHECKED: PJM		



LEGEND

- ⊕ = Monitoring Well with water level in feet above mean sea level
- ● = Piezometer with water level in feet above mean sea level
- × = Extraction Well
- O = Air Well with water level in feet above mean sea level
- = Approximate Property Line
- = Centerline
- = Fence line
- = Utility lines
- = Utility pole
- = Hydrant
- NM = Water level not measured

Approximate Scale
1 inch = 175 feet

0 175 350

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

ENSR water level gauging data, collected 12/12/02.

Figure 3-2
December 12, 2002
Medium Groundwater Elevation Map
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.: water.dwg	CHECKED: PJM		

BLACK RIVER SHORELINE

CANOE LANDING

MW-1S 647.73

MW-1M

647.5

ASPHALT DRIVE

LYTLE ROAD

B.N.S.F. RAILROAD

647

STATE BIKE TRAIL

SHORELINE

RIVER

SPLIT RAIL FENCE

COUNTY ROAD "Z"

646.5

AW-1 646.56

MW-2M

MW-2D

MW-2S 646.28

HUBLEY WELL

CLARIFIER

MW-14S 646.65

PZ-1 646.50

AW-9 646.46

MW-5S 646.40

CONCRETE PIT

EW-5

INFERRED GROUNDWATER FLOW DIRECTION

PROCESS BUILDING

AW-13 646.13

EW-4

TREES

646

PZ-2 646.60

AW-20 645.90

EW-3

AW-25 645.99

EW-2

AW-28 645.70

MW-4S 645.78

EW-1

PZ-3 646.25

TREES

PZ-5 645.67

645.5

PZ-6 645.53

MW-6S 645.91

MW-6M

MW-15M

GRAVEL DRIVE

MW-7M

MW-8M

SPORTSMANS CLUB ROAD

ACKERMAN WELL

MW-8S 645.57

MW-8D

MW-12S 645.41

GARDEN SPIGOTS

PZ-4 645.89

CROPLAND

PASTURE

MW-9M

MW-11M

MW-10M

N

LEGEND

- ⊕ = Monitoring Well with water level in feet above mean sea level
- ● = Piezometer with water level in feet above mean sea level
- × = Extraction Well
- O = Air Well with water level in feet above mean sea level
- = Approximate Property Line
- = Centerline
- = Fence line
- = Utility lines
- = Utility pole
- = Hydrant
- NM = Water level not measured

Approximate Scale
1 inch = 175 feet

0 175 350

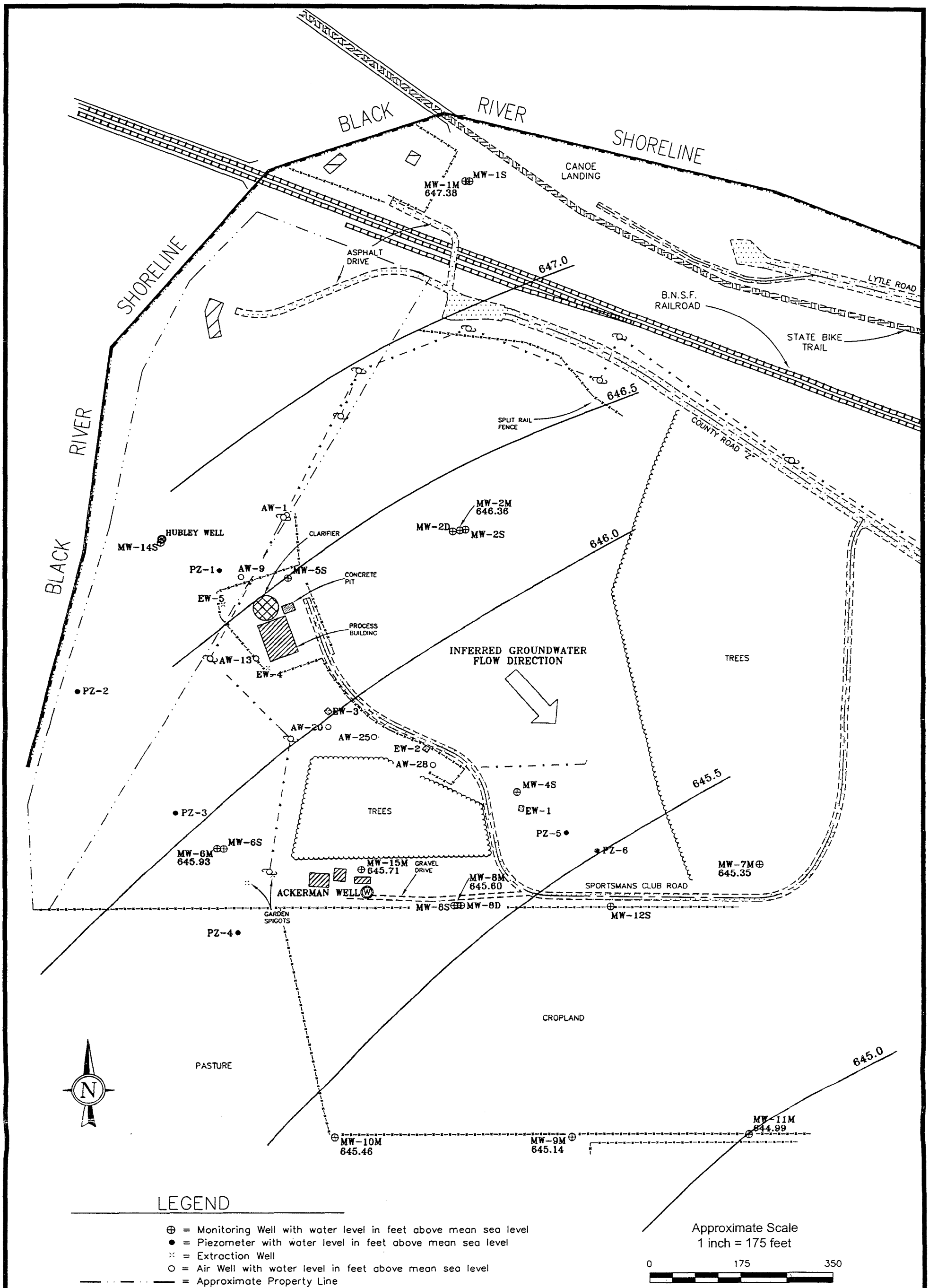
Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

ENSR water level gauging data, collected 4/22/03.

Figure 3-3
April 22, 2003
Shallow Groundwater Elevation Map
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.: water.dwg	CHECKED: PJM		



LEGEND

- ⊕ = Monitoring Well with water level in feet above mean sea level
- ● = Piezometer with water level in feet above mean sea level
- × = Extraction Well
- O = Air Well with water level in feet above mean sea level
- Approximate Property Line
- Centerline
- Fence line
- Utility lines
- Utility pole
- Hydrant
- NM = Water level not measured

Approximate Scale
1 inch = 175 feet

0 175 350

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.
ENSR water level gauging data, collected 4/22/03.

Figure 3-4
April 22, 2003
Medium Groundwater Elevation Map
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.: water.dwg	CHECKED: PJM		

Table 3-2
AW-1
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/23/2003	PAL	ES
1,2,4-Trimethylbenzene	25	8.4	96	480
1,3,5-Trimethylbenzene	22	6.1	96	480
Acetone	6	< 1.1	200	1000
Methylene chloride	3.8	< 0.29	0.5	5
Xylenes (total)	4	4.7	1,000	10,000
Metals, mg/L				
Arsenic	< 0.0021	< 0.0021	0.005	0.05
Barium	0.25	0.13	0.4	2
Cadmium	0.0032	< 0.00028	0.0005	0.005
Cobalt	0.0043	< 0.00074	0.008	0.04
Iron	**4.5**	**0.39**	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**6**	**0.7**	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 3	< 3	---	---
Ethene	< 2.9	< 2.9	---	---
Methane	1500	690	---	---
Natural Attenuation Parameters, mg/L				
Chloride	2.1	5.6	125	250
Nitrate as N	< 0.0076	0.83	2	10
Sulfate	9.1	6.2	125	250
Total Alkalinity	290	210	---	---
Total Organic Carbon	6	2	---	---
pH	---	6.98	---	---
Conductivity (mS/cm)	---	0.441	---	---
Temperature (C)	---	7.87	---	---
ORP (mV)	---	178	---	---
Dissolved Oxygen (mg/L)	---	4.5	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
AW-9
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/23/2003	PAL	ES
1,2,4-Trimethylbenzene	1.6	< 0.37	96	480
Acetone	2.9	< 1.1	200	1000
Methylene chloride	3.8	0.34	0.5	5
Metals, mg/L				
Arsenic	< 0.0021	< 0.0021	0.005	0.05
Barium	0.072	0.051	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	0.008	0.04
Iron	0.067	< 0.042	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	0.041	0.016	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 0.3	< 0.6	---	---
Ethene	< 0.29	< 0.58	---	---
Methane	260	220	---	---
Natural Attenuation Parameters, mg/L				
Chloride	3.1	3	125	250
Nitrate as N	0.42	1.1	2	10
Sulfate	3.5	3.1	125	250
Total Alkalinity	220	170	---	---
Total Organic Carbon	1	0.8	---	---
pH	---	7.07	---	---
Conductivity (mS/cm)	---	0.36	---	---
Temperature (C)	---	7.35	---	---
ORP (mV)	---	190	---	---
Dissolved Oxygen (mg/L)	---	6.67	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
AW-13
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	Duplicate 12/12/2002	4/22/2003	PAL	ES
1,2,4-Trimethylbenzene	2	1.8	**860**	96	480
1,3,5-Trimethylbenzene	< 0.4	1.1	**32**	96	480
Acetone	2.5	5.9	< 24	200	1000
Methylene chloride	3.6	3.6	< 6.4	0.5	5
Xylenes (total)	< 0.44	< 0.44	10	1,000	10,000
Metals, mg/L					
Arsenic	0.0033	< 0.0021	0.0048	0.005	0.05
Barium	0.28	0.27	0.2	0.4	2
Cadmium	< 0.00028	< 0.00028	0.00034	0.0005	0.005
Cobalt	0.0043	0.0044	< 0.00074	0.008	0.04
Iron	**4.7**	**5.1**	**34.8**	0.15	0.3
Lead	< 0.0016	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**24.3**	**23.7**	**11.4**	0.025	0.05
Mercury	< 0.000087	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L					
Ethane	< 1.5	< 0.6	< 3	---	---
Ethene	< 1.4	< 0.58	< 2.9	---	---
Methane	300	340	2200	---	---
Natural Attenuation Parameters, mg/L					
Chloride	2.6	2.3	6.7	125	250
Nitrate as N	0.2	0.28	0.01	2	10
Sulfate	3.1	2.7	0.49	125	250
Total Alkalinity	550	550	260	---	---
Total Organic Carbon	5	4	5	---	---
pH	---	---	7.08	---	---
Conductivity (mS/cm)	---	---	0.585	---	---
Temperature (C)	---	---	8.78	---	---
ORP (mV)	---	---	87	---	---
Dissolved Oxygen (mg/L)	---	---	0.32	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
AW-20
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/22/2003	Duplicate 4/23/03	PAL	ES
1,2,4-Trimethylbenzene	22	**450**	**450**	96	480
1,3,5-Trimethylbenzene	17	**200**	**190**	96	480
Acetone	3.6	< 17	< 17	200	1000
Methylene chloride	3.4	< 4.5	< 4.5	0.5	5
Naphthalene	0.64	8.2	8.9	8	40
Xylenes (total)	1.1	30	28	1,000	10,000
Metals, mg/L					
Arsenic	0.0088	< 0.0021	< 0.0021	0.005	0.05
Barium	0.29	0.13	0.23	0.4	2
Cadmium	0.00037	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	0.011	< 0.00074	0.01	0.008	0.04
Iron	**23.3**	**0.39**	**5.4**	0.15	0.3
Lead	< 0.0016	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**17**	**0.7**	**11.8**	0.025	0.05
Mercury	0.000087	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L					
Ethane	< 3	< 3	< 3	---	---
Ethene	< 2.9	< 2.9	< 2.9	---	---
Methane	1600	690	830	---	---
Natural Attenuation Parameters, mg/L					
Chloride	1.8	5.6	7.1	125	250
Nitrate as N	< 0.0076	0.83	1.9	2	10
Sulfate	1.1	6.2	3.9	125	250
Total Alkalinity	600	210	400	---	---
Total Organic Carbon	15	2	10	---	---
pH	---	6.98	6.98	---	---
Conductivity (mS/cm)	---	0.445	0.445	---	---
Temperature (C)	---	7.61	7.61	---	---
ORP (mV)	---	147	147	---	---
Dissolved Oxygen (mg/L)	---	0.23	0.23	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
AW-25
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/22/2003	PAL	ES
1,2,4-Trimethylbenzene	240	52	96	480
1,3,5-Trimethylbenzene	38	9.1	96	480
Methylene chloride	5.1	< 0.72	0.5	5
Naphthalene	4.5	< 1	8	40
Xylenes (total)	5.6	2.9	1,000	10,000
Metals, mg/L				
Arsenic	0.0034	< 0.0021	0.005	0.05
Barium	0.43	0.23	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	0.0049	0.0021	0.008	0.04
Iron	13.8	3.6	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	6.6	2.3	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 3	< 3	---	---
Ethene	< 2.9	< 2.9	---	---
Methane	570	1400	---	---
Natural Attenuation Parameters, mg/L				
Chloride		15.2	125	250
Nitrate as N	0.97	2.2	2	10
Sulfate	4.4	1.9	125	250
Total Alkalinity	520	320	---	---
Total Organic Carbon	7	6	---	---
pH	---	7.02	---	---
Conductivity (mS/cm)	---	0.644	---	---
Temperature (C)	---	7.67	---	---
ORP (mV)	---	156	---	---
Dissolved Oxygen (mg/L)	---	0.88	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
AW-28
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/22/2003	PAL	ES
1,2,4-Trimethylbenzene	45	44	96	480
1,3,5-Trimethylbenzene	21	18	96	480
Acetone	5.4	< 2.2	200	1000
Methylene chloride	4.6	< 0.58	0.5	5
Toluene	0.83	< 0.78	200	1,000
Xylenes (total)	2.9	1.6	1,000	10,000
Metals, mg/L				
Arsenic	0.0026	< 0.0021	0.005	0.05
Barium	0.26	0.22	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	0.0064	0.0036	0.008	0.04
Iron	9.8	3.7	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	5	2.4	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 3	< 3	---	---
Ethene	< 2.9	< 2.9	---	---
Methane	1200	1700	---	---
Natural Attenuation Parameters, mg/L				
Chloride	10.8	14	125	250
Nitrate as N	1.1	1.7	2	10
Sulfate	1.4	2.7	125	250
Total Alkalinity	370	360	---	---
Total Organic Carbon	9	11	---	---
pH	---	7.02	---	---
Conductivity (mS/cm)	---	0.709	---	---
Temperature (C)	---	8.35	---	---
ORP (mV)	---	166	---	---
Dissolved Oxygen (mg/L)	---	1.36	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-1S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	4/22/2003	PAL	ES
2-Butanone	< 0.59	0.82	---	---
Acetone	3.7	< 1.1	200	1000
Methylene chloride	2.4	0.37	0.5	5
Metals, mg/L				
Arsenic	0.0029	< 0.0021	0.005	0.05
Barium	0.034	0.039	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	0.008	0.04
Iron	0.15	0.12	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**0.86**	**0.76**	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	0.00088	0.0012	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 0.3	< 0.3	---	---
Ethene	< 0.29	< 0.29	---	---
Methane	18	150	---	---
Natural Attenuation Parameters, mg/L				
Chloride	5.5	7.3	125	250
Nitrate as N	< 0.0076	0.14	2	10
Sulfate	19.7	12.9	125	250
Total Alkalinity	120	140	---	---
Total Organic Carbon	4	3	---	---
pH	7.11	7.17	---	---
Conductivity (mS/cm)	0.3	0.325	---	---
Temperature (C)	11.2	8.38	---	---
ORP (mV)	157	137	---	---
Dissolved Oxygen (mg/L)	6.39	5.66	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-1M
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	4/22/2003	PAL	ES
Acetone	3.4	< 1.1	200	1000
Methylene chloride	2.4	0.32	0.5	5
Metals, mg/L				
Arsenic	0.014	0.01	0.005	0.05
Barium	0.32	0.33	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	0.008	0.04
Iron	8.7	7.7	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	1.7	1.6	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 0.3	< 0.3	---	---
Ethene	< 0.29	< 0.29	---	---
Methane	9.9	89	---	---
Natural Attenuation Parameters, mg/L				
Chloride	7.8	8.1	125	250
Nitrate as N	< 0.0076	< 0.0076	2	10
Sulfate	5.2	5.7	125	250
Total Alkalinity	76	72	---	---
Total Organic Carbon	4	3	---	---
pH	6.75	7.08	---	---
Conductivity (mS/cm)	0.209	0.215	---	---
Temperature (C)	9.61	9.42	---	---
ORP (mV)	86	105	---	---
Dissolved Oxygen (mg/L)	0.35	0.43	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-2S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	4/22/2003	PAL	ES
Acetone	3.8	< 1.1	200	1000
Benzene	0.91	0.45	0.5	5
Chlorobenzene	19	1.5	---	---
Methylene chloride	2.8	< 0.29	0.5	5
Metals, mg/L				
Arsenic	0.012	0.012	0.005	0.05
Barium	0.17	0.14	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	0.008	0.0013	0.008	0.04
Iron	**29.5**	**29.3**	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**1.9**	**2.8**	0.025	0.05
Mercury	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	0.00084	0.002	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 1.5	< 1.5	---	---
Ethene	< 1.4	< 1.4	---	---
Methane	520	540	---	---
Natural Attenuation Parameters, mg/L				
Chloride	26.1	18.4	125	250
Nitrate as N	< 0.0076	0.01	2	10
Sulfate	< 0.11	0.22	125	250
Total Alkalinity	180	170	---	---
Total Organic Carbon	6	4	---	---
pH	6.47	6.74	---	---
Conductivity (mS/cm)	0.563	0.476	---	---
Temperature (C)	10.65	11.36	---	---
ORP (mV)	133	96	---	---
Dissolved Oxygen (mg/L)	3.35	0.9	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-2M
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	4/22/2003	PAL	ES
Acetone	5.5	< 1.1	200	1000
Methylene chloride	3.1	< 0.29	0.5	5
Metals, mg/L				
Arsenic	0.019	0.019	0.005	0.05
Barium	0.37	0.66	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	0.008	0.04
Iron	**5**	**9.6**	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**0.41**	**0.64**	0.025	0.05
Mercury	0.000092	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 0.3	< 0.6	---	---
Ethene	< 0.29	< 0.58	---	---
Methane	22	310	---	---
Natural Attenuation Parameters, mg/L				
Chloride	4.8	16	125	250
Nitrate as N	< 0.0076	< 0.0076	2	10
Sulfate	0.13	< 0.11	125	250
Total Alkalinity	100	160	---	---
Total Organic Carbon	4	4	---	---
pH	6.98	7.26	---	---
Conductivity (mS/cm)	0.231	0.391	---	---
Temperature (C)	10.01	10.61	---	---
ORP (mV)	107	89	---	---
Dissolved Oxygen (mg/L)	0.41	1.11	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-4S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	Duplicate 12/12/2002	4/22/2003	PAL	ES
1,2,4-Trimethylbenzene	**540**	**570**	**780**	96	480
1,3,5-Trimethylbenzene	**120**	**130**	**170**	96	480
Ethylbenzene	10	< 10	16	140	700
Naphthalene	< 10	< 10	14	8	40
Xylenes (total)	29	27	54	1,000	10,000
Metals, mg/L					
Arsenic	0.0089	0.009	0.0065	0.005	0.05
Barium	0.3	0.32	0.26	0.4	2
Cadmium	< 0.00028	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	< 0.00074	0.008	0.04
Iron	**16.9**	**17.2**	**15.4**	0.15	0.3
Lead	< 0.0016	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**2.1**	**2.1**	**1.8**	0.025	0.05
Mercury	< 0.000087	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L					
Ethane	< 3	< 3	< 3	---	---
Ethene	< 2.9	< 2.9	< 2.9	---	---
Methane	1200	750	1700	---	---
Natural Attenuation Parameters, mg/L					
Chloride	13.5	13.5	10.2	125	250
Nitrate as N	< 0.0076	< 0.0076	< 0.0076	2	10
Sulfate	0.98	0.92	0.22	125	250
Total Alkalinity	280	280	260	---	---
Total Organic Carbon	5	6	5	---	---

pH	6.66	7.15	---
Conductivity (mS/cm)	0.612	0.543	---
Temperature (C)	12.02	10.15	---
ORP (mV)	117	132	---
Dissolved Oxygen (mg/L)	4.49	0.58	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-5S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/22/2003	PAL	ES
1,2,4-Trimethylbenzene	210	180	96	480
1,3,5-Trimethylbenzene	47	38	96	480
Ethylbenzene	6.2	5.1	140	700
Methylene chloride	3.9	< 1.7	0.5	5
Naphthalene	6.2	5.4	8	40
Xylenes (total)	12	13	1,000	10,000
Metals, mg/L				
Arsenic	0.0098	0.011	0.005	0.05
Barium	0.18	0.28	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	0.0025	0.0041	0.008	0.04
Iron	**10.2**	**19.4**	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**1.6**	**2**	0.025	0.05
Mercury	0.000088	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 3	< 0.3	---	---
Ethene	< 2.9	< 0.29	---	---
Methane	130	230	---	---
Natural Attenuation Parameters, mg/L				
Chloride	5.8	5.7	125	250
Nitrate as N	0.1	0.62	2	10
Sulfate	0.34	3.3	125	250
Total Alkalinity	140	160	---	---
Total Organic Carbon	5	4	---	---
pH	6.99	7.12	---	---
Conductivity (mS/cm)	0.333	0.379	---	---
Temperature (C)	12.4	9.66	---	---
ORP (mV)	106	117	---	---
Dissolved Oxygen (mg/L)	1.75	0.74	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-6S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	PAL	ES
1,1-Dichloroethane	0.55	85	850
Acetone	2.6	200	1000
Methylene chloride	2.2	0.5	5
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.17	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	0.0022	0.008	0.04
Iron	0.065	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	2.7	0.025	0.05
Mercury	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	2.9	---	---
Natural Attenuation Parameters, mg/L			
Chloride	6.7	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	4	125	250
Total Alkalinity	160	---	---
Total Organic Carbon	6	---	---
pH	7.45	---	---
Conductivity (mS/cm)	0.342	---	---
Temperature (C)	11.1	---	---
ORP (mV)	113	---	---
Dissolved Oxygen (mg/L)	2.86	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-6M
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	PAL	ES
Acetone	2.1	200	1000
Methylene chloride	2.1	0.5	5
Metals, mg/L			
Arsenic	0.0024	0.005	0.05
Barium	0.75	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	< 0.042	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	1.7	0.025	0.05
Mercury	0.000097	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	1.1	---	---
Natural Attenuation Parameters, mg/L			
Chloride	6	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	0.42	125	250
Total Alkalinity	100	---	---
Total Organic Carbon	4	---	---
pH	7.49	---	---
Conductivity (mS/cm)	0.227	---	---
Temperature (C)	10.5	---	---
ORP (mV)	96	---	---
Dissolved Oxygen (mg/L)	0.42	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-8S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	PAL	ES
Acetone	2.2	200	1000
Methylene chloride	2.6	0.5	5
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.088	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	0.052	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	**0.59**	0.025	0.05
Mercury	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	0.58	---	---
Natural Attenuation Parameters, mg/L			
Chloride	9.5	125	250
Nitrate as N	1.5	2	10
Sulfate	12.3	125	250
Total Alkalinity	190	---	---
Total Organic Carbon	0.9	---	---
pH	7.32	---	---
Conductivity (mS/cm)	0.44	---	---
Temperature (C)	11.73	---	---
ORP (mV)	124	---	---
Dissolved Oxygen (mg/L)	7.07	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-8M
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	PAL	ES
Acetone	2.9	200	1000
Methylene chloride	3.2	0.5	5
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.68	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	< 0.042	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	2.7	0.025	0.05
Mercury	0.00009	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	2	---	---
Natural Attenuation Parameters, mg/L			
Chloride	2.6	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	5.7	125	250
Total Alkalinity	220	---	---
Total Organic Carbon	2	---	---
pH	7.41	---	---
Conductivity (mS/cm)	0.422	---	---
Temperature (C)	9.95	---	---
ORP (mV)	105	---	---
Dissolved Oxygen (mg/L)	1.74	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-12S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/02	PAL	ES
Acetone	3	200	1000
Methylene chloride	2.7	0.5	5
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.021	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	< 0.042	0.15	0.3
Lead	0.0034	0.0015	0.015
Manganese	0.0023	0.025	0.05
Mercury	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	< 0.39	---	---
Natural Attenuation Parameters, mg/L			
Chloride	24.3	125	250
Nitrate as N	1.6	2	10
Sulfate	7.2	125	250
Total Alkalinity	170	---	---
Total Organic Carbon	1	---	---
pH	7.29	---	---
Conductivity (mS/cm)	0.444	---	---
Temperature (C)	12.04	---	---
ORP (mV)	132	---	---
Dissolved Oxygen (mg/L)	5.86	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-14S
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/23/2003	PAL	ES
1,2,4-Trimethylbenzene	1.7	0.97	96	480
1,3,5-Trimethylbenzene	0.64	< 0.4	96	480
Acetone	4.3	< 1.1	200	1000
Methylene chloride	2.1	< 0.29	0.5	5
Naphthalene	5	2.2	8	40
Xylenes (total)	1.4	0.47	1,000	10,000
Metals, mg/L				
Arsenic	< 0.0021	< 0.0021	0.005	0.05
Barium	0.18	0.084	0.4	2
Cadmium	0.00045	< 0.00028	0.0005	0.005
Cobalt	0.0052	0.0015	0.008	0.04
Iron	**11.6**	**2.5**	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**3.7**	**0.83**	0.025	0.05
Mercury	0.000088	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	< 0.00067	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 3	< 0.6	---	---
Ethene	< 2.9	< 0.58	---	---
Methane	450	430	---	---
Natural Attenuation Parameters, mg/L				
Chloride	5	5.4	125	250
Nitrate as N	0.01	0.34	2	10
Sulfate	3	5.4	125	250
Total Alkalinity	210	150	---	---
Total Organic Carbon	14	5	---	---
pH	6.88	6.96	---	---
Conductivity (mS/cm)	0.441	0.328	---	---
Temperature (C)	11.13	7.7	---	---
ORP (mV)	114	166	---	---
Dissolved Oxygen (mg/L)	3.22	5.02	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
MW-15M
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	PAL	ES
1,1-Dichloroethane	1	85	850
cis-1,2-Dichloroethene	0.56	7	70
Methylene chloride	3	0.5	5
Metals, mg/L			
Arsenic	0.0054	0.005	0.05
Barium	0.86	0.4	2
Cadmium	0.00031	0.0005	0.005
Cobalt	0.0012	0.008	0.04
Iron	**1.1**	0.15	0.3
Lead	0.0049	0.0015	0.015
Manganese	**3.6**	0.025	0.05
Mercury	0.000092	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	12	---	---
Natural Attenuation Parameters, mg/L			
Chloride	5.2	125	250
Nitrate as N	0.03	2	10
Sulfate	2.4	125	250
Total Alkalinity	240	---	---
Total Organic Carbon	3	---	---
pH	7.25	---	---
Conductivity (mS/cm)	0.466	---	---
Temperature (C)	10.65	---	---
ORP (mV)	93	---	---
Dissolved Oxygen (mg/L)	0.51	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
PZ-1
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/23/2003	Duplicate 4/23/03	PAL	ES
Methylene chloride	3.4	< 0.29	< 0.29	0.5	5
Metals, mg/L					
Arsenic	0.0029	< 0.0021	< 0.0021	0.005	0.05
Barium	0.024	0.031	0.031	0.4	2
Cadmium	< 0.00028	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	< 0.00074	0.008	0.04
Iron	< 0.042	< 0.042	< 0.042	0.15	0.3
Lead	< 0.0016	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**0.19**	**0.3**	**0.29**	0.025	0.05
Mercury	0.000091	< 0.000087	< 0.000087	0.0002	0.002
Vanadium	0.0013	0.0011	0.0012	0.006	0.03
Dissolved Gases, ug/L					
Ethane	< 0.3	< 0.3	< 0.3	---	---
Ethene	< 0.29	< 0.29	< 0.29	---	---
Methane	6.6	1.5	1.9	---	---
Natural Attenuation Parameters, mg/L					
Chloride	9.4	12.8	13	125	250
Nitrate as N	0.23	0.23	0.23	2	10
Sulfate	1.6	5.5	5.4	125	250
Total Alkalinity	120	130	140	---	---
Total Organic Carbon	3	< 0.7	2	---	---
pH	7.54	7.43	---	---	---
Conductivity (mS/cm)	0.271	0.314	---	---	---
Temperature (C)	11.33	9.93	---	---	---
ORP (mV)	105	169	---	---	---
Dissolved Oxygen (mg/L)	2.78	4.8	---	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
PZ-2
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	PAL	ES
Acetone	2.6	200	1000
Methylene chloride	2.4	0.5	5
Metals, mg/L			
Arsenic	**0.056**	0.005	0.05
Barium	0.66	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	0.011	0.008	0.04
Iron	**98.8**	0.15	0.3
Lead	0.0062	0.0015	0.015
Manganese	**5.2**	0.025	0.05
Mercury	0.00013	0.0002	0.002
Vanadium	0.026	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.6	---	---
Ethene	< 0.58	---	---
Methane	98	---	---
Natural Attenuation Parameters, mg/L			
Chloride	8.6	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	2.4	125	250
Total Alkalinity	160	---	---
Total Organic Carbon	15	---	---
pH	6.68	---	---
Conductivity (mS/cm)	0.432	---	---
Temperature (C)	11.03	---	---
ORP (mV)	116	---	---
Dissolved Oxygen (mg/L)	5.14	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
PZ-3
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/11/2002	PAL	ES
Acetone	3.1	200	1000
Methylene chloride	2.5	0.5	5
Metals, mg/L			
Arsenic	0.0038	0.005	0.05
Barium	0.097	0.4	2
Cadmium	0.00099	0.0005	0.005
Cobalt	0.0018	0.008	0.04
Iron	**1.2**	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	**2.7**	0.025	0.05
Mercury	0.00012	0.0002	0.002
Vanadium	0.0028	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	2.4	---	---
Natural Attenuation Parameters, mg/L			
Chloride	6.3	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	1.2	125	250
Total Alkalinity	160	---	---
Total Organic Carbon		---	---
pH	7.06	---	---
Conductivity (mS/cm)	0.33	---	---
Temperature (C)	10.98	---	---
ORP (mV)	133	---	---
Dissolved Oxygen (mg/L)	4.48	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
PZ-4
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	PAL	ES
Acetone	3.5	200	1000
Methylene chloride	2.6	0.5	5
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.12	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	0.001	0.008	0.04
Iron	< 0.042	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	2.6	0.025	0.05
Mercury	0.000088	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03
Dissolved Gases, ug/L			
Ethane	< 0.3	---	---
Ethene	< 0.29	---	---
Methane	< 0.39	---	---
Natural Attenuation Parameters, mg/L			
Chloride	5.5	125	250
Nitrate as N	< 0.0076	2	10
Sulfate	4.2	125	250
Total Alkalinity	130	---	---
Total Organic Carbon	5	---	---
pH	7.53	---	---
Conductivity (mS/cm)	0.278	---	---
Temperature (C)	11.80	---	---
ORP (mV)	105	---	---
Dissolved Oxygen (mg/L)	12	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
PZ-5
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	12/12/2002	4/23/2003	PAL	ES
Acetone	3	< 1.1	200	1000
Methylene chloride	2.5	0.34	0.5	5
Metals, mg/L				
Arsenic	< 0.0021	< 0.0021	0.005	0.05
Barium	0.091	0.075	0.4	2
Cadmium	< 0.00028	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	< 0.00074	0.008	0.04
Iron	0.13	0.12	0.15	0.3
Lead	< 0.0016	< 0.0016	0.0015	0.015
Manganese	**0.18**	**0.17**	0.025	0.05
Mercury	0.000098	< 0.000087	0.0002	0.002
Vanadium	0.0011	0.00075	0.006	0.03
Dissolved Gases, ug/L				
Ethane	< 0.6	< 0.3	---	---
Ethene	< 0.58	< 0.29	---	---
Methane	130	210	---	---
Natural Attenuation Parameters, mg/L				
Chloride	9.7	8.6	125	250
Nitrate as N	0.48	0.37	2	10
Sulfate	5.7	10.1	125	250
Total Alkalinity	260	220	---	---
Total Organic Carbon	2	1	---	---
pH	7.15	7.18	---	---
Conductivity (mS/cm)	0.529	0.469	---	---
Temperature (C)	10.98	8.72	---	---
ORP (mV)	112	159	---	---
Dissolved Oxygen (mg/L)	1.21	2.42	---	---

Note: Please see notes provided at the end of this table.

Table 3-2
Ackerman
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	4/22/2003	PAL	ES
	(No VOCs Detected)		
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.024	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	**5.9**	0.15	0.3
Lead	0.0034	0.0015	0.015
Manganese	**0.12**	0.025	0.05
Mercury	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03

Note: Please see notes provided at the end of this table.

Table 3-2
Hubley
Summary of Detected Compounds
Former Onalaska Landfill

Volatile Organic Compounds (VOC), ug/L	4/22/2003	PAL	ES
	(No VOCs Detected)		
Metals, mg/L			
Arsenic	< 0.0021	0.005	0.05
Barium	0.084	0.4	2
Cadmium	< 0.00028	0.0005	0.005
Cobalt	< 0.00074	0.008	0.04
Iron	0.16	0.15	0.3
Lead	< 0.0016	0.0015	0.015
Manganese	0.2	0.025	0.05
Mercury	< 0.000087	0.0002	0.002
Vanadium	< 0.00067	0.006	0.03

Note: Please see notes provided at the end of this table.

Table 3-2
Notes
Summary of Detected Compounds
Former Onalaska Landfill

For the VOC only; the compounds reported are the only VOC that have been detected since the December 2002 sampling event

Shaded cells indicate the compound exceeds the WDNR Preventive Action Level (PAL)

Shaded cell and bold number indicates the compound exceeds the WDNR PAL and Enforcement Standard (ES)

The ES and PAL criteria for trimethylbenzene (TMB) is the sum of 1,2,4-TMB and 1,3,5-TMB

< indicates the compound was not detected at or above the detection limit

--- indicates no criteria associated with that compound

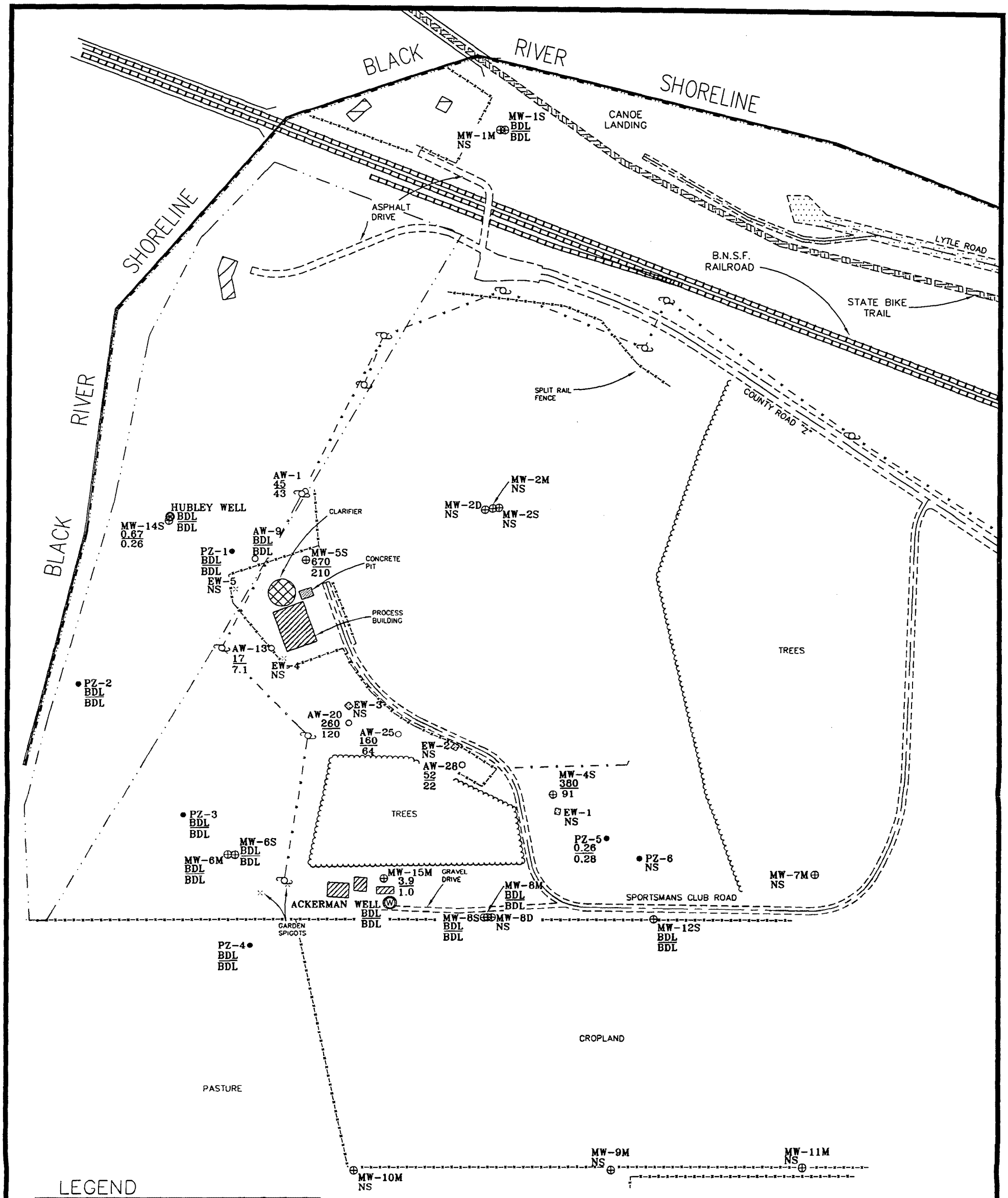
Ackerman and Hubley residential wells were sampled for VOC and metals

The following are the results from December 2002 and April 2003 sampling events.

- No VOC were detected in the two residential wells (Ackerman and Hubley). In the Ackerman well, the concentration of iron and manganese exceeded the ES, and the concentration of lead exceeded the PAL. In the Hubley well, the concentration of manganese exceeded the ES and the iron exceeded the PAL.
- The most common VOC contaminants detected were the trimethylbenzenes (1,2,4 & 1,3,5), xylenes, acetone and methylene chloride. The concentrations of the trimethylbenzene for the baseline sampling event (November 2001) and the two most recent sampling events are depicted on Figures 3-5, 3-6, and 3-7, respectively. For the December 2002 sampling event, methylene chloride and acetone were found in most wells sampled and in Quality Assurance/Quality control samples (two trip blanks). It is inferred that the methylene chloride and acetone are laboratory artifacts.
- Methylene chloride and the trimethylbenzenes were the only VOCs that exceeded the WDNR Enforcement Standards (ES). Methylene chloride exceeded the ES in AW-25 and trimethylbenzene exceeded the ES in MW-4S, AW-13 and AW-20.
- Methylene chloride, naphthalene, benzene, and the trimethylbenzenes were the only VOCs that exceeded the PAL. The trimethylbenzenes exceeded the PAL in MW-4S, MW-5S, AW-13, AW-20, and AW-25. Benzene exceeded the PAL in MW-2S and naphthalene exceeded the PAL in MW-4S, and AW-20. Methylene chloride exceeded the PAL in 24 wells. No other PALs were exceeded.
- The Ackerman residential well is located downgradient of the Site. During the most recent sampling event (April 2003) the Ackerman well was tested. No VOCs were detected. Monitoring well MW-15M is located between the Site and Ackerman well. MW-15M was tested in December 2002. The PAL for methylene chloride was exceeded but can be attributed as a laboratory artifact. Two other VOCs were detected but are below the respective PAL.
- Of the 37 VOCs analyzed, only 13 VOCs were detected. The following is a list of detected VOCs.

1,2,4-Trimethylbenzene	Naphthalene	1,1-Dichloroethane
1,3,5-Trimethylbenzene	Toluene	cis-1,2-Dichloroethene
Acetone	Benzene	2-butanone
Methylene chloride	Chlorobenzene	
Xylenes (total)	Ethylbenzene	

- Concentrations of all of the nine metals tested were detected. Iron and manganese were the most prevalent metals detected. Concentrations of iron exceeded the ES in 15 monitoring wells and manganese exceeded the ES in 24 monitoring wells. No other ES were exceeded for the metals.
- The PAL was exceeded for all metals tested except for mercury. The PAL for Manganese was exceeded in 24 wells and the PAL for iron was exceeded in 15 wells. Concentrations of arsenic exceeded the PAL in AW-20, MW-15M, MW-1M, MW-2M, MW-2S, MW-4S, MW-5S, and PZ-2. Concentrations of cobalt (AW-20) barium (MW-2M, AW-25, MW-15M, MW-2M, MW-6M, PZ-2), cadmium (PZ-3, AW-1), lead (MW-12S, MW-15M, PZ-2, Ackerman) and vanadium (PZ-2), exceeded the PAL in each respective well. No other PALs were exceeded.



LEGEND

- ⊕ = Monitoring Well
- ● = Piezometer
- ⊗ = Extraction Well
- ○ = Air Well
- = Approximate Property Line
- = Centerline
- = Fence line
- = Utility lines
- = Utility pole
- = Hydrant

N

Approximate Scale
1 inch = 175 feet

0 175 350

NOTES

NS = Well was not sampled

BDL = Below Laboratory Detection Limit

52 = 1,2,4 – Trimethylbenzene concentration in groundwater (ug/l)

0.12 = 1,3,5 – Trimethylbenzene concentration in groundwater (ug/l)

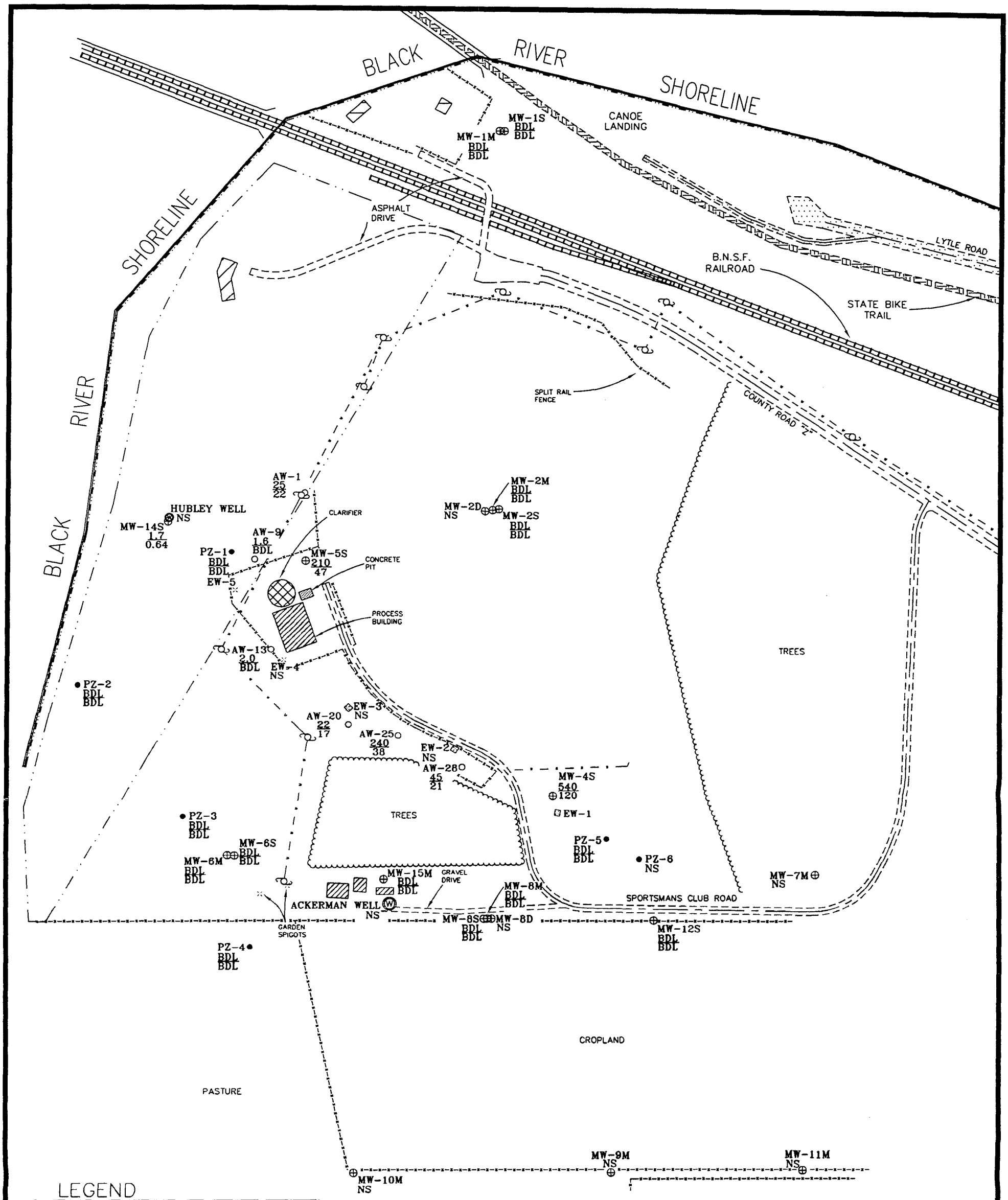
Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

Groundwater samples were collected by CH2M Hill, Fall 2001 Sampling, Baseline Natural Attenuation Monitoring.

Figure 3-5
November 2001
Trimethylbenzene Groundwater Analytical Results
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.:analytical.dwg	CHECKED: PJM		



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0 175 350

NOTES

NS = Well was not sampled

BDL = Below Laboratory Detection Limit

52 = 1,2,4 – Trimethylbenzene concentration in groundwater (ug/l)

0.12 = 1,3,5 – Trimethylbenzene concentration in groundwater (ug/l)

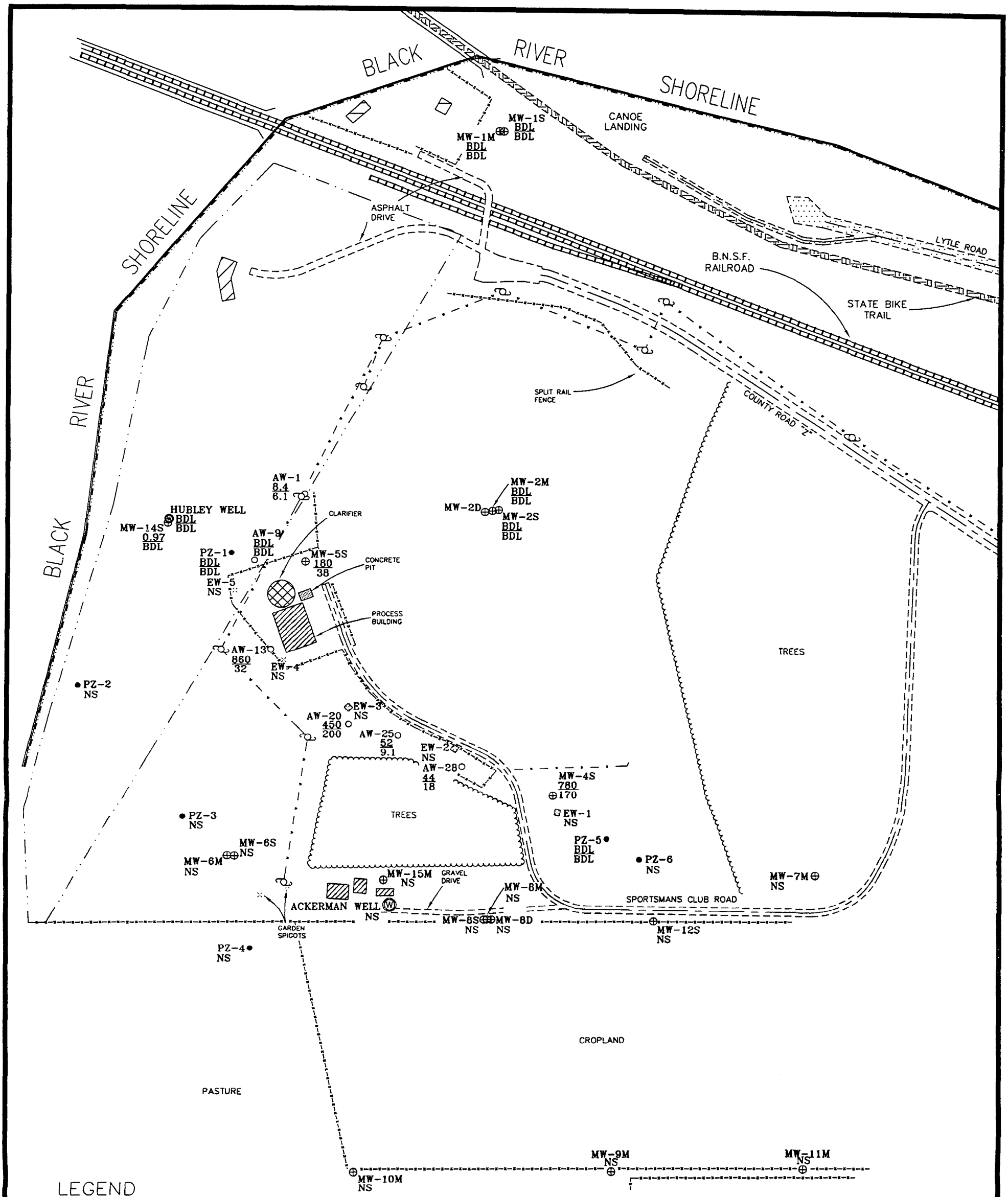
Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

Groundwater samples were collected by ENSR for the fall 2002 sampling event. (December 11 and 12, 2002)

Figure 3-6
December 2002
Trimethylbenzene Groundwater Analytical Results
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.:analytical.dwg	CHECKED: PJM		



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N

Approximate Scale
1 inch = 175 feet

0 175 350

NOTES

NS = Well was not sampled

BDL = Below Laboratory Detection Limit

52 = 1,2,4 – Trimethylbenzene concentration in groundwater (ug/l)

0.12 = 1,3,5 – Trimethylbenzene concentration in groundwater (ug/l)

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.

Groundwater samples were collected by ENSR for the spring 2003 sampling event. (April 22 and 23, 2003)

Figure 3–7
April 2003
Trimethylbenzene Groundwater Analytical Results
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413–114	ENSR INTERNATIONAL
FILE No.:analytical.dwg	CHECKED: PJM		

Table 3-3 below, provides a comparison of groundwater quality over time from three wells. Wells MW-5S and MW-4S were selected to evaluate water quality immediately downgradient of the landfill. MW-5S and MW-4S have historically been two of the most impacted wells. MW-6S was selected as a well that is located downgradient of the extraction system. All three of these monitoring wells were installed prior to activation of the groundwater extraction system. Data from three different eras (pre-pumping, pumping and post pumping) are included in **Table 3-3**. The VOCs listed in the table were identified during the RI as the predominant organic compounds of concern. The groundwater extraction system operated from June 1994 through November 2001.

Table 3-3 - Comparison of Concentrations of Certain VOCs in the Groundwater

Well Number	Sample Date	Concentration in ppb				
		benzene	toluene	xylenes	1-1, DCA	TCE
MW-4S	10/31/93	0.93	54.64	317	5.71	0.13
	12/19/96	<0.3	7	371.4	<0.2	<1.0
	10/26/98	<8	<8	86	<8	<8
	11/1/01	<0.16	<0.18	30	<0.16	<0.14
	4/22/03	<11	<11	54	<8.6	<12
MW-5S	10/31/93	0.78	160	469	3.39	0.29
	12/18/96	0.7	490.5	174.9	0.3	<1.0
	10/26/98	<0.4	28	27	<0.4	<0.4
	11/02/01	<0.16	0.48	180	<0.16	0.14
	4/22/03	<2.1	<2.2	13	<1.7	<2.4
MW-6S	10/31/93	0.5	1.78	0.1	7.1	0.14
	10/2/96	<1	<1	<1	0.3	<1
	10/27/98	<0.4	<0.4	<0.4	<0.4	<0.4
	10/31/01	<0.16	<0.18	<0.33	0.33	0.16
	12/12/03	<0.37	<0.39	<0.44	0.55	<0.42

4.0 NATURAL ATTENUATION EVALUATION

This section discusses the analytical results for the MNA parameters for the samples collected during the December 2002 and April 2003 monitoring events. Also, presented below, is a discussion on the natural attenuation environment at the Site. Future MNA data will continue to look at natural attention indicators and will evaluate the trends in contaminants using a WDNR approved statistical model.

The results of the laboratory analyzed and field collected natural attenaution parameters from the December 2002 and April 2003 sampling events are summarized below and contained in **Table 3-2**. The field pararmeties reported in Table 3-2 were collected from the final purge volume. **Attachment A** contains the abbreviated analytical report. The complete analytical data packages for the sampling events are stored in ENSR's Minneapolis office.

Concentration isopleth drawings using data from the December 2002 and April 2003 sampling events were completed for sulfate (**Figure 4-1 and 4-2**) and methane (**Figure 4-3 and 4-4**) and are discussed below.

The field collected NA parameters included the following:

- Oxidation/Reduction Potential (ORP)
- Dissolved Oxygen (DO)
- Temperature
- pH
- Specific Conductance

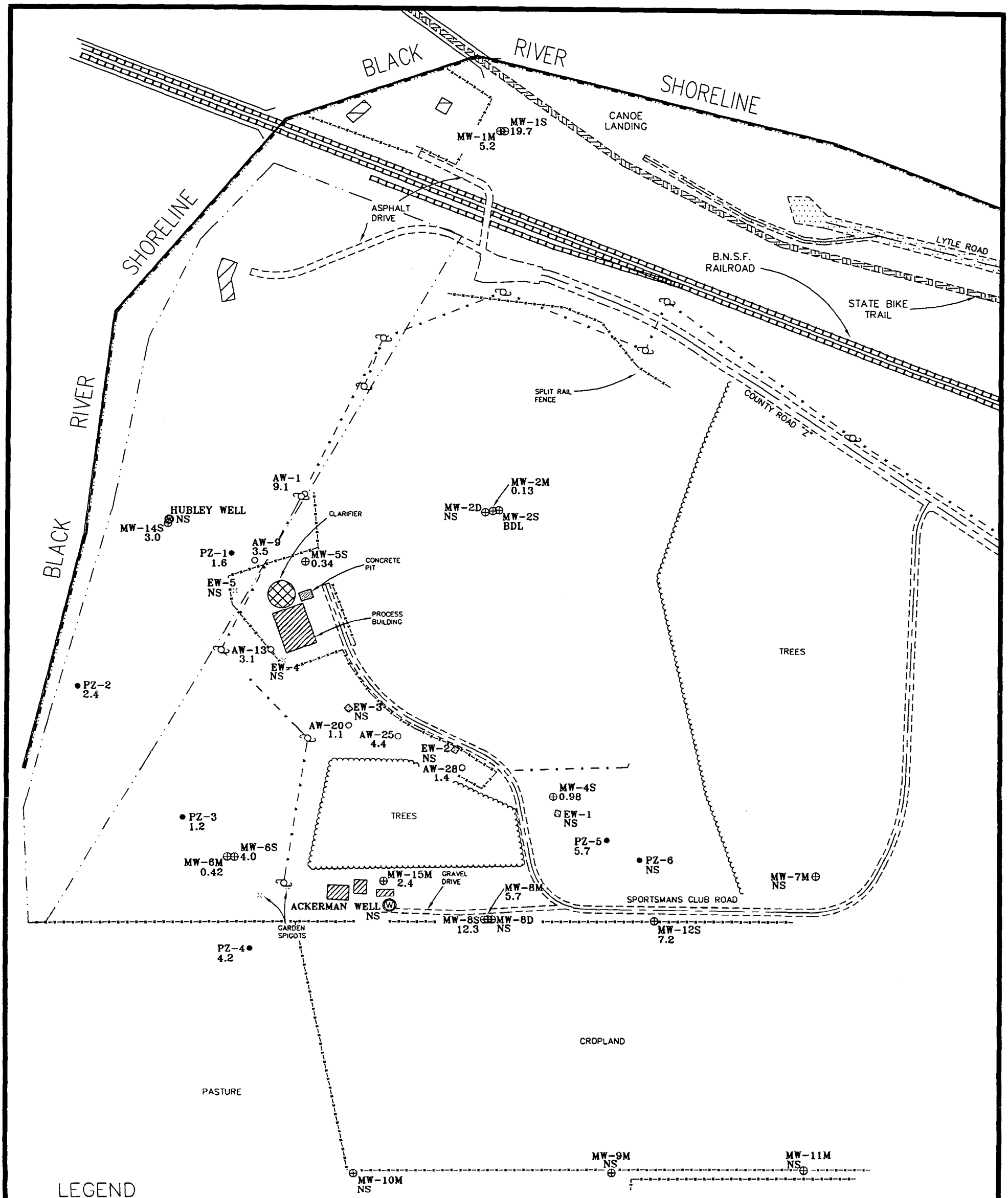
The laboratory analyzed NA parameters included the following:

- Total Organic Carbon (TOC)
- Nitrate
- Dissolved iron
- Sulfate
- Alkalinity
- Dissolved gases (methane, ethane, ethene)
- Chloride

The Following is a summary of findings from the NA monitoring:

- The ORP in the monitoring points ranged from 87mV to 190mV. An ORP value greater than 50mV indicate reductive dechlorination can occur. Future monitoring will evaluate the trends in ORP concentrations. A decreasing concentration of ORP in groundwater indicates an increase in biological activity.

- The DO in the monitoring points ranged from 0.23 mg/l to 7.07mg/l. Generally, DO concentrations less than 1 mg/l indicate anaerobic conditions and concentrations greater than 1 mg/l indicate aerobic conditions. It appears that groundwater at most monitoring points was in aerobic conditions. Anaerobic conditions were found in AW-13, AW-20, AW-25, MW-1M, MW-6M, and MW-15M. The DO concentrations exhibited both aerobic and anaerobic conditions between the December 2002 and April 2003 sampling events in MW-2S, MW-2M, MW-4S, and MW-5S.



LEGEND

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- = Utility pole
- = Hydrant

N

Approximate Scale
1 inch = 175 feet

0 175 350

NOTES

1,200 = Sulfate concentration in groundwater (mg/L)
NS = Well was not sampled
BDL = Below Laboratory Detection Limit

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.
Groundwater samples were collected by ENSR for the fall 2002 sampling event. (December 11 and 12, 2002)

Figure 4-1
December 2002
Sulfate Concentations in Groundwater
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.:sulfate.dwg	CHECKED: PJM		

BLACK RIVER SHORELINE

CANOE LANDING

MW-1S ⊕18

MW-1M 9.9

ASPHALT DRIVE

LYTLE ROAD

B.N.S.F. RAILROAD

STATE BIKE TRAIL

SPLIT RAIL FENCE

COUNTY ROAD "Z"

AW-1 1,500

MW-2M 22

MW-2D NS

MW-2S 520

HUBLEY WELL NS

MW-14S 450

CLARIFIER

AW-9 260

PZ-1 6.6

MW-5S ⊕130

CONCRETE PIT

EW-5 NS

PROCESS BUILDING

AW-13 300

EW-4 NS

TREES

PZ-2 98

EW-3 NS

AW-20 1,600

AW-25 570

EW-2 NS

AW-28 1,200

MW-4S ⊕1,200

EW-1 NS

PZ-3 2.4

TREES

PZ-5 130

PZ-6 NS

MW-6S ⊕2.9

MW-6M 1.1

MW-15M ⊕12

GRAVEL DRIVE

MW-8M 2

MW-7M ⊕ NS

SPORTSMANS CLUB ROAD

ACKERMAN WELL (W) NS

MW-8S ⊕ MW-8D ⊕ NS

0.58

MW-12S BDL

GARDEN SPIGOTS

PZ-4 BDL

CROPLAND

PASTURE

MW-9M NS

MW-11M NS

MW-10M NS

LEGEND

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N

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0 175 350

NOTES

1,200 = Dissolved methane concentration in groundwater (ug/L)
NS = Well was not sampled
BDL = Below Laboratory Detection Limit

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.
Groundwater samples were collected by ENSR for the fall 2002 sampling event. (December 11 and 12, 2002)

Figure 4-3
December 2002
Methane Concentations in Groundwater
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.:analytical.dwg	CHECKED: PJM		

BLACK RIVER SHORELINE

CANOE LANDING

MW-1S 150

MW-1M 89

ASPHALT DRIVE

SHORELINE RIVER

LYTLE ROAD

B.N.S.F. RAILROAD

STATE BIKE TRAIL

SPLIT RAIL FENCE

COUNTY ROAD "Z"

AW-1 690

MW-2M 310

MW-2D

MW-2S 540

HUBLEY WELL NS

MW-14S 430

CLARIFIER

AW-9 220

PZ-1 1.5

MW-5S 230

CONCRETE PIT

EW-5 NS

PROCESS BUILDING

AW-13 2,200

EW-4 NS

PZ-2 NS

EW-3 NS

AW-20 690

AW-25 1,400

EW-2 NS

AW-28 1,700

TREES

MW-4S 1,700

EW-1 NS

PZ-3 NS

PZ-5 210

PZ-6 NS

MW-6S NS

MW-6M NS

MW-15M NS

GRAVEL DRIVE

MW-8M NS

MW-7M NS

ACKERMAN WELL NS

SPORTSMANS CLUB ROAD

MW-8S NS

MW-8D NS

MW-12S NS

GARDEN SPIGOTS

PZ-4 NS

CROPLAND

PASTURE

MW-9M NS

MW-11M NS

MW-10M NS

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0 175 350

NOTES

1,200 = Dissolved methane concentration in groundwater (ug/L)
NS = Well was not sampled
BDL = Below Laboratory Detection Limit

Source:

Onalaska Landfill Site Plan Survey, prepared by Coulee Region Land Surveyors, Inc., project no. S-4754, dated 5/14/03.
Groundwater samples were collected by ENSR for the spring 2003 sampling event. (April 22 and 23, 2003)

Figure 4-4
April 2003
Methane Concentations in Groundwater
Onalaska Landfill
Onalaska, Wisconsin

DRAWN: CMB/5802	DATE: June 2003	PROJECT No.: 09413-114	ENSR INTERNATIONAL
FILE No.:analytical.dwg	CHECKED: PJM		

- The pH, conductivity and temperature were collected to evaluate when stagnant water had been removed during the purging process.

- Ethane and Ethene was not detected in the groundwater. Ethane and ethene are degradation products of vinyl chloride. No vinyl chloride was detected in the groundwater, thus it is unlikely that ethane or ethene is present in the groundwater.

- Chloride can be used as a measure of degradation of CVOC. The chloride concentration in the monitoring point ranged from 1.8 to 16 mg/l. The PAL for chloride is 125 mg/l.

- Nitrate can be used as a terminal electron acceptor when oxygen is depleted. The concentrations of nitrate ranged from below detection limits to 2.2. The PAL for nitrate is 2 mg/L and was exceeded in AW-25. No other wells exceeded the PAL for nitrate.

- Increasing concentrations of alkalinity reflects higher concentrations of calcium and magnesium, indicating that microbial respiration is releasing carbon dioxide into the groundwater. The concentrations of alkalinity at the Site ranged from 72 mg/L to 600 mg/L. Future results will be evaluated on a well by well basis to determine trends in alkalinity concentrations.

- Total Organic Carbon (TOC) can be used as a general measure of organics concentration, both natural and man made. The TOC at the Site ranged from 0.8 to 15 mg/L with most of the TOC concentrations around 5mg/L.

- Sulfate can be used as an electron acceptor once oxygen, nitrate, and iron have been reduced. The concentration of sulfate is expected to decrease with an increase in biological activity. The concentrations of sulfate in the groundwater for the December 2002 and April 2003 are illustrated **on Figure 4-1 and Figure 4-2**. The highest concentrations of sulfate were detected in the upgradient well MW-1S for both sampling events and were typically lower in wells with contaminants present.

- Higher concentrations of methane in the groundwater typically indicate methanogenesis is occurring. Thus higher methane concentrations may indicate that NA is occurring. The concentrations of methane in the groundwater for the December 2002 and April 2003 are illustrated **on Figure 4-3 and Figure 4-4**. The highest concentrations of methane were detected in the wells within the plume while wells outside the plume had substantially lower methane concentrations.

5.0 DATA VALIDATION

Full validation was performed on the data for seven groundwater samples and one trip blank for the site-specific volatile organic compounds (VOCs) by SW-846 method 8260B, and for seven groundwater samples analyzed for selected tatal and dissolved metals by SW-846 methods 6010B and 7470A. The samples were collected at the Site on December 12, 2002 and submitted to Severn Trent Laboratory (STL) in North Canton, OH for analysis. STL processed and reported the samples under Lot # A2L140130.

The sample results were assessed according to the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (2/99) and the quality assurance project plan (QAPP). Modification of the Functional Guidelines was done to accommodate the non-CLP methodologies.

In general, the data appear to be valid as reported and may be used for decision making purposes.

Samples included in this review are listed below:

Sample ID	Sample ID
AW-13	AW-13 Dup (field duplicate of sample AW-13)
AW-28	AW-25
AW-20	AW-9
AW-1	TRIP(trip blank)

5.1.1 VOC DATA VALIDATION

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody requests
- Holding times/sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Method blanks/trip blanks/field blank
- Surrogate spike recoveries
- Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) results
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Internal standard performance
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with Chain of Custody Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody. There were no discrepancies noted with the following exceptions:

Custody seals were not used in the transportation of these samples. No validation action was taken on this basis other than this notation.

It should be noted that the laboratory reported additional compounds on the Form that was not part of the site-specific VOC list.

One vial of sample AW-20 for the VOC analysis was received with air bubbles greater than 6mm in diameter.

Holding Times and Sample Preservation

The samples were analyzed within the method specified holding time.

The cooler temperature was within the acceptable range of 4°C ± 2°C.

All samples were preserved at a pH <2.

GC/MS Tunes

The frequency and abundance of all bromofluorobenzene (BFB) tunes were within the Quality Control acceptance criteria. The samples were analyzed within the method specified tune times.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs) or correlation coefficients, the response factors (RFs), and the percent differences (%Ds) of all compounds were within the QC acceptance limits in the initial and continuing calibration standards associated with these samples.

Method Blanks/Trip Blanks/Field Blank

Target analyses were not detected in the laboratory method blank.

A field blank was not submitted with this sample set since all sampling equipment used was either dedicated equipment of single use disposable equipment. No validation action was taken other than this notation.

Methylene chloride (1.9µg/L) was detected in sample TRIP. The presence of blank contamination indicates that false positives may exist for this analyte in the associated samples. It is recommended that any detected results for methylene chloride above 19µg/L in the associated samples be considered a false positive.

Surrogate Spike Recoveries

The surrogate percent recoveries were within the QC acceptance limits in all sample analyses.

LCS/LCSD Results

The surrogate percent recoveries and relative percent differences (RPDs) were within the laboratory's QC acceptance criteria in the Laboratory Control Samples/Laboratiry Control Sample Duplicate associated with all samples in this data set.

MS/MSD Results

Lab Matrix Spike/Matrix Spike Duplicate analyses were performed on a sample provided by another client for this data set. The surrogate percent recoveries and RPDs were all within the laboratory's QC acceptance criteria.

Internal Standard Performance

The internal standard performance was within the QC acceptance criteria in all sample analyses.

Field Duplicate Results

Samples AW-13 and AW-13 Dup were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. The RPD for acetone exceeded the QC acceptance criteria. The RPD for 1,3,5-trimethylbenzene was not calculable (NC) due to a nondetect result in the sample but is acceptable since the detected result is < 5x the Standard Qualification Limit.

Since the precision for acetone did not meet the acceptance criteria, it may be appropriate to evaluate results for this analyte in other field duplicates.

VOCs

Compound	AW-13 (µg/L)	AW-13 Dup (µg/L)	RPD (%)
Methylene chloride	3.6	3.6	0
1,2,4-Trimethylbenzene	2.0	1.8	11
Acetone	2.5	5.9	81
1,3,5-Trimethylbenzene	1 U	1.1	NC

Quantitation Limits and Sample Results

The following samples were analyzed as dilutions due to target analytes which would have exceeded the calibration range and may have produced inaccurate results. The laboratory elevated sample quantitation limits accordingly.

Sample	Dilution
AW-28	1.25x
AW-25	7.81x

5.2.1 METALS DATA VALIDATION

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody requests
- Holding times/sample preservation
- Calibrations
- Laboratory blanks/equipment blanks/field blanks
- Inductively coupled plasma (ICP) interference check sample (ICS) results
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory duplicate results
- Field duplicate results
- Laboratory control sample (LCS) results
- Serial dilution results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted with Client Chain of Cusody Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody. The following discrepancies were observed. No validation action was taken other than these notations.

Custody seals were not used in the transportation of these samples.

Sample preservation was not recorded on the Chain of Custody and the laboratory sample receiving checklist was not specific regarding the tests for which sample pHs were checked. It was not possible from either the Chain of Custody or the laboratory documentation to determine if samples submitted for laboratory filtration for dissolved metals were received unpreserved.

Holding Times and Sample Preservation

The samples were analyzed within the method specified holding time for metals, but it was not possible to determine when the filtration of unpreserved samples for dissolved metals was performed.

The cooler temperature was within the acceptable range of 4°C ± 2°C.

Sample AW-20 for total metals required additional preservation in the laboratory to meet the method recommended pH of <2. No validation action was taken other than this notation.

Initial and Continuing Calibrations

All criteria were met for the calibration curves and the initial and continuing calibration verification (ICV/CCV) standards for metals.

Although a Contract Required Detection Limit (CRDL) standard is not applicable to SW-846 methods, Severe Treat Laboratory chose to analyze a similar standard (CRI and CRA represent the CRDL Standard for Atomic Absorbtion Analysis (CRA) and for the ICP analysis (CRI)). An acceptance limit of 100 + 20% recovery (%R) was used to evaluate these standards. All CRI and CRA standards met the acceptance criteria with the following exceptions.

CRI/CRA	Analyte	%R	True Value (ug/L)	Affected samples
CRA	Mercury	123	0.20	All samples
CRI	Vanadium	75	7.0	All samples

While it is considered that there is no impact on the nondetect results for mercury, positive results less than 2x the CRA true value may be biased high and should therefore be considered as estimated. All samples in the data set were nondetect for vanadium. These nondetects may be biased low and therefore should be considered as estimated.

Laboratory Blanks/Equipment Blanks/Field Blanks

No equipment or field blanks were submitted with this sample set. No validation action was taken other than this notation.

Various analytes were detected in the laboratory preparation blanks and in the initial and continuing calibration blanks (ICBs and CCBs) associated with these samples. The presence of blank contamination indicates that false positive results or false negative results (for negative blanks) may exist for these analytes in the associated samples. An Action Level (AL) was established for each analyte at 5x the highest concentration detected in the blanks and should be considered for the evaluation of blank contamination in the sample data. The following table summarizes these ALs and the associated samples.

Blank Type	Element (Total and Dissolved)	Conc. Detected (µg/L)	AL (µg/L)
ICB/CCB 12/21/02	Barium	0.30	1.5
	Manganese	1.3	6.5
ICB/CCB 1/3/03	Arsenic	-3.1	-15.5
	Cadmium	+0.30/-0.20	+1.5/-1.0
	Vanadium	-1.3	-6.5
Associated samples: All samples analyzed for total and dissolved metals			

Results less than the absolute value of a negative blank AL should be considered biased low or potential false negatives. Results less than the value of a positive blank AL should be considered false positives.

ICP ICS Results

All criteria were met for the analysis of the ICS A and ICS AB solutions.

MS/MSD Results

MS/MSD analyses were performed on sample AW-13 for total and dissolved metals. All percent %Rs and relative percent differences (%RPDs) were within acceptable limits.

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed. Precision in the laboratory was demonstrated by the MS/MSD analyses as discussed above.

Field Duplicate Results

Samples AW-13 and AW-13-DUP were submitted as the field duplicates with this sample set. The following tables summarize the RPDs of the detected total and dissolved analytes in the field duplicate pair, all of which met the QC acceptance criteria. Selected RPDs were reported as not calculable (NC) due to a nondetect value in either the sample or its duplicate. NC results were deemed acceptable since the detected value was less than five times the laboratory reporting limit.

Total Metals			
Analytes	**AW-13 (mg/L)**	**AW-13-DUP (mg/L)**	**RPD (%)**
Arsenic	0.0033	ND	NC
Cobalt	0.0043	0.0044	2.3
Iron	4.7	5.1	8.2
Manganese	24.3	23.7	2.5

Dissolved Metals			
Analytes	**AW-13 (mg/L)**	**AW-13-DUP (mg/L)**	**RPD (%)**
Cobalt	0.0045	0.0043	4.5
Iron	ND	0.062	NC
Manganese	21.1	22.1	46.5

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analyses for total and dissolved metals.

Serial Dilution Results

The laboratory performed serial dilution analyses on sample AW-1 for total and dissolved metals. The percent differences (%Ds) for all analytes met the QC acceptance criteria of <10%. No validation action was taken on this basis.

Quantitation Limits and Sample Results

No dilutions were required for the samples in this data set analyzed for total and dissolved metals.

Result calculations were spot-checked; no discrepancies were noted.

Nondetect results were reported to the laboratory reporting limit. Based on the laboratory narrative it is believed that detected results were reported to the MDL, but the MDLs for the reported analytes are not included in the data package (only Instrument Detection Limits were provided). It was not possible to determine if the laboratory MDLs met the sensitivity requirements for the following metals for which the QAPP specified detection limits: lead (1.5 ug/L), arsenic (5 ug/L), and barium (20 ug/L).

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based upon the December 2002 and April 2003 sampling events.

- Preliminary inspection of the natural attenuation data indicates that natural attenuation may be an effective modification to the ROD.
- The limited list of chemicals of concern from the ROD did not include the trimethylbenzenes (1,2,4-trimethlbenzene and 1,3,5-trimethylbenzene). Testing for trimethylbenzenes did not begin until 2001 and thus were not evaluated in the health assessment. The current natural attenuation monitoring program analyzes for 37 VOC including all chemicals of concern. The most recent sampling data indicates that trimethylbenzenes exceed NR 140 criteria in four of the 26 wells sampled.
- Methylene chloride and acetone have been found in groundwater samples collected at the Site. These two VOCs are common laboratory artifacts and their presence in the groundwater samples is attributed to the laboratory.
- Concentrations of iron and manganese in groundwater samples collected at the Site have exceeded criteria. Background levels of iron and manganese in shallow groundwater in Wisconsin are similar to the concentrations detected at the Site.
- The Ackerman domestic residential well 207 feet deep and is located downgradient of he Site. This well is used for potable uses.

The following are recommendations for this Site resulting from the recent monitoring events.

- Continue natural attenuation monitoring and evaluation in accordance with plan approvals. Determine if natural attenuation can be an effective modification to the ROD remedy that remains protective of human health and the environment.
- Determine if the presence of the trimethylbenzenes requires an additional health analysis.
- Require that the laboratory instill better practices to reduce the occurrence of methylene chloride and acetone in samples. WDNR has already mandated better laboratory practices and if future laboratory performance does not improve, corrective actions will be implemented.
- Complete additional studies to evaluate the occurrence of iron and manganese (as well as other metals) in the groundwater with respect to background levels and develop Wisconsin Alternative Concentration Limits (WACLs) for iron and manganese, if applicable. Additional
- Increase sampling frequency of twice per year for Ackerman residential well to better determine changes in groundwater quality. Ongoing groundwater sampling will be completed by the WDNR.

7.0 REFERENCES

References, Major Documents Reviewed

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

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Lot #: A3D290115 — ONALASKA LANDFILL — **Date Reported:** 5/07/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: ACKERMAN					
Sample #: 001 Date Sampled: 04/22/03 13:10 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	**0.0034**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.024 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**5.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.12**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D290115 ONALASKA LANDFILL Date Reported: 5/07/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: ACKERMAN					
Sample #: 001 Date Sampled: 04/22/03 13:10 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Client Sample ID: HUBLEY					
Sample #: 002 Date Sampled: 04/22/03 15:00 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.084 B	0.20	mg/L	SW846 6010B	
Iron	0.16	0.10	mg/L	SW846 6010B	
Manganese	0.20	0.015	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D290115 ONALASKA LANDFILL Date Reported: 5/07/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: HUBLEY					
Sample #: 002 Date Sampled: 04/22/03 15:00 Date Received: 04/24/03 Matrix: WATER					
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.					
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D290115 ONALASKA LANDFILL Date Reported: 5/07/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: HUBLEY					
Sample #: 002 Date Sampled: 04/22/03 15:00 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

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Lot #: A3D240294 — ONALASKA LANDFILL — Date Reported: 5/05/03

Client Sample ID: TRIP BLANK

Sample #: 001 Date Sampled: 04/22/03 Date Received: 04/24/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**3.5 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	**2.2 J**	**10**	**ug/L**	**SW846 8260B**	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**1.0**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: TRIP BLANK				
Sample #: 001 Date Sampled: 04/22/03 Date Received: 04/24/03 Matrix: WATER				
Volatile Organics by GC/MS				In Review

J Estimated result. Result is less than RL.

Client Sample ID: AW-13				
Sample #: 002 Date Sampled: 04/22/03 15:25 Date Received: 04/24/03 Matrix: WATER				
Trace Inductively Coupled Plasma (ICP) Metals				Reviewed
Arsenic	**0.0048 B**	0.010	**mg/L**	**SW846 6010B**
Cadmium	**0.00034 B**	0.0020	**mg/L**	**SW846 6010B**
Cobalt	ND	0.0070	mg/L	SW846 6010B
Lead	ND	0.0030	mg/L	SW846 6010B
Vanadium	ND	0.0070	mg/L	SW846 6010B
Inductively Coupled Plasma (ICP) Metals				Reviewed
Barium	**0.20**	0.20	**mg/L**	**SW846 6010B**
Iron	**34.8**	0.10	**mg/L**	**SW846 6010B**
Manganese	**11.4**	0.015	**mg/L**	**SW846 6010B**
Mercury in Liquid Waste (Manual Cold-Vapor)				Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A

B Estimated result. Result is less than RL.

Dissolved Gases in Water				In Review
Ethane	ND	5.0	ug/L	RSK SOP-175
Ethene	ND	5.0	ug/L	RSK SOP-175
Methane	**2200**	5.0	**ug/L**	**RSK SOP-175**
Volatile Organics by GC/MS				In Review
Bromomethane	ND	22	ug/L	SW846 8260B
Chloroethane	ND	22	ug/L	SW846 8260B
Chloromethane	ND	22	ug/L	SW846 8260B
Acetone	ND	220	ug/L	SW846 8260B
Bromodichloromethane	ND	22	ug/L	SW846 8260B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13					
Sample #: 002 Date Sampled: 04/22/03 15:25 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Bromoform	ND	22	ug/L	SW846 8260B	
2-Butanone	ND	220	ug/L	SW846 8260B	
Carbon disulfide	ND	22	ug/L	SW846 8260B	
Carbon tetrachloride	ND	22	ug/L	SW846 8260B	
Chlorobenzene	ND	22	ug/L	SW846 8260B	
Dibromochloromethane	ND	22	ug/L	SW846 8260B	
Chloroform	ND	22	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	22	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	22	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	22	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	22	ug/L	SW846 8260B	
2-Hexanone	ND	220	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	220	ug/L	SW846 8260B	
Styrene	ND	22	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	22	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	22	ug/L	SW846 8260B	
Benzene	ND	22	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	22	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	11	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	11	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	22	ug/L	SW846 8260B	
Ethylbenzene	ND	22	ug/L	SW846 8260B	
Methylene chloride	ND	22	ug/L	SW846 8260B	
Naphthalene	ND	22	ug/L	SW846 8260B	
Tetrachloroethene	ND	22	ug/L	SW846 8260B	
Toluene	ND	22	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	22	ug/L	SW846 8260B	
Trichloroethene	ND	22	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**860**	22	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**32**	22	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	22	ug/L	SW846 8260B	
Xylenes (total)	**10 J**	22	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13					
Sample #: 002 Date Sampled: 04/22/03 15:25 Date Received: 04/24/03 Matrix: WATER					
Inorganic Analysis					Reviewed
Alkalinity	260	5.0	mg/L	MCAWW 310.1	
Chloride	6.7	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.010 B	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.49 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	5	1	mg/L	MCAWW 415.1	
Client Sample ID: AW-25					
Sample #: 003 Date Sampled: 04/22/03 17:30 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	0.0021 B	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.23	0.20	mg/L	SW846 6010B	
Iron	3.6	0.10	mg/L	SW846 6010B	
Manganese	2.3	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	1400	5.0	ug/L	RSK SOP-175	

B Estimated result. Result is less than RL.

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

Client Sample ID: AW-25
Sample #: 003 Date Sampled: 04/22/03 17:30 Date Received: 04/24/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	2.5	ug/L	SW846 8260B	
Chloroethane	ND	2.5	ug/L	SW846 8260B	
Chloromethane	ND	2.5	ug/L	SW846 8260B	
Acetone	ND	25	ug/L	SW846 8260B	
Bromodichloromethane	ND	2.5	ug/L	SW846 8260B	
Bromoform	ND	2.5	ug/L	SW846 8260B	
2-Butanone	ND	25	ug/L	SW846 8260B	
Carbon disulfide	ND	2.5	ug/L	SW846 8260B	
Carbon tetrachloride	ND	2.5	ug/L	SW846 8260B	
Chlorobenzene	ND	2.5	ug/L	SW846 8260B	
Dibromochloromethane	ND	2.5	ug/L	SW846 8260B	
Chloroform	ND	2.5	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	2.5	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	2.5	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	2.5	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	2.5	ug/L	SW846 8260B	
2-Hexanone	ND	25	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	25	ug/L	SW846 8260B	
Styrene	ND	2.5	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	2.5	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	2.5	ug/L	SW846 8260B	
Benzene	ND	2.5	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	2.5	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	1.2	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	1.2	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	2.5	ug/L	SW846 8260B	
Ethylbenzene	ND	2.5	ug/L	SW846 8260B	
Methylene chloride	ND	2.5	ug/L	SW846 8260B	
Naphthalene	ND	2.5	ug/L	SW846 8260B	
Tetrachloroethene	ND	2.5	ug/L	SW846 8260B	
Toluene	ND	2.5	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	2.5	ug/L	SW846 8260B	
Trichloroethene	ND	2.5	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	52	2.5	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	9.1	2.5	ug/L	SW846 8260B	
Vinyl chloride	ND	2.5	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-25					
Sample #: 003 Date Sampled: 04/22/03 17:30 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Xylenes (total)	2.9	2.5	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	320	5.0	mg/L	MCAWW 310.1	
Chloride	15.2	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	2.2	0.10	mg/L	MCAWW 300.0A	
Sulfate	1.9	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	6	1	mg/L	MCAWW 415.1	
Client Sample ID: MW-2M					
Sample #: 004 Date Sampled: 04/22/03 11:25 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	0.019	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.66	0.20	mg/L	SW846 6010B	
Iron	9.6	0.10	mg/L	SW846 6010B	
Manganese	0.64	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	310	1.0	ug/L	RSK SOP-175	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

Client Sample ID: MW-2M
Sample #: 004 Date Sampled: 04/22/03 11:25 Date Received: 04/24/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2M					
Sample #: 004 Date Sampled: 04/22/03 11:25 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**160**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**16.0**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	**4**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-2S					
Sample #: 005 Date Sampled: 04/22/03 11:05 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.012**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0013 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0020 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.14 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**29.3**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.8**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					In Review
Ethane	ND	2.5	ug/L	RSK SOP-175	
Ethene	ND	2.5	ug/L	RSK SOP-175	
Methane	**540**	**2.5**	**ug/L**	**RSK SOP-175**	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

Client Sample ID: MW-2S

Sample #: 005 Date Sampled: 04/22/03 11:05 Date Received: 04/24/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	**1.5**	**1.0**	**ug/L**	**SW846 8260B**	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	**0.45 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2S					
Sample #: 005 Date Sampled: 04/22/03 11:05 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
J Estimated result. Result is less than RL.					
Inorganic Analysis					Reviewed
Alkalinity	**170**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**18.4**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.010 B**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate	**0.22 B**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**4**	**1**	**mg/L**	**MCAWW 415.1**	
B Estimated result. Result is less than RL.					
Client Sample ID: MW-5S					
Sample #: 006 Date Sampled: 04/22/03 12:00 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.011**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0041 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.28**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	19.4	0.10	mg/L	SW846 6010B	
Manganese	2.0	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.					

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-5S					
Sample #: 006 Date Sampled: 04/22/03 12:00 Date Received: 04/24/03 Matrix: WATER					
Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**230**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	5.7	ug/L	SW846 8260B	
Chloroethane	ND	5.7	ug/L	SW846 8260B	
Chloromethane	ND	5.7	ug/L	SW846 8260B	
Acetone	ND	57	ug/L	SW846 8260B	
Bromodichloromethane	ND	5.7	ug/L	SW846 8260B	
Bromoform	ND	5.7	ug/L	SW846 8260B	
2-Butanone	ND	57	ug/L	SW846 8260B	
Carbon disulfide	ND	5.7	ug/L	SW846 8260B	
Carbon tetrachloride	ND	5.7	ug/L	SW846 8260B	
Chlorobenzene	ND	5.7	ug/L	SW846 8260B	
Dibromochloromethane	ND	5.7	ug/L	SW846 8260B	
Chloroform	ND	5.7	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	5.7	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	5.7	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	5.7	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	5.7	ug/L	SW846 8260B	
2-Hexanone	ND	57	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	57	ug/L	SW846 8260B	
Styrene	ND	5.7	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	5.7	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	5.7	ug/L	SW846 8260B	
Benzene	ND	5.7	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	5.7	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	2.9	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	2.9	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	5.7	ug/L	SW846 8260B	
Ethylbenzene	**5.1 J**	**5.7**	**ug/L**	**SW846 8260B**	
Methylene chloride	ND	5.7	ug/L	SW846 8260B	
Naphthalene	**5.4 J**	**5.7**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	5.7	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-5S					
Sample #: 006 Date Sampled: 04/22/03 12:00 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Toluene	ND	5.7	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	5.7	ug/L	SW846 8260B	
Trichloroethene	ND	5.7	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**180**	5.7	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**38**	5.7	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	5.7	ug/L	SW846 8260B	
Xylenes (total)	**13**	5.7	**ug/L**	**SW846 8260B**	
Inorganic Analysis					Reviewed
Alkalinity	**160**	5.0	**mg/L**	**MCAWW 310.1**	
Chloride	**5.7**	1.0	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.62**	0.10	**mg/L**	**MCAWW 300.0A**	
Sulfate	**3.3**	1.0	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**4**	1	**mg/L**	**MCAWW 415.1**	
Client Sample ID: PZ-05					
Sample #: 007 Date Sampled: 04/23/03 08:20 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	0.00075 B	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.075 B	0.20	mg/L	SW846 6010B	
Iron	0.12	0.10	mg/L	SW846 6010B	
Manganese	0.17	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

J Estimated result. Result is less than RL.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-05					
Sample #: 007 Date Sampled: 04/23/03 08:20 Date Received: 04/24/03 Matrix: WATER					
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
B Estimated result. Result is less than RL.					
Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**210**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-05					
Sample #: 007 Date Sampled: 04/23/03 08:20 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**0.34 J**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	220	5.0	mg/L	MCAWW 310.1	
Chloride	8.6	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.37	0.10	mg/L	MCAWW 300.0A	
Sulfate	10.1	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	1	1	mg/L	MCAWW 415.1	
Client Sample ID: MW-1M					
Sample #: 008 Date Sampled: 04/22/03 19:40 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.010**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.33	0.20	mg/L	SW846 6010B	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1M					
Sample #: 008 Date Sampled: 04/22/03 19:40 Date Received: 04/24/03 Matrix: WATER					
Iron	**7.7**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**1.6**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**89**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1M					
Sample #: 008 Date Sampled: 04/22/03 19:40 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**0.32 J**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**72**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**8.1**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**5.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**3**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-1S					
Sample #: 009 Date Sampled: 04/22/03 19:35 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0012 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.039 B**	**0.20**	**mg/L**	**SW846 6010B**	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1S					
Sample #: 009 Date Sampled: 04/22/03 19:35 Date Received: 04/24/03 Matrix: WATER					
Iron	**0.12**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.76**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.					
Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**150**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	**0.82 J**	**10**	**ug/L**	**SW846 8260B**	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1S					
Sample #: 009 Date Sampled: 04/22/03 19:35 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**0.37 J**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**140**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**7.3**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.14**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate	**12.9**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**3**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: PZ-1					
Sample #: 010 Date Sampled: 04/23/03 10:20 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-1					
Sample #: 010 Date Sampled: 04/23/03 10:20 Date Received: 04/24/03 Matrix: WATER					
Vanadium	**0.0011 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.031 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.30**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**1.5**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-1					
Sample #: 010 Date Sampled: 04/23/03 10:20 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	130	5.0	mg/L	MCAWW 310.1	
Chloride	12.8	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.23	0.10	mg/L	MCAWW 300.0A	
Sulfate	5.5	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	
Client Sample ID: MW-14S					
Sample #: 011 Date Sampled: 04/23/03 09:55 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-14S					
Sample #: 011 Date Sampled: 04/23/03 09:55 Date Received: 04/24/03 Matrix: WATER					
Cobalt	**0.0015 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.084 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**2.5**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.83**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					In Review
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	**430**	**1.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-14S				
Sample #: 011 Date Sampled: 04/23/03 09:55 Date Received: 04/24/03 Matrix: WATER				
Volatile Organics by GC/MS				In Review
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	**2.2**	**1.0**	**ug/L**	**SW846 8260B**
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	**0.97 J**	**1.0**	**ug/L**	**SW846 8260B**
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	**0.47 J**	**1.0**	**ug/L**	**SW846 8260B**

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	**150**	**5.0**	**mg/L**	**MCAWW 310.1**
Chloride	**5.4**	**1.0**	**mg/L**	**MCAWW 300.0A**
Nitrate as N	0.34	0.10	mg/L	MCAWW 300.0A
Sulfate	5.4	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-09					
Sample #: 012 Date Sampled: 04/23/03 09:40 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.051 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.016**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	**220**	**1.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-09					
Sample #: 012 Date Sampled: 04/23/03 09:40 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**0.34 J**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	170	5.0	mg/L	MCAWW 310.1	
Chloride	3.0	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	1.1	0.10	mg/L	MCAWW 300.0A	
Sulfate	3.1	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-1					
Sample #: 013 Date Sampled: 04/23/03 09:00 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.13 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.39**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.70**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**690**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-1					
Sample #: 013 Date Sampled: 04/23/03 09:00 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**8.4**	1.0	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**6.1**	1.0	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	**4.7**	1.0	**ug/L**	**SW846 8260B**	
Inorganic Analysis					Reviewed
Alkalinity	210	5.0	mg/L	MCAWW 310.1	
Chloride	5.6	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.83	0.10	mg/L	MCAWW 300.0A	
Sulfate	6.2	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S					
Sample #: 014 Date Sampled: 04/22/03 12:30 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.0065 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.26**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**15.4**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**1.8**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**1700**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	29	ug/L	SW846 8260B	
Chloroethane	ND	29	ug/L	SW846 8260B	
Chloromethane	ND	29	ug/L	SW846 8260B	
Acetone	ND	290	ug/L	SW846 8260B	
Bromodichloromethane	ND	29	ug/L	SW846 8260B	
Bromoform	ND	29	ug/L	SW846 8260B	
2-Butanone	ND	290	ug/L	SW846 8260B	
Carbon disulfide	ND	29	ug/L	SW846 8260B	
Carbon tetrachloride	ND	29	ug/L	SW846 8260B	
Chlorobenzene	ND	29	ug/L	SW846 8260B	
Dibromochloromethane	ND	29	ug/L	SW846 8260B	
Chloroform	ND	29	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	29	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-4S				
Sample #: 014 Date Sampled: 04/22/03 12:30 Date Received: 04/24/03 Matrix: WATER				
Volatile Organics by GC/MS				In Review
1,2-Dichloropropane	ND	29	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	29	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	29	ug/L	SW846 8260B
2-Hexanone	ND	290	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	290	ug/L	SW846 8260B
Styrene	ND	29	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	29	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	29	ug/L	SW846 8260B
Benzene	ND	29	ug/L	SW846 8260B
1,1-Dichloroethane	ND	29	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	14	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	14	ug/L	SW846 8260B
1,1-Dichloroethene	ND	29	ug/L	SW846 8260B
Ethylbenzene	**16 J**	**29**	**ug/L**	**SW846 8260B**
Methylene chloride	ND	29	ug/L	SW846 8260B
Naphthalene	**14 J**	**29**	**ug/L**	**SW846 8260B**
Tetrachloroethene	ND	29	ug/L	SW846 8260B
Toluene	ND	29	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	29	ug/L	SW846 8260B
Trichloroethene	ND	29	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	**780**	**29**	**ug/L**	**SW846 8260B**
1,3,5-Trimethylbenzene	**170**	**29**	**ug/L**	**SW846 8260B**
Vinyl chloride	ND	29	ug/L	SW846 8260B
Xylenes (total)	**54**	**29**	**ug/L**	**SW846 8260B**

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	260	5.0	mg/L	MCAWW 310.1
Chloride	10.2	1.0	mg/L	MCAWW 300.0A
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	0.22 B	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20					
Sample #: 015 Date Sampled: 04/22/03 18:10 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.011**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.24**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**7.0**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**12.4**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	10	ug/L	RSK SOP-175	
Ethene	ND	10	ug/L	RSK SOP-175	
Methane	**2300**	**10**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	15	ug/L	SW846 8260B	
Chloroethane	ND	15	ug/L	SW846 8260B	
Chloromethane	ND	15	ug/L	SW846 8260B	
Acetone	ND	150	ug/L	SW846 8260B	
Bromodichloromethane	ND	15	ug/L	SW846 8260B	
Bromoform	ND	15	ug/L	SW846 8260B	
2-Butanone	ND	150	ug/L	SW846 8260B	
Carbon disulfide	ND	15	ug/L	SW846 8260B	
Carbon tetrachloride	ND	15	ug/L	SW846 8260B	
Chlorobenzene	ND	15	ug/L	SW846 8260B	
Dibromochloromethane	ND	15	ug/L	SW846 8260B	
Chloroform	ND	15	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	15	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	15	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	15	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20					
Sample #: 015 Date Sampled: 04/22/03 18:10 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
trans-1,3-Dichloropropene	ND	15	ug/L	SW846 8260B	
2-Hexanone	ND	150	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	150	ug/L	SW846 8260B	
Styrene	ND	15	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	15	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	15	ug/L	SW846 8260B	
Benzene	ND	15	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	15	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	7.7	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	7.7	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	15	ug/L	SW846 8260B	
Ethylbenzene	ND	15	ug/L	SW846 8260B	
Methylene chloride	ND	15	ug/L	SW846 8260B	
Naphthalene	**8.2 J**	**15**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	15	ug/L	SW846 8260B	
Toluene	ND	15	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	15	ug/L	SW846 8260B	
Trichloroethene	ND	15	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**450**	**15**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**200**	**15**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	15	ug/L	SW846 8260B	
Xylenes (total)	**30**	**15**	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	**410**	5.0	mg/L	MCAWW 310.1	
Chloride	7.8	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	2.2	0.10	mg/L	MCAWW 300.0A	
Sulfate	3.9	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20 DUP					
Sample #: 016 Date Sampled: 04/22/03 18:15 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.010**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.23**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**5.4**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**11.8**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					In Review
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**830**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	15	ug/L	SW846 8260B	
Chloroethane	ND	15	ug/L	SW846 8260B	
Chloromethane	ND	15	ug/L	SW846 8260B	
Acetone	ND	150	ug/L	SW846 8260B	
Bromodichloromethane	ND	15	ug/L	SW846 8260B	
Bromoform	ND	15	ug/L	SW846 8260B	
2-Butanone	ND	150	ug/L	SW846 8260B	
Carbon disulfide	ND	15	ug/L	SW846 8260B	
Carbon tetrachloride	ND	15	ug/L	SW846 8260B	
Chlorobenzene	ND	15	ug/L	SW846 8260B	
Dibromochloromethane	ND	15	ug/L	SW846 8260B	
Chloroform	ND	15	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	15	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	15	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	15	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL **Date Reported:** 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20 DUP					
Sample #: 016 Date Sampled: 04/22/03 18:15 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
trans-1,3-Dichloropropene	ND	15	ug/L	SW846 8260B	
2-Hexanone	ND	150	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	150	ug/L	SW846 8260B	
Styrene	ND	15	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	15	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	15	ug/L	SW846 8260B	
Benzene	ND	15	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	15	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	7.7	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	7.7	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	15	ug/L	SW846 8260B	
Ethylbenzene	ND	15	ug/L	SW846 8260B	
Methylene chloride	ND	15	ug/L	SW846 8260B	
Naphthalene	**8.9 J**	**15**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	15	ug/L	SW846 8260B	
Toluene	ND	15	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	15	ug/L	SW846 8260B	
Trichloroethene	ND	15	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**450**	**15**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**190**	**15**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	15	ug/L	SW846 8260B	
Xylenes (total)	**28**	**15**	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	**400**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	7.1	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	1.9	0.10	mg/L	MCAWW 300.0A	
Sulfate	3.9	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-01 DUP					
Sample #: 017 Date Sampled: 04/23/03 10:00 Date Received: 04/24/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0012 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.031 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.29**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					In Review
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**1.9**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					In Review
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3D240294 ONALASKA LANDFILL Date Reported: 5/05/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-28					
Sample #: 018 Date Sampled: 04/22/03 17:00 Date Received: 04/24/03 Matrix: WATER					
Volatile Organics by GC/MS					In Review
1,2-Dichloropropane	ND	2.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	2.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	2.0	ug/L	SW846 8260B	
2-Hexanone	ND	20	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	20	ug/L	SW846 8260B	
Styrene	ND	2.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	2.0	ug/L	SW846 8260B	
Benzene	ND	2.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	2.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	2.0	ug/L	SW846 8260B	
Ethylbenzene	ND	2.0	ug/L	SW846 8260B	
Methylene chloride	ND	2.0	ug/L	SW846 8260B	
Naphthalene	ND	2.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	2.0	ug/L	SW846 8260B	
Toluene	ND	2.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	2.0	ug/L	SW846 8260B	
Trichloroethene	ND	2.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**44**	**2.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**18**	**2.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	2.0	ug/L	SW846 8260B	
Xylenes (total)	**1.6 J**	**2.0**	**ug/L**	**SW846 8260B**	
Inorganic Analysis					Reviewed
Alkalinity	360	5.0	mg/L	MCAWW 310.1	
Chloride	14.0	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	1.7	0.10	mg/L	MCAWW 300.0A	
Sulfate	2.7	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	IN PROCESS	1	mg/L	MCAWW 415.1	

J Estimated result. Result is less than RL.

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1M (128)						
Sample #: 001 Date Sampled: 12/11/02 13:10 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.014**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0024 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	**Dissolved**	**0.00029 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.32**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**8.7**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**1.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.22**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**0.10**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**1.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.00011 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	9.9	0.50	**ug/L**	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-1M (128)				
Sample #: 001 Date Sampled: 12/11/02 13:10 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**2.4**	**1.0**	**ug/L**	**SW846 8260B**
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**3.4 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1M (128)						
Sample #: 001 Date Sampled: 12/11/02 13:10 Date Received: 12/13/02 Matrix: WATER						
Inorganic Analysis						Reviewed
Alkalinity		**76**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride		**7.8**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**5.2**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**4**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-1S (116)						
Sample #: 002 Date Sampled: 12/11/02 13:35 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0029 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		**0.00088 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic	**Dissolved**	**0.0030 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	**Dissolved**	**0.00032 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	**Dissolved**	**0.00079 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**Dissolved**	**0.00099 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.034 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**0.15**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**0.86**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.027 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**0.053 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**0.34**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

Client Sample ID: MW-1S (116)
Sample #: 002 Date Sampled: 12/11/02 13:35 Date Received: 12/13/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**18**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**2.4**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**3.7 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1S (116)					
Sample #: 002 Date Sampled: 12/11/02 13:35 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**120**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**5.5**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**19.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**4**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: PZ-02 (138)					
Sample #: 003 Date Sampled: 12/11/02 15:35 Date Received: 12/13/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.056**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.011**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	**0.0062**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	**0.026**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt Dissolved	**0.0069 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.66**	**0.20**	**mg/L**	**SW846 6010B**	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-02 (138)						
Sample #: 003 Date Sampled: 12/11/02 15:35 Date Received: 12/13/02 Matrix: WATER						
Iron		**98.8**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**5.2**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.037 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**0.43**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**4.2**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.00013 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000092 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	**98**	**1.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**2.4**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-02 (138)					
Sample #: 003 Date Sampled: 12/11/02 15:35 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**2.6 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	**160**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**8.6**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**2.4**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	15	1	mg/L	MCAWW 415.1	

Client Sample ID: PZ-03 (139)					
Sample #: 004 Date Sampled: 12/11/02 16:10 Date Received: 12/13/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	0.0038 B	0.010	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-03 (139)						
Sample #: 004 Date Sampled: 12/11/02 16:10 Date Received: 12/13/02 Matrix: WATER						
Cadmium		**0.00099 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt		**0.0018 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		**0.0028 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic	**Dissolved**	**0.0023 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	**Dissolved**	**0.00074 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	**Dissolved**	**0.0019 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**Dissolved**	**0.0015 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.097 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**1.2**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**2.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.069 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**0.10**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**2.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.00012 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000096 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**2.4**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: PZ-03 (139)				
Sample #: 004 Date Sampled: 12/11/02 16:10 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Methylene chloride	**2.5**	**1.0**	**ug/L**	**SW846 8260B**
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**3.1 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	160	5.0	mg/L	MCAWW 310.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-03 (139)						
Sample #: 004 Date Sampled: 12/11/02 16:10 Date Received: 12/13/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**6.3**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**1.2**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Client Sample ID: MW-2M (118)						
Sample #: 005 Date Sampled: 12/11/02 17:05 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.019**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0083 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.37**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**5.0**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**0.41**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.28**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**0.38**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		0.000092 B	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	0.000087 B	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2M (118)					
Sample #: 005 Date Sampled: 12/11/02 17:05 Date Received: 12/13/02 Matrix: WATER					
Dissolved Gases in Water					Reviewed
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**22**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.1**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**5.5 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2M (118)						
Sample #: 005 Date Sampled: 12/11/02 17:05 Date Received: 12/13/02 Matrix: WATER						
Volatile Organics by GC/MS						Reviewed
2-Hexanone		ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone		ND	10	ug/L	SW846 8260B	
Styrene		ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane		ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis						Reviewed
Alkalinity		**100**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride		**4.8**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**0.13 B**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**4**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-2S (117)						
Sample #: 006 Date Sampled: 12/11/02 17:20 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.012**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0080**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		**0.00084 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0014 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.17 B**	**0.20**	**mg/L**	**SW846 6010B**	

J Estimated result. Result is less than RL.

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2S (117)						
Sample #: 006 Date Sampled: 12/11/02 17:20 Date Received: 12/13/02 Matrix: WATER						
Iron		**29.5**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**1.9**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.13 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**14.0**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**1.9**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.00010 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	2.5	ug/L	RSK SOP-175	
Ethene	ND	2.5	ug/L	RSK SOP-175	
Methane	**520**	**2.5**	**ug/L**	**RSK SOP-175**	

Volatile Organics by GC/MS					Reviewed
Benzene	**0.91 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**2.8**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-2S (117)				
Sample #: 006 Date Sampled: 12/11/02 17:20 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**3.8 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	**19**	**1.0**	**ug/L**	**SW846 8260B**
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	**180**	**5.0**	**mg/L**	**MCAWW 310.1**
Chloride	**26.1**	**1.0**	**mg/L**	**MCAWW 300.0A**
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	ND	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	**6**	**1**	**mg/L**	**MCAWW 415.1**

Client Sample ID: MW-8S (124)				
Sample #: 007 Date Sampled: 12/11/02 19:00 Date Received: 12/13/02 Matrix: WATER				
Trace Inductively Coupled Plasma (ICP) Metals				Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-8S (124)						
Sample #: 007 Date Sampled: 12/11/02 19:00 Date Received: 12/13/02 Matrix: WATER						
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.088 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**0.052 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**0.59**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.081 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**0.50**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.000087 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	
Ethene		ND	0.50	ug/L	RSK SOP-175	
Methane		**0.58**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

Client Sample ID: MW-8S (124)

Sample #: 007 Date Sampled: 12/11/02 19:00 Date Received: 12/13/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Methylene chloride	**2.6**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**2.2 J**	**10**	**ug/L**	**SW846 8260B**	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	190	5.0	mg/L	MCAWW 310.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-8S (124)						
Sample #: 007 Date Sampled: 12/11/02 19:00 Date Received: 12/13/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**9.5**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		**1.5**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate		**12.3**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**0.9 B**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-8M (125)						
Sample #: 008 Date Sampled: 12/11/02 19:10 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		ND	0.010	mg/L	SW846 6010B	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0024 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.68**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		ND	0.10	mg/L	SW846 6010B	
Manganese		**2.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.66**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**2.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000090 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000090 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-8M (125)					
Sample #: 008 Date Sampled: 12/11/02 19:10 Date Received: 12/13/02 Matrix: WATER					
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**2.0**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.2**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**2.9 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-12S (126)						
Sample #: 009 Date Sampled: 12/11/02 18:20 Date Received: 12/13/02 Matrix: WATER						
Iron		ND	0.10	mg/L	SW846 6010B	
Manganese		**0.0023 B**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.022 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	Dissolved	ND	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.00013 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	
Ethene		ND	0.50	ug/L	RSK SOP-175	
Methane		ND	0.50	ug/L	RSK SOP-175	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	
Methylene chloride		**2.7**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene		ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene		ND	1.0	ug/L	SW846 8260B	
Toluene		ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Trichloroethene		ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
Vinyl chloride		ND	1.0	ug/L	SW846 8260B	
Xylenes (total)		ND	1.0	ug/L	SW846 8260B	
Bromomethane		ND	1.0	ug/L	SW846 8260B	
Chloroethane		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A2L130219 ONALASKA LANDFILL Date Reported: 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-12S (126)				
Sample #: 009 Date Sampled: 12/11/02 18:20 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**3.0 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	**170**	**5.0**	**mg/L**	**MCAWW 310.1**
Chloride	**24.3**	**1.0**	**mg/L**	**MCAWW 300.0A**
Nitrate as N	**1.6**	**0.10**	**mg/L**	**MCAWW 300.0A**
Sulfate	**7.2**	**1.0**	**mg/L**	**MCAWW 300.0A**
Total Organic Carbon	**1**	**1**	**mg/L**	**MCAWW 415.1**
Client Sample ID: MW-4S (120)				
Sample #: 010 Date Sampled: 12/12/02 09:30 Date Received: 12/13/02 Matrix: WATER				
Trace Inductively Coupled Plasma (ICP) Metals				Reviewed
Arsenic	**0.0089 B**	**0.010**	**mg/L**	**SW846 6010B**

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S (120)						
Sample #: 010 Date Sampled: 12/12/02 09:30 Date Received: 12/13/02 Matrix: WATER						
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0028 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.30**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**16.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**2.1**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.23**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**2.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**2.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.000088 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**1200**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	25	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	25	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	12	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	12	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	25	ug/L	SW846 8260B	
Ethylbenzene	**10 J**	25	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering

Lot #: A2L130219 ONALASKA LANDFILL **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S (120)					
Sample #: 010 Date Sampled: 12/12/02 09:30 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Methylene chloride	ND	25	ug/L	SW846 8260B	
Naphthalene	ND	25	ug/L	SW846 8260B	
Tetrachloroethene	ND	25	ug/L	SW846 8260B	
Toluene	ND	25	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	25	ug/L	SW846 8260B	
Trichloroethene	ND	25	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**540**	**25**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**120**	**25**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	25	ug/L	SW846 8260B	
Xylenes (total)	**29**	**25**	**ug/L**	**SW846 8260B**	
Chloromethane	ND	25	ug/L	SW846 8260B	
Bromomethane	ND	25	ug/L	SW846 8260B	
Chloroethane	ND	25	ug/L	SW846 8260B	
Acetone	ND	250	ug/L	SW846 8260B	
Carbon disulfide	ND	25	ug/L	SW846 8260B	
Chloroform	ND	25	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	25	ug/L	SW846 8260B	
2-Butanone	ND	250	ug/L	SW846 8260B	
Carbon tetrachloride	ND	25	ug/L	SW846 8260B	
Bromodichloromethane	ND	25	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	25	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	25	ug/L	SW846 8260B	
Dibromochloromethane	ND	25	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	25	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	25	ug/L	SW846 8260B	
Bromoform	ND	25	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	250	ug/L	SW846 8260B	
2-Hexanone	ND	250	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	25	ug/L	SW846 8260B	
Chlorobenzene	ND	25	ug/L	SW846 8260B	
Styrene	ND	25	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	280	5.0	mg/L	MCAWW 310.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S (120)						
Sample #: 010 Date Sampled: 12/12/02 09:30 Date Received: 12/13/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**13.5**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**0.98 B**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**5**	**1**	**mg/L**	**MCAWW 415.1**	

B Estimated result. Result is less than RL.

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S DUP (120)						
Sample #: 011 Date Sampled: 12/12/02 09:35 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0090 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0024 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	**Dissolved**	**0.00029 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	**Dissolved**	**0.00095 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.32**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**17.2**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**2.1**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.25**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**3.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	Dissolved	2.0	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	0.00018 B	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

Client Sample ID: MW-4S DUP (120)
Sample #: 011 Date Sampled: 12/12/02 09:35 Date Received: 12/13/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**750**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	25	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	25	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	12	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	12	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	25	ug/L	SW846 8260B	
Ethylbenzene	ND	25	ug/L	SW846 8260B	
Methylene chloride	ND	25	ug/L	SW846 8260B	
Naphthalene	ND	25	ug/L	SW846 8260B	
Tetrachloroethene	ND	25	ug/L	SW846 8260B	
Toluene	ND	25	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	25	ug/L	SW846 8260B	
Trichloroethene	ND	25	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**570**	**25**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**130**	**25**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	25	ug/L	SW846 8260B	
Xylenes (total)	**27**	**25**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	25	ug/L	SW846 8260B	
Chloroethane	ND	25	ug/L	SW846 8260B	
Chloromethane	ND	25	ug/L	SW846 8260B	
Acetone	ND	250	ug/L	SW846 8260B	
Bromodichloromethane	ND	25	ug/L	SW846 8260B	
Bromoform	ND	25	ug/L	SW846 8260B	
2-Butanone	ND	250	ug/L	SW846 8260B	
Carbon disulfide	ND	25	ug/L	SW846 8260B	
Carbon tetrachloride	ND	25	ug/L	SW846 8260B	
Chlorobenzene	ND	25	ug/L	SW846 8260B	
Dibromochloromethane	ND	25	ug/L	SW846 8260B	
Chloroform	ND	25	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	25	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	25	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A2L130219 ONALASKA LANDFILL Date Reported: 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-4S DUP (120)					
Sample #: 011 Date Sampled: 12/12/02 09:35 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
cis-1,3-Dichloropropene	ND	25	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	25	ug/L	SW846 8260B	
2-Hexanone	ND	250	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	250	ug/L	SW846 8260B	
Styrene	ND	25	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	25	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	25	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**280**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**13.5**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**0.92 B**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**6**	**1**	**mg/L**	**MCAWW 415.1**	

B Estimated result. Result is less than RL.

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-15M (137)						
Sample #: 012 Date Sampled: 12/12/02 11:10 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0054 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		**0.00031 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt		**0.0012 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		**0.0049**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.00082 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.86**	**0.20**	**mg/L**	**SW846 6010B**	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-15M (137)						
Sample #: 012 Date Sampled: 12/12/02 11:10 Date Received: 12/13/02 Matrix: WATER						
Iron		**1.1**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**3.6**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.84**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**3.6**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000092 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000095 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	
Ethene		ND	0.50	ug/L	RSK SOP-175	
Methane		**12**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		**1.0**	**1.0**	**ug/L**	**SW846 8260B**	
cis-1,2-Dichloroethene		**0.56**	**0.50**	**ug/L**	**SW846 8260B**	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	
Methylene chloride		**3.0**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene		ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene		ND	1.0	ug/L	SW846 8260B	
Toluene		ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Trichloroethene		ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
Vinyl chloride		ND	1.0	ug/L	SW846 8260B	
Xylenes (total)		ND	1.0	ug/L	SW846 8260B	
Bromomethane		ND	1.0	ug/L	SW846 8260B	
Chloroethane		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-15M (137)					
Sample #: 012 Date Sampled: 12/12/02 11:10 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	240	5.0	mg/L	MCAWW 310.1	
Chloride	5.2	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.030 B	0.10	mg/L	MCAWW 300.0A	
Sulfate	2.4	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	3	1	mg/L	MCAWW 415.1	
Client Sample ID: MW-6M (123)					
Sample #: 013 Date Sampled: 12/12/02 12:05 Date Received: 12/13/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	0.0024 B	0.010	mg/L	SW846 6010B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6M (123)						
Sample #: 013 Date Sampled: 12/12/02 12:05 Date Received: 12/13/02 Matrix: WATER						
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	**Dissolved**	**0.0034 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.00078 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.75**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		ND	0.10	mg/L	SW846 6010B	
Manganese		**1.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.71**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**1.6**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000097 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000090 B**	**0.00020**	**mg/L**	**SW846 7470A**	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**1.1**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-6M (123)				
Sample #: 013 Date Sampled: 12/12/02 12:05 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Methylene chloride	**2.1**	**1.0**	**ug/L**	**SW846 8260B**
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**2.1 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	100	5.0	mg/L	MCAWW 310.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6M (123)						
Sample #: 013 Date Sampled: 12/12/02 12:05 Date Received: 12/13/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**6.0**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**0.42 B**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**4**	**1**	**mg/L**	**MCAWW 415.1**	

B Estimated result. Result is less than RL.

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6S (122)						
Sample #: 014 Date Sampled: 12/12/02 12:20 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		ND	0.010	mg/L	SW846 6010B	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0022 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0013 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.17 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**0.065 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**2.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.13 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	1.6	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	0.000090 B	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6S (122)					
Sample #: 014 Date Sampled: 12/12/02 12:20 Date Received: 12/13/02 Matrix: WATER					
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**2.9**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	**0.55 J**	**1.0**	**ug/L**	**SW846 8260B**	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**2.2**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**2.6 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6S (122)						
Sample #: 014 Date Sampled: 12/12/02 12:20 Date Received: 12/13/02 Matrix: WATER						
Volatile Organics by GC/MS						Reviewed
cis-1,3-Dichloropropene		ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene		ND	1.0	ug/L	SW846 8260B	
2-Hexanone		ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone		ND	10	ug/L	SW846 8260B	
Styrene		ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane		ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis						Reviewed
Alkalinity		**160**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride		**6.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		ND	0.10	mg/L	MCAWW 300.0A	
Sulfate		**4.0**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**6**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: PZ-4 (140)						
Sample #: 015 Date Sampled: 12/12/02 13:00 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		ND	0.010	mg/L	SW846 6010B	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0010 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	**Dissolved**	**0.0016 B**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.12 B**	**0.20**	**mg/L**	**SW846 6010B**	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-4 (140)						
Sample #: 015 Date Sampled: 12/12/02 13:00 Date Received: 12/13/02 Matrix: WATER						
Iron		ND	0.10	mg/L	SW846 6010B	
Manganese		**2.6**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.063 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**1.3**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000088 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000090 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	
Ethene		ND	0.50	ug/L	RSK SOP-175	
Methane		ND	0.50	ug/L	RSK SOP-175	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	
Methylene chloride		**2.6**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene		ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene		ND	1.0	ug/L	SW846 8260B	
Toluene		ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Trichloroethene		ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
Vinyl chloride		ND	1.0	ug/L	SW846 8260B	
Xylenes (total)		ND	1.0	ug/L	SW846 8260B	
Bromomethane		ND	1.0	ug/L	SW846 8260B	
Chloroethane		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-4 (140)					
Sample #: 015 Date Sampled: 12/12/02 13:00 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**3.5 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	**130**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**5.5**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**4.2**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**5**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: PZ-5 (130)					
Sample #: 016 Date Sampled: 12/12/02 10:25 Date Received: 12/13/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-5 (130)						
Sample #: 016 Date Sampled: 12/12/02 10:25 Date Received: 12/13/02 Matrix: WATER						
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		**0.0011 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**Dissolved**	**0.00078 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.091 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**0.13**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**0.18**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.086 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**0.080**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000098 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.00011 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	1.0	ug/L	RSK SOP-175	
Ethene		ND	1.0	ug/L	RSK SOP-175	
Methane		**130**	**1.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-5 (130)						
Sample #: 016 Date Sampled: 12/12/02 10:25 Date Received: 12/13/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**9.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		**0.48**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate		**5.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**2**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-5S (121)						
Sample #: 017 Date Sampled: 12/12/02 14:15 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0098 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0025 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0026 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.18 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**10.2**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**1.6**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.15 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**2.2**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**1.6**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000088 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

Client Sample ID: MW-5S (121)
Sample #: 017 Date Sampled: 12/12/02 14:15 Date Received: 12/13/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**130**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	7.7	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	7.7	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	3.8	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	3.8	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	7.7	ug/L	SW846 8260B	
Ethylbenzene	**6.2 J**	**7.7**	**ug/L**	**SW846 8260B**	
Methylene chloride	**3.9 J**	**7.7**	**ug/L**	**SW846 8260B**	
Naphthalene	**6.2 J**	**7.7**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	7.7	ug/L	SW846 8260B	
Toluene	ND	7.7	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	7.7	ug/L	SW846 8260B	
Trichloroethene	ND	7.7	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**210**	**7.7**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**47**	**7.7**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	7.7	ug/L	SW846 8260B	
Xylenes (total)	**12**	**7.7**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	7.7	ug/L	SW846 8260B	
Chloroethane	ND	7.7	ug/L	SW846 8260B	
Chloromethane	ND	7.7	ug/L	SW846 8260B	
Acetone	ND	77	ug/L	SW846 8260B	
Bromodichloromethane	ND	7.7	ug/L	SW846 8260B	
Bromoform	ND	7.7	ug/L	SW846 8260B	
2-Butanone	ND	77	ug/L	SW846 8260B	
Carbon disulfide	ND	7.7	ug/L	SW846 8260B	
Carbon tetrachloride	ND	7.7	ug/L	SW846 8260B	
Chlorobenzene	ND	7.7	ug/L	SW846 8260B	
Dibromochloromethane	ND	7.7	ug/L	SW846 8260B	
Chloroform	ND	7.7	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	7.7	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	7.7	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-5S (121)				
Sample #: 017 Date Sampled: 12/12/02 14:15 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
cis-1,3-Dichloropropene	ND	7.7	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	7.7	ug/L	SW846 8260B
2-Hexanone	ND	77	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	77	ug/L	SW846 8260B
Styrene	ND	7.7	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	7.7	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	7.7	ug/L	SW846 8260B
J Estimated result. Result is less than RL.				
Inorganic Analysis				Reviewed
Alkalinity	**140**	**5.0**	**mg/L**	**MCAWW 310.1**
Chloride	**5.8**	**1.0**	**mg/L**	**MCAWW 300.0A**
Nitrate as N	**0.10**	**0.10**	**mg/L**	**MCAWW 300.0A**
Sulfate	**0.34 B**	**1.0**	**mg/L**	**MCAWW 300.0A**
Total Organic Carbon	**5**	**1**	**mg/L**	**MCAWW 415.1**
B Estimated result. Result is less than RL.				
Client Sample ID: TRIP				
Sample #: 018 Date Sampled: 12/12/02 14:15 Date Received: 12/13/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	**2.0**	**1.0**	**ug/L**	**SW846 8260B**
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: TRIP					
Sample #: 018 Date Sampled: 12/12/02 14:15 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Client Sample ID: MW-14S (127)					
Sample #: 019 Date Sampled: 12/12/02 15:00 Date Received: 12/13/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	**0.00045 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	**0.0052 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-14S (127)						
Sample #: 019 Date Sampled: 12/12/02 15:00 Date Received: 12/13/02 Matrix: WATER						
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0052 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.18 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**11.6**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**3.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.15 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**4.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**3.4**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000088 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	**Dissolved**	**0.000095 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	5.0	ug/L	RSK SOP-175	
Ethene		ND	5.0	ug/L	RSK SOP-175	
Methane		**450**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	
Methylene chloride		**2.1**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene		**5.0**	**1.0**	**ug/L**	**SW846 8260B**	
Tetrachloroethene		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L130219 Date Reported: 8/14/03

Client Sample ID: MW-14S (127)
Sample #: 019 Date Sampled: 12/12/02 15:00 Date Received: 12/13/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**1.7**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**0.64 J**	**1.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	**1.4**	**1.0**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**4.3 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	210	5.0	mg/L	MCAWW 310.1	
Chloride	5.0	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.010 B	0.10	mg/L	MCAWW 300.0A	
Sulfate	3.0	1.0	mg/L	MCAWW 300.0A	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A2L130219 ONALASKA LANDFILL Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-14S (127)						
Sample #: 019 Date Sampled: 12/12/02 15:00 Date Received: 12/13/02 Matrix: WATER						
Total Organic Carbon						Reviewed
Total Organic Carbon		**14**	**1**	**mg/L**	**MCAWW 415.1**	
B Estimated result. Result is less than RL.						
Client Sample ID: PZ-1 (129)						
Sample #: 020 Date Sampled: 12/12/02 15:30 Date Received: 12/13/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0029 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		ND	0.0070	mg/L	SW846 6010B	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		**0.0013 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**Dissolved**	**0.0011 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.024 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		ND	0.10	mg/L	SW846 6010B	
Manganese		**0.19**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.022 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**0.18**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		0.000091 B	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	0.00010 B	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.						
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-1 (129)					
Sample #: 020 Date Sampled: 12/12/02 15:30 Date Received: 12/13/02 Matrix: WATER					
Dissolved Gases in Water					Reviewed
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**6.6**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.4**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L130219 ONALASKA LANDFILL **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-1 (129)					
Sample #: 020 Date Sampled: 12/12/02 15:30 Date Received: 12/13/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**120**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**9.4**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.23**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate	**1.6**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**3**	**1**	**mg/L**	**MCAWW 415.1**	

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering

Lot #: A2L140130 ONALASKA LANDFILL **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13 (133)						
Sample #: 001 Date Sampled: 12/12/02 19:00 Date Received: 12/14/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0033 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0043 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0045 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.28**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**4.7**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**24.3**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.22**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**21.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	2.5	ug/L	RSK SOP-175	
Ethene	ND	2.5	ug/L	RSK SOP-175	
Methane	300	2.5	**ug/L**	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

Client Sample ID: AW-13 (133)
Sample #: 001 Date Sampled: 12/12/02 19:00 Date Received: 12/14/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.6**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**2.0**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**2.5 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L140130 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13 (133)						
Sample #: 001 Date Sampled: 12/12/02 19:00 Date Received: 12/14/02 Matrix: WATER						
Inorganic Analysis						Reviewed
Alkalinity		**550**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride		**2.6**	**2.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		**0.20**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate		**3.1**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**5**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: AW-13 DUP (133)						
Sample #: 002 Date Sampled: 12/12/02 19:05 Date Received: 12/14/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		ND	0.010	mg/L	SW846 6010B	
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0044 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0043 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.27**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**5.1**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**23.7**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.23**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**0.062 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**22.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L140130 — ONALASKA LANDFILL — **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13 DUP (133)					
Sample #: 002 Date Sampled: 12/12/02 19:05 Date Received: 12/14/02 Matrix: WATER					
Dissolved Gases in Water					Reviewed
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	**340**	**1.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.6**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**1.8**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**1.1**	**1.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**5.9 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-13 DUP (133)					
Sample #: 002 Date Sampled: 12/12/02 19:05 Date Received: 12/14/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**550**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**2.3**	**2.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.28**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate	**2.7**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**4**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: AW-28 (136)					
Sample #: 003 Date Sampled: 12/12/02 20:00 Date Received: 12/14/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.0026 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0064 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Arsenic Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt Dissolved	**0.0063 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.26**	**0.20**	**mg/L**	**SW846 6010B**	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-28 (136)						
Sample #: 003 Date Sampled: 12/12/02 20:00 Date Received: 12/14/02 Matrix: WATER						
Iron		**9.8**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**5.0**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.21**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**2.3**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**4.6**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	**Dissolved**	**0.000096 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water						Reviewed
Ethane		ND	5.0	ug/L	RSK SOP-175	
Ethene		ND	5.0	ug/L	RSK SOP-175	
Methane		**1200**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.2	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.2	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.62	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.62	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.2	ug/L	SW846 8260B	
Ethylbenzene		ND	1.2	ug/L	SW846 8260B	
Methylene chloride		**4.6**	**1.2**	**ug/L**	**SW846 8260B**	
Naphthalene		ND	1.2	ug/L	SW846 8260B	
Tetrachloroethene		ND	1.2	ug/L	SW846 8260B	
Toluene		**0.83 J**	**1.2**	**ug/L**	**SW846 8260B**	
1,1,1-Trichloroethane		ND	1.2	ug/L	SW846 8260B	
Trichloroethene		ND	1.2	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene		**45**	**1.2**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene		**21**	**1.2**	**ug/L**	**SW846 8260B**	
Vinyl chloride		ND	1.2	ug/L	SW846 8260B	
Xylenes (total)		**2.9**	**1.2**	**ug/L**	**SW846 8260B**	
Bromomethane		ND	1.2	ug/L	SW846 8260B	
Chloroethane		ND	1.2	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: AW-28 (136)				
Sample #: 003 Date Sampled: 12/12/02 20:00 Date Received: 12/14/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Chloromethane	ND	1.2	ug/L	SW846 8260B
Acetone	**5.4 J**	**12**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.2	ug/L	SW846 8260B
Bromoform	ND	1.2	ug/L	SW846 8260B
2-Butanone	ND	12	ug/L	SW846 8260B
Carbon disulfide	ND	1.2	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.2	ug/L	SW846 8260B
Chlorobenzene	ND	1.2	ug/L	SW846 8260B
Dibromochloromethane	ND	1.2	ug/L	SW846 8260B
Chloroform	ND	1.2	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.2	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.2	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.2	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.2	ug/L	SW846 8260B
2-Hexanone	ND	12	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	12	ug/L	SW846 8260B
Styrene	ND	1.2	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.2	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.2	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	**370**	**5.0**	**mg/L**	**MCAWW 310.1**
Chloride	**10.8**	**1.0**	**mg/L**	**MCAWW 300.0A**
Nitrate as N	**1.1**	**0.10**	**mg/L**	**MCAWW 300.0A**
Sulfate	**1.4**	**1.0**	**mg/L**	**MCAWW 300.0A**
Total Organic Carbon	9	1	mg/L	MCAWW 415.1
Client Sample ID: AW-25 (135)				
Sample #: 004 Date Sampled: 12/12/02 17:20 Date Received: 12/14/02 Matrix: WATER				
Trace Inductively Coupled Plasma (ICP) Metals				Reviewed
Arsenic	0.0034 B	0.010	mg/L	SW846 6010B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 **Date Reported:** 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-25 (135)						
Sample #: 004 Date Sampled: 12/12/02 17:20 Date Received: 12/14/02 Matrix: WATER						
Cadmium		ND	0.0020	mg/L	SW846 6010B	
Cobalt		**0.0049 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0044 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.43**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**13.8**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**6.6**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.30**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**1.8**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**5.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water						Reviewed
Ethane		ND	5.0	ug/L	RSK SOP-175	
Ethene		ND	5.0	ug/L	RSK SOP-175	
Methane		**570**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	7.8	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	7.8	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	3.9	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	3.9	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	7.8	ug/L	SW846 8260B	
Ethylbenzene		ND	7.8	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A2L140130 ONALASKA LANDFILL Date Reported: 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-25 (135)					
Sample #: 004 Date Sampled: 12/12/02 17:20 Date Received: 12/14/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Methylene chloride	**5.1 J**	**7.8**	**ug/L**	**SW846 8260B**	
Naphthalene	**4.5 J**	**7.8**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	7.8	ug/L	SW846 8260B	
Toluene	ND	7.8	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	7.8	ug/L	SW846 8260B	
Trichloroethene	ND	7.8	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**240**	**7.8**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**38**	**7.8**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	7.8	ug/L	SW846 8260B	
Xylenes (total)	**5.6 J**	**7.8**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	7.8	ug/L	SW846 8260B	
Chloroethane	ND	7.8	ug/L	SW846 8260B	
Chloromethane	ND	7.8	ug/L	SW846 8260B	
Acetone	ND	78	ug/L	SW846 8260B	
Bromodichloromethane	ND	7.8	ug/L	SW846 8260B	
Bromoform	ND	7.8	ug/L	SW846 8260B	
2-Butanone	ND	78	ug/L	SW846 8260B	
Carbon disulfide	ND	7.8	ug/L	SW846 8260B	
Carbon tetrachloride	ND	7.8	ug/L	SW846 8260B	
Chlorobenzene	ND	7.8	ug/L	SW846 8260B	
Dibromochloromethane	ND	7.8	ug/L	SW846 8260B	
Chloroform	ND	7.8	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	7.8	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	7.8	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	7.8	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	7.8	ug/L	SW846 8260B	
2-Hexanone	ND	78	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	78	ug/L	SW846 8260B	
Styrene	ND	7.8	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	7.8	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	7.8	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	520	5.0	mg/L	MCAWW 310.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L140130 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-25 (135)						
Sample #: 004 Date Sampled: 12/12/02 17:20 Date Received: 12/14/02 Matrix: WATER						
Chloride						Reviewed
Chloride		**2.1**	**2.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N		**0.97**	**0.10**	**mg/L**	**MCAWW 300.0A**	
Sulfate		**4.4**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon		**7**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: AW-20 (134)						
Sample #: 005 Date Sampled: 12/12/02 17:30 Date Received: 12/14/02 Matrix: WATER						
Trace Inductively Coupled Plasma (ICP) Metals						Reviewed
Arsenic		**0.0088 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium		**0.00037 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt		**0.011**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.011**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.29**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**23.3**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**17.0**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.16 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**3.3**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**14.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		**0.000087 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

Client Sample ID: AW-20 (134)
Sample #: 005 Date Sampled: 12/12/02 17:30 Date Received: 12/14/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**1600**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**3.4**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	**0.64 J**	**1.0**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**22**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**17**	**1.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	**1.1**	**1.0**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**3.6 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20 (134)					
Sample #: 005 Date Sampled: 12/12/02 17:30 Date Received: 12/14/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**600**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**1.8**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**1.1**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**15**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: AW-9 (132)					
Sample #: 006 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Arsenic Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt Dissolved	ND	0.0070	mg/L	SW846 6010B	
Lead Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.072 B	0.20	mg/L	SW846 6010B	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering

Lot #: A2L140130 — ONALASKA LANDFILL — Date Reported: 8/14/03

Project Number: 00507

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-9 (132)						
Sample #: 006 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER						
Iron		**0.067 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**0.041**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.064 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	Dissolved	ND	0.10	mg/L	SW846 6010B	
Manganese	**Dissolved**	**0.040**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water						Reviewed
Ethane		ND	0.50	ug/L	RSK SOP-175	
Ethene		ND	0.50	ug/L	RSK SOP-175	
Methane		**260**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	
Methylene chloride		**3.8**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene		ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene		ND	1.0	ug/L	SW846 8260B	
Toluene		ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane		ND	1.0	ug/L	SW846 8260B	
Trichloroethene		ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene		**1.6**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene		ND	1.0	ug/L	SW846 8260B	
Vinyl chloride		ND	1.0	ug/L	SW846 8260B	
Xylenes (total)		ND	1.0	ug/L	SW846 8260B	
Bromomethane		ND	1.0	ug/L	SW846 8260B	
Chloroethane		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: AW-9 (132)				
Sample #: 006 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	**2.9 J**	**10**	**ug/L**	**SW846 8260B**
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	220	5.0	mg/L	MCAWW 310.1
Chloride	3.1	1.0	mg/L	MCAWW 300.0A
Nitrate as N	0.42	0.10	mg/L	MCAWW 300.0A
Sulfate	3.5	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	1	1	mg/L	MCAWW 415.1

Client Sample ID: AW-1 (131)				
Sample #: 007 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER				
Trace Inductively Coupled Plasma (ICP) Metals				Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

PARAMETER		RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-1 (131)						
Sample #: 007 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER						
Cadmium		**0.0032**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt		**0.0043 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead		ND	0.0030	mg/L	SW846 6010B	
Vanadium		ND	0.0070	mg/L	SW846 6010B	
Arsenic	Dissolved	ND	0.010	mg/L	SW846 6010B	
Cadmium	Dissolved	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**Dissolved**	**0.0045 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	Dissolved	ND	0.0030	mg/L	SW846 6010B	
Vanadium	Dissolved	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals						Reviewed
Barium		**0.25**	**0.20**	**mg/L**	**SW846 6010B**	
Iron		**4.5**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese		**6.0**	**0.015**	**mg/L**	**SW846 6010B**	
Barium	**Dissolved**	**0.21**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**Dissolved**	**2.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**Dissolved**	**5.3**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)						Reviewed
Mercury		ND	0.00020	mg/L	SW846 7470A	
Mercury	Dissolved	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water						Reviewed
Ethane		ND	5.0	ug/L	RSK SOP-175	
Ethene		ND	5.0	ug/L	RSK SOP-175	
Methane		**1500**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS						Reviewed
Benzene		ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane		ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene		ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene		ND	1.0	ug/L	SW846 8260B	
Ethylbenzene		ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 Date Reported: 8/14/03

Client Sample ID: AW-1 (131)
Sample #: 007 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Methylene chloride	**3.8**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**25**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**22**	**1.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	**4.0**	**1.0**	**ug/L**	**SW846 8260B**	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**6.0 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	290	5.0	mg/L	MCAWW 310.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL
Project Number: 00507

Lot #: A2L140130 **Date Reported:** 8/14/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-1 (131)					
Sample #: 007 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER					
Chloride					Reviewed
Chloride	**2.1**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**9.1**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**6**	**1**	**mg/L**	**MCAWW 415.1**	
Client Sample ID: TRIP					
Sample #: 008 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	**1.9**	**1.0**	**ug/L**	**SW846 8260B**	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering

Lot #: A2L140130 ONALASKA LANDFILL **Date Reported:** 8/14/03

Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: TRIP					
Sample #: 008 Date Sampled: 12/12/02 18:00 Date Received: 12/14/02 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL, WISCONSIN

Lot #: A3J080218 Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-15M					
Sample #: 001 Date Sampled: 10/07/03 13:30 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	**0.00092 B**	**0.0020**	**mg/L**	**SW846 6010B**	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	**0.13**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.74**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**4.1**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**3.4**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**19**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-15M				
Sample #: 001 Date Sampled: 10/07/03 13:30 Date Received: 10/08/03 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	**0.29 J**	**0.50**	**ug/L**	**SW846 8260B**
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	**0.29 J**	**1.0**	**ug/L**	**SW846 8260B**
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	230	5.0	mg/L	MCAWW 310.1
Chloride	5.1	1.0	mg/L	MCAWW 300.0A
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	5.8	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	2	1	mg/L	MCAWW 415.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6S					
Sample #: 002 Date Sampled: 10/07/03 12:40 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.13 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**2.7**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**7.9**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6S					
Sample #: 002 Date Sampled: 10/07/03 12:40 Date Received: 10/08/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	**0.71 J**	**1.0**	**ug/L**	**SW846 8260B**	
cis-1,2-Dichloroethene	**0.59**	**0.50**	**ug/L**	**SW846 8260B**	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	**0.37 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	150	5.0	mg/L	MCAWW 310.1	
Chloride	5.6	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	3.6	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	5	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-6M					
Sample #: 003 Date Sampled: 10/07/03 12:25 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	**0.0024 B**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.89**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.12**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.8**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**6.6**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

Client Sample ID: MW-6M
Sample #: 003 Date Sampled: 10/07/03 12:25 Date Received: 10/08/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	**0.61 J**	**1.0**	**ug/L**	**SW846 8260B**	
cis-1,2-Dichloroethene	**0.42 J**	**0.50**	**ug/L**	**SW846 8260B**	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	140	5.0	mg/L	MCAWW 310.1	
Chloride	4.7	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.020 B	0.10	mg/L	MCAWW 300.0A	
Sulfate	1.8	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	3	1	mg/L	MCAWW 415.1	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-4					
Sample #: 004 Date Sampled: 10/07/03 11:50 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.077 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**2.0**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**10**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-4					
Sample #: 004 Date Sampled: 10/07/03 11:50 Date Received: 10/08/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	**0.33 J**	**1.0**	**ug/L**	**SW846 8260B**	
cis-1,2-Dichloroethene	**0.46 J**	**0.50**	**ug/L**	**SW846 8260B**	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	**0.34 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	130	5.0	mg/L	MCAWW 310.1	
Chloride	4.5	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	5.1	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	4	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-3					
Sample #: 005 Date Sampled: 10/07/03 16:30 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.081 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.58**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.2**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	**0.000070 B**	**0.00020**	**mg/L**	**SW846 7470A**	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**51**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: PZ-3				
Sample #: 005 Date Sampled: 10/07/03 16:30 Date Received: 10/08/03 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Inorganic Analysis				Reviewed
Alkalinity	180	5.0	mg/L	MCAWW 310.1
Chloride	5.5	1.0	mg/L	MCAWW 300.0A
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	3.5	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	6	1	mg/L	MCAWW 415.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-2					
Sample #: 006 Date Sampled: 10/07/03 16:00 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0016 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.071 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**20.8**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**1.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**490**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

Client Sample ID: PZ-2
Sample #: 006 Date Sampled: 10/07/03 16:00 Date Received: 10/08/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	77	5.0	mg/L	MCAWW 310.1	
Chloride	6.6	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	7	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-15MD					
Sample #: 007 Date Sampled: 10/07/03 13:30 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	**0.043**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.75**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**1.6**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**3.5**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**21**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: MW-15MD				
Sample #: 007 Date Sampled: 10/07/03 13:30 Date Received: 10/08/03 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	**0.26 J**	**0.50**	**ug/L**	**SW846 8260B**
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	**0.28 J**	**1.0**	**ug/L**	**SW846 8260B**
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	230	5.0	mg/L	MCAWW 310.1
Chloride	5.2	1.0	mg/L	MCAWW 300.0A
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	5.6	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	2	1	mg/L	MCAWW 415.1

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Client Sample ID: TRIP				
Sample #: 008 Date Sampled: 10/07/03 13:30 Date Received: 10/08/03 Matrix: WATER				
Volatile Organics by GC/MS				Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: ACKERMAN					
Sample #: 009 Date Sampled: 10/07/03 11:00 Date Received: 10/08/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.023 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**1.7**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.085**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Lot #: A3J080218 ONALASKA LANDFILL, WISCONSIN Date Reported: 10/27/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: ACKERMAN					
Sample #: 009 Date Sampled: 10/07/03 11:00 Date Received: 10/08/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-1SR (116)					
Sample #: 001 Date Sampled: 10/08/03 09:50 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0030 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Lead	**0.0024 B**	**0.0030**	**mg/L**	**SW846 6010B**	
Vanadium	**0.0080**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.18 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**6.2**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**250**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-1SR (116)
Sample #: 001 Date Sampled: 10/08/03 09:50 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	**0.34 J**	**1.0**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**1.1**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**0.30 J**	**1.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	**0.64 J**	**1.0**	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	95	5.0	mg/L	MCAWW 310.1	
Chloride	8.9	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	7.0	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	5	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: PZ-05 (130)
Sample #: 002 Date Sampled: 10/08/03 09:00 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.082 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.43**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**47**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: PZ-05 (130)
Sample #: 002 Date Sampled: 10/08/03 09:00 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	260	5.0	mg/L	MCAWW 310.1	
Chloride	5.6	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.28	0.10	mg/L	MCAWW 300.0A	
Sulfate	5.5	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	2	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-4S (120)
Sample #: 003 Date Sampled: 10/08/03 08:30 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.0091 B**	**0.010**	**mg/L**	**SW846 6010B**	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.29**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**18.9**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.1**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**1400**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	83	ug/L	SW846 8260B	
Chloroethane	ND	83	ug/L	SW846 8260B	
Chloromethane	ND	83	ug/L	SW846 8260B	
Acetone	ND	830	ug/L	SW846 8260B	
Bromodichloromethane	ND	83	ug/L	SW846 8260B	
Bromoform	ND	83	ug/L	SW846 8260B	
2-Butanone	ND	830	ug/L	SW846 8260B	
Carbon disulfide	ND	83	ug/L	SW846 8260B	
Carbon tetrachloride	ND	83	ug/L	SW846 8260B	
Chlorobenzene	ND	83	ug/L	SW846 8260B	
Dibromochloromethane	ND	83	ug/L	SW846 8260B	
Chloroform	ND	83	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	83	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-4S (120)
Sample #: 003 Date Sampled: 10/08/03 08:30 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	83	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	83	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	83	ug/L	SW846 8260B	
2-Hexanone	ND	830	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	830	ug/L	SW846 8260B	
Styrene	ND	83	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	83	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	83	ug/L	SW846 8260B	
Benzene	ND	83	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	83	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	42	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	42	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	83	ug/L	SW846 8260B	
Ethylbenzene	**38 J**	83	**ug/L**	**SW846 8260B**	
Methylene chloride	ND	83	ug/L	SW846 8260B	
Naphthalene	**20 J**	83	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	83	ug/L	SW846 8260B	
Toluene	ND	83	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	83	ug/L	SW846 8260B	
Trichloroethene	ND	83	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**1100**	83	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**230**	83	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	83	ug/L	SW846 8260B	
Xylenes (total)	**160**	83	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	290	5.0	mg/L	MCAWW 310.1	
Chloride	7.7	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.15 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	4	1	mg/L	MCAWW 415.1	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-8S (124)
Sample #: 004 Date Sampled: 10/07/03 20:00 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.093 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.32**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**6.2**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL - WISCONSIN
Project Number: 00507

Lot #: A3J090307 Date Reported: 10/28/03

Client Sample ID: MW-8S (124)
Sample #: 004 Date Sampled: 10/07/03 20:00 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	230	5.0	mg/L	MCAWW 310.1	
Chloride	17.2	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.15	0.10	mg/L	MCAWW 300.0A	
Sulfate	5.6	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	2	1	mg/L	MCAWW 415.1	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-8M (125)					
Sample #: 005 Date Sampled: 10/07/03 20:10 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.73**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.045 B**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**2.8**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**110**	**0.50**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-8M (125)
Sample #: 005 Date Sampled: 10/07/03 20:10 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Volatile Organics by GC/MS				Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	**0.23 J**	**1.0**	**ug/L**	**SW846 8260B**
1,2,4-Trimethylbenzene	**0.36 J**	**1.0**	**ug/L**	**SW846 8260B**
1,3,5-Trimethylbenzene	**0.22 J**	**1.0**	**ug/L**	**SW846 8260B**
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B

J Estimated result. Result is less than RL.

Inorganic Analysis				Reviewed
Alkalinity	240	5.0	mg/L	MCAWW 310.1
Chloride	12.8	1.0	mg/L	MCAWW 300.0A
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A
Sulfate	1.1	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon	3	1	mg/L	MCAWW 415.1

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL - WISCONSIN
Project Number: 00507

Lot #: A3J090307 Date Reported: 10/28/03

Client Sample ID: MW-12S (126)
Sample #: 006 Date Sampled: 10/07/03 20:35 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0013 B**	**0.0070**	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.021 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.0017 B**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	ND	0.50	ug/L	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL - WISCONSIN
Project Number: 00507

Lot #: A3J090307 Date Reported: 10/28/03

Client Sample ID: MW-12S (126)
Sample #: 006 Date Sampled: 10/07/03 20:35 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	210	5.0	mg/L	MCAWW 310.1	
Chloride	9.1	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	1.4	0.10	mg/L	MCAWW 300.0A	
Sulfate	5.0	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	0.8 B	1	mg/L	MCAWW 415.1	

B Estimated result. Result is less than RL.

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
ONALASKA LANDFILL - WISCONSIN
Project Number: 00507

Lot #: A3J090307 Date Reported: 10/28/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-5S (121)					
Sample #: 007 Date Sampled: 10/07/03 17:35 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.022**	0.010	**mg/L**	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0058 B**	0.0070	**mg/L**	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.27**	0.20	**mg/L**	SW846 6010B	
Iron	**30.5**	0.10	**mg/L**	SW846 6010B	
Manganese	**2.3**	0.015	**mg/L**	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	**0.000075 B**	0.00020	**mg/L**	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**910**	5.0	**ug/L**	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	67	ug/L	SW846 8260B	
Chloroethane	ND	67	ug/L	SW846 8260B	
Chloromethane	ND	67	ug/L	SW846 8260B	
Acetone	ND	670	ug/L	SW846 8260B	
Bromodichloromethane	ND	67	ug/L	SW846 8260B	
Bromoform	ND	67	ug/L	SW846 8260B	
2-Butanone	ND	670	ug/L	SW846 8260B	
Carbon disulfide	ND	67	ug/L	SW846 8260B	
Carbon tetrachloride	ND	67	ug/L	SW846 8260B	
Chlorobenzene	ND	67	ug/L	SW846 8260B	
Dibromochloromethane	ND	67	ug/L	SW846 8260B	
Chloroform	ND	67	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	67	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-5S (121)
Sample #: 007 Date Sampled: 10/07/03 17:35 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	67	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	67	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	67	ug/L	SW846 8260B	
2-Hexanone	ND	670	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	670	ug/L	SW846 8260B	
Styrene	ND	67	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	67	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	67	ug/L	SW846 8260B	
Benzene	ND	67	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	67	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	33	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	33	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	67	ug/L	SW846 8260B	
Ethylbenzene	**29 J**	**67**	**ug/L**	**SW846 8260B**	
Methylene chloride	ND	67	ug/L	SW846 8260B	
Naphthalene	**28 J**	**67**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	67	ug/L	SW846 8260B	
Toluene	ND	67	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	67	ug/L	SW846 8260B	
Trichloroethene	ND	67	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**750**	**67**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**200**	**67**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	67	ug/L	SW846 8260B	
Xylenes (total)	**150**	**67**	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	180	5.0	mg/L	MCAWW 310.1	
Chloride	4.3	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.020 B	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.16 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	9	1	mg/L	MCAWW 415.1	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-2S (117)
Sample #: 008 Date Sampled: 10/07/03 18:30 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.011**	0.010	**mg/L**	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	**0.0019 B**	0.0070	**mg/L**	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0013 B**	0.0070	**mg/L**	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.18 B**	0.20	**mg/L**	SW846 6010B	
Iron	**40.0**	0.10	**mg/L**	SW846 6010B	
Manganese	**3.0**	0.015	**mg/L**	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**870**	5.0	**ug/L**	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	**13**	1.0	**ug/L**	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-2S (117)
Sample #: 008 Date Sampled: 10/07/03 18:30 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	**1.3**	**1.0**	**ug/L**	**SW846 8260B**	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**0.14 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	230	5.0	mg/L	MCAWW 310.1	
Chloride	12.8	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.25 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	5	1	mg/L	MCAWW 415.1	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-2M (118)
Sample #: 009 Date Sampled: 10/07/03 18:50 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	**0.020**	0.010	**mg/L**	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.42**	0.20	**mg/L**	SW846 6010B	
Iron	**6.4**	0.10	**mg/L**	SW846 6010B	
Manganese	**0.41**	0.015	**mg/L**	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	**130**	0.50	**ug/L**	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-2M (118)					
Sample #: 009 Date Sampled: 10/07/03 18:50 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**110**	**5.0**	**mg/L**	**MCAWW 310.1**	
Chloride	**6.9**	**1.0**	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	4	1	mg/L	MCAWW 415.1	
Client Sample ID: TRIP(COC# 133874)					
Sample #: 010 Date Sampled: 10/07/03 18:50 Date Received: 10/09/03 Matrix: WATER					

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: TRIP(COC# 133874)
Sample #: 010 Date Sampled: 10/07/03 18:50 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**1.0 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	**0.45 J**	**10**	**ug/L**	**SW846 8260B**	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: TRIP(COC# 133874)					
Sample #: 010 Date Sampled: 10/07/03 18:50 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
J Estimated result. Result is less than RL.					
Client Sample ID: AW-09 (132)					
Sample #: 011 Date Sampled: 10/08/03 13:15 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.19 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.11**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.24**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.					
Dissolved Gases in Water					Reviewed
Ethane	ND	1.0	ug/L	RSK SOP-175	
Ethene	ND	1.0	ug/L	RSK SOP-175	
Methane	340	1.0	ug/L	RSK SOP-175	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
ONALASKA LANDFILL - WISCONSIN
Project Number: 00507

Lot #: A3J090307 Date Reported: 10/28/03

Client Sample ID: AW-09 (132)
Sample #: 011 Date Sampled: 10/08/03 13:15 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	0.61 J	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-09 (132)					
Sample #: 011 Date Sampled: 10/08/03 13:15 Date Received: 10/09/03 Matrix: WATER					
Inorganic Analysis					Reviewed
Alkalinity	**190**	5.0	**mg/L**	**MCAWW 310.1**	
Chloride	**6.9**	1.0	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	**0.070 B**	0.10	**mg/L**	**MCAWW 300.0A**	
Sulfate	**5.4**	1.0	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	**2**	1	**mg/L**	**MCAWW 415.1**	

B Estimated result. Result is less than RL.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-01 (129)					
Sample #: 012 Date Sampled: 10/08/03 13:00 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	**0.0012 B**	0.0070	**mg/L**	**SW846 6010B**	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.033 B**	0.20	**mg/L**	**SW846 6010B**	
Iron	ND	0.10	mg/L	SW846 6010B	
Manganese	**0.37**	0.015	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	0.50	ug/L	RSK SOP-175	
Ethene	ND	0.50	ug/L	RSK SOP-175	
Methane	48	0.50	ug/L	RSK SOP-175	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: PZ-01 (129)
Sample #: 012 Date Sampled: 10/08/03 13:00 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: PZ-01 (129)					
Sample #: 012 Date Sampled: 10/08/03 13:00 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	**190**	5.0	**mg/L**	**MCAWW 310.1**	
Chloride	**5.8**	1.0	**mg/L**	**MCAWW 300.0A**	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**6.1**	1.0	**mg/L**	**MCAWW 300.0A**	
Total Organic Carbon	2	1	**mg/L**	**MCAWW 415.1**	
Client Sample ID: MW-14S (127)					
Sample #: 013 Date Sampled: 10/08/03 12:40 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.19 B**	0.20	**mg/L**	**SW846 6010B**	
Iron	**17.8**	0.10	**mg/L**	**SW846 6010B**	
Manganese	**7.0**	0.015	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	1200	5.0	ug/L	RSK SOP-175	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: MW-14S (127)
Sample #: 013 Date Sampled: 10/08/03 12:40 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	5.0	ug/L	SW846 8260B	
Chloroethane	ND	5.0	ug/L	SW846 8260B	
Chloromethane	ND	5.0	ug/L	SW846 8260B	
Acetone	ND	50	ug/L	SW846 8260B	
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B	
Bromoform	ND	5.0	ug/L	SW846 8260B	
2-Butanone	ND	50	ug/L	SW846 8260B	
Carbon disulfide	ND	5.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B	
Chlorobenzene	ND	5.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B	
Chloroform	ND	5.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B	
2-Hexanone	ND	50	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	50	ug/L	SW846 8260B	
Styrene	ND	5.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B	
Benzene	ND	5.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	2.5	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	2.5	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B	
Ethylbenzene	**1.2 J**	**5.0**	**ug/L**	**SW846 8260B**	
Methylene chloride	ND	5.0	ug/L	SW846 8260B	
Naphthalene	**18**	**5.0**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B	
Toluene	ND	5.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	5.0	ug/L	SW846 8260B	
Trichloroethene	ND	5.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**5.5**	**5.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**1.8 J**	**5.0**	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	5.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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Lot #: A3J090307 — ENSR Consulting & Engineering — ONALASKA LANDFILL - WISCONSIN — Project Number: 00507 — Date Reported: 10/28/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: MW-14S (127)					
Sample #: 013 Date Sampled: 10/08/03 12:40 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Xylenes (total)	2.3 J	5.0	ug/L	SW846 8260B	
J Estimated result. Result is less than RL.					
Elevated reporting limits due to dilution for TICs.					
Inorganic Analysis					Reviewed
Alkalinity	170	5.0	mg/L	MCAWW 310.1	
Chloride	7.3	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.18 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	12	1	mg/L	MCAWW 415.1	
B Estimated result. Result is less than RL.					
Client Sample ID: AW-20 (134)					
Sample #: 014 Date Sampled: 10/08/03 14:05 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	0.021	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	0.011	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	0.0029 B	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.38	0.20	mg/L	SW846 6010B	
Iron	50.0	0.10	mg/L	SW846 6010B	
Manganese	16.1	0.015	mg/L	SW846 6010B	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
B Estimated result. Result is less than RL.					

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: AW-20 (134)
Sample #: 014 Date Sampled: 10/08/03 14:05 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**2200**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	20	ug/L	SW846 8260B	
Chloroethane	ND	20	ug/L	SW846 8260B	
Chloromethane	ND	20	ug/L	SW846 8260B	
Acetone	ND	200	ug/L	SW846 8260B	
Bromodichloromethane	ND	20	ug/L	SW846 8260B	
Bromoform	ND	20	ug/L	SW846 8260B	
2-Butanone	ND	200	ug/L	SW846 8260B	
Carbon disulfide	ND	20	ug/L	SW846 8260B	
Carbon tetrachloride	ND	20	ug/L	SW846 8260B	
Chlorobenzene	ND	20	ug/L	SW846 8260B	
Dibromochloromethane	ND	20	ug/L	SW846 8260B	
Chloroform	ND	20	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	20	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	20	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	20	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	20	ug/L	SW846 8260B	
2-Hexanone	ND	200	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	200	ug/L	SW846 8260B	
Styrene	ND	20	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	20	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	20	ug/L	SW846 8260B	
Benzene	ND	20	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	20	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	10	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	10	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	20	ug/L	SW846 8260B	
Ethylbenzene	ND	20	ug/L	SW846 8260B	
Methylene chloride	ND	20	ug/L	SW846 8260B	
Naphthalene	**6.8 J**	**20**	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	20	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-20 (134)					
Sample #: 014 Date Sampled: 10/08/03 14:05 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Toluene	ND	20	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	20	ug/L	SW846 8260B	
Trichloroethene	ND	20	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**170**	20	**ug/L**	SW846 8260B	
1,3,5-Trimethylbenzene	**120**	20	**ug/L**	SW846 8260B	
Vinyl chloride	ND	20	ug/L	SW846 8260B	
Xylenes (total)	**12 J**	20	**ug/L**	SW846 8260B	
Inorganic Analysis					Reviewed
Alkalinity	520	5.0	mg/L	MCAWW 310.1	
Chloride	5.5	1.0	mg/L	MCAWW 300.0A	
Nitrate as N	0.24	0.10	mg/L	MCAWW 300.0A	
Sulfate	0.22 B	1.0	mg/L	MCAWW 300.0A	
Total Organic Carbon	21	1	mg/L	MCAWW 415.1	
Client Sample ID: AW-25 (135)					
Sample #: 015 Date Sampled: 10/08/03 14:25 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	0.013	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	0.0020 B	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	0.32	0.20	mg/L	SW846 6010B	
Iron	19.6	0.10	mg/L	SW846 6010B	
Manganese	3.4	0.015	mg/L	SW846 6010B	

J Estimated result. Result is less than RL.

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: AW-25 (135)
Sample #: 015 Date Sampled: 10/08/03 14:25 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	
Dissolved Gases in Water					Reviewed
Ethane	ND	5.0	ug/L	RSK SOP-175	
Ethene	ND	5.0	ug/L	RSK SOP-175	
Methane	**2200**	**5.0**	**ug/L**	**RSK SOP-175**	
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	20	ug/L	SW846 8260B	
Chloroethane	ND	20	ug/L	SW846 8260B	
Chloromethane	ND	20	ug/L	SW846 8260B	
Acetone	ND	200	ug/L	SW846 8260B	
Bromodichloromethane	ND	20	ug/L	SW846 8260B	
Bromoform	ND	20	ug/L	SW846 8260B	
2-Butanone	ND	200	ug/L	SW846 8260B	
Carbon disulfide	ND	20	ug/L	SW846 8260B	
Carbon tetrachloride	ND	20	ug/L	SW846 8260B	
Chlorobenzene	ND	20	ug/L	SW846 8260B	
Dibromochloromethane	ND	20	ug/L	SW846 8260B	
Chloroform	ND	20	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	20	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	20	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	20	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	20	ug/L	SW846 8260B	
2-Hexanone	ND	200	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	200	ug/L	SW846 8260B	
Styrene	ND	20	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	20	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	20	ug/L	SW846 8260B	
Benzene	ND	20	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	20	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	10	ug/L	SW846 8260B	

B Estimated result. Result is less than RL.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: AW-25 (135)					
Sample #: 015 Date Sampled: 10/08/03 14:25 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
trans-1,2-Dichloroethene	ND	10	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	20	ug/L	SW846 8260B	
Ethylbenzene	ND	20	ug/L	SW846 8260B	
Methylene chloride	**7.6 J**	20	**ug/L**	**SW846 8260B**	
Naphthalene	**6.8 J**	20	**ug/L**	**SW846 8260B**	
Tetrachloroethene	ND	20	ug/L	SW846 8260B	
Toluene	ND	20	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	20	ug/L	SW846 8260B	
Trichloroethene	ND	20	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**760**	20	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	**210**	20	**ug/L**	**SW846 8260B**	
Vinyl chloride	ND	20	ug/L	SW846 8260B	
Xylenes (total)	**18 J**	20	**ug/L**	**SW846 8260B**	

J Estimated result. Result is less than RL.

Inorganic Analysis					Reviewed
Alkalinity	290	5.0	**mg/L**	MCAWW 310.1	
Chloride	2.1	1.0	**mg/L**	MCAWW 300.0A	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	
Sulfate	**0.77 B**	1.0	**mg/L**	MCAWW 300.0A	
Total Organic Carbon	5	1	**mg/L**	MCAWW 415.1	

B Estimated result. Result is less than RL.

Client Sample ID: HUBLEY					
Sample #: 016 Date Sampled: 10/08/03 10:45 Date Received: 10/09/03 Matrix: WATER					
Trace Inductively Coupled Plasma (ICP) Metals					Reviewed
Arsenic	ND	0.010	mg/L	SW846 6010B	
Cadmium	ND	0.0020	mg/L	SW846 6010B	
Cobalt	ND	0.0070	mg/L	SW846 6010B	
Lead	ND	0.0030	mg/L	SW846 6010B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: HUBLEY					
Sample #: 016 Date Sampled: 10/08/03 10:45 Date Received: 10/09/03 Matrix: WATER					
Vanadium	ND	0.0070	mg/L	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals					Reviewed
Barium	**0.087 B**	**0.20**	**mg/L**	**SW846 6010B**	
Iron	**0.16**	**0.10**	**mg/L**	**SW846 6010B**	
Manganese	**0.32**	**0.015**	**mg/L**	**SW846 6010B**	
Mercury in Liquid Waste (Manual Cold-Vapor)					Reviewed
Mercury	ND	0.00020	mg/L	SW846 7470A	

B Estimated result. Result is less than RL.

Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	ND	10	ug/L	SW846 8260B	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: HUBLEY					
Sample #: 016 Date Sampled: 10/08/03 10:45 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	**0.18 J**	**1.0**	**ug/L**	**SW846 8260B**	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Client Sample ID: TRIP(COC# 133875)					
Sample #: 017 Date Sampled: 10/08/03 10:45 Date Received: 10/09/03 Matrix: WATER					
Volatile Organics by GC/MS					Reviewed
Bromomethane	ND	1.0	ug/L	SW846 8260B	
Chloroethane	ND	1.0	ug/L	SW846 8260B	
Chloromethane	ND	1.0	ug/L	SW846 8260B	
Acetone	**0.66 J**	**10**	**ug/L**	**SW846 8260B**	
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B	
Bromoform	ND	1.0	ug/L	SW846 8260B	
2-Butanone	ND	10	ug/L	SW846 8260B	
Carbon disulfide	ND	1.0	ug/L	SW846 8260B	
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B	
Chlorobenzene	ND	1.0	ug/L	SW846 8260B	
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B	
Chloroform	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

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ENSR Consulting & Engineering
Lot #: A3J090307 ONALASKA LANDFILL - WISCONSIN Date Reported: 10/28/03
Project Number: 00507

Client Sample ID: TRIP(COC# 133875)
Sample #: 017 Date Sampled: 10/08/03 10:45 Date Received: 10/09/03 Matrix: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD	
Volatile Organics by GC/MS					Reviewed
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B	
2-Hexanone	ND	10	ug/L	SW846 8260B	
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B	
Styrene	ND	1.0	ug/L	SW846 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Benzene	ND	1.0	ug/L	SW846 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B	
cis-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B	
Ethylbenzene	ND	1.0	ug/L	SW846 8260B	
Methylene chloride	ND	1.0	ug/L	SW846 8260B	
Naphthalene	ND	1.0	ug/L	SW846 8260B	
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B	
Toluene	ND	1.0	ug/L	SW846 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B	
Trichloroethene	ND	1.0	ug/L	SW846 8260B	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B	
Vinyl chloride	ND	1.0	ug/L	SW846 8260B	
Xylenes (total)	ND	1.0	ug/L	SW846 8260B	

J Estimated result. Result is less than RL.