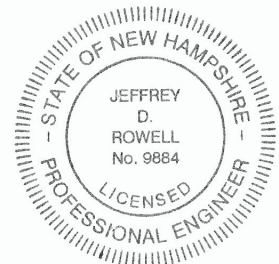


**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**ANNUAL SUMMARY REPORT
CALENDAR YEAR 2016
CROSS ROAD LANDFILL
EXETER, NEW HAMPSHIRE
NHDES SITE # 198401081
GROUNDWATER MANAGEMENT PERMIT #198401081-E-004
PROJECT NO. 978**

Prepared For:
Town of Exeter, New Hampshire
10 Front Street
Exeter, New Hampshire 03833
Contact Name: Ms. Jennifer Mates, P.E.
Contact Phone No. (603) 773-6157

Prepared by:
GZA GeoEnvironmental, Inc.
5 Commerce Park North, Suite 201
Bedford, New Hampshire 03110
Phone Number: (603) 232-8740
Contact Name: Ms. Dawna M. Tousignant, P.E.
Contact Email: dawna.tousignant@gza.com
GZA File No.: 04.0021270.28



Date of Report: January 31, 2017

Groundwater Monitoring Report Cover Sheet

Site Name: Cross Road Landfill and Stump Dump

Town: Exeter, New Hampshire

Permit #: GWP-198401081-E-004

Type of Submittal *(Check all that apply)*

- ☒ Periodic Summary Report (year): 2016
 - ☐ Data Submittal *(per Condition #7 of Permit)*:
-

Check each box where the answer to any of the following questions is "YES"

Sampling Results

- ☐ During the most recent monitoring event, were any new compounds detected at any sampling point?
Well/Compound:
- ☐ Are there any detections of contamination in drinking water that is untreated prior to use?
Well/Compound:
 - ☐ Do compounds detected exceed AGQS?
- ☐ Was free product detected for the first time in any monitoring point?
 - ☐ Surface Water *(visible sheen)*
 - ☐ Groundwater *(1/8" or greater thickness)*
Location/Thickness:

Contaminant Trends

- ☐ Do sampling results show an increasing concentration trend in any source area monitoring well?
Well/Compound:
- ☐ Do sampling results indicate an AGQS violation in any of the GMZ boundary wells?
Well/Compound:

Recommendations

- ☐ Does the report include any recommendations requiring DES action? *(Do not check this box if the only recommendation is to continue with existing permit conditions.)*

This form is to be completed for groundwater monitoring data submittals and periodic summary reports submitted to the New Hampshire Department of Environmental Services Waste Management Division.



Proactive by Design

GEOTECHNICAL

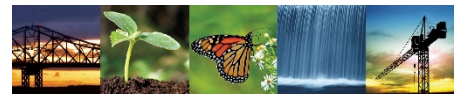
ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

5 Commerce Park North
Suite 201
Bedford, NH 03110
T: 603.623.3600
F: 603.624.9463
www.gza.com



January 31, 2017
File No. 04.0021270.28

Groundwater Management Permit Coordinator
New Hampshire Department of Environmental Services
Waste Management Division
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: Annual Summary Report Calendar Year 2016
Cross Road Landfill
Exeter, New Hampshire
Groundwater Management Permit No. GWP-198401081-E-004

Dear Permit Coordinator:

On behalf of the Town of Exeter (Town), GZA GeoEnvironmental, Inc. (GZA) is pleased to provide the New Hampshire Department of Environmental Services (NHDES) this report summarizing water quality monitoring at the Cross Road Landfill (Landfill) in Exeter during calendar year 2016. This report has been submitted to fulfill the requirement of an Annual Summary Report for the Landfill for calendar year 2016, as required by Condition No. 7 of the Groundwater Management Permit (Permit; GWP-198401081-E-004; issued December 16, 2013).

This report includes GZA's conclusions and recommendations regarding the Landfill water quality monitoring completed in accordance with the Permit, and focuses on the results from the November 2016 monitoring round. The results of the April 2016 sampling were previously submitted in GZA's data transmittal¹ dated May 26, 2016. GZA's work and this report are subject to the attached **Limitations**.

The following data summary documents are attached:

- **Table 1** - summarizing the results of water quality monitoring associated with the Landfill through 2016 including results of analytical laboratory and field screening analyses;
- **Table 2** - summarizing recent surface water and groundwater level elevation data;
- **Plots 1A through Plot 5D** - illustrating primary indicator water quality parameter concentration data;
- **Figure 1 - showing** Landfill and vicinity features including water quality monitoring locations;

¹ April 2016 Data Transmittal, Cross Road Landfill, Exeter, New Hampshire, prepared by GZA dated May 26, 2016.



- **Figure 2** summarizing recent Landfill water quality and elevation data; and
- **Figure 3** - illustrating a hydrogeologic cross-section from the Landfill to the Exeter River.

The following sections summarize recent work performed, results, water quality trends, and GZA's conclusions and recommendations.

WORK PERFORMED

PERMIT-RELATED LANDFILL WATER QUALITY MONITORING

In accordance with Condition No. 7 of the Permit, water quality monitoring during the reporting period included sampling in April and November at the following sampling locations as depicted on **Figure 1**:

- Nine groundwater monitoring wells (RFW-2, RFW-3, RFW-4, GZ-1L, GZ-2L, GZ-3L, GZ-104, GZ-201 and GZ-202A)²;
- One piezometer (P-9R [a.k.a., SW-P-9, P-9, and north spring]); and
- One surface water sampling location (SW-17 [groundwater seep located proximate to the Exeter River]).

GZA notes that due to low groundwater levels at monitoring well, GMW-11, a water quality sample could not be collected during April or November 2016.

Available water quality data for historical Landfill sampling locations include the results of sampling from May 1992 through November 2016 and are summarized in **Table 1**. Water quality monitoring has historically included volatile organic compounds (VOCs), arsenic, barium, cadmium, chloride, chromium, iron, lead, mercury, manganese, nitrate, total kjeldahl nitrogen (TKN), selenium, silver, and thallium. Sampling frequencies for individual water quality parameters and locations have been modified over time, with modifications based on the results of monitoring.

As required by the Permit (GWP-198401081-E-004, issued December 16, 2013), current water quality monitoring includes sample collection and analyses for specific conductance, pH, chloride, nitrate, total kjeldahl nitrogen (TKN), iron, manganese, and arsenic biannually during November and April.

With the exception of wells GZ-1L, GZ-2L, and GZ-3L, each of the Permit-related Landfill groundwater quality monitoring wells and piezometers are screened within overburden. Consistent with the Permit and standard NHDES requirements, overburden groundwater and groundwater seep samples for analytical laboratory analysis of metals concentration are field filtered, and the data represent dissolved concentrations. Surface water samples for analytical laboratory analysis of metals concentration are not field filtered, and the data represent total concentrations. GZA notes that the groundwater quality samples collected and analyzed for metals from the three wells screened in bedrock were not field filtered and were analyzed for total metals in accordance with the Permit requirements.

² Well GMW-11 is required by the Permit but could not be sampled due to the observed dry condition of the well.



Except as noted, Civil & Environmental Consultants, Inc. (CEC) performs sample collection and field screening on behalf of the Town. Water quality samples are submitted by CEC to Eastern Analytical, Inc. (EAI), of Concord, New Hampshire for analytical laboratory analyses. GZA understands that copies of CEC's reports and EAI's analytical laboratory reports are submitted to the NHDES by the Town. GZA provides environmental consulting support to the Town, and is provided with copies of CEC's field screening and EAI's laboratory reports for summary and evaluation of the data.

REVISED CONCEPTUAL SITE MODEL

The following describes GZA's Conceptual Site Model (CSM) for the Landfill. The conceptual model provides a summary of our understanding of site hydrogeology and contaminant distribution and transport, and is described in the following subsections.

HYDROGEOLOGY

Geology

Based on the results of subsurface explorations at and within the vicinity of the Landfill³ and published information, the geology beneath the Landfill includes a sequence of glacially derived sediments overlying a fractured metasedimentary bedrock. A hydrostratigraphic cross section through the Landfill and the area toward the east of the Landfill is illustrated on **Figure 3**. Overburden geology includes up to 99 feet (RFW-3) of glacial outwash sand and gravel overlying a thin (about 4 feet) discontinuous layer of glacial till. The thickness of the sand and gravel deposit beneath the Landfill area varies, in part, due to historical sand and gravel mining. Up to 11 feet of silt and clay was encountered in certain borings drilled along the western side of the Landfill. The silt and clay unit may be associated with glaciolacustrine deposits identified to the west of the site underlying the Jones Swamp, or may be the result of a temporary ice damming on the surface of the glacial outwash sand and gravel during deglaciation.

Overburden borings drilled along the eastern side of the Landfill and further east of the Landfill encountered between 10 feet to 31 feet of primarily fine sand glacial outwash deposits. A fine sand, silt, and clay deposit interbedded with sand and gravel layers was encountered at a depth of 31 feet below ground surface (bgs) within one boring that was drilled to a total depth of 57 feet bgs at a location east of the Landfill (GZ-107). Sand and gravel deposits were also encountered within the generally fine sand outwash deposits encountered to the east of the Landfill.

Bedrock cored beneath the site includes metasedimentary rock consisting of a generally fresh and slightly fractured fine-grained gray to purple-gray phyllite. Weston described bedrock cores drilled from borings RFW-1 and RFW-4 as gray, fine-grained schist belonging to the Eliot Formation. Based on review of the USGS map titled "Bedrock Geologic Map of New Hampshire," dated 1997, both of the rock types cored beneath the site are consistent with the description provided for the Eliot Formation. The bedrock surface encountered in the borings generally slopes downward from a high of about elevation 82 feet (GZ-2L) toward the north (about elevation 47 feet [RWF-4]) and east (about elevation 35 feet [RFW-1]). South of boring GZ-2L, the bedrock surface slopes downward toward the south as suggested by the elevation of the bedrock surface encountered in boring GZ-3L

³ Supplemental Hydrogeologic Investigation, 2002 Annual Water Quality Monitoring, Cross Road Landfill, prepare by GZA dated May 2002.



(about 69 feet). East of RFW-1 the bedrock surface appears to slope upward, as suggested by the elevation of the bedrock surface encountered in boring GZ-1L (about 44 feet).

Based on review of the USGS map titled “Lineament Map of Area 1 of the New Hampshire Bedrock Aquifer Assessment, Southeastern New Hampshire,” dated 1997, a lineament identified using 1:250,000-scale side-looking airborne radar imagery transects the site as shown on **Figure 1**. If this lineament is indicative of the presence of an interconnected set of fractures in bedrock (i.e., a potential fracture zone) located beneath the site, it may represent a preferential pathway for groundwater flow. Notwithstanding, the presence of a bedrock fracture zone at this location has not been confirmed, and the shallow bedrock cored within boring GZ-1L was not highly fractured. No other lineaments were identified crossing or adjacent to the site.

Groundwater Flow

Groundwater within outwash sands is estimated to flow radially away from the Landfill. The estimated horizontal component of the direction of groundwater flow ranges from east-northeast beneath the central and eastern portions of the Landfill to northwest beneath the northwestern portion of the Landfill near the Jones Swamp. Groundwater surface elevation contours, developed based on water level measurements obtained during November 2016 by CEC, are shown on **Figure 2**. Historical depth-to-water and water surface elevation data collected by GZA and others are summarized in **Table 2**. Historical water quality data are generally consistent with the estimated radial flow pattern and indicate contaminant transport in overburden toward the north with transport locally northwest and northeast.

The calculated estimate of the average horizontal component of the hydraulic gradient beneath the site is approximately 0.0009 and varies from approximately 0.022 (beneath the northeast portion of site) to 0.002 (beneath the southeast portion of site).

As discussed in GZA’s May 2002 Supplemental Hydrogeologic Investigation Report, recharge from the sedimentation ponds located along the southern site boundary may cause a local reversal in the direction of shallow overburden groundwater flow south of the Landfill. The extent of this effect has not been evaluated, but would likely have a limited effect on the overall direction of groundwater flow due to the relatively high hydraulic conductivity of the sand and gravel unit underlying the ponds.

Upward vertical components of hydraulic head gradient beneath the Landfill have been measured between the bedrock and overburden. This upward vertical gradient suggests groundwater discharge from bedrock to overburden may occur. The measured difference in hydraulic head between overburden and bedrock at the GZ-1 and GZ-3 locations on July 23, 2001 and August 9, 2001 was 2.0 feet (GZ-1) and greater than 4.6 feet and 0.1 feet (GZ-3), respectively.

Estimates of hydraulic conductivity for the sand and gravel unit based on slug testing range from 4.7×10^{-3} centimeter per second (cm/sec) to 7.0×10^{-3} cm/sec. Based on an average estimated hydraulic conductivity of 5.5×10^{-3} cm/sec, an average hydraulic gradient of about 0.010, and an assumed effective porosity of 0.30, the estimated average seepage velocity for the sand and gravel unit beneath the Landfill is approximately 0.5 feet per day. Based on an average estimated hydraulic conductivity of 5.5×10^{-3} cm/sec, and average hydraulic gradient from the eastern side of the Landfill to the seep located east of the Landfill of about 0.022, and an assumed effective porosity of 0.30, the estimated average seepage velocity for the sand and gravel unit beneath the Landfill is approximately 1.1 feet per day.



Based on constant head pumping tests of bedrock well GZ-3L, an effective hydraulic conductivity of about 2.2×10^{-4} cm/sec is estimated for the upper 20 feet of the bedrock at this location. This value provides a measure of how rapidly groundwater can flow to the well under pumping conditions relative to flow in a porous media. Due to the nature of groundwater flow through fractured rock, this value, which assumes porous media flow, should not be used to calculate estimates of seepage velocities for fractured bedrock.

Based on this understanding of the horizontal and vertical direction of groundwater flow beneath the site, the areas located toward the southwest, south, and southeast of the Landfill that are currently not supplied with municipal water are considered upgradient of the Landfill. The effects of bedrock groundwater extraction could alter the direction of groundwater flow in bedrock beneath the site. Similarly, the presence of interconnected bedrock fractures or fracture zones may create preferential pathways for groundwater flow and Landfill contaminant transport. As indicated above, the presence of significant zones of interconnected fractures or fracture zones has not been identified beneath the site.

CONTAMINANT DISTRIBUTION/TRANSPORT

The following subsection describes the site conceptual model with respect to contaminant, distribution, and transport. The term contaminant as used herein refers to dissolved-phase VOCs, metals, and inorganic parameters with a Landfill source. Routine water quality monitoring has been on-going at the Landfill since May 1992, and Landfill post-closure water quality monitoring has been on-going in accordance with a Permit since November 1996. Historical Landfill groundwater quality data are summarized in **Table 1**. Water quality monitoring locations are shown on **Figure 1**. Contaminant concentration trends are described in the *Water Quality Trend Evaluation* section of this report.

In general, the results of historical and recent Landfill groundwater quality and elevation data indicate contaminant transport in overburden toward the north with transport locally toward the northwest and northeast. Sampling locations RFW-3, RFW-4, and SW-P-9 are downgradient of the Landfill. Sampling location RFW-2 is located hydraulically sidegradient of the Landfill, and GZ-3L is assumed to be upgradient of the Landfill.

Supplemental hydrogeologic investigations east of the Landfill, and descriptions of the work performed, with the off-site investigation are included in GZA's October 16, 2009 and January 18, 2013 reports.⁴ The off-site investigation has been focused on evaluating the source of landfill-related groundwater contaminants discharged through a seep located proximate to the Exeter River.

The areas located north and east of the Landfill are zoned residentially, and are supplied with municipal water. While GZA found evidence of residential bedrock groundwater supply wells within the study area, the residences were reportedly connected to the municipal water supply, and wells were reportedly not used as drinking water sources. Three of these wells have been sampled and analyzed for landfill-related contaminants during 2013; however, the results of the analyses did not indicate that the groundwater intersected by the open borehole portion of the wells had been impacted by the Landfill.

To evaluate off-site impacts, shallow overburden groundwater monitoring wells GZ-101 through GZ-107 were installed in 2009. Based on the results of the shallow overburden well sampling, potential Landfill-related impacts

⁴ Reports by GZA titled "Calendar Year 2007/2008 Annual Report, Cross Road Landfill, Exeter, New Hampshire, Groundwater Management Permit No. GWP-198401081-E-003," and "Annual Summary Report Calendar Year 2012, Application for Groundwater Management Permit Renewal, Cross Road Landfill, Exeter, New Hampshire, Groundwater Management Permit No. GWP-198401081-E-003," dated October 16, 2009 and January 18, 2013, respectively.



to overburden groundwater quality were identified in the vicinity of the groundwater seep (GZ-102 and GZ-104). The general direction of groundwater flow and limited surficial geophysical (electrical conductivity methods) evidence suggested a Landfill source. Monitoring wells were subsequently installed along Juniper Ridge Road (GZ-201) and immediately east of the Landfill (GZ-202 and GZ-202A) to further evaluate the source of the landfill-related contaminants in groundwater in the vicinity of the seep.

April and November 2016 arsenic, iron, and manganese concentration data are summarized on **Figure 2** to illustrate the spatial distribution of these landfill-related contaminants. The data summarized on **Figure 2** are consistent with a landfill source migrating east-northeastward toward the seep and also suggest a background contribution (evidence by the presence of manganese and/or iron at concentrations exceeding the New Hampshire Ambient Groundwater Standards (NH AQGS) in monitoring well GZ-2L. The historical presence of 1,4-dioxane in monitoring wells (GZ-104, GZ-202A, and RFW-4) indicates the presence of a landfill source. While background and/or other sources may be present for other Landfill contaminants including metals, chloride, and nitrate, no potential sources of 1,4-dioxane, other than the Landfill, have been identified.

GZA anticipates that the presence of the seep and apparent direction of Landfill-related contaminant transport may be due to variations in hydraulic conductivity within the subsurface between the Landfill and the seep. **Figure 3** illustrates a hydrogeologic cross section from the Landfill to the seep. The location of the cross section is illustrated on **Figure 1**.

SUMMARY OF RECENT LANDFILL WATER QUALITY MONITORING RESULTS

Year 2016 groundwater quality data are generally consistent with historical Landfill water quality monitoring, indicating that groundwater quality improved or has remained relatively stable following closure of the Landfill during 1994. Recent and historical monitoring indicates limited exceedances of NH AGQS and/or Secondary Maximum Concentration Limits (SMCLs),⁵ primarily for certain parameters typical of landfill-related water quality (i.e., arsenic, iron, and manganese).

Landfill-related groundwater contaminants routinely detected in groundwater sampled from monitoring wells located downgradient of the Landfill include arsenic, barium, chloride, iron, manganese, and 1,4-dioxane). In our opinion, the detections of this VOC are the result of historical waste disposal and do not indicate a recent or ongoing release of 1,4-dioxane at the Landfill.

Certain other metals and inorganic parameters, and VOCs have been intermittently detected in groundwater sampled from monitoring wells located downgradient of the Landfill, including cadmium, chromium, lead, mercury, selenium, and silver. Significantly, only arsenic, iron, and manganese are routinely detected in Landfill groundwater samples at concentrations exceeding NH AGQS (arsenic and manganese) or SMCLs (iron). Detected concentrations of the other water quality parameters have infrequently exceeded NH AGQS, SMCLs, or surface water quality criteria. The following table summarizes post-closure (i.e., since September 1994) exceedances of applicable water quality standards for landfill contaminants other than arsenic, manganese, iron, and VOCs, and has been revised through year 2016.

⁵ SMCLs are aesthetic-based secondary maximum contaminant-level water quality standards used to regulate public water systems (Env-Dw 706 [Regulated Secondary Maximum Contaminant Levels]).



PARAMETER	LOCATION	CONCENTRATION (mg/L)	SAMPLING DATE	WATER QUALITY STANDARDS (mg/L)
Cadmium	SW-P-2/P-2R	0.007	4/99	AGQS – 0.005 WQCTS – 0.00095
		0.0078	4/01	
	SW-P-9/P-9R	0.012	4/99	
		0.0022	4/01	
	SW-1	0.005	4/02	
		0.01	4/03	
	SW-13	0.010	11/10	
	GZ-1U	0.006	4/12	
Chromium	SW-1	0.26	4/06	AGQS – 0.10 WQCTS- NE
Lead	SW-P-2/P-2R	0.18	4/97	AGQS – 0.015 WQCTS- NE
	RFW-2	0.053	7/96	
	RFW-3	18	4/98	
	SW-1	0.36	4/06	
	SW-13	0.058	11/10	
Barium	SW-1	1.9	11/01	WQCTS – 1
		2.3	4/06	
Chloride	RFW-1	420	7/00	SMCL – 250 AGQS –NE
	GZ-6	460	7/01	
Nitrate	RFW-4	19	11/96	AGQS – 10
Selenium	RFW-3	0.06	11/03	AGQS – 0.05 WQCTS- 0.170
	GZ-1U	0.0711	8/01	
	GZ-1L	0.082	8/01	
	GZ-2L	0.05	11/03	
	SW-1	0.13	4/06	
Mercury	SW-5	0.0012	7/96	WQCTS – 0.00005

Notes:

1. WQCTS indicates surface water quality criteria, protection of human health, water and fish ingestion standard shown.⁶
2. mg/L indicates milligrams per liter.
3. NE indicates not established.

Since 2009, VOCs other than 1,4-dioxane have only been detected in groundwater quality samples collected from well points P-2R and P-9R located west of the Landfill, and monitoring well MW-202A located northeast of the Landfill. VOCs were detected in the December 2013 water quality samples collected from these locations, and were limited to p-isopropyltoluene (7 µg/L at GZ-P-2R, 11 µg/L at GZ-P-9R, and 2 µg/L at GZ-202A) and toluene (1 µg/L at GZ-P-2R. The detected concentrations of p-isopropyltoluene and toluene do not exceed the NH AGQS 260 µg/L and 1,000 µg/L, respectively. Groundwater sampling during 2014 and 2015 did not detect VOCs at concentrations greater than the laboratory reporting limits. In accordance with Permit requirements, samples for VOC analysis were not collected during 2016.

1,4 dioxane has been historically detected in groundwater quality samples collected from RFW-2, RFW-3, RFW-4, SW-P2 (P-2R), P-9R, GZ-P-5R, GZ-102, GZ-104, GZ-106, GZ-202A, and SW-16 at concentrations up to 6 µg/L. 1,4-dioxane has not been detected in samples collected from monitoring wells GZ-1U, GZWP-1, GZ-201, GZ-1L, GZ-2L, GZ-3L, SW-1 (Exeter River), SW-13, and SW-17 since monitoring began for this parameter in 2009. Most recently (November 2015) 1,4 dioxane was detected in the water quality sample collected from P-2R at a

⁶ As defined in New Hampshire Code of Administrative Rules Env-Ws 1703.21 (Water Quality Criteria for Toxic Substances, Protection of Human Health). Refer to **Table 1** for further information.



concentration of 1.2 µg/L; it was not detected at SW-13. Sampling for 1,4-dioxane was not required by the Permit in 2016, the next sampling event including 1,4-dioxane analysis is schedule for November 2017.

The results of the year 2016 Permit-related groundwater quality monitoring indicate exceedances of NH AGQS for arsenic (RFW-3, RFW-4, P-9R, GZ-104, GZ-202A, and SW-17 [April 2016 only]), and manganese (RFW-3, RFW-4, GZ-2L, GZ-104, GZ-202A, P-9R [November 2016 only], and SW-17) in water quality samples collected during one or more of the sampling rounds. The remaining target analytes were not detected in the water quality samples or were detected at concentrations less than their associated water quality standards (excluding SMCLs which are not directly applicable to the samples collected).

WATER QUALITY TREND EVALUATION

Plots of arsenic, iron, manganese, and chloride concentrations over time were prepared using data from selected water quality monitoring locations to illustrate concentration trends for graphical evaluation. Copies of these plots are attached and summarized below. Please note that where concentrations are reported as less than the laboratory reporting limits (RL), one half of the RL is shown on the concentration trend plots.

SUMMARY

In general, the concentration of the Landfill-related contaminants in groundwater and surface water are relatively stable. The concentrations of the contaminants fluctuate to varying degrees at each of the monitoring locations. Fluctuations in concentration are likely due to variations in groundwater flow due to seasonal variations in infiltration. Monitoring locations exhibiting potential current increasing or decreasing concentration trends for the primary Landfill-related groundwater contaminants include:

- Arsenic Decreasing Trend– Overburden well RFW-4;
- Arsenic Increasing Trends – Overburden well GZ-104 and RFW-3, and P-2R;
- Iron Increasing Trend – Overburden seep location P-9R and overburden well GZ-104;
- Manganese Increasing Trend – Overburden wells RFW-3, and GZ-104;
- Chloride Decreasing Trend – Bedrock well GZ-2L; and
- Chloride Increasing Trend – Overburden seep location P-9R.

Increasing concentration trends were indicated for overburden wells GZ-104, P-2R, P-9R, and RFW-3. The significance of the increasing iron concentration trend for GZ-P-9R should continue to be assessed based on the results of future monitoring, as should the apparent increasing arsenic, iron, and manganese, concentrations at overburden monitoring well GZ-104.

The sampling results indicate an AGQS violation(s) of downgradient wells RFW-3 (manganese) and P-9R (manganese and arsenic). As discussed above, GZA recommends on-going assessment of the observed concentration trends in groundwater samples collected from P-9R due to variability in the results. Monitoring well GZ-106 is located downgradient of monitoring well RFW-3 and was last sampled in November 2014 for manganese. Results indicated that the detected manganese concentration was less than the AGQS. GZA recommends including sampling of this well at least once during the next permit period.



DISSOLVED-PHASE CONTAMINANT TRANSPORT

Sampling locations RFW-2, P-2R and GZ-201 are located sidegradient to downgradient of the Landfill, and exhibit relatively limited impacts to groundwater quality. Sampling locations RFW-3, RFW-4, P-9R, GZ-102, GZ-104, GZ-202A, SW-16, and SW-17 are located downgradient of the Landfill, and generally exhibit relatively greater impacts to groundwater quality.

The results of recent sampling at monitoring well locations GZ-202A, GZ-102, and GZ-104 suggest a potential Landfill source for the groundwater contaminants detected in groundwater and surface water samples collected in the seep area. The data collected to date suggest the presence of a potential groundwater flow pathway from the eastern side of the Landfill east-northeastward toward the seep.

On August 10, 2016, GZA personnel visited the area surrounding the groundwater seep to evaluate the condition of the riverbed of the Exeter River relative to the potential for the collection of pore water samples. GZA observed groundwater seepage locations proximate to, and portions of the Exeter River located hydraulically downgradient of, the landfill. During the visit, the riverbed was comprised mostly of gravel, cobbles, and boulders with apparent bedrock outcrops within the vicinity of the discharge point from the groundwater seep area to the Exeter River. The observations of bedrock suggest that overburden pinches out at the location of the Exeter River. The observed conditions are not conducive to the collection of pore water samples, and if overburden pinches out, pore water sampling would be unnecessary. Further, the groundwater seepage in the area of SW-14 converges into a small stream that discharges to the Exeter River.

CONCLUSIONS/DISCUSSION

The following summarize our primary findings regarding the Landfill water quality monitoring.

- Groundwater quality data for the current reporting period are generally consistent with the previously described concentration ranges and temporal trends for the water quality parameters monitored in accordance with the Permit for the Landfill;
- Recent water quality monitoring to the northeast of the Landfill in the general area of the seep indicates possible increasing contaminant concentrations; however, concentrations detected during 2015 at monitoring location SW-16, outside the boundary of the Groundwater Management Zone (GMZ), were not greater than the AGQS. Expansion of the GMZ is not warranted at this time;
- Additional potential Landfill-related contaminants including: chloride, iron, nitrate, and TKN were detected in one or more of the water quality samples collected during the reporting period. The concentrations of these parameters were below the NH AGQS or WQCTS during the reporting period.
- Calculated groundwater elevations for wells sampled during November 2016 are consistent with radial groundwater flow from the Landfill toward the northwest, north, northeast, and east of the Landfill within the shallow overburden outwash deposits underlying the area.



RECOMMENDATIONS

GZA recommends the following:

- Continued groundwater and surface water quality monitoring as outlined in the current Permit;
- The increasing iron concentration trends for P-9R and contaminant concentration trend for GZ-104 should be further evaluated based on the results of future monitoring; and
- Previous recommendations included installation of a well couplet in the general vicinity of GZ-101, or collection of pore water samples from groundwater beneath the river to evaluate mass loading of iron, manganese, and arsenic to the Exeter River. However, based on observations of the seep area by GZA on August 10, 2016, a revised investigative approach to assess metals loading to the river is recommended and will be described in a separate Work Plan to be provided to NHDES for review and approval in the next several months.
- Manganese sampling of downgradient monitoring well GZ-106 during the next five year permitting period.

On behalf of the Town, we greatly appreciate your review of this report and trust the information contained herein and attached meet the needs of the NHDES. Should you have any questions, please contact the undersigned at (603) 232-8740.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in black ink that reads 'Dawna M. Tousignant'.

Dawna M. Tousignant, P.E.
Project Manager

A handwritten signature in black ink that reads 'James M. Wieck'.

James M. Wieck, P.G.
Consultant/Reviewer

A handwritten signature in black ink that reads 'Jeffrey D. Powell'.

Jeffrey D. Powell, P.E.
Associate Principal

DMT/JDR/JMW:kr

\\gzaman1\jobs\jobs\21000s\21270\04.0021270.28\report\draft 04.0021270.28 annual summary report 012717.docx

Attachments: Limitations
Tables
Figures
Plots
November 2016 Analytical Laboratory Data

cc: Ms. Jennifer Mates, P.E., Department of Public Works; Town of Exeter



Limitations



USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.
4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
6. Water level readings have been made, as described in this Report, in monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.



SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.
9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.
10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

CONCEPTUAL SITE MODEL

14. Our opinions were developed, in part, based upon a comparison of site data to conditions anticipated within our Conceptual Site Model (CSM). The CSM is based on available information, and professional judgment. There are rarely sufficient data to develop a unique CSM. Therefore observations over time, and/or space, may vary from those depicted in the CSM provided in this report. In addition, the CSM should be evaluated and refined (as appropriate) whenever significant new information and/or data is obtained.



Tables

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Arsenic (mg/L)

NH AGQS = 0.01 mg/L
WQCTS (Water and Fish Ingestion) = 0.000018 mg/L

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring and Residential Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations										Leachate Monitoring Well	
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
PRE-CLOSURE	5/27/1992	0.02	0.04	0.02	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	0.04	
	11/12/1992	<0.01	<0.01	<0.01	0.0284	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	
	4/6/1993	0.001	0.17	0.025	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	0.03	
	7/1/1993	0.001	0.001	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	
	11/5/1993	0.001	0.002	0.002	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	0.048
	4/14/1994	<0.005	0.06	0.058	0.263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.034	-	-	-	-	-	-	-	-	-	-
	7/15/1994	<0.100	<0.100	<0.100	0.245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.100	-	-	-	-	-	-	-	-	-	-
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.057	
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	
	11/18/1994	0.001	0.059	0.038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.013	-	-	-	-	-	-	-	-	-	-
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.005	
	4/12/1995	<0.005	0.039	0.022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005
POST-CLOSURE	7/28/1995	<0.005	0.021	0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	0.018
	12/8/1995	<0.01	<0.01	0.042	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.027	-	-	-	-	-	-	-	-	-	0.099
	4/26/1996	<0.01	<0.01	0.01	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	<0.01
	7/25/1996	<0.005	<0.005	<0.005	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-
	11/14/1996	-	0.015	0.17	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	0.017	<0.005	-	-	-	-	-	-	-	-	-	-	-
	4/21/1997	-	<0.005	0.024	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	0.012	0.008	-	-	-	-	-	-	-	-	-	-	-
	7/22/1997	<0.005	<0.005	0.014	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.005	-	0.006	<0.005	-	-	-	-	-	-	-	-	-	-	-
	11/11/1997	<0.005	0.011	0.04	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	0.15	0.008	-	-	-	-	-	-	-	-	-	-	-
	4/15/1998	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
	7/6/1998	-	<0.005	0.021	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	-	4.9	<0.005	-	-	-	-	-	-	-	-	-	-	-
	11/16/1998	<0.005	0.012	0.001	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	0.58	<0.005	-	-	-	-	-	-	-	-	-	-	-
	4/19/1999	<0.005	<0.005	0.037	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	0.66	<0.005	-	-	-	-	-	-	-	-	-	-	-
	7/27/1999	<0.005	<0.005	0.026	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	12	0.009	-	-	-	-	-	-	-	-	-	-	-
	11/18/1999	0.01	0.018	0.2	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	-	5.9	1.2	-	-	-	-	-	-	-	-	-	-	-
	5/5/2000	<0.005	<0.005	0.054	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
	7/7/2000	<0.005	0.008	0.46	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.009	-	0.71	0.008	-	-	-	-	-	-	-	-	-	-	-
	11/16/2000	<0.01	<0.01	0.13	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.023	-	0.013	0.3	-	-	-	-	-	-	-	-	-	-	-
	4/25/2001	<0.01	0.014	0.21	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.91	-	0.032	0.047	-	-	-	-	-	-	-	-	-	-	-
	7/25/2001	<0.005	0.009	0.22	0.19	0.0124	-	-	<0.004	0.0102	0.0062	-	-	-	-	-	<0.004	<0.004	<0.004	-	0.015	-	27	0.03	-	-	-	-	-	-	-	-	-	-	-
	8/9/2001	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	0.008	0.006	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/28/2001	<0.01	<0.01	0.09	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	1.9	-	-	-	-	-	-	-	-	-	-
	1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.026	-	<0.026	<0.026	<0.026	-	-	-	-	-	-	-
	4/24/2002	<0.02	<0.02	0.22	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	<0.02	<0.02	<0.02	-	-	-	-	-	-	-
	11/20/2002	<0.05	<0.05	0.28	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-
	4/29/2003	<0.01	<0.01	0.24	0.19	<0.01	-	-	-	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-
	11/17/2003	-	0.014	0.22	0.18	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005	0.011	<0.005	-	-	-	0.12	<0.005	-	<0.005	<0.005	<0.005	-	-	-	-	-	-	-
	4/28/2004	-	0.01	0.20	0.22	<0.005	-	-	-	-	-	0.01	-	-	-	-	<0.005	0.005	<0.005	<0.005	<0.005	0.005	0.043	<0.005	-	-	-	-	-	-	-	-	-	-	
	11/15/2004	-	0.017	0.076	0.19	<0.005	-	-	-	-	-	0.013	-	-	-	-	<0.005	0.008	<0.005	<0.005	0.41	<0.005	0.063	<0.005	-	-	-	-	-	-	-	-	-	-	-
	4/28/2005	-	<0.01	0.07	0.2	<0.01	-	-	-	-	-	0.03	-	-	-	-	<0.01	<0.01	<0.01	-	0.12	<0.01	0.03	<0.01	-	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-
	11/8/2005	-	0.006	0.023	0.156	<0.005	-	-	-	-	-	0.058	-	-	-	-	<0.005	0.013	<0.005	-	0.149	<0.005	0.017	0.008	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-
	4/17/2006	-	<0.005	0.011	0.16	<0.005	-	-	-	-	-	0.076	-	-	-	-	<0.005	0.007	<0.005	-	0.034	<0.005	0.023	1.2	-	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-
	11/20/2006	-	0.007	0.014	0.14	<0.005	-	-	-	-	-	0.062	-	-	-	-	<0.005	0.01	<0.005	-	0.026	<0.005	0.042	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-
	5/2/2007	-	0.012	0.006	0.13	<0.005	-	-	-	-	-	0.029	-	-	-	-	-	0.006	-	-	0.011	<0.005	0.011	0.029	-	<0.005	<0.005	<0.005	<0.005	-	-	-	<0.005	-	-
	11/14/2007	-	<0.005	0.006	0.13	<0.005	-	-	-	-	-	0.032	-	0.087	-	-	<0.005	<0.005	0.007	-	0.024	0.007	0.036	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	<0.005	-	-
	4/25/2008	-	0.007	0.007	0.17	<0.005	-	-	-	-	-	0.040	-	-	-	-	&																		

HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Barium (mg/L)

WQCTS (Water and Fish Ingestion) = 1.0 mg/l

[illegible]

See last page for notes:

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Cadmium (mg/L)

NH AGQS = 0.005 mg/L
WQCTS (Protection of Aquatic Life - Fresh Water Acute) = 0.21 ug/L

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations										Leachate Monitoring Well	
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
PRE CLOSURE	5/27/1992	<0.005	0.007	<0.005	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005	
	11/12/1992	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	<0.01	-	-	-	-	-	-	-	-	-	
	4/6/1993	0.01	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005	
	7/1/1993	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	
	11/5/1993	0.02	0.02	0.02	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	0.02	
	4/14/1994	0.015	<0.01	<0.01	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.016	-	-	-	-	-	-	-	-	-	-	
	7/15/1994	<0.01	<0.01	0.017	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.014	
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011	
	11/18/1994	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	
	4/12/1995	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005
POST CLOSURE	7/28/1995	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	0.7
	12/8/1995	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	<0.004
	4/26/1996	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005
	7/25/1996	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-	-
	11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/21/1997	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	
	7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/15/1998	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
	7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/19/1999	<0.001	<0.001	0.002	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.007	-	0.012	<0.001	-	-	-	-	-	-	-	-	-	-	-
	7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5/5/2000	<0.001	<0.001	0.002	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
	7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/25/2001	<0.001	<0.001	<0.001	0.0016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0078	-	0.0042	0.0022	-	-	-	-	-	-	-	-	-	-	-
	7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8/9/2001	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/28/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/24/2002	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-
	11/20/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/29/2003	<0.005	0.01	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	11/17/2003	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	4/28/2004	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	11/15/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/28/2005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	11/8/2005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	4/17/2006	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	11/20/2006	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	
	5/2/2007	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-	-	
	11/14/2007	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-	-	
	4/25/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/18/2008	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	Dry	-	<0.005	-	-	-	<0.005	<0.005	-	-	Dry	<0.005	<0.005	-	-	-	-	<0.005	-	-	-	<0.005	-	-	
	11/4/2009	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	-	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	-	
	4/20/2010	-																																	

Chloride (mg/L)

NH AGQS = NE

SMCL = 250 mg/L

WQTS (Protection of Aquatic Life - Fresh Water Acute) = 230 mg/L

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations											Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
PRE-CLOSURE	5/27/1992	17	56	78	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	900	
	11/12/1992	24	70	78	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-	-	-		
	4/6/1993	32	70	34	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	-	-	1,150		
	7/1/1993	900	700	650	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	-	-	-	-	-	-	-	-		
	11/5/1993	18	52	66	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	-	-	-	-	-	-	-	700		
	4/14/1994	6.6	56	52.6	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-		
	7/15/1994	5.24	49.7	46.6	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.1	-	-	-	-	-	-	-	-		
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350		
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950	
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450	
POST-CLOSURE	11/18/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470	
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	
	4/12/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490	
	7/28/1995	10	54	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	-	-	-	-	-	-	-	-	510	
	12/8/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	
	4/26/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550	
	7/25/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/14/1996	-	66	35	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	49	52	-	-	-	-	-	-	-	-	-	-
	4/21/1997	-	60	32	160	-	-	-	-	-																									

See last page for notes.

Chromium (mg/L)

[illegible]

Page 5 of 19

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

1,4-Dioxane (mg/L)

NH AGQS = 3 µg/L
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations								Leachate Monitoring Well			
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
4/27/2009	-	-	1	6	-	-	-	-	-	-	<1	-	-	-	-	-	-	<1	-	-	1	-	5	-	-	-	-	-	-	-	-	-	-	-	
11/4/2009	-	-	1	4	-	-	-	-	-	-	-	-	<1	-	-	-	-	<1	-	-	1	-	2	-	-	-	-	-	-	<1	-	<1	-	-	
4/20/2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/11/2010	-	<1	2	4	<1	-	-	-	-	-	-	-	1	-	-	-	<1	<1	<1	-	1	<1	3	-	-	-	-	-	-	-	-	-	-	-	
4/22/2011	-	<0.25	1	1	<0.25	-	-	-	-	-	-	-	0.95	-	-	-	-	<0.25	-	-	0.58	<0.25	2	-	-	-	-	-	-	-	-	-	-	-	
11/4/2011	-	<0.25	1.3	1.4	<0.25	-	-	-	-	-	-	-	1.6	-	-	-	<0.25	<0.25	<0.25	-	0.56	<0.25	-	-	-	-	-	-	-	-	-	-	-	-	
4/30/2012	-	0.55	1.6	2.8	<0.25	-	-	-	-	-	-	-	0.83	-	-	-	-	<0.25	-	-	1.2	0.50	-	-	-	-	-	-	-	-	-	-	-	-	
11/5/2012	-	<0.25	1.5	1.3	<0.25	-	-	-	-	-	-	-	1.7	-	<0.25	2.8	<0.25	<0.25	-	-	1.4	0.55	2.1	-	-	-	-	-	<0.25	-	<0.25	<0.25	-	-	
5/7/2013	-	-	-	-	-	-	-	-	-	-	-	0.70	1.2	-	<0.25	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12/19/2013	-	<0.25	0.25	1.1	<0.25	-	-	-	-	-	-	0.79	1.2	-	<0.25	2.0	<0.25	<0.25	<0.25	-	-	-	1.1	-	-	-	-	-	-	-	1.3	<0.25	-	-	-
4/15/2014	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	<0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	-	-	-	
11/3/2014	-	-	-	-	-	-	-	-	-	-	-	0.33	-	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	-	-	-	
11/17/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	<0.25	-	-	-	-	
11/2/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See last page for notes.

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Iron (mg/L)

NH AGQS = NE
SMCL = 0.30 mg/L

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations												Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-SR	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6			
PRE-CLOSURE	5/27/1992	9.3	42	19	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	
	11/12/1992	0.06	0.35	0.21	2.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	-	-	-	-	-	-	-	-	-	-	
	4/6/1993	0.16	22.8	9.8	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	-	-	-	-	-	-	-	-	-	174	
	7/1/1993	0.93	3.01	25.59	4.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.07	-	-	-	-	-	-	-	-	-	-	
	11/5/1993	0.81	1.6	4.4	15.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	-	-	-	-	-	-	-	-	-	49	
	4/14/1994	2.55	8.82	3.22	46.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	-	-	-	-	-	-	-	-	-	-	
	7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400		
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470		
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135		
	11/18/1994	0.98	1.75	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43		
	4/12/1995	<0.1	4.1	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	85	
	7/28/1995	<0.1	1.32	0.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	11	
	12/8/1995	<0.04	0.41	3.7	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.91	-	-	-	-	-	-	-	-	-	66	
POST-CLOSURE	4/26/1996	<0.02	0.55	0.55	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	-	-	-	-	3.5	
	7/25/1996	0.015	0.37	0.038	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-	
	11/14/1996	-	0.45	12	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	5.9	3.7	-	-	-	-	-	-	-	-	-	-	-	
	4/21/1997	-	0.34	1.5	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	-	3.3	0.49	-	-	-	-	-	-	-	-	-	-	-	
	7/22/1997	3.4	0.66	0.036	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.095	-	0.065	0.67	-	-	-	-	-	-	-	-	-	-	-	
	11/11/1997	0.024	0.48	4.8	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	-	26	0.4	-	-	-	-	-	-	-	-	-	-	-	
	4/15/1998	0.012	0.59	18	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	0.34	-	-	-	-	-	-	-	-	-	-	-	
	7/6/1998	-	0.24	4.1	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	-	280	1.1	-	-	-	-	-	-	-	-	-	-	-	
	11/16/1998	0.041	0.51	0.28	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	-	63	0.53	-	-	-	-	-	-	-	-	-	-	-	
	4/19/1999	0.018	0.48	2.96	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	-	110	0.64	-	-	-	-	-	-	-	-	-	-	-	
	7/27/1999	0.032	0.29	3.8	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.62	-	1500	1.3	-	-	-	-	-	-	-	-	-	-	-	
	11/18/1999	0.019	0.51	410	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	-	1900	420	-	-	-	-	-	-	-	-	-	-	-	
	5/5/2000	0.071	0.53	12	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-	-	-	-	-	-	-	-	-	-		
	7/7/2000	0.028	0.35	62	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5	-	160	1	-	-	-	-	-	-	-	-	-	-	-	
	11/16/2000	0.046	0.16	10	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	6.8	122	-	-	-	-	-	-	-	-	-	-	-	
	4/25/2001	0.2	2.2	16	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	10	7.3	-	-	-	-	-	-	-	-	-	-	-	
	7/25/2001	<0.03	0.34	22	38	<0.004	-	-	<0.044	<0.044	<0.044	<0.044	-	-	-	-	0.291	<0.044	<0.044	-	32	-	3,700	21	-	-	-	-	-	-	-	-	-	-	-	
	8/9/2001	-	-	-	-	<0.044	-	-	-	-	-	-	-	-	-	-	<0.044	0.578	0.054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/28/2001	<0.05	0.29	7.4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45	-	-	510	-	-	-	-	-	-	-	-	-	-	-	
	1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/24/2002	<0.03	0.78	15	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.77	-	-	-	-	-	-	-	-	-	-	-	
	11/20/2002	<0.05	3.6	58	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	-	-	-	-	-	-	-	-	-	-	-	
	4/29/2003	<0.05	2.2	100	38	<0.05	-	-	-	-	-	-	-	-	-	-	<0.05	28	<0.05	-	0.78	-	15	0.14	-	-	-	-	-	-	-	-	-	-	-	
	11/17/2003	-	3.1	38	25	<0.05	-	-	-	-	-	-	-	-	-	-	<0.05	26	0.06	-	-	-	7.0	0.18	-	-	-	-	-	-	-	-	-	-	-	
	4/28/2004	-	1.9	22	37	<0.05	-	-	-	-	2.1	-	-	-	-	-	<0.05	0.21	<0.05	0.05	0.35	2.4	0.06	0.49	-	-	-	-	-	-	-	-	-	-	-	
	11/15/2004	-	5.2	8.7	32	<0.05	-	-	-	-	5.4	-	-	-	-	-	<0.05	2.5	0.09	-	5.0	0.53	7.0	1.8	-	-	-	-	-	-	-	-	-	-	-	
	4/28/2005	-	2.0	8.6	26	<0.05	-	-	-	-	7.1	-	-	-	-	-	<0.05	3.2	<0.05	-	0.72	0.27	2.4	0.59	-	-	-	-	-	-	-	-	-	-	-	
	11/8/2005	-	3.0	1.8	38	<0.05	-	-	-	-	13	-	-	-	-	-	<0.05	10	<0.05	-	2.3	0.98	6.0	4.0	-	-	-	-	-	-	-	-	-	-	-	
	4/17/2006	-	0.68	1.6	32	<0.05	-	-	-	-	12	-	-	-	-	-	<0.05	6.8	<0.05	-	0.58	0.57	2.9	380.0	-	-	-	-	-	-	-	-	-	-	-	
	11/20/2006	-	1.1	2.9	25	<0.05	-	-	-	-	11	-	-	-	-	-	<0.05	0.08	<0.05	-	2.0	0.39	0.45	0.49	-	-	-	-	-	-	-	-	-	-	-	
	5/2/2007	-	2.4	2.2	25	<0.05	-	-	-	-	20	-	-	-	-	-	-	2.4	-	-	4.7	0.87	5.30	5.40	-	-	-	-	-	-	-	-	0.03	-	-	
	11/14/2007	-	1.4	2.7	37	<0.05	-	-	-	-	21	-	1.7	-	-	-	0.43	<0.05	0.10	-	0.67	0.23	6.0	0.32	-	-	-	-	-	-	-	-	0.29	-	-	
	4/25/2008	-	0.73	3.8	37	<0.05	-	-	-	-	22	-	-	-	-	-	-	0.32	-	-	5.4	<0.05	4.7	0.31	-	-	-	-	-	0.64	-	-	0.38	-	-	
	11/18/2008	-	0.85	0.50	48	<0.05	-	-	-	-	Dry	-	0.84	-	-	-	<0.05	<0.05	-	Dry	2.3	9.3	0.57	-	-	-	-	-	1.7	-	-	0.7	-	-	-	
	4/27/2009	-	0.44	0.07	32	<0.05	-	-	-	-	3.2	-	-	-	-	-	<0.05	<0.05	-	3.4	0.39	4.2	2.7	-	-	-	-	-	0.31	-	0.22	0.34	-	-	-	
	11/4/2009	-	2.0	<0.05	40	<0.05	-	-	-	-	-	-	0.68	-	-	-	<0.05	0.69	<0.05	-	6.2	0.48	8.2	-	-	-	-	-	0.61	-	26					

HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Lead (mg/L)

NH AGQS = 0.015 mg/L
WQCTS (Water and Fish Ingestion) = NE

[illegible]

See last page for notes

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Mercury (mg/L)

NH AGQS = 0.002 mg/L
WQCTS (Water and Fish Ingestion) = 0.00005 mg/L

	Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations														Leachate Monitoring Well
		RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/I/P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/I/P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6				
PRE-CLOSURE	5/27/1992	<0.0003	<0.0003	<0.0003	<0.0003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0003	-	-	-	-	-	-	-	-	-	-	-	-	<0.0003		
	11/12/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/6/1993	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0002		
	7/1/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/5/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/14/1994	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-			
	7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002			
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002			
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002			
	11/18/1994	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-	-		
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0003			
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002			
	4/12/1995	<0.001	<0.001	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-	<0.001		
POST-CLOSURE	7/28/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001			
	12/8/1995	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0002		
	4/26/1996	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0002		
	7/25/1996	0.0008	0.0007	0.0007	0.0012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0012	-	-	-	-	-	-	-	-	-	-	-		
	11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/21/1997	-	0.0003	<0.0002	0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-			
	7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/15/1998	<0.0002	<0.0002	<0.0003	<0.0005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-			
	7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/19/1999	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-		
	7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	5/5/2000	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0002	-	-	-	-	-	-	-	-	-	-			
	7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/25/2001	<0.00035	<0.00035	<0.00035	<0.00035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.00035	-	<0.00035	<0.00035	<0.00035	-	-	-	-	-	-	-	-	-	-		
	7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	8/9/2001	-	-	-	-	<0.0005	-	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/28/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/24/2002	<0.0004	<0.0004	<0.0004	<0.0004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0004	-	-	-	-	-	-	-	-	-	-	-		
	11/20/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/29/2003	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	-	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0005	-	-	-	-	-	-	-	-	-	-			
	11/17/2003	-	<0.0005	<0.0005	<0.0005	<0.0009	-	-	-	-	-	-	-	-	-	-	-	<0.0009	<0.0009	<0.0009	-	<0.0009	-	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	4/28/2004	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	0.0013	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	11/15/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4/28/2005	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	<0.0009	<0.0009	<0.0009	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	11/8/2005	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	<0.0009	<0.0009	<0.0009	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	4/17/2006	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	<0.0009	<0.0009	<0.0009	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	11/20/2006	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	<0.0009	<0.0009	<0.0009	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	5/2/2007	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	-	<0.0009	-	-	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	<0.0009	-	-			
	11/14/2007	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	<0.0009	-	-	-	-	-	-	<0.0009	-	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	-	-	-	-	-			
	4/25/2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11/18/2008	-	<0.0009	<0.0009	<0.0009	<0.0009	-	-	-	-	-	Dry	-	<0.01	-	-	-	<0.0009	<0.0009	-	-	Dry	<0.0009															

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Manganese (mg/L)

NH AGQS = 0.840 mg/L
WQCTS (Water and Fish Ingestion) = 0.05 mg/L

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations											Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
PRE-CLOSURE	5/27/1992	0.14	0.93	4.9	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	-	-	-	-	-	-	-	-	-	-	6.4	
	11/12/1992	0.01	0.01	4.75	0.965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.53	-	-	-	-	-	-	-	-		
	4/6/1993	<0.01	0.56	6.62	4.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	1.56		
	7/1/1993	0.59	0.39	6.24	5.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-		
	11/5/1993	0.12	0.34	10.8	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-	-	-	-	-	-	-	0.78		
	4/14/1994	1.31	1.07	11.3	4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.29	-	-	-	-	-	-	-	-		
	7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
POST-CLOSURE	11/18/1994	0.05	0.19	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	-	-	-	-	-	-	-	-	-	
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/12/1995	<0.05	0.68	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-		
	7/28/1995	<0.05	0.26	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	-	-	-	-	-	-	-	-		
	12/8/1995	<0.01	0.56	13	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	-	-	-	-	-	-	-	-		
	4/26/1996	<0.01	0.61	9.2	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-		
	7/25/1996	<0.02	0.66	15	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.4	-	-	-	-	-	-	-	-		
	11/14/1996	-	0.77	16	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	-	1.8	0.54	-	-	-	-	-	-	-	-	-		
	4/21/1997	-	0.4	14	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	1.4	0.11	-	-	-	-	-	-	-	-	-		
	7/22/1997	0.8	0.47	0.36	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	-	2.8	0.8	-	-	-	-	-	-	-	-	-		
	11/11/1997	<0.005	0.73	19	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.031	-	4.4	0.14	-	-	-	-	-	-	-	-	-		
	4/15/1998	<0.005	0.67	14	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.5	-	-	0.055	-	-	-	-	-	-	-	-	-		
	7/6/1998	-	0.52	21	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	3.6	0.17	-	-	-	-	-	-	-	-	-		
	11/16/1998	<0.005	0.64	3.9	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.028	-	3	0.065	-	-	-	-	-	-	-	-	-		
	4/19/1999	<0.005	0.57	6.8	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	3.4	3.8	-	-	-	-	-	-	-	-	-		
	7/27/1999	<0.005	0.51	6.3	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	54	1.8	-	-	-	-	-	-	-	-	-		
	11/18/1999	<0.005	0.61	7.8	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	-	320	94	-	-	-	-	-	-	-	-	-		
	5/5/2000	0.018	0.55	7.8	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.096	-	-	-	-	-	-	-	-	-		
	7/7/2000	0.16	0.56	7	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	-	50	2.1	-	-	-	-	-	-	-	-	-		
	11/16/2000	<0.005	0.51	4.8	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	2.6	51	-	-	-	-	-	-	-	-	-		
	4/25/2001	<0.005	0.97	2.9	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	-	1.7	1.8	-	-	-	-	-	-	-	-	-		
	7/25/2001	<0.003	0.62	2.5	4.8	1.53	-	-	0.0946	0.893	0.0834	-	-	-	-	-	-	0.413	0.404	0.175	-	1.2	-	100	5.7	-	-	-	-	-	-	-	-		
	8/9/2001	-	-	-	-	0.902	-	-	-	-	-	-	-	-	-	-	-	0.399	1.730	0.195	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/28/2001	<0.03	0.42	1.2	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	110	-	-	-	-	-	-	-	-	-	
	1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/24/2002	<0.03	0.81	2.1	6.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	-	-	-	-	-	-	-	-	-		
	11/20/2002	<0.03	1.1	4.8	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	-	-	-	-	-	-		
	4/29/2003	<0.03	0.89	6.8	2.8	0.23	-	-	-	-	-	-	-	-	-	-	-	0.34	9.9	0.11	-	0.52	-	3.5	0.05	-	-	-	-	-	-	-	-		
	11/17/2003	-	1.1	3.0	3.6	0.2	-	-	-	-	-	-	-	-	-	-	-	0.45	19	0.16	-	-	-	2.5	0.1	-	-	-	-	-	-	-	-		
	4/28/2004	-	0.75	1.9	5.5	0.08	-	-	-	-	-	4.9	-	-	-	-	-	0.48	5.8	0.12	<0.05	0.84	1.1	0.64	<0.05	-	-	-	-	-	-	-	-	-	
	11/15/2004	-	0.81	1.0	5.2	<0.03	-	-	-	-	-	4.6	-	-	-	-	-	0.09	14	0.17	-	1.1	0.66	2.0	0.17	-	-	-	-	-	-	-	-		
	4/28/2005	-	0.86	0.88	4.7	0.04	-	-	-	-	-	6.8	-	-	-	-	-	0.05	18	0.16	-	0.53	0.29	1.1	<0.03	-	-	-	-	-	-	-	-		
	11/8/2005	-	0.71	0.21	3.8	<0.03	-	-	-	-	-	5.3	-	-	-	-	-	<0.03	10	0.10	-	1.1	0.63	2.5	1.9	-	-	-	-	-	-	-	-		
	4/17/2006	-	0.72	0.33	3.0	<0.03	-	-	-	-	-	4.2	-	-	-	-	-	<0.03	11	0.07	-	0.94	0.68	1.4	260	-									

Nitrate (mg/L)

WQCTS (Water and Fish Ingestion) = 10 mg/L

See last page for notes.

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

pH (mg/L)

NH AGQS = NE
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations											Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/ South Spring)	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
5/27/1992	6.51	6.42	6.53	6.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/12/1992	7.00	6.50	6.30	6.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70	-	-	-	-	-	-	-	-	-	-
4/6/1993	6.95	6.41	6.51	6.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.15	-	-	-	-	-	-	-	-	-	6.90
4/25/1996	6.34	7.15	6.42	6.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.72	-	-	-	-	-	-	-	-	-	6.84
7/25/1996	6.48	6.67	7.05	6.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.58	-	-	-	-	-	-	-	-	-	-
4/21/1997	-	6.70	6.70	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	7.10	-	6.60	-	-	-	-	-	-	-	-	-	-	-	-
7/22/1997	6.42	6.96	6.46	6.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.19	7.08	-	6.72	-	-	-	-	-	-	-	-	-	-	-	-
7/27/1999	6.68	6.52	6.37	6.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.92	7.04	-	7.36	-	-	-	-	-	-	-	-	-	-	-	-
4/25/2001	6.81	6.86	6.60	6.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.44	6.77	-	7.02	-	-	-	-	-	-	-	-	-	-	-	-
7/25/2001	6.40	6.61	6.51	6.43	5.90	-	-	5.80	5.90	5.50	-	-	-	-	-	-	7.10	7.40	7.10	-	7.08	7.03	-	6.63	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2001	-	-	-	-	6.60	-	-	7.00	7.10	6.10	-	-	-	-	-	-	7.10	7.40	7.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/28/2001	6.22	6.41	6.40	6.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.69	6.96	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-
4/24/2002	6.94	6.88	6.70	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	-	-	-	-	-	-	-	-	-	-	-	-
11/20/2002	6.19	6.29	6.26	6.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.94	-	-	-	-	-	-	-	-	-	-	-	-
4/29/2003	6.37	6.19	6.51	6.57	6.16	-	-	-	-	-	-	-	-	-	-	-	9.20	6.95	6.78	-	6.37	6.38	-	6.77	-	-	-	-	-	-	-	-	-	-	-	-
11/17/2003	-	6.72	6.47	6.66	6.35	-	-	-	-	-	-	-	-	-	-	-	7.26	6.70	6.80	-	6.59	6.82	-	6.88	-	-	-	-	-	-	-	-	-	-	-	-
4/28/2004	-	6.43	6.46	6.90	6.53	-	-	-	-	-	6.80	-	-	-	-	-	7.46	8.23	7.62	7.69	-	6.76	6.58	6.81	-	-	-	-	-	-	-	-	-	-	-	-
11/15/2004	-	6.44	6.52	6.50	6.39	-	-	-	-	-	6.45	-	-	-	-	-	7.38	7.06	6.86	-	-	6.72	6.56	6.97	-	-	-	-	-	-	-	-	-	-	-	-
4/28/2005	-	6.39	6.33	6.81	6.48	-	-	-	-	-	6.77	-	-	-	-	-	7.44	8.04	7.51	-	-	6.70	6.49	6.74	-	-	-	-	-	-	-	-	-	-	-	-
11/8/2005	-	6.45	6.67	6.65	6.42	-	-	-	-	-	6.63	-	-	-	-	-	7.41	6.86	6.88	-	-	7.08	6.64	7.23	-	-	-	-	-	-	-	-	-	-	-	-
4/17/2006	-	6.29	6.60	6.46	6.24	-	-	-	-	-	6.43	-	-	-	-	-	6.98	7.36	6.77	-	-	6.64	6.41	7.06	7.12	-	-	-	-	-	-	-	-	-	-	-
11/20/2006	-	6.10	6.35	6.46	6.23	-	-	-	-	-	6.34	-	-	-	-	-	7.13	7.32	7.28	-	-	6.46	6.33	7.11	7.62	-	-	-	-	-	-	-	-	-	-	-
5/2/2007	-	6.40	6.35	6.54	6.41	-	-	-	-	-	6.50	-	-	-	-	-	-	6.90	-	-	-	6.76	6.56	6.91	6.95	-	-	-	-	-	-	-	-	7.09	-	-
11/14/2007	-	6.29	6.38	6.49	6.35	-	-	-	-	-	6.47	-	-	-	-	-	7.09	6.87	7.16	-	-	6.61	6.44	6.98	6.90	-	-	-	-	-	-	-	-	7.04	-	-
4/25/2008	-	6.01	5.91	6.05	6.33	-	-	-	-	-	6.64	-	-	-	-	-	6.65	-	-	-	-	6.37	6.39	6.77	6.65	-	-	-	-	-	6.83	-	-	6.71	-	-
11/18/2008	-	5.96	5.97	6.11	6.37	-	-	-	-	-	Dry	-	6.56	-	-	-	7.02	6.68	-	-	-	-	6.44	6.80	6.77	-	-	-	-	-	6.88	-	-	6.69	-	-
4/27/2009	-	6.00	5.89	6.08	6.26	-	-	-	-	-	6.70	-	-	-	-	-	-	6.61	-	-	-	6.38	6.41	6.73	6.81	-	-	-	-	-	6.88	-	6.69	6.76	-	-
11/4/2009	-	5.88	6.42	6.35	6.51	-	-	-	-	-	-	-	6.42	-	-	-	7.44	6.81	7.17	-	-	6.42	6.14	6.68	-	-	-	-	-	6.83	-	6.72	6.71	-	-	
4/20/2010	-	5.84	6.45	6.31	6.57	-	-	-	-	-	-	-	6.49	-	-	-	-	6.87	-	-	-	6.40	6.12	6.73	-	-	-	-	-	6.86	-	6.70	6.70	-	-	
11/11/2010	-	5.83	6.51	6.41	6.56	-	-	-	-	-	6.41	-	6.36	-	-	-	7.31	6.77	7.13	-	-	6.39	6.08	6.56	-	-	-	-	-	6.81	-	6.77	6.63	-	-	
4/22/2011	-	5.93	6.55	6.39	6.61	-	-	-	-	-	-	-	6.44	-	-	-	-	6.83	-	-	-	6.38	6.06	6.67	-	-	-	-	-	6.8	-	6.72	6.63	-	-	
11/14/2011	-	5.91	6.58	6.49	6.61	-	-	-	-	-	-	-	6.29	-	-	-	7.27	6.7	7.06	-	-	6.34	6.11	6.63	-	-	-	-	-	6.78	-	6.68	6.68	-	-	
4/30/2012	-	5.96	6.38	6.41	6.38	-	-	-	-	-	-	-	6.44	-	-	-	-	6.84	-	-	-	6.49	6.4	6.83	-	-	-	-	-	6.59	-	6.77	6.68	-	-	
11/5/2012	-	6.02	5.66	6.48	6.38	-	-	-	-	-	-	-	6.18	-	6.23	6.7	7.68	6.84	7.16	-	-	6.51	6.33	6.9	-	-	-	-	-	6.01	-	6.85	5.87	-	-	
5/7/2013	-	-	-	-	-	-	-	-	-	-	-	6.40	6.53	-	6.29	6.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/19/2013	-	6.34	6.6	6.81	6.81	-	-	-	-	-	-	6.68	6.97	-	6.55	6.79	7.91	7.16	7.21	-	-	6.98	-	7.18	-	-	-	-	-	-	7.45	7.48	-	-	-	
11/3/2014	-	6.35	6.15	6.53	-	-	-	-	-	-	-	6.55	6.77	6.92	6.19	6.67	7.50	6.72	7.02	-	-	-	-	6.94	-	-	-	-	-	-	7.22	7.35	-	-	-	
4/6/2015	-	7.1	6.5	6.72	-	-	-	-	-	-	-	-	6.89	-	6.36	6.75	7.75	8.1	8.15	-	-	-	-	8.05	-	-	-	-	-	-	7.41	7.46	-	-	-	
11/17/2015	-	6.91	6.77	6.89	-	-	-	-	-	-	-	-	7.03	-	7.03	6.97	7.27	6.99	7.58	-	-	6.99	-	7.64	-	-	-	-	-	8.24	-	7.83	-	-	-	
4/14/2016	-	6.50	6.51	6.63	-	-	-	-	-	-	-	-	6.82	-	6.39	6.78	7.17	6.99	7.78	-	-	-	-	7.48	-	-	-	-	-	-	-	7.46	-	-	-	
11/2/2016	-	6.91	6.40	7.41	-	-	-	-	-	-	-	-	6.56	-	6.37	6.78	6.92	6.70	7.12	-	-	-	-	8.95	-	-	-	-	-	-	-	6.37	-	-	-	

See last page for notes.

HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Selenium (mg/l)

NH AGQS = 0.05 mg
WQCTS (Water and Fish Ingestion) = 0.170 mg

[illegible]

See last page for note

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Silver (mg/L)

NH AGQS = 0.10 mg/L
WQCTS (Water and Fish Ingestion) = 0.05 mg/L

	Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations										Leachate Monitoring Well	
		RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6	
PRE-CLOSURE	5/27/1992	<0.02	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	<0.02
	11/12/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/6/1993	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	<0.01
	7/1/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/5/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/14/1994	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	-	-	-
	7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
	11/18/1994	0.06	0.03	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
	4/12/1995	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	<0.05
	7/28/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	
	12/8/1995	<0.008	<0.008	<0.008	<0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.008	-	-	-	-	-	-	-	-	0.011
	4/26/1996	<0.008	<0.008	<0.008	<0.008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.008	-	-	-	-	-	-	-	-	<0.008
	7/25/1996	<0.003	<0.003	<0.003	<0.003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	-	-	-	-	-
	11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/21/1997	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	
7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/15/1998	<0.001	0.019	<0.001	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	
7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/19/1999	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	
7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5/5/2000	0.005	0.002	0.005	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-	
7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/25/2001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	
7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8/9/2001	-	-	-	-	<0.013	-	-	-	-	-	-	-	-	-	-	-	<0.013	<0.013	<0.013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/28/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/24/2002	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	
11/20/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/29/2003	<0.007	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-	<0.007	<0.007	<0.007	-	<0.007	-	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	
11/17/2003	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-	<0.007	<0.007	<0.007	-	-	-	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	
4/28/2004	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	<0.007	-	-	-	-	-	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	
11/15/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/28/2005	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	<0.007	-	-	-	-	-	<0.007	<0.007	<0.007	-	<0.007	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	
11/8/2005	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	<0.007	-	-	-	-	-	<0.007	<0.007	<0.007	-	<0.007	<0.007	<												

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Specific Conductance (mg/L)

NH AGQS = NE
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations												Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/Southern Spring)	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6			
5/27/1992	150	370	910	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	7,500	
11/12/1992	130	347	858	1,270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	630	-	-	-	-	-	-	-	-	-	-	
4/6/1993	180	340	699	855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	-	-	-	-	-	-	-	-	-	6,790	
7/1/1993	134	368	991	1,350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	721	-	-	-	-	-	-	-	-	-	-	
11/5/1993	136	352	943	1,310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	727	-	-	-	-	-	-	-	-	-	5,830	
4/14/1994	69	350	710	958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	280	-	-	-	-	-	-	-	-	-	-	
7/15/1994	77	335	740	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	665	-	-	-	-	-	-	-	-	-	-	
11/18/1994	140	340	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	800	-	-	-	-	-	-	-	-	-	-	
7/22/1997	189	1,024	202	156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,274	1,107	-	166	-	-	-	-	-	-	-	-	-	-	-	-	
7/22/1999	117	325	1,076	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	615	1,045	-	610	-	-	-	-	-	-	-	-	-	-	-	-	
4/25/2001	261	327	887	847	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	314	274	-	371	-	-	-	-	-	-	-	-	-	-	-	-	
7/25/2001	229	301	1,390	982	810	-	-	504	296	805	-	-	-	-	-	-	530	290	585	-	131	494	-	261	-	-	-	-	-	-	-	-	-	-	-	-	
8/9/2001	-	-	-	-	662	-	-	435	225	-	-	-	-	-	-	-	603	769	279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/28/2001	590	387	1,610	984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470	477	-	398	-	-	-	-	-	-	-	-	-	-	-	-	
4/24/2002	266	349	912	940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	307	-	-	-	-	-	-	-	-	-	-	
11/20/2002	192	355	822	782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	291	-	-	-	-	-	-	-	-	-	-	
4/29/2003	535	94	1,003	431	346	-	-	-	-	-	-	-	-	-	-	-	586	696	224	-	259	573	-	140	-	-	-	-	-	-	-	-	-	-	-	-	
11/17/2003	-	117	968	412	362	-	-	-	-	-	-	-	-	-	-	-	613	712	242	-	230	508	-	103	-	-	-	-	-	-	-	-	-	-	-	-	
4/28/2004	-	542	1,017	760	405	-	-	-	-	-	936	-	405	-	-	-	596	553	382	342	-	247	270	762	-	-	-	-	-	-	-	-	-	-	-	-	
11/15/2004	-	226	1,262	794	251	-	-	-	-	-	580	-	-	-	-	-	436	402	204	-	-	199	180	406	-	-	-	-	-	-	-	-	-	-	-	-	
4/28/2005	-	558	1,093	717	390	-	-	-	-	-	909	-	-	-	-	-	559	561	366	-	-	240	235	723	-	-	-	-	-	-	-	-	-	-	-	-	
11/8/2005	-	268	1,330	905	554	-	-	-	-	-	855	-	-	-	-	-	623	711	284	-	-	265	397	581	-	-	-	-	-	-	-	-	-	-	-	-	
4/17/2006	-	205	1,231	606	301	-	-	-	-	-	548	-	-	-	-	-	393	324	218	-	-	170	255	464	320	-	-	-	-	-	-	-	-	-	-	-	
11/20/2006	-	274	796	756	1,050	-	-	-	-	-	718	-	-	-	-	-	582	308	257	-	-	197	363	442	113	-	-	-	-	-	-	-	-	-	-	-	
5/2/2007	-	358	603	707	508	-	-	-	-	-	121	-	-	-	-	-	-	627	-	-	-	308	363	517	347	-	-	-	-	-	-	-	-	119	-	-	
11/14/2007	-	303	633	715	510	-	-	-	-	-	975	-	-	-	-	-	525	605	229	-	-	217	344	485	208	-	-	-	-	-	-	-	-	97	-	-	
4/25/2008	-	367	681	856	700	-	-	-	-	-	913	-	-	-	-	-	-	668	-	-	-	325	246	517	257	-	-	-	-	-	165	-	-	155	-	-	
11/18/2008	-	341	634	871	765	-	-	-	-	-	-	-	417	-	-	-	487	677	-	-	-	-	255	492	249	-	-	-	-	-	137	-	-	131	-	-	
4/27/2009	-	367	636	835	712	-	-	-	-	-	938	-	-	-	-	-	-	625	-	-	-	317	226	502	117	-	-	-	-	-	131	-	248	130	-	-	
11/4/2009	-	350	1,062	1,070	338	-	-	-	-	-	-	-	607	-	-	-	668	554	217	-	-	330	264	481	-	-	-	-	-	-	114	-	262	106	-	-	
4/20/2010	-	347	1,071	1,019	321	-	-	-	-	-	-	-	618	-	-	-	-	568	-	-	-	322	249	446	-	-	-	-	-	-	105	-	250	93	-	-	
11/11/2010	-	344	1,138	1,048	322	-	-	-	-	-	-	-	592	-	-	-	683	561	202	-	-	338	246	456	-	-	-	-	-	-	119	-	240	98	-	-	
4/22/2011	-	339	1033	987	337	-	-	-	-	-	-	-	641	-	-	-	-	554	-	-	-	308	228	461	-	-	-	-	-	-	96	-	227	67	-	-	
11/14/2011	-	267	628	692	416	-	-	-	-	-	-	-	568	-	-	-	515	626	214	-	-	-	304	234	422	-	-	-	-	-	174	-	212	151	-	-	
4/30/2012	-	290	918	844	301	-	-	-	-	-	-	-	509	-	-	-	-	500	-	-	-	288	251	426	-	-	-	-	-	-	133	-	71	92	-	-	
11/5/2012	-	248	467	703	286	-	-	-	-	-	-	-	546	-	421	649	446	500	228	-	-	231	212	408	-	-	-	-	-	-	151	-	88	100	-	-	
5/7/2013	-	-	-	-	-	-	-	-	-	-	-	559	579	-	449	691	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12/19/2013	-	346	880	808	595	-	-	-	-	-	-	614	588	-	578	570	605	819	221	-	-	339	-	498	-	-	-	-	-	-	-	496	520	-	-	-	
11/3/2014	-	344	612	786	-	-	-	-	-	-	-	547	688	329	676	610	583	839	241	-	-	-	-	577	-	-	-	-	-	-	-	528	510	-	-	-	
4/6/2015	-	306	482	786	-	-	-	-	-	-	-	-	571	-	828	629	571	897	834	-	-	-	-	275	-	-	-	-	-	-	-	712	478	-	-	-	
11/17/2015	-	235	469	537	-	-	-	-	-	-	-	-	495	-	625	482	404	239	155	-	-	239	-	410	-	-	-	-	-	-	167	-	345	-	-	-	
4/14/2016	-	211	381	537	-	-	-	-	-	-	-	-	543	-	543	411	452	698	195.7	-	-	-	-	292	-	-	-	-	-	-	-	-	407	-	-	-	
11/2/2016	-	277	435	632	-	-	-	-	-	-	-	-	538	-	762	383	490	518	190	-	-	-	-	518	-	-	-	-	-	-	-	392	-	-	-	-	

See last page for notes.

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

VOCs (mg/L)

Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations											Leachate Monitoring Well
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/ South Spring)	GZ-P-SR	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6		
PRE-CLOSURE	5/27/1992	BDL	BDL	BDL	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,122	
	11/12/1992	BDL	BDL	BDL	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	
	4/6/1993	BDL	BDL	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	1,338.6	
	7/1/1993	BDL	BDL	25.17	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	
	11/5/1993	BDL	BDL	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	154.6	
	4/14/1994	BDL	BDL	3.5	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	
	7/15/1994	BDL	BDL	BDL	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	697.1	
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	801.5
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	731.5
	11/18/1994	BDL	BDL	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	-
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,443
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	283.4
	4/12/1995	BDL	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-
7/28/1995	BDL	BDL	DA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DA	-	-	-	-	-	-	-	-	-	260.3
12/8/1995	BDL	BDL	4	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	201.5
4/26/1996	BDL	BDL	14.2	39.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	2,279.6
7/25/1996	BDL	BDL	4.1	49.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	-
11/14/1996	-	BDL	4.7	332.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
4/21/1997	-	BDL	2.9	24.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
7/22/1997	BDL	BDL	3	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
11/11/1997	4.6	BDL	BDL	26.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
4/15/1998	BDL	3	BDL	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	BDL	-	-	-	-	-	-	-	-	-	-	-
7/6/1998	-	4	BDL	93.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.2	-	2.1	BDL	-	-	-	-	-	-	-	-	-	-	-
11/16/1998	DA	19.9	DA	27.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	-	DA	-	-	-	-	-	-	-	-	-	-	-	-
4/19/1999	BDL	BDL	2.8	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	2.4	BDL	-	-	-	-	-	-	-	-	-	-	-
7/27/1999	BDL	BDL	BDL	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
11/18/1999	BDL	BDL	4.6	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	2.1	BDL	-	-	-	-	-	-	-	-	-	-	-
5/5/2000	BDL	BDL	BDL	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	-	
7/7/2000	BDL	BDL	BDL	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
11/16/2000	BDL	BDL	BDL	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
4/25/2001	BDL	BDL	2.1	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
7/25/2001	BDL	BDL	BDL	10	BDL	-	-	-	BDL	BDL	BDL	-	-	-	-	-	17	BDL	BDL	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
8/9/2001	-	-	-	-	BDL	-	-	-	BDL	BDL	BDL	-	-	-	-	-	3.1	2	BDL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/28/2001	BDL	BDL	BDL	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/24/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/20/2002	BDL	BDL	BDL	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BDL	-	-	-	-	-	-	-	-	-	-	-
4/29/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/17/2003	-	BDL	BDL	2	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL	3	BDL	-	BDL	-	BDL	BDL	-	-	-	-	-	-	-	-	-	-	-
4/28/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/15/2004	-	BDL	BDL	5	BDL	-	-	-	-	-	BDL	-	-	-	-	-	BDL	BDL	BDL	-	10	-	BDL	BDL	BDL	-	-	-	-	-	-	-	-	-	-
4/28/2005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/8/2005	-	BDL	BDL	2.2	BDL	-	-	-	-	-	BDL	-	-	-	-	-	BDL	BDL	BDL	-	8.7	-	BDL	BDL	14	-	-	-	-	-	-	-	-	-	-
4/17/2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/20/2006	-																																		

HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

TKN (mg/L)

NH AGQS = NE
WQCTS = NE

	Sampling Date	Overburden Monitoring Wells																Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations										Leachate Monitoring Well
		RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/ South Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-16	SW-17	Exeter River	MW-6	
PRE-CLOSURE	5/27/1992	0.5	0.5	1.2	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	
	11/12/1992	0.665	0.904	0.477	7.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.425	-	-	-	-	-	-	-	-	-
	4/6/1993	2.09	1.39	1.39	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.39	-	-	-	-	-	-	-	-	207
	7/1/1993	<1.0	<1.0	24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	-	-	-
	11/5/1993	0.164	0.164	0.789	8.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	213
	4/14/1994	0.393	0.241	1.24	7.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.685	-	-	-	-	-	-	-	-	-
	7/15/1994	0.317	0.099	0.404	6.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.343	-	-	-	-	-	-	-	-	-
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11/18/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4/12/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7/28/1995	1.64	<1	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
	12/8/1995	0.56	0.31	3.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	-	-	-	-	-	-	-	-	-
	4/26/1996	<1	0.24	2.5	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28	-	-	-	-	-	-	-	-	-
	7/25/1996	0.05	0.15	2.6	7.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-
11/14/1996	-	0.69	11	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	-	0.74	0.52	-	-	-	-	-	-	-	-	-	-	
4/21/1997	-	0.61	1.5	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34	-	2.1	1.4	-	-	-	-	-	-	-	-	-	-	
7/22/1997	0.27	0.61	1.29	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.45	-	3.36	0.44	-	-	-	-	-	-	-	-	-	-	
11/11/1997	0.3	1.9	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	1.5	0.8	-	-	-	-	-	-	-	-	-	-	
4/15/1998	<0.1	0.95	1.5	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	-	1.1	-	-	-	-	-	-	-	-	-	-	
7/6/1998	-	1.8	1.4	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-	4.3	0.3	-	-	-	-	-	-	-	-	-	-	
11/16/1998	2.2	0.27	1.8	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	-	0.47	3.6	-	-	-	-	-	-	-	-	-	-	
4/19/1999	<0.5	<0.5	1.6	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	
7/27/1999	<0.01	<0.01	1.9	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	-	1.5	0.8	-	-	-	-	-	-	-	-	-	-	
11/18/1999	<0.5	<0.5	5.3	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	2.4	2	-	-	-	-	-	-	-	-	-	-	
5/5/2000	<0.5	<0.5	2.7	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	
7/7/2000	<0.5	<0.5	3.5	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	
11/16/2000	1.3	0.5	2.5	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4.1	45.2	-	-	-	-	-	-	-	-	-	-	
4/25/2001	0.7	ND	1.8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	5	2.2	-	-	-	-	-	-	-	-	-	-	
7/25/2001	0.8	<0.3	1.1	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	16	-	-	-	-	-	-	-	-	-	-	
8/9/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/28/2001	0.6	0.3	1.2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	77	-	-	-	-	-	-	-	-	-	-	
1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/24/2002	0.4	0.2	1.1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	
11/20/2002	0.4	0.5	1.3	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	
4/29/2003	<0.3	<0.3	1.2	3.8	0.4	-	-	-	-	-	-	-	-	-	-	-	1.1	0.5	<0.3	-	1.3	-	1.1	<0.3	-	-	-	-	-	-	-	-	-	-	
11/17/2003	-	0.7	1.2	2.6	1.1	-	-	-	-	-	-	-	-	-	-	-	1.1	3.1	<0.3	-	-	-	3.5	0.4	-	-	-	-	-	-	-	-	-	-	
4/28/2004	-	5.0	0.8	2.8	1.2	-	-	-	-	-	2.0	-	-	-	-	-	0.4	3.0	<0.3	<0.3	<0.3	5.1	1.2	1.5	0.7	-	-	-	-	-	-	-	-	-	-
11/15/2004	-	0.8	2.2	3.2	0.4	-	-	-	-	-	3.5	-	-	-	-	-	<0.3	0.8	<0.3	-	3.9	<1.5	2.5	1.2	-	-	-	-	-	-	-	-	-	-	
4/28/2005	-	0.8	0.5	1.9	0.4	-	-	-	-	-	1.5	-	-	-	-	-	<0.3	0.4	<0.3	-	4.3	0.4	1.8	0.7	-	-	-	-	-	-	-	-	-	-	-
11/8/2005	-	0.5	0.5	6.2	0.4	-	-	-	-	-	1.7	-	-	-	-	-	<0.3	14.7	0.3	-	5.8	1.2	5.1	1.2	-	-	-	-	-	-	-	-	-	-	
4/17/2006	-	0.3	0.6	5.4	0.6	-	-	-	-	-	2.4	-	-	-	-	-	0.3	3.5	1.1	-	12.1	2.2	4.9	20.0	-	-	-	-	-	-	-	-	-	-	
11/20/2006	-	1.3	1.7	6.2	<1	-	-	-	-	-	2.2	-	-	-	-	-	<1	14	1.3	-	77	6.0	110	<1	-	-	-	-	-	-	-	-	-	-	-
5/2/2007	-	<0.5	0.7	4	<0.5	-	-	-	-	-	3.9	-	-	-	-	-	-	1.5	-	-	36	2.1	7	<0.5	-	-	-	-	-	-	-	-	<0.5	-	
11/14/2007	-	<0.5	<0.5	3.9	0.5	-	-	-	-	-	1.3	-	0.6	-	-	-	<0.5	<0.5	1.0	-	17	2.1	7.1	1.4	-	-	-	-	-	-	-	-	1.0	-	
4/25/2008	-	<0.5	1.1	3.6	0.6	-	-	-	-	-	1.3	-	-	-	-	-	-	<0.5	-	-	1.9	0.9	0.8	<0.5	-	-	-	-	-	<0.5	-	-	<0.5	-	
11/18/2008	-	<0.5	0.6	6.1	<0.5	-	-	-	-	-	2.7	-	0.91	-	-	-	<0.5	2.8	-	-	Dry	<0.5	0.8 M	<0.5	-	-	-	-	-	<0.5	-	-	-	-	
4/27/2009	-	<0.5	<0.5	4.3	0.7	-	-	-	-	-	<0.5	-	-	-	-	-	-	<0.5	-	-	4.0	<0.5	1.7	0.9	-	-	-	-	-	<0.5	-	-	<0.5	-	
11/4/2009	-	<0.5	<0.5	4.6	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	1.3	<0.5	-	2.2	<0.5	1.6	-	-	-	-	-	-	0.7	-	<0.5	<0.5	-	
4/20/2010	-	<0.5	0.7	3.4	0.6	-	-	-	-	-	-	-	<0.5	-	-	-	-	0.7	-	-	4.8	<0.5	0.9	-	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	
11/11/2010	-	0.6	<0.5	4.0	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	<0.5	<0.5	-	2.8	<0.5	1.9	-	-	-	-	-	-	<0.5	-	<0.5	0.6	-	
4/22/2011	-	<0.5	<0.5	1.8	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	-	<0.5	-	-	2.9	<0.5	1.5	-	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	
11/14/2011	-	0.5	0.8	2.9	0.6	-	-	-	-	-	-	-	<0.5	-	-	-	<0.5	0.5	<0.5	-	2.9	<0.5	17	-	-	-	-	-	-	<0.5	-	<0.5	<0.5	-	
4/30/2012	-	<0.5	0.6	3.5																															

See last page for notes.

HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Thallium (mg/L)

WQCTS (Water and Fish Ingestion) = 0.0017 mg

[illegible]

See last page for notes

TABLE 1
HISTORIC WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

NOTES:

1. Concentrations are in milligrams per liter (mg/L) or micrograms per liter (µg/L) as indicated.
2. "-" indicates that measurement were not made/not applicable.
3. "<" indicates the parameter was not detected above the detection limit shown.
4. **Bold** face print indicates detection.
5. "NH AGQS" indicates New Hampshire Ambient Groundwater Quality Standards as defined in the New Hampshire Code of Administrative Rules Env-Or 603.03 revised October 22, 2016.
6. **Shading** indicates that the measured level exceeds its NH AGQS, Secondary Maximum Contaminant Level (SMCL), or Water Quality Criteria for Toxic Substances (WQCTS) as defined by the New Hampshire Code of Administrative Rules Env-Wq 1703.23, adopted November 17, 2016. For groundwater monitoring locations where NH AGQS are not established for the referenced parameter SMCLs are used to shade data. For surface water monitoring locations where WQCTS are not established for the referenced parameter NH AGQS are used to shade data.
7. "NE" indicates none established.
8. "DA" indicates that the Chain-of-Custody indicates a sample taken and a volatile organic compound (VOC) laboratory report was not available.
9. Water quality data were compiled by GZA GeoEnvironmental, Inc. from analytical laboratory reports provided by the Town of Exeter.
10. "BDL" indicates target VOCs for the method used were below laboratory detection limits.
11. "µS/cm" indicates microseimens per centimeter.
12. "M" indicates that the percent recovery for the matrix was outside of the acceptance criteria. Refer to analytical reports for additional information.
13. The analytical laboratory reports provided by Resource Environmental Group for groundwater monitoring wells RFW-2, RFW-3 and RFW-4 during November 2006 are mislabeled GZ-2, GZ-3 and GZ-4, respectively.
14. The groundwater elevation data provided by Resource Environmental Group for GZ-2U during November 2006 is mislabeled GZ-2M.
15. For 11/14/2007 the percent recovery for sample P-9R for chloride was 85.
16. Please note that based on review of historic chain-of-custody forms, samples for metals analyses collected from groundwater monitoring wells have been field filtered and represent dissolved metals analyses. Samples collected from surface water location SW-1 have not been field filtered and represent total metals analyses. Samples collected at P-2 (southern spring) and P-9 (northern spring) through 2002 were also not field filtered and represent total metals analyses. Samples collected from the replacement well points (P-2R, P-5R, and P-9R) during 2006 were field filtered. For further information regarding historic sampling procedures, please refer to Section 5.2.4 (Review of Historic Total Metals and Dissolved Metals Analyses) of GZA's May 10, 2002 report.
17. Landfill water quality monitoring associated with the samples labeled P-2 and P-9 has been performed by Mr. Tom Walker of REG. Based on conversations with Mr. Walker during a site visit on April 17, 2002, the samples designated P-2 and P-9 on laboratory reports and chain-of-custody forms since November 1996 (the start of routine sampling of P-2 and P-9) were collected from surface water proximate to P-2 and about 300 feet south of P-9 from November 1996 through November 2001. The locations sampled from November 1996 through November 2001 are designated SW-P-2 and SW-P-9 on **Figure 1**. The data from these locations represent total metals analyses of surface water. Replacement groundwater well points designated P-2R and P-9R have been sampled since November 2001.

\\gzaman1\Jobs\JOBS\21000s\21270\04.0021270.28\Report\Table 1 Notes.doc

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					04/25/01		07/23/01		07/25/01		08/09/01		11/28/01		04/24/02	
GZ-1U	97.1	-		99.68	-	-	22.6	77.1	-	-	22.8	76.9	-	-	-	-
GZ-1L	97.1	45.1		99.44	-	-	20.4	79.1	-	-	20.5	78.9	-	-	-	-
GMW-10	114.2	-		-	-	-	Dry	-	-	-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	Dry	<116.3	-	-	Dry	<116.3	-	-	-	-
GZ-2L	114.6	81.6		117.12	-	-	33.9	83.3	-	-	34.2	82.9	-	-	-	-
GMW-11	93.8	-		96.32	-	-	Dry	<81.32	-	-	10.9	85.4	-	-	-	-
GZ-3L	94.8	68.8		97.32	-	-	11.5	85.9	-	-	11.8	85.5	-	-	-	-
GZ-4	142.9	<85.9		142.29	-	-	50.1	92.2	-	-	50.3	92.0	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	50.8	89.9	-	-	51.1	89.6	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	50.0	91.2	-	-	51.2	89.9	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-	-	-	-	-	-	-
GZ-102	77.0	-	21.5	80	-	-	-	-	-	-	-	-	-	-	-	-
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-	-	-	-	-	-	-
GZ-104	72.4	-	15.5	75.02	-	-	-	-	-	-	-	-	-	-	-	-
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-	-	-	-	-	-	-
GZ-106	73.5	-	13	76.13	-	-	-	-	-	-	-	-	-	-	-	-
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-	-	-	-	-	-	-
GZ-201	123.3		58	122.85	-	-	-	-	-	-	-	-	-	-	-	-
GZ-202A	121.1		62	123.99	-	-	-	-	-	-	-	-	-	-	-	-
P-1	64.5	-		67.17	-	-	-	-	-	-	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	-	-	-	-	-	-	0.7	68.5	-	-	-	-
P-3	67.9	-		68.41	-	-	-	-	-	-	2.0	66.4	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	-	-	2.0	69.2	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-
P-6	74.8	-		76.01	-	-	-	-	-	-	3.2	72.8	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-	2.5	67.8	-	-	-	-
P-9 / P-9R	68	-		68.35	-	-	-	-	-	-	-	-	-	-	-	-
RFW-1	85.6	34.6		88.11	3.23	84.88	-	-	4.95	83.16	5.3	82.8	7.5	80.6	7.9	80.2
RFW-2	118	-		119.72	41.34	78.38	-	-	43.02	76.7	-	-	44.9	74.8	45.2	74.5
RFW-3	140.6	-		143.48	72.95	70.53	-	-	72.89	70.59	73.2	70.3	74.9	68.6	75.6	67.9
RFW-4	116.9	46.9		118.71	45	73.71	-	-	45.75	72.96	46.0	72.8	47.5	71.3	47.9	70.8
WS-1	102	-		102.26	-	-	-	-	-	-	12.2	90.0	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	-	-	4.3	89.3	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-	-	-	-	-	-	-
SW-14	-	-		40.47	-	-	-	-	-	-	-	-	-	-	-	-
Bridge	917.07	-		60.55	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					11/20/02		04/29/03		06/17/03		11/17/03		04/28/04		11/15/04	
GZ-1U	97.1	-		99.68	-	-	23.5	76.2	23.2	76.5	23.5	76.2	22.6	77.1	22.3	77.4
GZ-1L	97.1	45.1		99.44	-	-	23.2	76.3	20.8	78.6	21.1	78.3	23.2	76.3	20.9	78.6
GMW-10	114.2	-		-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	dry	<116.3	dry	<116.3	dry	<116.3	-	-	-	-
GZ-2L	114.6	81.6		117.12	-	-	33.6	83.5	33.7	83.4	36.6	80.5	32.8	84.3	34.7	82.4
GMW-11	93.8	-		96.32	-	-	-	-	-	-	-	-	-	-	-	-
GZ-3L	94.8	68.8		97.32	-	-	13.9	83.4	12.2	85.2	13.0	84.4	10.8	86.5	12.4	84.9
GZ-4	142.9	<85.9		142.29	-	-	-	-	-	-	-	-	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	-	-	-	-	-	-	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	-	-	-	-	-	-	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-	-	-	-	-	-	-
GZ-102	77.0	-	21.5	80	-	-	-	-	-	-	-	-	-	-	-	-
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-	-	-	-	-	-	-
GZ-104	72.4	-	15.5	75.02	-	-	-	-	-	-	-	-	-	-	-	-
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-	-	-	-	-	-	-
GZ-106	73.5	-	13	76.13	-	-	-	-	-	-	-	-	-	-	-	-
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-	-	-	-	-	-	-
GZ-201	123.3		58	122.85	-	-	-	-	-	-	-	-	-	-	-	-
GZ-202A	121.1		62	123.99	-	-	-	-	-	-	-	-	-	-	-	-
P-1	64.5	-		67.17	-	-	-	-	-	-	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	-	-	3.2	68.3	-	-	3.7	68.3	3.6	65.6	3.6	65.6
P-3	67.9	-		68.41	-	-	-	-	-	-	-	-	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	1.8	69.4	-	-	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	-	-	-	-	2.0	72.8	-	-	7.8	76.7	7.6	76.9
P-6	74.8	-		76.01	-	-	-	-	-	-	-	-	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-	-	-	-	-	-	-
P-9 / P-9R	68	-		68.35	-	-	2.7	68.0	-	-	3.2	68.0	3.0	65.4	3.0	65.3
RFW-1	85.6	34.6		88.11	8.0	80.2	5.7	82.4	5.8	82.3	destroyed	-	-	-	-	-
RFW-2	118	-		119.72	45.7	74.0	43.5	76.2	43.6	76.1	43.8	75.9	42.3	77.4	43.5	76.2
RFW-3	140.6	-		143.48	76.2	67.3	74.3	69.2	-	-	74.6	68.9	73.6	69.9	73.9	69.6
RFW-4	116.9	46.9		118.71	48.5	70.3	46.4	72.3	-	-	47.0	71.8	45.8	73.0	46.5	72.2
WS-1	102	-		102.26	-	-	-	-	12.4	89.8	-	-	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	destroyed	-	-	-	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-	-	-	-	-	-	-
SW-14	-	-		40.47	-	-	-	-	-	-	-	-	-	-	-	-
Bridge	917.07	-		60.55	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					04/28/05		11/08/05		04/17/06		11/20/06		05/20/07		11/12/07	
GZ-1U	97.1	-		99.68	21.3	78.4	21.9	77.8	21.4	78.3	19.9	79.8	19.7	80.0	22.7	77.0
GZ-1L	97.1	45.1		99.44	18.5	81.0	18.0	81.4	18.6	80.9	16.8	82.6	16.4	83.0	27.0	72.5
GMW-10	114.2	-		-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	-	-	30.9	85.4	28.6	87.7	28.1	88.2	-	-
GZ-2L	114.6	81.6		117.12	32.0	85.1	31.7	85.4	32.5	84.7	31.5	85.6	30.7	86.5	35.2	81.9
GMW-11	93.8	-		96.32	-	-	-	-	-	-	-	-	-	-	-	-
GZ-3L	94.8	68.8		97.32	8.8	88.5	8.7	88.6	9.2	88.1	7.5	89.9	7.3	90.1	12.1	85.2
GZ-4	142.9	<85.9		142.29	-	-	-	-	-	-	-	-	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	-	-	-	-	-	-	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	-	-	-	-	-	-	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-	-	-	-	-	11.0	61.1
GZ-102	77.0	-	21.5	80	-	-	-	-	-	-	-	-	-	-	16.5	63.5
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-	-	-	-	-	17.8	63.6
GZ-104	72.4	-	15.5	75.02	-	-	-	-	-	-	-	-	-	-	12.7	62.3
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-	-	-	-	-	11.1	56.8
GZ-106	73.5	-	13	76.13	-	-	-	-	-	-	-	-	-	-	12.3	63.9
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-	-	-	-	-	37.1	66.6
GZ-201	123.3		58	122.85	-	-	-	-	-	-	-	-	-	-	-	-
GZ-202A	121.1		62	123.99	-	-	-	-	-	-	-	-	-	-	-	-
P-1	64.5	-		67.17	-	-	-	-	-	-	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	3.4	65.8	3.6	65.6	3.8	65.4	3.5	65.7	3.6	65.5	4.0	65.2
P-3	67.9	-		68.41	-	-	-	-	-	-	-	-	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	-	-	-	-	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	6.7	77.8	5.1	79.4	7.1	77.5	5.3	79.2	5.4	79.2	9.3	75.2
P-6	74.8	-		76.01	-	-	-	-	-	-	-	-	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-	-	-	-	-	-	-
P-9 / P-9R	68	-		68.35	2.9	65.4	3.2	65.2	3.0	65.3	3.3	65.1	3.3	65.1	3.4	64.9
RFW-1	85.6	34.6		88.11	-	-	-	-	-	-	-	-	-	-	-	-
RFW-2	118	-		119.72	41.2	78.5	40.2	79.5	41.5	78.2	39.3	80.4	39.4	80.3	43.3	76.4
RFW-3	140.6	-		143.48	72.0	71.5	72.0	71.5	71.6	71.9	70.8	72.7	70.5	73.0	73.9	69.6
RFW-4	116.9	46.9		118.71	44.5	74.2	44.5	74.2	44.7	74.0	43.9	74.9	43.4	75.3	46.8	71.9
WS-1	102	-		102.26	-	-	-	-	-	-	-	-	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	-	-	-	-	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-	-	-	-	-	3.8	57.9
SW-14	-	-		40.47	-	-	-	-	-	-	-	-	-	-	2.9	37.6
Bridge	917.07	-		60.55	-	-	-	-	-	-	-	-	-	-	13.14	47.4

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					04/25/08		11/18/08		04/27/09		11/04/09		04/20/10		11/11/10	
GZ-1U	97.1	-		99.68	21.2	78.5	21.9	77.8	20.80	78.9	22.15	77.5	17.42	82.3	22.18	77.5
GZ-1L	97.1	45.1		99.44	-	-	19.3	80.2	-	-	19.55	79.9	-	-	19.78	79.7
GMW-10	114.2	-		-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2L	114.6	81.6		117.12	32.2	84.9	33.2	83.9	31.76	85.4	33.68	83.4	29.2	87.9	34.31	82.8
GMW-11	93.8	-		96.32	-	-	-	-	-	-	-	-	-	-	-	-
GZ-3L	94.8	68.8		97.32	-	-	-	-	-	-	10.71	86.6	-	-	11.2	86.1
GZ-4	142.9	<85.9		142.29	-	-	-	-	-	-	-	-	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	-	-	-	-	-	-	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	-	-	-	-	-	-	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-	-	-	-	-	-	-
GZ-102	77.0	-	21.5	80	-	-	-	-	-	-	-	-	-	-	-	-
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-	-	-	-	-	-	-
GZ-104	72.4	-	15.5	75.02	-	-	12.3	62.7	-	-	12.40	62.6	8.94	66.1	12.40	62.6
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-	-	-	-	-	-	-
GZ-106	73.5	-	13	76.13	-	-	-	-	-	-	-	-	-	-	-	-
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-	-	-	-	-	-	-
GZ-201	123.3		58	122.85	-	-	-	-	-	-	-	-	-	-	-	-
GZ-202A	121.1		62	123.99	-	-	-	-	-	-	-	-	-	-	-	-
P-1	64.5	-		67.17	-	-	-	-	-	-	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	3.5	65.6	3.5	65.7	3.51	65.7	3.46	65.7	3.61	65.6	3.41	65.8
P-3	67.9	-		68.41	-	-	-	-	-	-	-	-	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	-	-	-	-	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	7.0	77.5	7.7	76.9	6.47	78.1	7.93	76.6	4.08	80.4	8.22	76.3
P-6	74.8	-		76.01	-	-	-	-	-	-	-	-	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-	-	-	-	-	-	-
P-9 / P-9R	68	-		68.35	2.8	65.6	2.9	65.5	2.90	65.5	2.81	65.5	2.76	65.6	2.86	65.5
RFW-1	85.6	34.6		88.11	-	-	-	-	-	-	-	-	-	-	-	-
RFW-2	118	-		119.72	41.4	78.3	41.9	77.8	40.67	79.1	42.16	77.6	37.81	81.9	42.37	77.4
RFW-3	140.6	-		143.48	71.8	71.7	71.7	71.8	71.87	71.6	72.75	70.7	71.68	71.8	73.66	69.8
RFW-4	116.9	46.9		118.71	44.5	74.2	45.4	73.3	44.19	74.5	45.68	73.0	42.04	76.7	45.74	73.0
WS-1	102	-		102.26	-	-	-	-	-	-	-	-	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	-	-	-	-	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-	-	-	-	-	-	-
SW-14	-	-		40.47	-	-	-	-	-	-	-	-	-	-	-	-
Bridge	917.07	-		60.55	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					04/22/11		11/14/11		04/30/12		11/05/12		05/07/13		12/19/2013		11/03/14	
GZ-1U	97.1	-		99.68	21.97	77.7	22.17	77.5	22.87	76.8	24.20	75.5	-	-	24.66	75.0	-	-
GZ-1L	97.1	45.1		99.44	-	-	19.63	79.8	-	-	26.40	73.0	-	-	22.44	77.0	22.63	76.8
GMW-10	114.2	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-2L	114.6	81.6		117.12	32.54	84.6	33.40	83.7	33.92	83.2	36.85	80.3	-	-	37.32	79.8	35.78	81.3
GMW-11	93.8	-		96.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-3L	94.8	68.8		97.32	-	-	10.72	86.6	-	-	13.96	83.4	-	-	14.74	82.6	15.87	81.5
GZ-4	142.9	<85.9		142.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-	-	-	11.50	60.6	-	-	-	-
GZ-102	77.0	-	21.5	80	-	-	-	-	-	-	-	-	17.05	63.0	17.85	62.2	18.18	61.8
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-	-	-	18.20	63.2	-	-	-	-
GZ-104	72.4	-	15.5	75.02	8.94	66.1	12.72	62.3	12.44	62.6	13.77	61.3	13.50	61.5	13.87	61.2	14.22	60.8
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-	-	-	11.48	56.4	-	-	-	-
GZ-106	73.5	-	13	76.13	-	-	-	-	-	-	-	-	14.15	62.0	-	-	13.53	62.6
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-	-	-	38.21	65.5	-	-	-	-
GZ-201	123.3		58	122.85	-	-	-	-	-	-	51.68	71.2	51.12	71.7	51.94	70.9	52.23	70.6
GZ-202A	121.1		62	123.99	-	-	-	-	-	-	52.48	71.5	51.58	72.4	52.38	71.6	52.76	71.2
P-1	64.5	-		67.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	3.55	65.6	3.48	65.7	3.50	65.7	3.47	65.7	-	-	3.55	65.6	-	-
P-3	67.9	-		68.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	7.46	77.1	7.96	76.6	8.68	75.8	9.98	74.5	-	-	-	-	-	-
P-6	74.8	-		76.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-9 / P-9R	68	-		68.35	2.77	65.6	2.74	65.6	2.78	65.6	2.92	65.4	-	-	2.8	65.6	3.26	65.1
RFW-1	85.6	34.6		88.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RFW-2	118	-		119.72	41.82	77.9	42.06	77.7	43.10	76.6	44.48	75.2	-	-	45.11	74.6	44.27	75.5
RFW-3	140.6	-		143.48	73.09	70.4	73.97	69.5	73.31	70.2	74.9	68.6	-	-	75.90	67.6	75.48	68.0
RFW-4	116.9	46.9		118.71	45.35	73.4	45.68	73.0	46.03	72.7	47.4	71.3	-	-	47.71	71.0	47.84	70.9
WS-1	102	-		102.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SW-14	-	-		40.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bridge	917.07	-		60.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NH DES No. 198401081

Monitoring Location	Ground Surface Elevation	Bedrock Surface Elevation	Depth to Bottom (drilled) (ft bgs)	Reference Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation	Depth-to-Water	Groundwater Surface Elevation
					11/17/15		04/14/16		11/02/16	
GZ-1U	97.1	-		99.68	-	-	-	-	-	-
GZ-1L	97.1	45.1		99.44	22.90	76.5	21.94	77.5	23.52	75.9
GMW-10	114.2	-		-	-	-	-	-	-	-
GZ-2U	113.8	-		116.29	-	-	-	-	-	-
GZ-2L	114.6	81.6		117.12	38.07	79.1	35.28	81.8	38.72	78.4
GMW-11	93.8	-		96.32	-	-	-	-	-	-
GZ-3L	94.8	68.8		97.32	15.25	82.1	13.68	83.6	15.79	81.5
GZ-4	142.9	<85.9		142.29	-	-	-	-	-	-
GZ-5	141.1	<84.1		140.73	-	-	-	-	-	-
GZ-6	141.4	<84.4		141.16	-	-	-	-	-	-
GZ-101	69.4	-	15	72.11	-	-	-	-	-	-
GZ-102	77.0	-	21.5	80	18.18	61.8	-	-	-	-
GZ-103	78.3	-	22	81.39	-	-	-	-	-	-
GZ-104	72.4	-	15.5	75.02	14.32	60.7	13.62	61.4	14.60	60.4
GZ-105	65.4	-	24	67.89	-	-	-	-	-	-
GZ-106	73.5	-	13	76.13	13.53	62.6	-	-	-	-
GZ-107	108.7	-	45	103.66	-	-	-	-	-	-
GZ-201	123.3		58	122.85	52.45	70.4	51.95	70.9	53.15	69.7
GZ-202A	121.1		62	123.99	52.95	71.0	52.40	71.6	53.58	70.4
P-1	64.5	-		67.17	-	-	-	-	-	-
P-2 / P-2R	68.3	-		69.18	3.7	65.5	-	-	-	-
P-3	67.9	-		68.41	-	-	-	-	-	-
P-4	70.5	-		71.15	-	-	-	-	-	-
GW-P-5R/P-5	82.3	-		84.52	-	-	-	-	-	-
P-6	74.8	-		76.01	-	-	-	-	-	-
P-7	-	-		84.52	-	-	-	-	-	-
P-8	69.7	-		70.25	-	-	-	-	-	-
P-9 / P-9R	68	-		68.35	3.05	65.3	2.73	65.6	3.19	65.2
RFW-1	85.6	34.6		88.11	-	-	-	-	-	-
RFW-2	118	-		119.72	44.27	75.5	44.35	75.4	45.83	73.9
RFW-3	140.6	-		143.48	75.66	67.8	74.93	68.6	76.32	67.2
RFW-4	116.9	46.9		118.71	48.08	70.6	47.26	71.5	48.55	70.2
WS-1	102	-		102.26	-	-	-	-	-	-
WS-2	93	-		93.57	-	-	-	-	-	-
SW-17/Seep	915.91	-		61.65	-	-	-	-	-	-
SW-14	-	-		40.47	-	-	-	-	-	-
Bridge	917.07	-		60.55	-	-	-	-	-	-

See last page for notes.

TABLE 2
REFERENCE/GROUNDWATER ELEVATION DATA SUMMARY

Cross Road Landfill - Exeter, New Hampshire

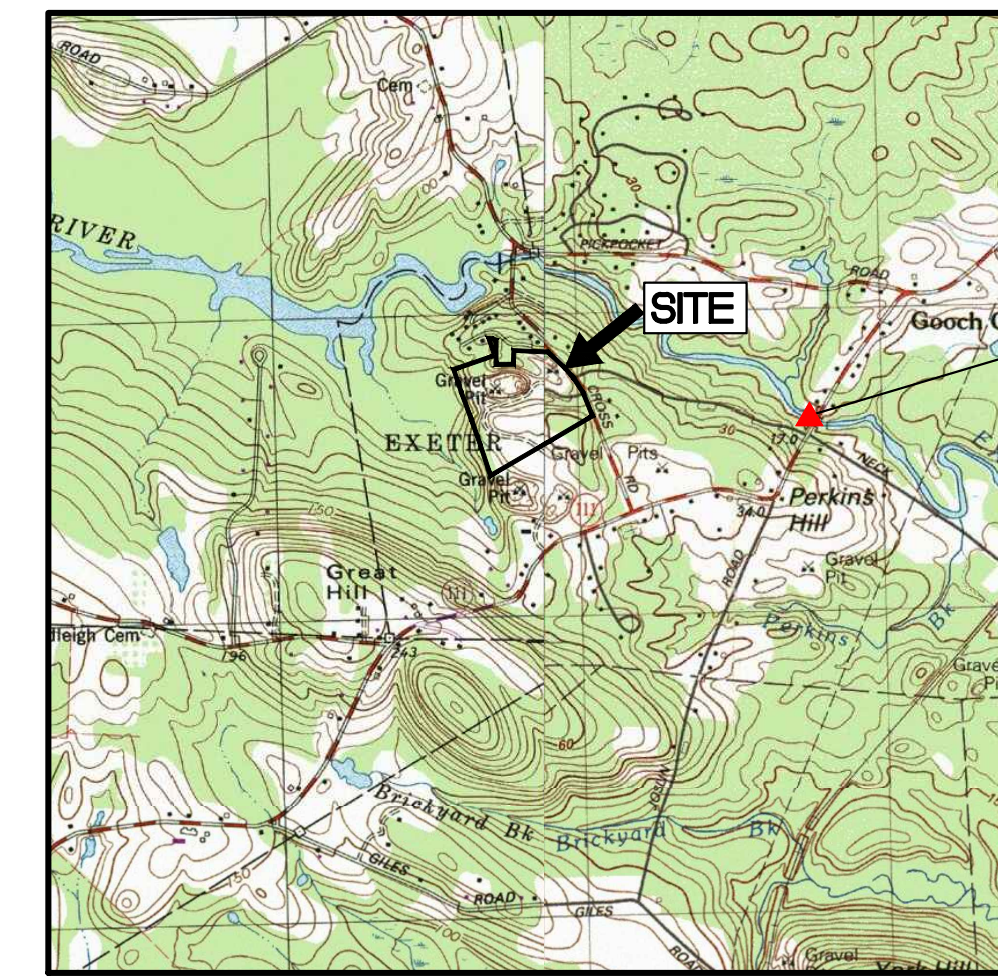
NH DES No. 198401081

NOTES:

1. Groundwater elevation data were collected by GZA GeoEnvironmental, Inc. (GZA) on 7/23/01 and 8/9/01, and provided by the Town of Exeter for 4/25/01, 7/25/01, and 11/28/01 through the present.
2. Reference elevation is the top of PVC riser or top of well point casing.
3. Elevations are reported in feet above the National Geodetic Vertical Datum.
4. Reference elevations for wells RFW-1 through RFW-4 and piezometers P-1 through P-9 are based on Table 2 (Water Level Measurements, Exeter Landfill, Exeter, New Hampshire) of Weston's report dated June 1990.
5. Reference elevations for wells GZ-1U through GZ-3L, GZ-101 through GZ-107, and GZ-201 through GZ-202A were established by GZA using optical survey techniques and referenced to a benchmark established by TF Moran approximately 75 feet south of well GZ-2L (GZ-1U through GZ-3L) and top of PVC of selected wells (each of the other monitoring wells referenced in this note).
6. Reference elevations for former water supply wells WS-1 and WS-2 were established by GZA on using optical survey techniques and referenced to the top of PVC (reference elevation) for monitoring well RFW-1 [88.11 feet] as indicated on Table 2 (Water Level Measurements, Exeter Landfill, Exeter, New Hampshire) of Weston's report dated June 1990.
7. Wells GMW-10 and GMW-11 were installed for use as Landfill gas monitoring wells. Groundwater was encountered in GMW-11 during the August 9, 2001 monitoring round.
8. "-" indicates water level measurements were not performed at the location and date specified, or no data/not encountered.
9. Bedrock surface elevations are based on depth to bedrock encountered while drilling borings and as shown on boring logs RFW-1, RFW-2, RFW-3, and RFW-4 in Weston's 1990 report.
10. P-5 was replaced with GZ-P-5R during April 2004.



Figures



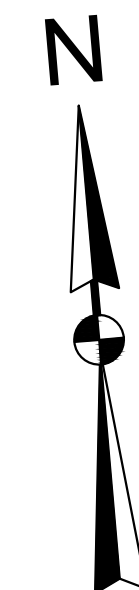
LOCUS MAP
SCALE: 1" = 2000'±

NOTES:

1. BASE MAP DEVELOPED FROM PROPERTY TAX MAP-S PROVIDED BY THE TOWN OF EXETER, NEW HAMPSHIRE INCLUDING TAX MAPS 98, 99, 100 AND 101.
2. LOCUS MAP DEVELOPED FROM UNITED STATES GEOLOGIC SURVEY MAPS, KINGSTON, 1981 PHOTO REVISSED 1989 AND EXETER 1985.
3. THE LOCATIONS OF SITE FEATURES INCLUDING WELLS, PIEZOMETERS, AND ROADS ARE BASED ON INFORMATION SHOWN ON PLANS TITLED "TOPOGRAPHIC PLAN OF LAND OF CROSSROAD LANDFILL, PREPARED FOR THE TOWN OF EXETER, NEW HAMPSHIRE," PREPARED BY T.F. MORAN, INC. OF BEDFORD, NEW HAMPSHIRE, DATED JANUARY 24, 1994; "GROUNDWATER ELEVATION CONTOUR MAP--26 APRIL 1990, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY ROY F. WESTON, INC. (WESTON) OF CONCORD NEW HAMPSHIRE, DATED MAY 1990; "EXPLORATION LOCATION PLAN, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY GZA GEONVIRONMENTAL, INC. OF MANCHESTER, NEW HAMPSHIRE, DATED JULY 1997; SITE SKETCH TITLED "PARKER SURVEY" PROVIDED BY THE TOWN OF EXETER, NEW HAMPSHIRE DATED FEBRUARY 1987. THE LOCATIONS OF CERTAIN WELLS, PIEZOMETERS, AND SURFACE WATER SAMPLING LOCATIONS ARE BASED ON TAPED MEASUREMENTS FROM SITE FEATURES BY GZA AND ARE APPROXIMATE.
4. WETLAND LIMITS AND LOCATIONS OF SW-1, NORTH SPRING, SOUTH SPRING, AND P-6 WERE OBTAINED FROM FIGURE 4 OF A REPORT TITLED "REPORT OF HYDROGEOLOGIC INVESTIGATION, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY ROY F. WESTON, INC. OF CONCORD, NEW HAMPSHIRE, DATED JUNE 1990. THE LOCATIONS ARE APPROXIMATE.
5. THE MONITORING WELL DESIGNATED "LAYNE WELL" WAS INSTALLED BY LAYNE NEW ENGLAND AS DIRECTED BY GIDLEY LABORATORIES, INC. (GIDLAB) OF FAIRHAVEN, MASSACHUSETTS DURING OR BEFORE 1979. PIEZOMETERS P-1 THROUGH P-3 WERE INSTALLED BY GIDLAB DURING OR BEFORE 1979. MONITORING WELLS RW-1 THROUGH RW-4 WERE INSTALLED BY WESTON DURING MARCH 27 THROUGH 28, 1990. MONITORING WELLS MW-1 THROUGH MW-3 LOCATED ON THE BROADSHOR PROPERTY WERE INSTALLED BY EXETER ENVIRONMENTAL ASSOCIATES, (EEA) ON DECEMBER 22, 2000. MONITORING WELLS MW-4 THROUGH MW-7, ALSO LOCATED ON THE BROADSHOR PROPERTY WERE INSTALLED BY EEA ON MAY 15, 2001. MONITORING WELLS GZ-1U, GZ-1L, GZ-2U, GZ-2L, GZ- 3L, GZ-4, GZ-5 AND GZ-6 AND SOIL GAS MONITORING WELLS GW10 AND GW11 WERE INSTALLED BY CAPITAL ENVIRONMENTAL DRILLING SERVICE OF DUNBARTON, NEW HAMPSHIRE DURING JUNE 28 THROUGH JULY 6 2001. WELL POINTS P-2R AND P-9R WERE INSTALLED BY GZA DURING APRIL 2003. GZ-P-5R WAS INSTALLED BY NEW HAMPSHIRE BORING OF LONDONDERRY, NH ON APRIL 20, 2004. MONITORING WELLS GZ-201, GZ-202, AND GZ-202A WERE INSTALLED BY NEW HAMPSHIRE BORING DURING SEPTEMBER AND NOVEMBER 2012.
6. LOCATION OF PHOTO LINEAMENT SHOWN BASED ON THE UNITED STATES GEOLOGIC SURVEY MAP TITLED "LINEAMENT MAP OF AREA 1 OF THE NEW HAMPSHIRE BEDROCK AQUIFER ASSESSMENT, SOUTH EASTERN NEW HAMPSHIRE," DATED 1997.
7. LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

LEGEND:

- | | | |
|---|------------|---|
|  | GZ-1L | GROUNDWATER MONITORING WELL BY GZA |
|  | R.F.W.-4 | GROUNDWATER MONITORING WELL |
|  | LAYNE WELL | LAYNE WELL FORMER MONITORING WELL BY OTHERS |
|  | MW-1 | OFFSITE OVERBURDEN MONITORING WELL BY OTHERS |
|  | WS-1 | ABANDONED OVERBURDEN WATER SUPPLY WELL |
|  | SW-5 | SURFACE WATER SAMPLING LOCATION |
|  | GMW4 | SOIL GAS MONITORING WELL LOCATION |
|  | P-5 | PIEZOMETER LOCATION |
|  | | STREAM |
|  | | OPEN SURFACE WATER |
| 100/4 | | TOWN OF EXETER, NEW HAMPSHIRE PROPERTY TAX MAP NO./LOT NO. |
| ---- | | TOWN OF EXETER, NEW HAMPSHIRE PROPERTY LOT BOUNDARY |
|  | | APPROXIMATE LOCATION OF STRUCTURE |
|  | | APPROXIMATE LOCATION OF FORMER STRUCTURE |
|  | | CURRENT GROUNDWATER MANAGEMENT PERMIT REQUIRED SAMPLING LOCATION |
|  | | APPROXIMATE LOCATION OF PHOTO LINEAMENT IDENTIFIED BY THE UNITED STATES GEOLOGICAL SURVEY |
|  | | LOCATION OF CROSS SECTION LINE |



2016 ANNUAL SUMMARY REPORT
CROSS ROAD LANDFILL
GWP-198401081-E-004
EXETER, NEW HAMPSHIRE

SITE/SITE VICINTY PLAN

PREPARED BY:



GZA GeoEnvironmental, Inc.
Engineers and Scientists
5 COMMERCE PARK NORTH, SUITE 201
BEDFORD, NEW HAMPSHIRE 03110
(603) 623-3600

PREPARED FOR:	
---------------	--

TOWN OF EXETER

THE SED,	PROJ MGR:
-------------	-----------

DMT

REVIEWED BY

JDR

	CHECKED BY:
--	-------------

$$1'' = 300'$$

FIGURE

HER	PRICE: 1000
RIOR	DESIGNED BY:

DMT
144M

REVIEWED BY:	
DRAWN BY:	

MR

SCALE: 1"

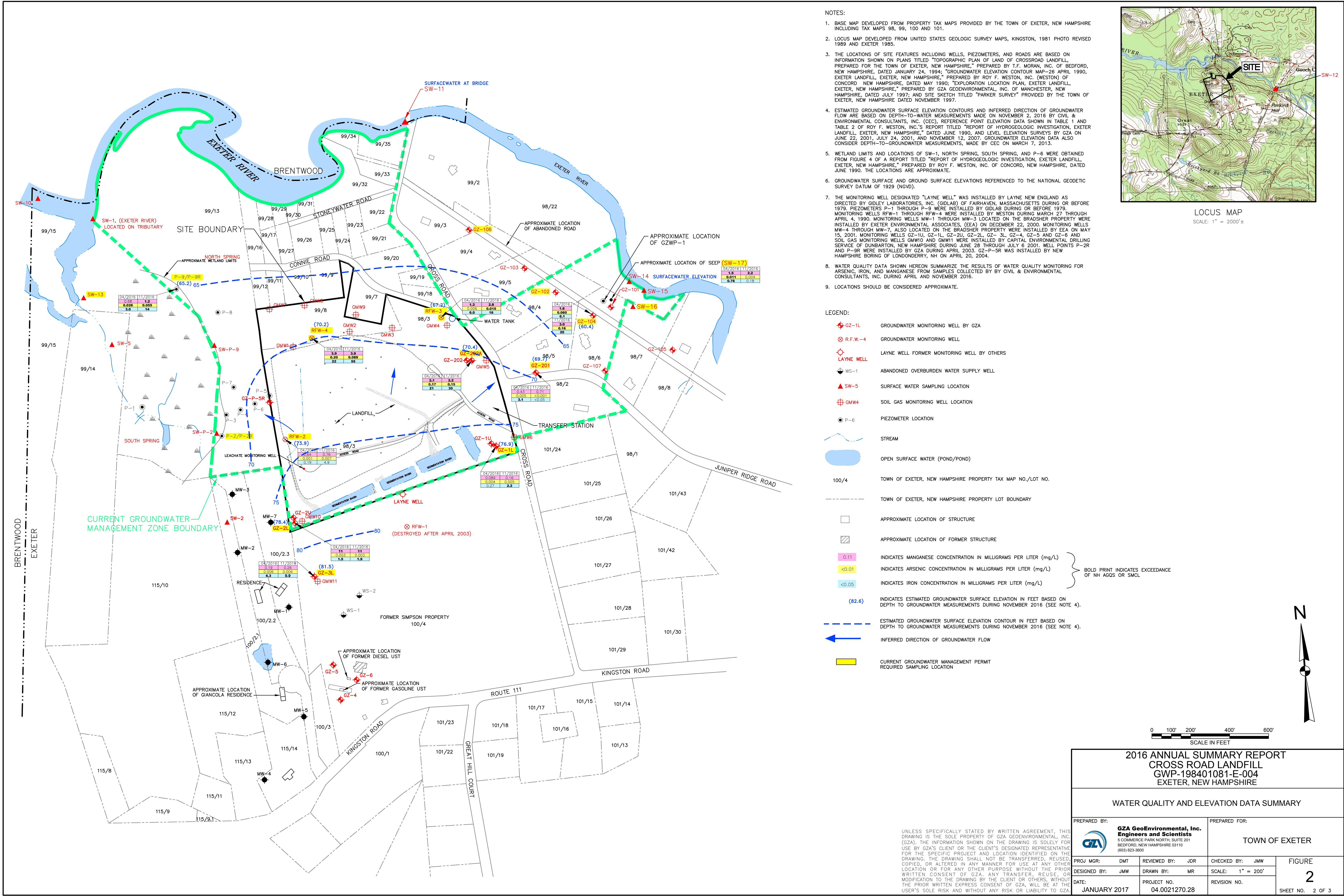
$T = 200$

1

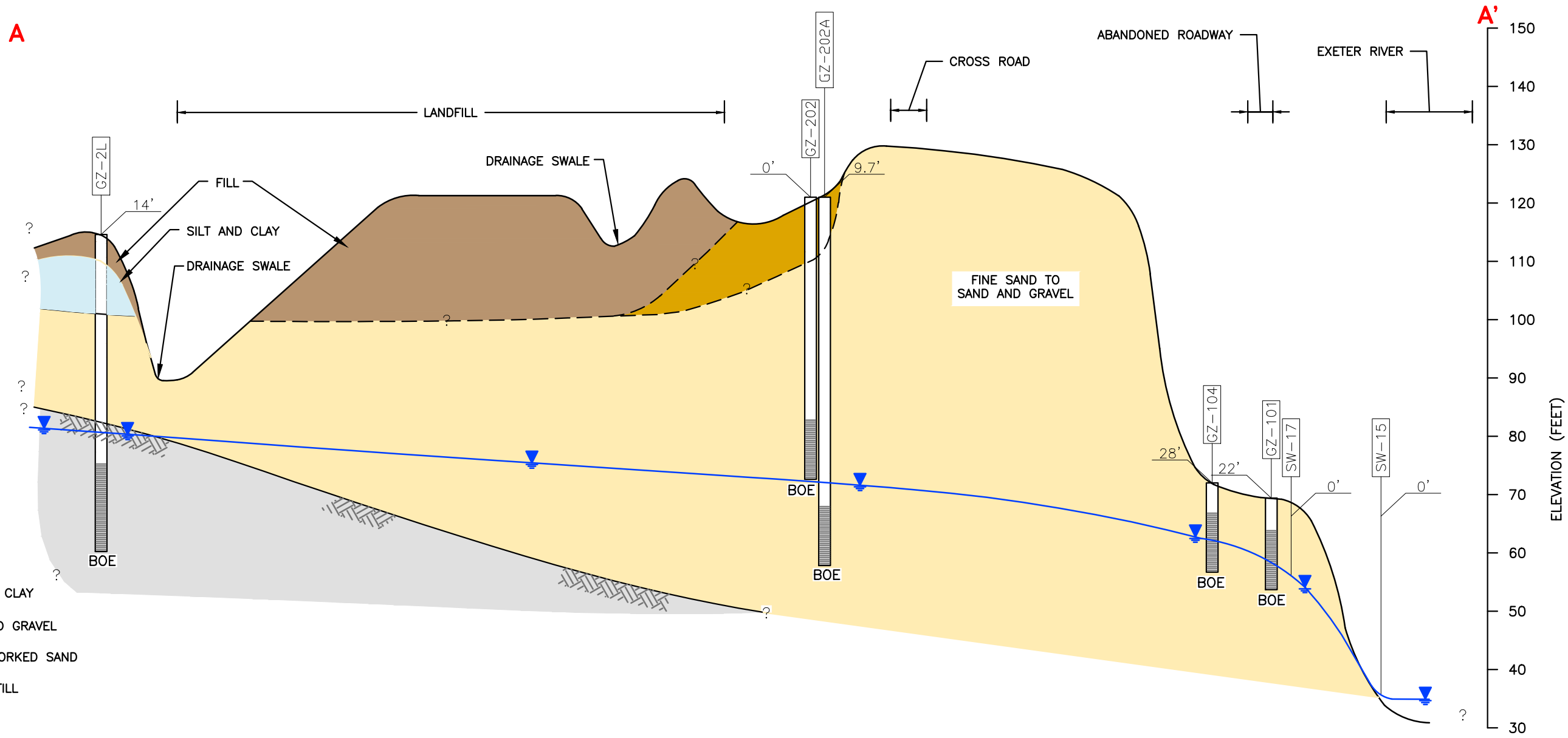
SHEET NO.

SHEET NO.

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, REPRODUCED, COPIED, OR ALTERED FOR ANY OTHER PROJECT, LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.



CROSS-SECTION A-A'



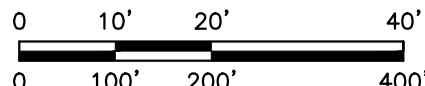
LEGEND:

- SILT AND CLAY
- SAND AND GRAVEL
- FILL/REWORKED SAND
- GLACIAL TILL
- BEDROCK
- STRATIFIED FINE SAND, SILT, AND CLAY WITH OCCASIONAL GRAVEL
- APPROXIMATE LOCATION OF LANDFILL MATERIALS

NOTES:

- 1) GEOLOGIC UNITS ARE GENERALIZED IN ORDER TO DEMONSTRATE MAJOR STRATIGRAPHIC RELATIONSHIPS. REFER TO BORING LOGS FOR DETAILED SOIL DESCRIPTIONS FOR INDIVIDUAL SUBSURFACE EXPLORATIONS.
- 2) STRATIFICATION LINES ARE APPROXIMATE AND ARE BASED ON DATA COLLECTED FROM WIDELY SPACED EXPLORATIONS AND REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. ACTUAL TRANSITIONS MAY VARY FROM THOSE SHOWN.
- 3) THE ESTIMATED GROUNDWATER ELEVATION IS BASED ON WATER LEVEL MEASUREMENTS MADE AT VARIOUS TIMES AND IS PROVIDED TO SHOW THE GENERAL LOCATION OF THE SATURATED ZONE.
- 4) THE GENERALIZED HYDROSTRATIGRAPHIC CROSS-SECTIONS SHOWN ARE BASED ON THE RESULTS OF THE EXPLORATIONS SHOWN ON THE CROSS-SECTIONS.
- 5) 'R' INDICATES REFUSAL.
- 6) 'BOE' INDICATES BOTTOM OF EXPLORATION.
- 7) GROUNDWATER SURFACE AND GROUND SURFACE ELEVATIONS REFERENCED TO THE NATIONAL GEODETIC SURVEY DATUM OF 1929 (NGVD).
- 8) PLEASE REFER TO FIGURE 1 FOR ADDITIONAL NOTES.

VERTICAL SCALE: 1" = 20'



HORIZONTAL SCALE: 1" = 200'

2016 ANNUAL SUMMARY REPORT
CROSS ROAD LANDFILL
GWP-198401081-E-004
EXETER, NEW HAMPSHIRE

HYDROGEOLOGIC CROSS SECTION

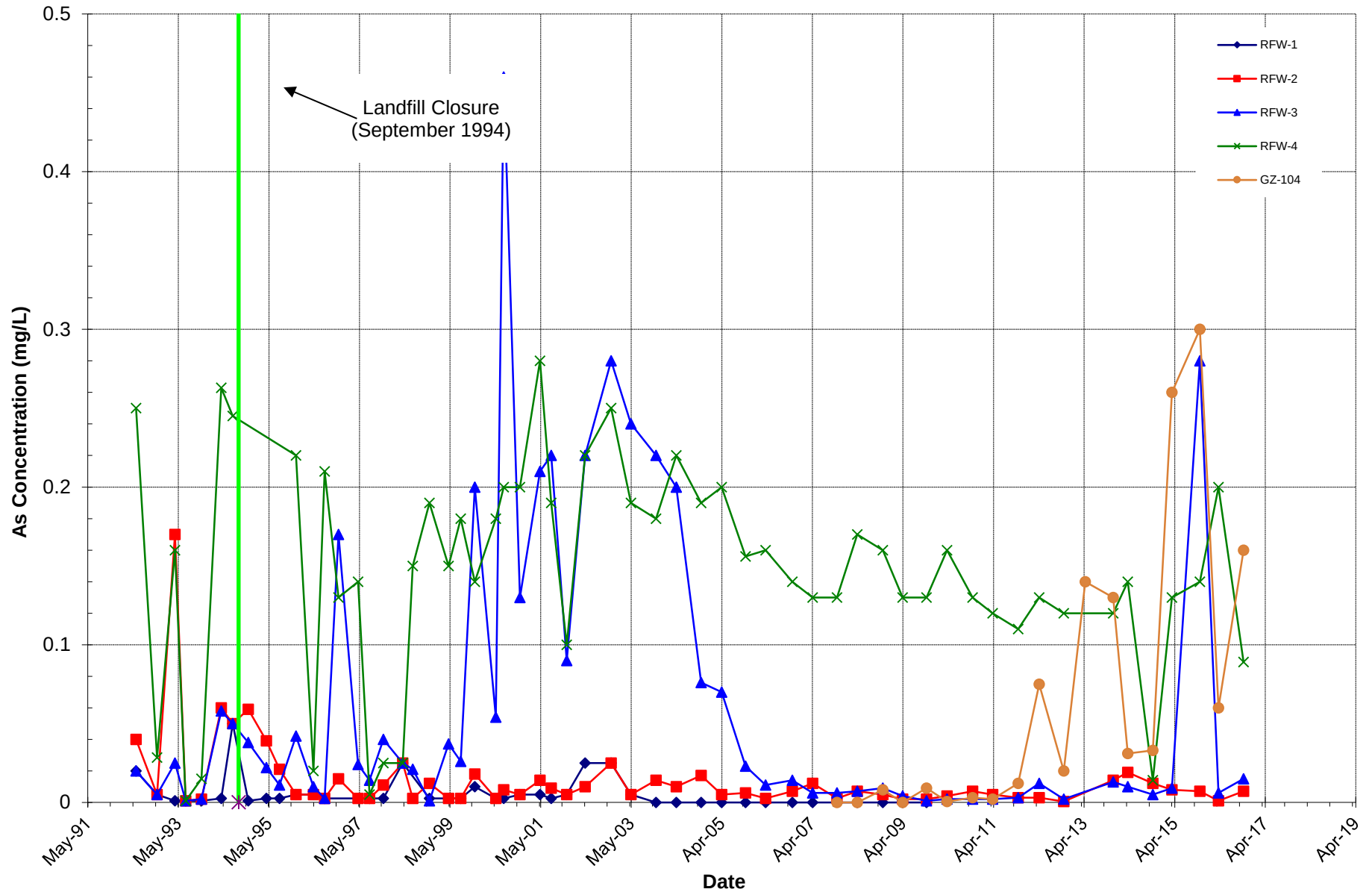
PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists 5 COMMERCE PARK NORTH, SUITE 201 BEDFORD, NEW HAMPSHIRE 03110 (603) 823-3600		PREPARED FOR: TOWN OF EXETER	
PROJ MGR: DMT	DESIGNED BY: JMW	REVIEWED BY: JDR	CHECKED BY: JMW
DATE: JANUARY 2017	PROJECT NO.: 04.0021270.28	SCALE: AS SHOWN	REVISION NO.
FIGURE 3			SHEET NO. 3 OF 3

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

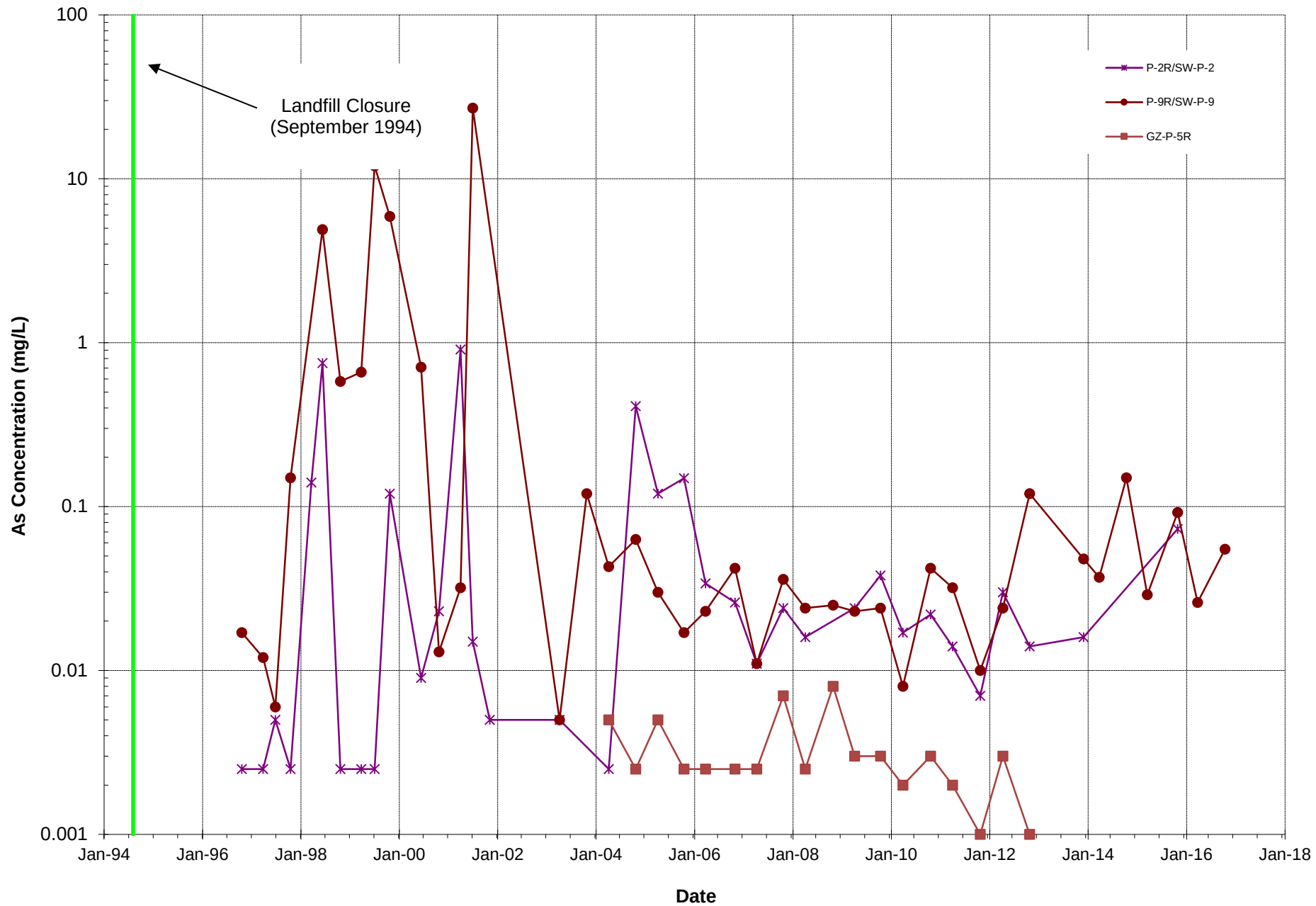


Plots

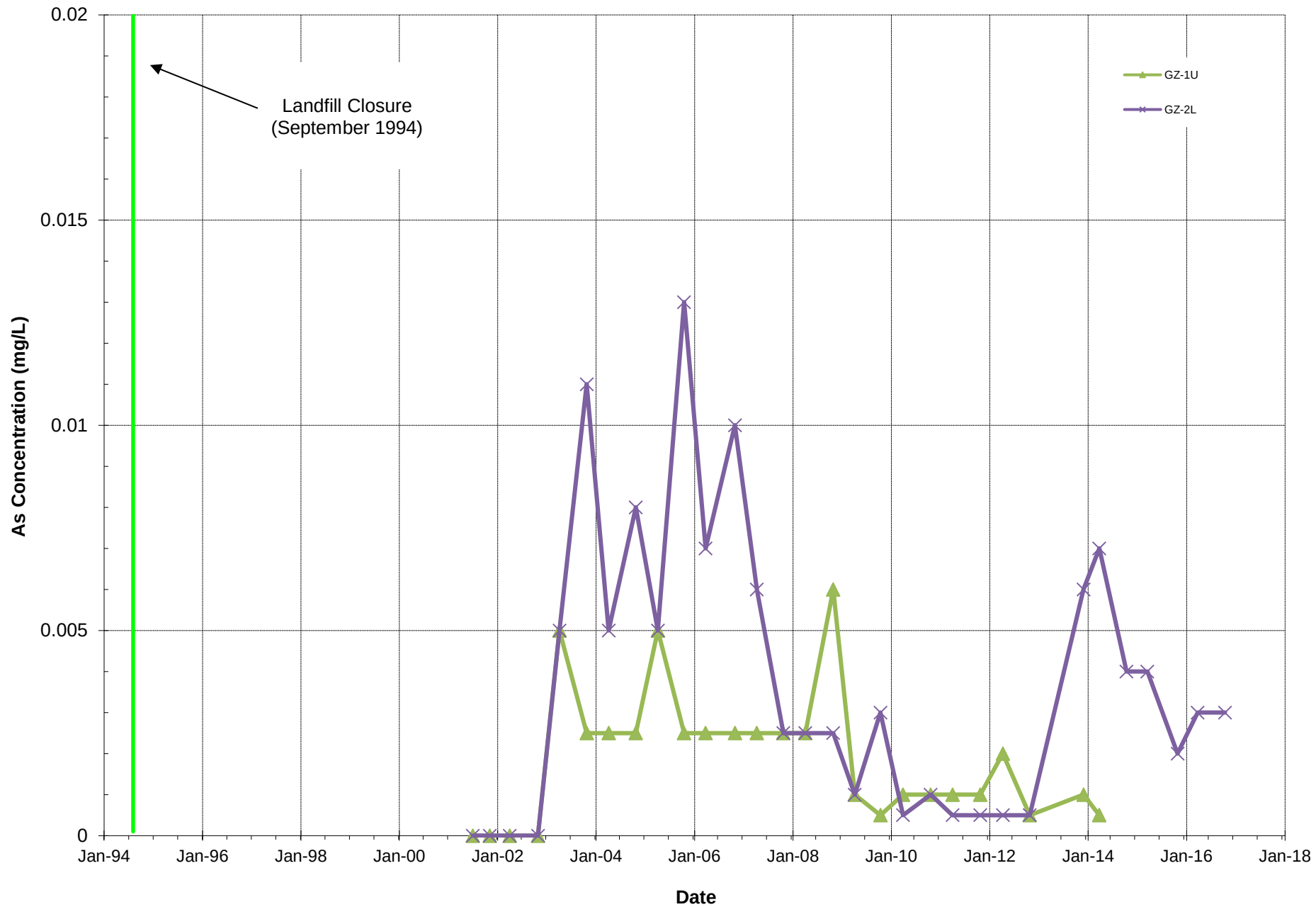
PLOT 1A
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



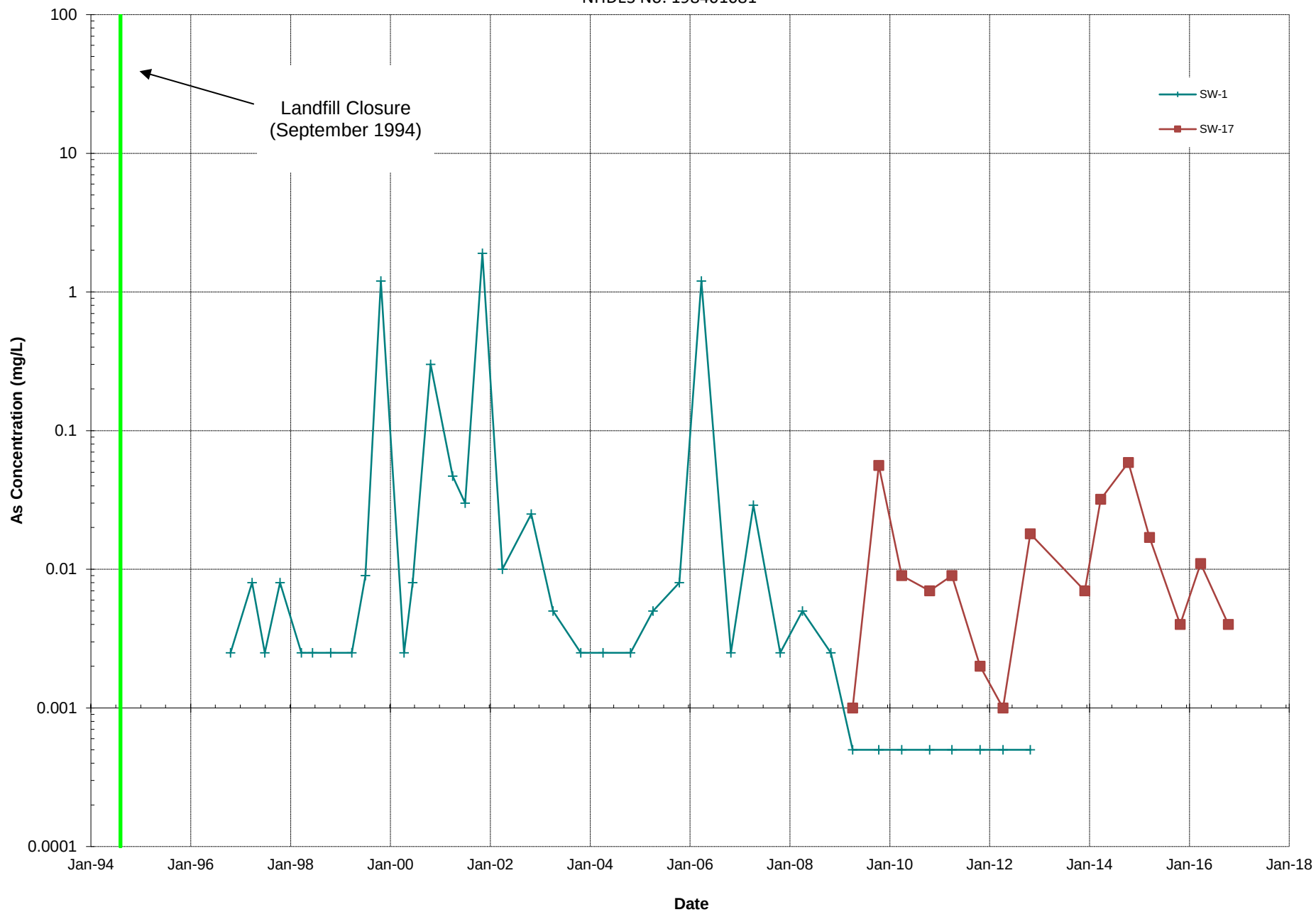
PLOT 1B
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



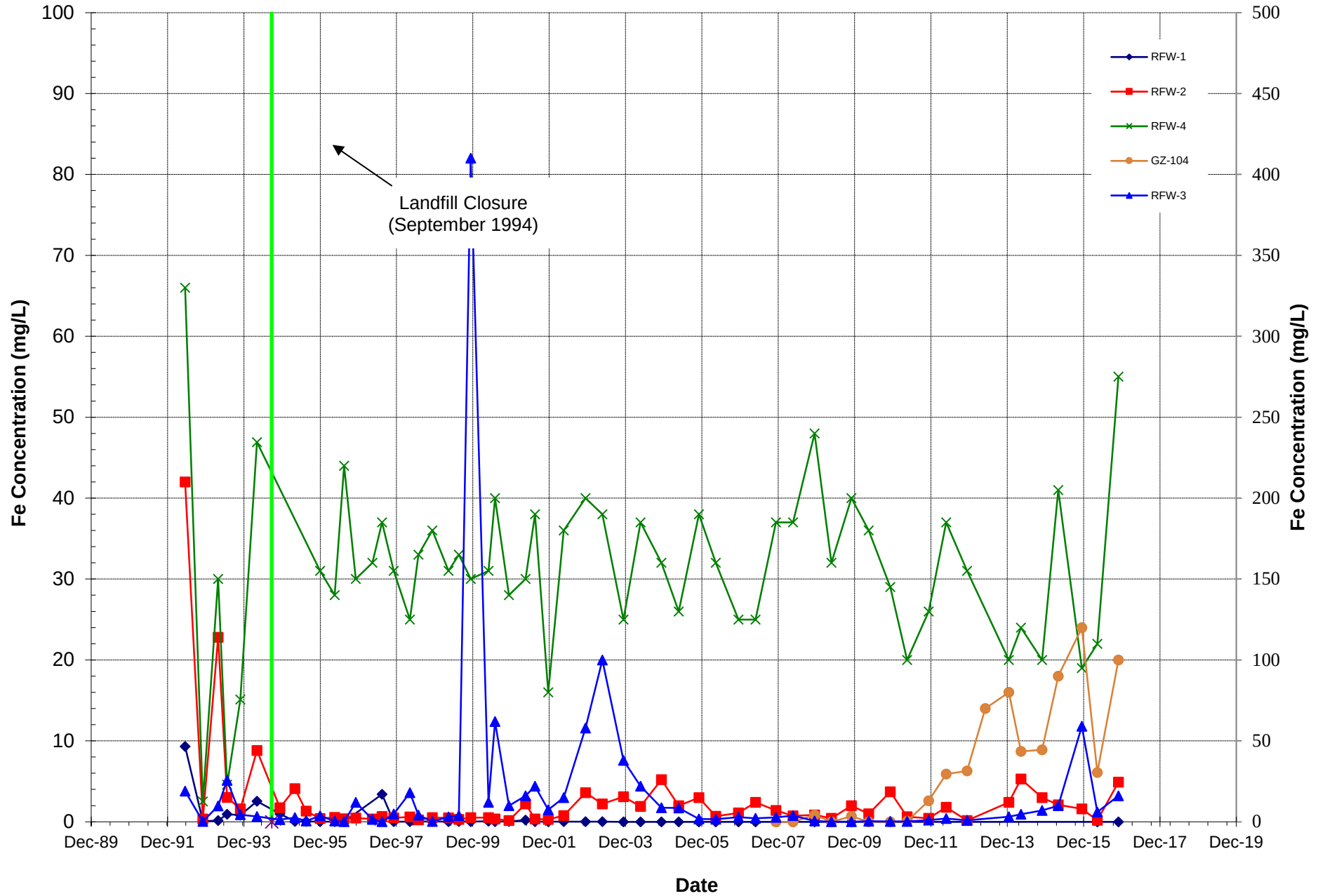
PLOT 1C
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



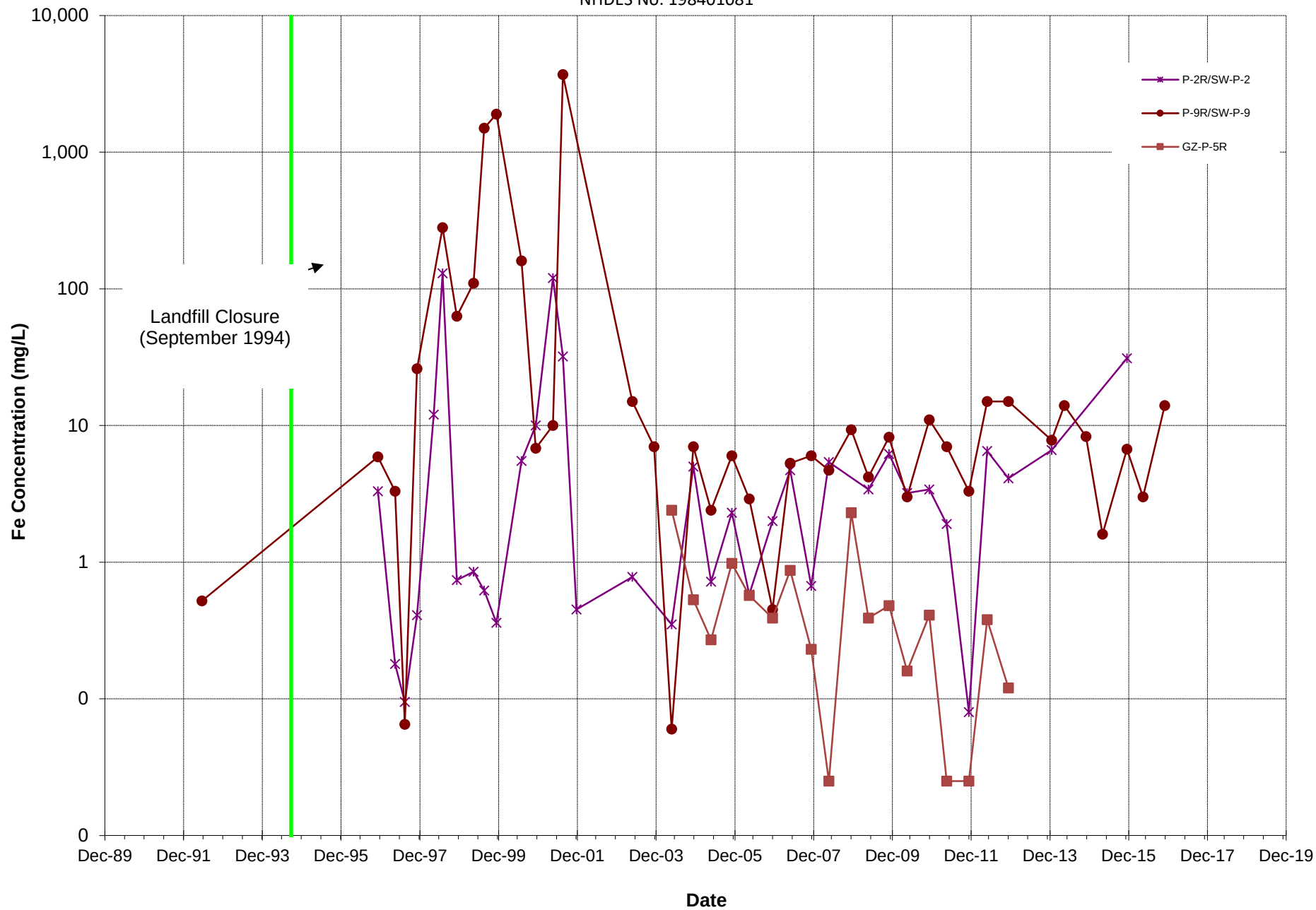
PLOT 1D
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



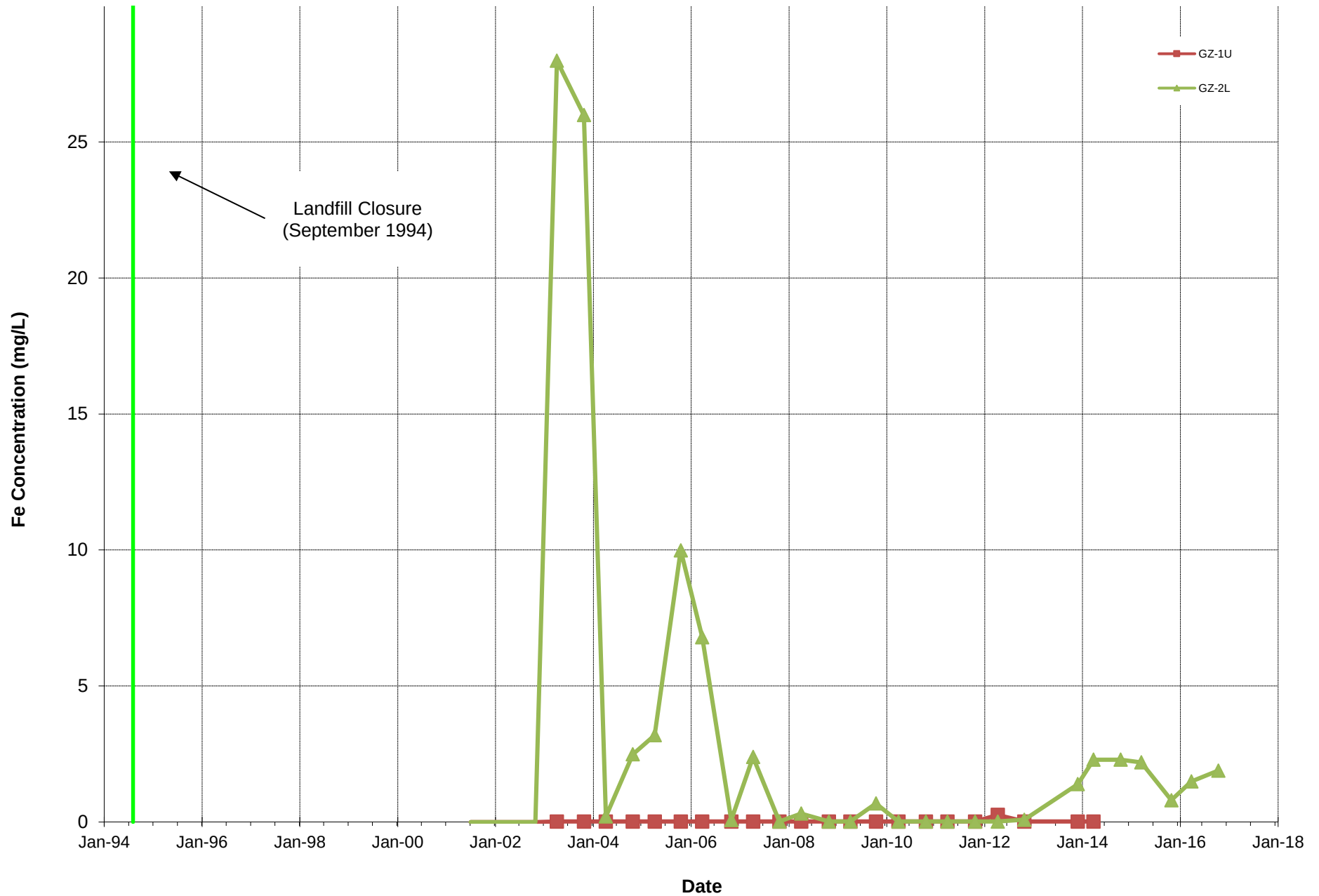
PLOT 2A
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



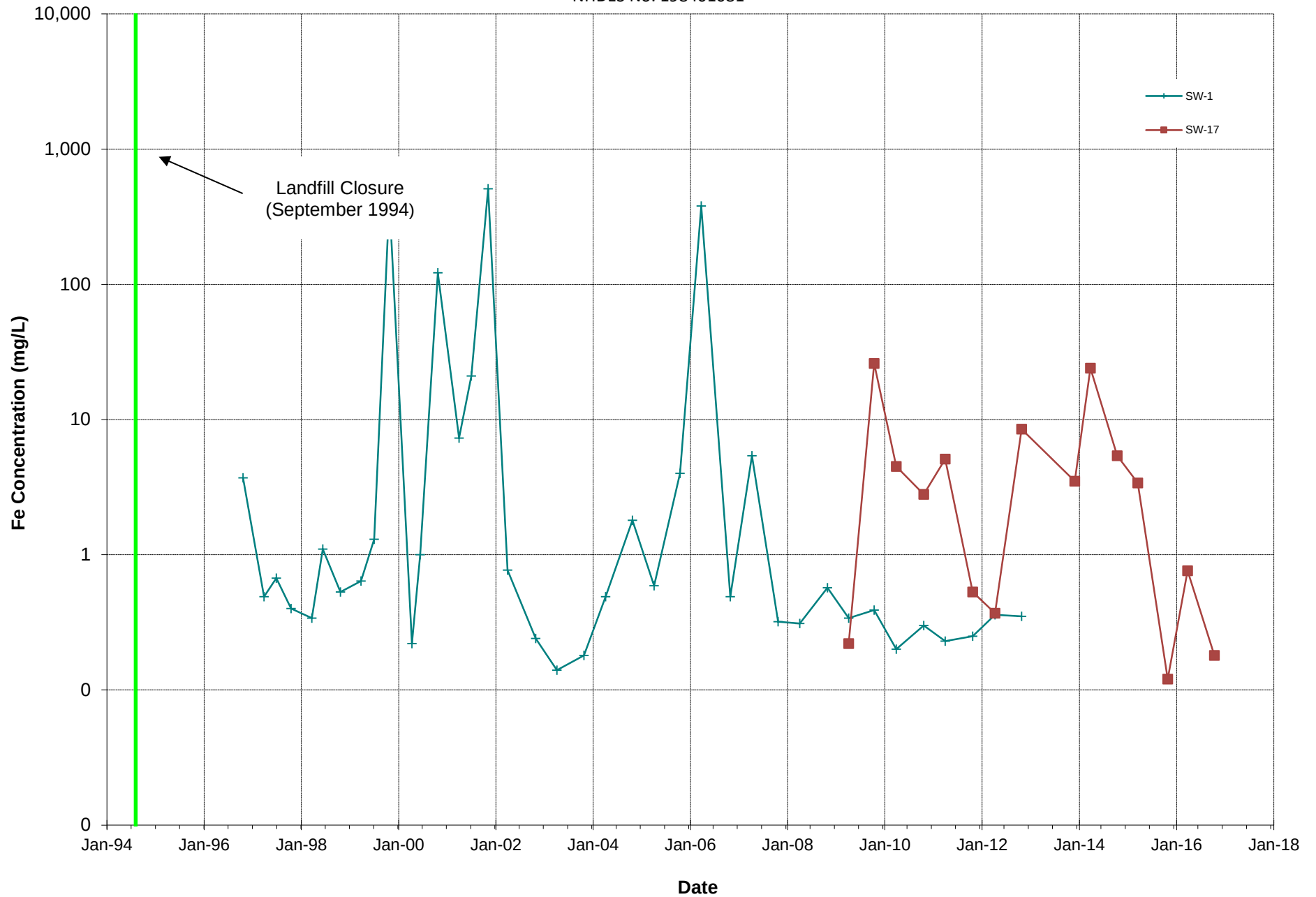
PLOT 2B
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



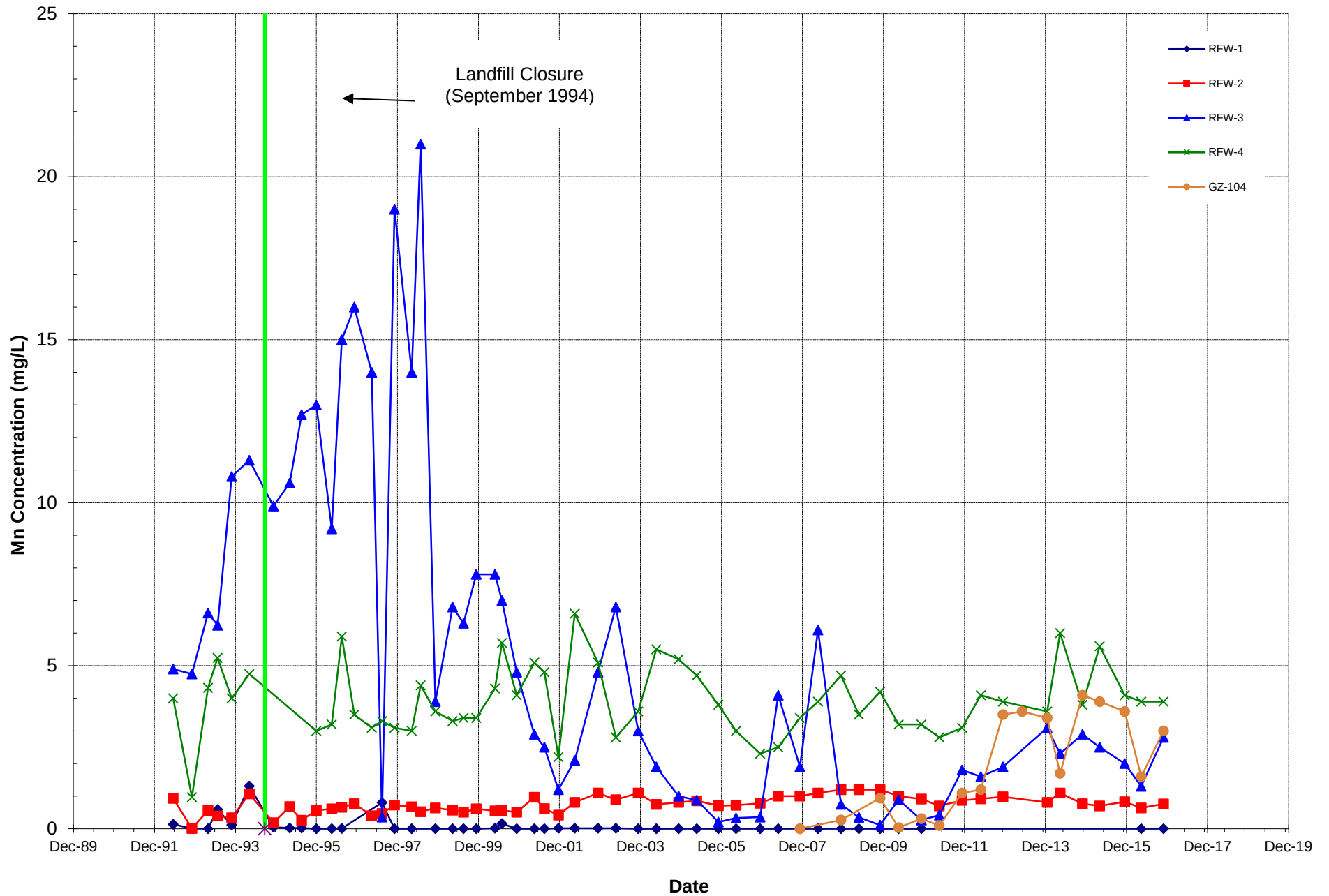
PLOT 2C
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



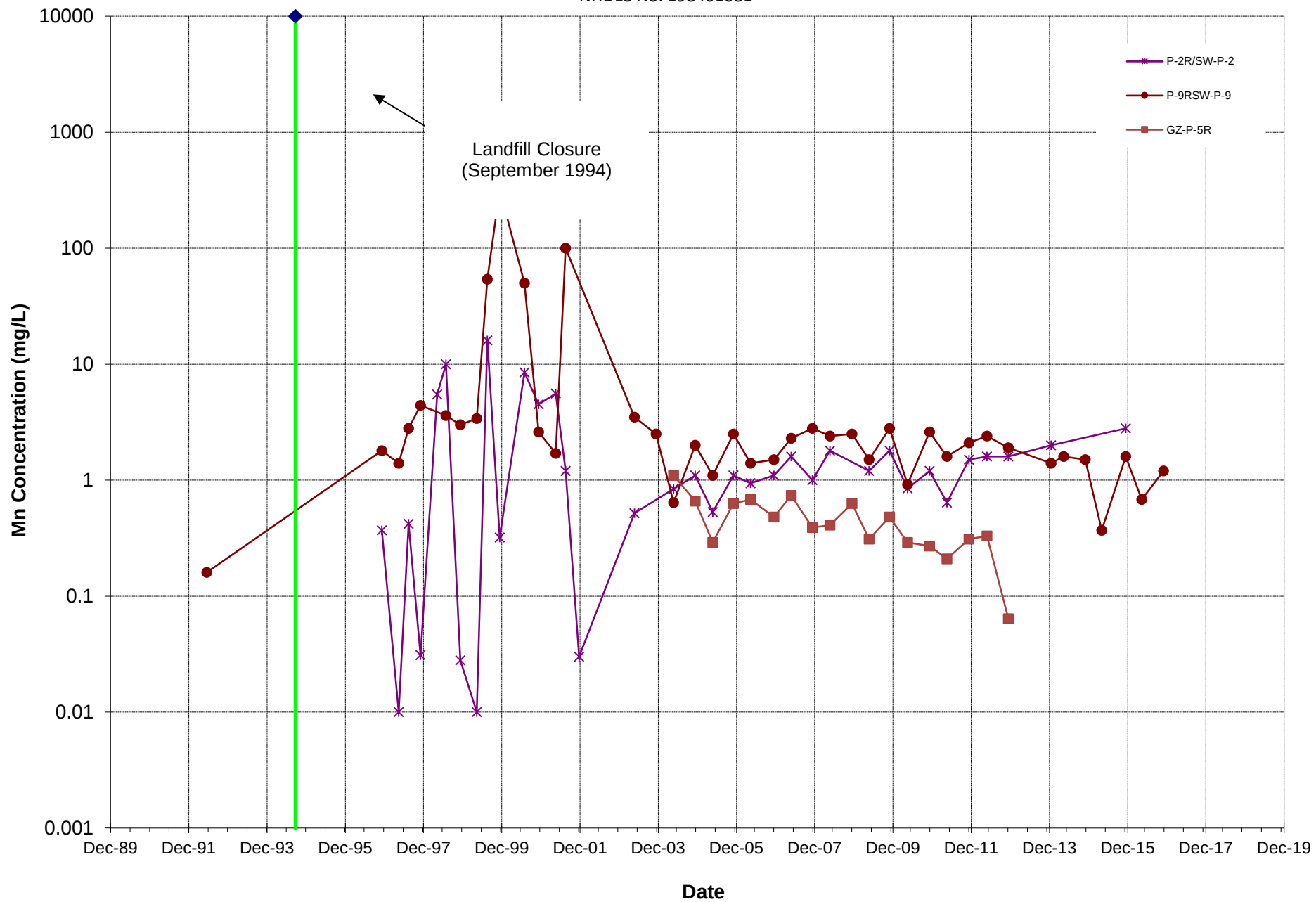
PLOT 2D
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



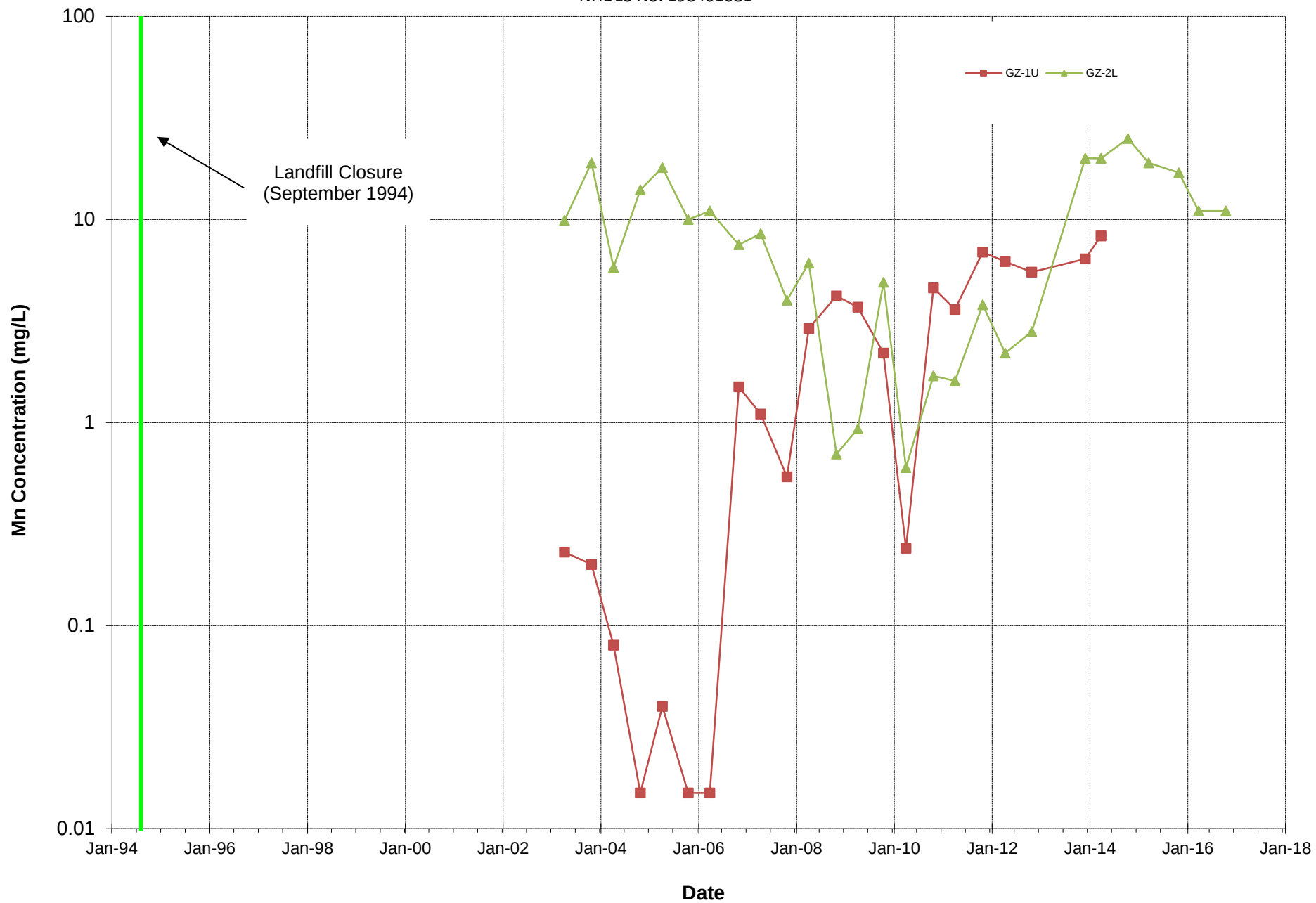
PLOT 3A
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



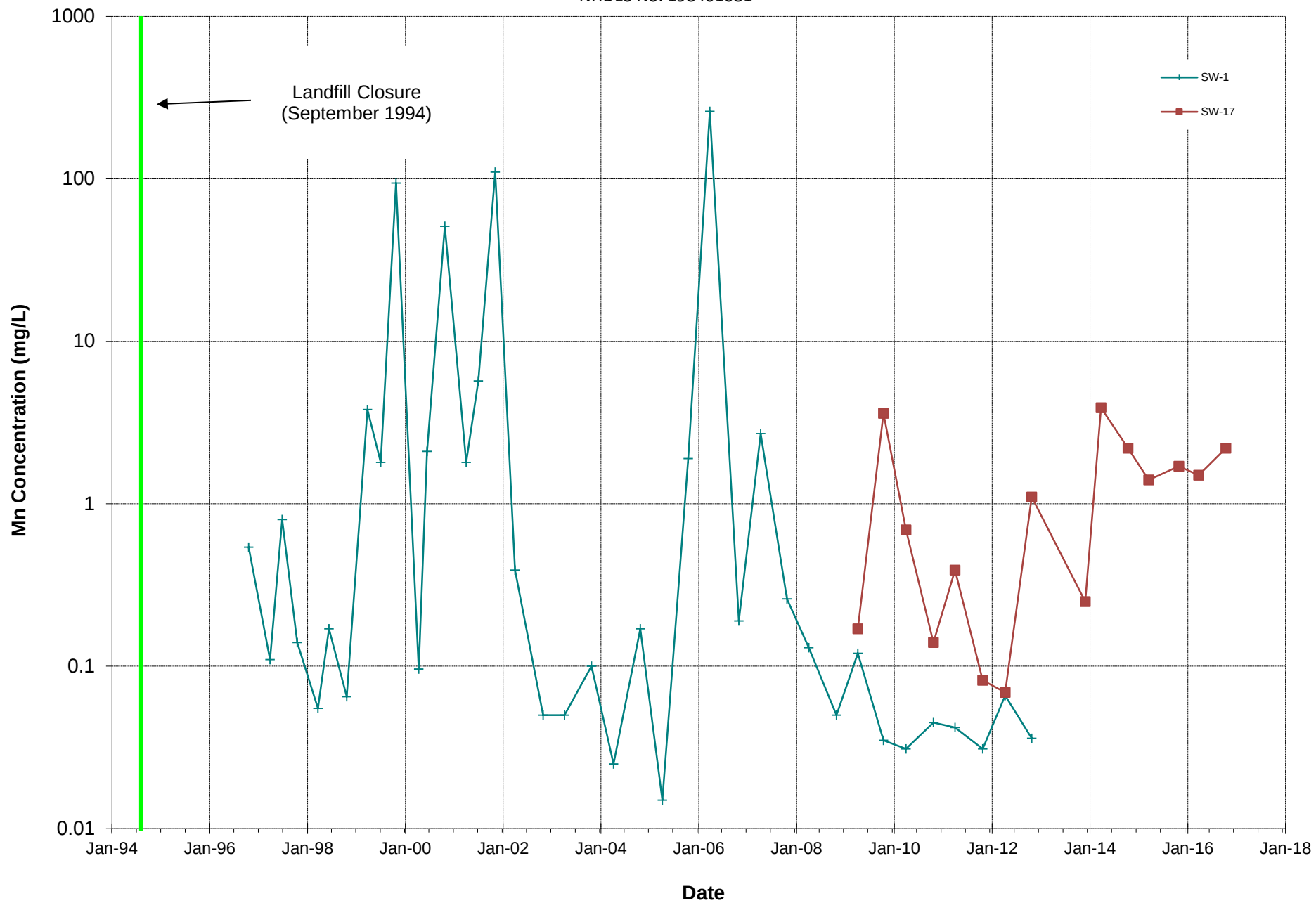
PLOT 3B
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



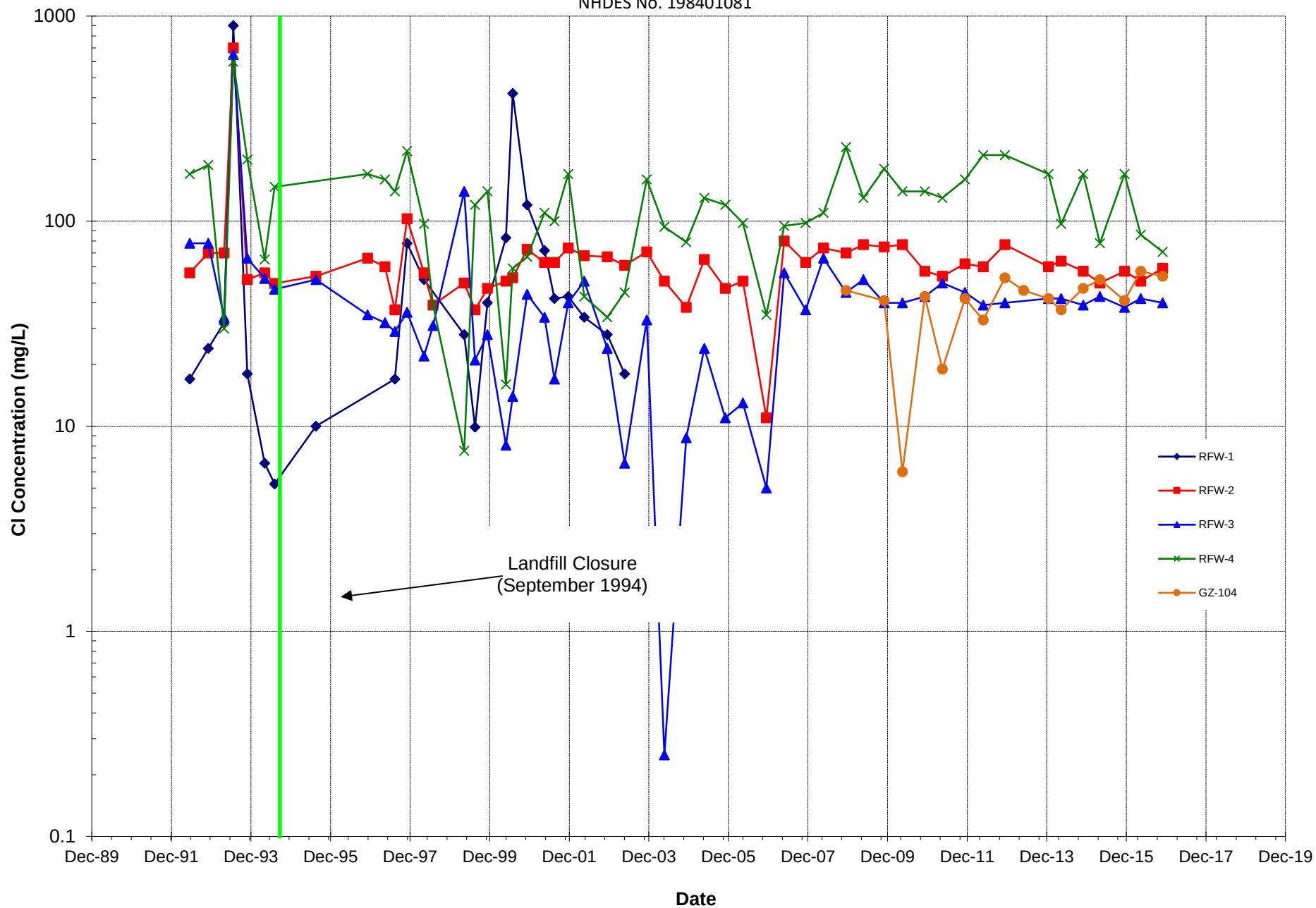
PLOT 3C
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



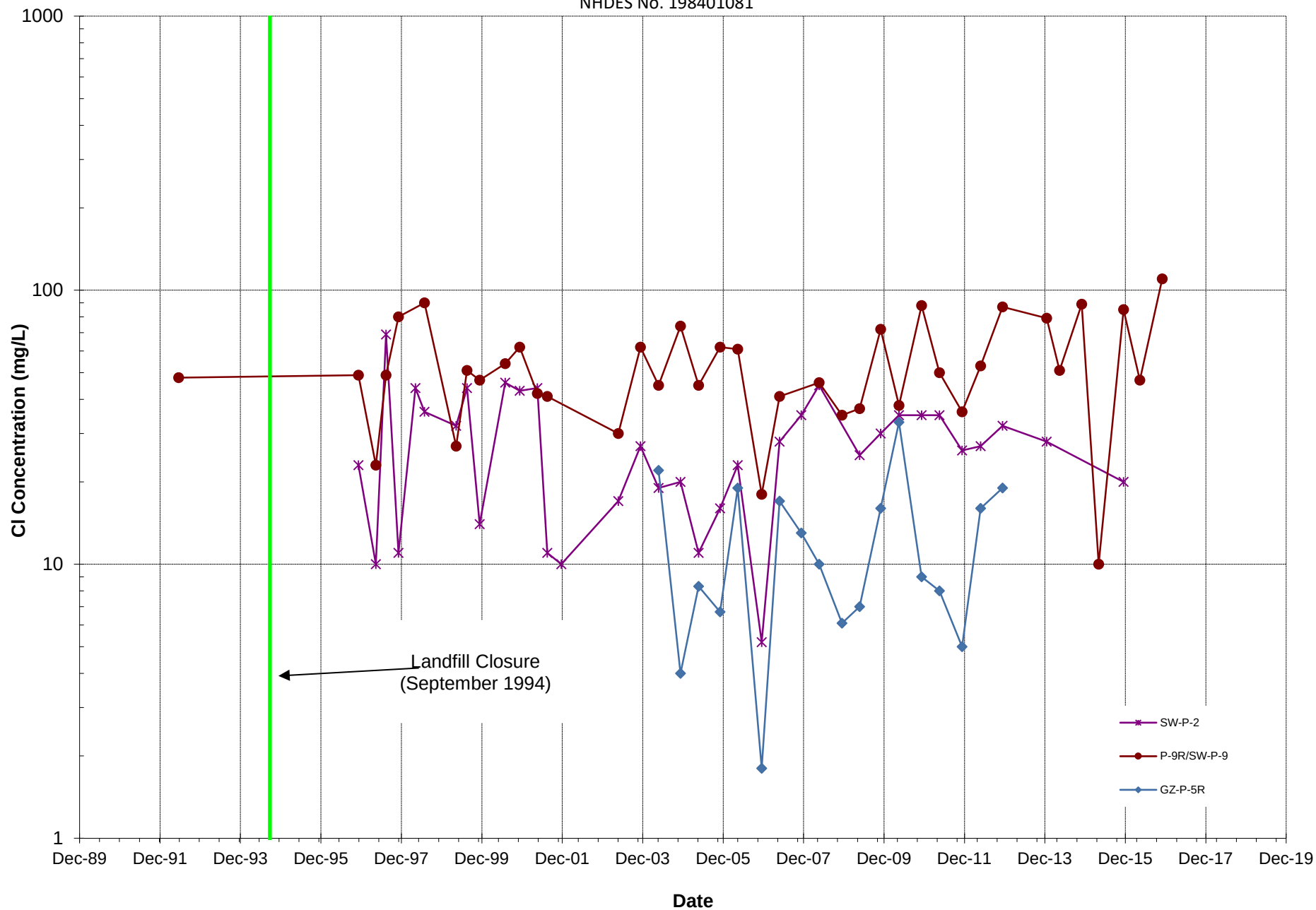
PLOT 3D
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



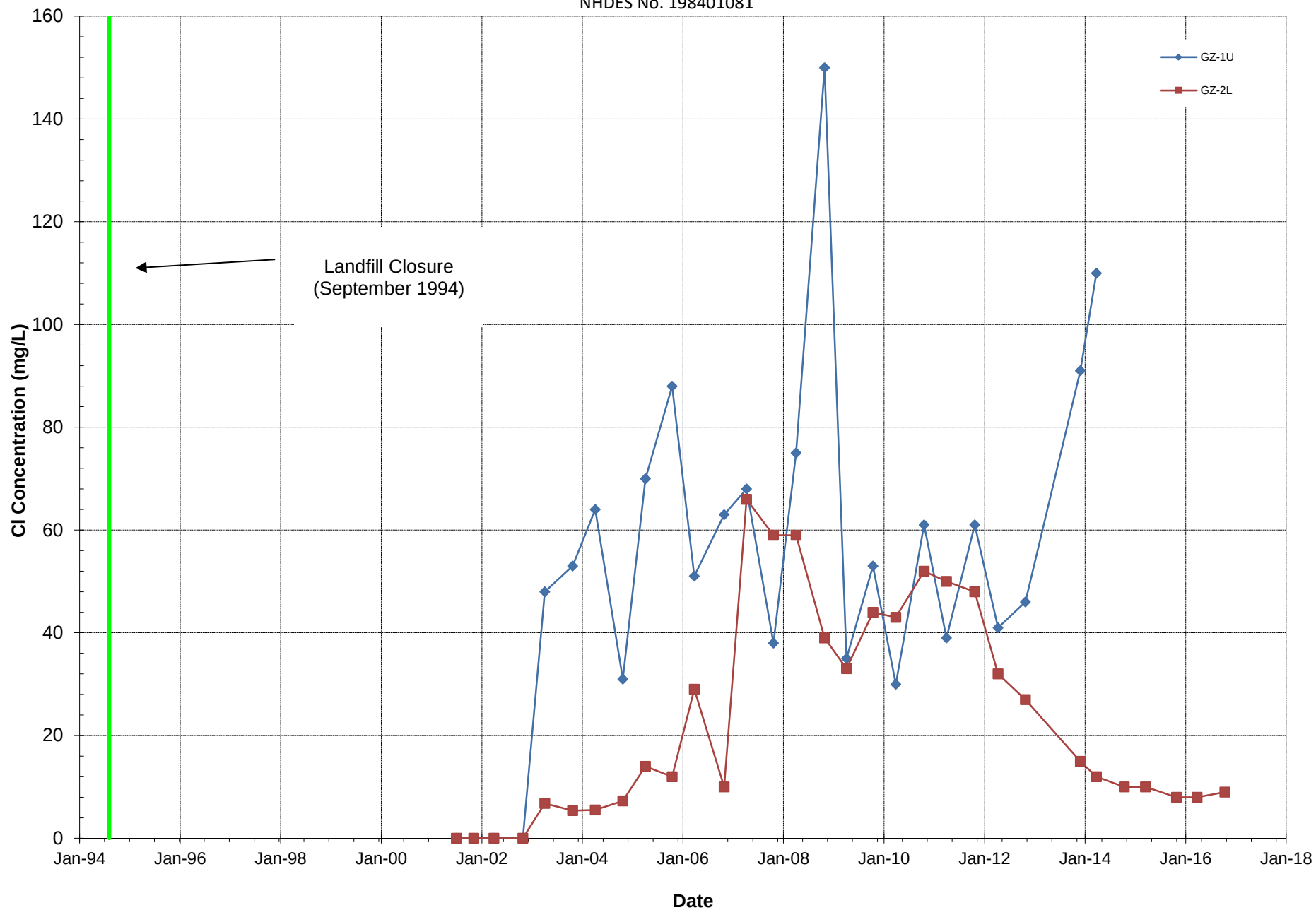
PLOT 4A
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



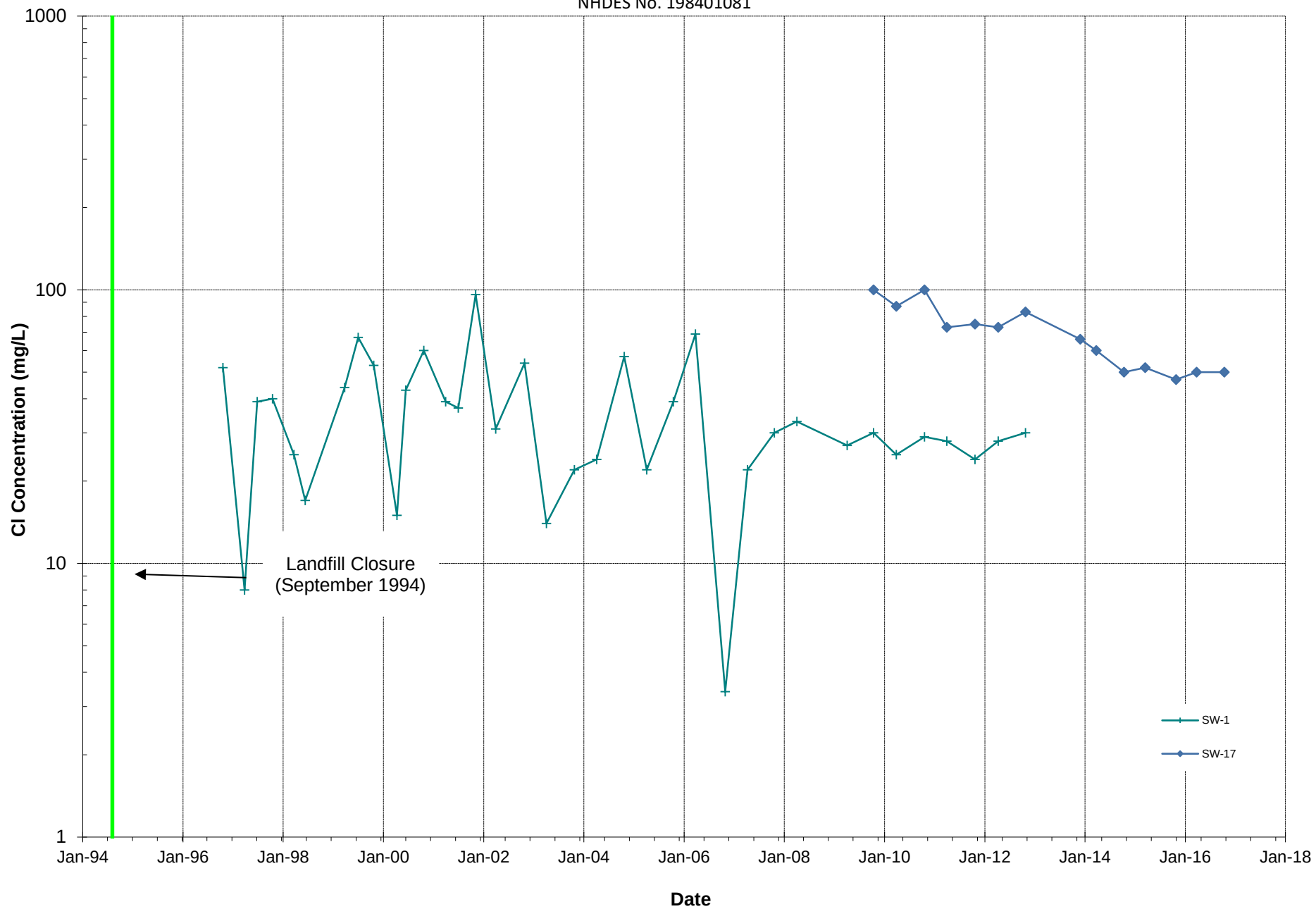
PLOT 4B
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



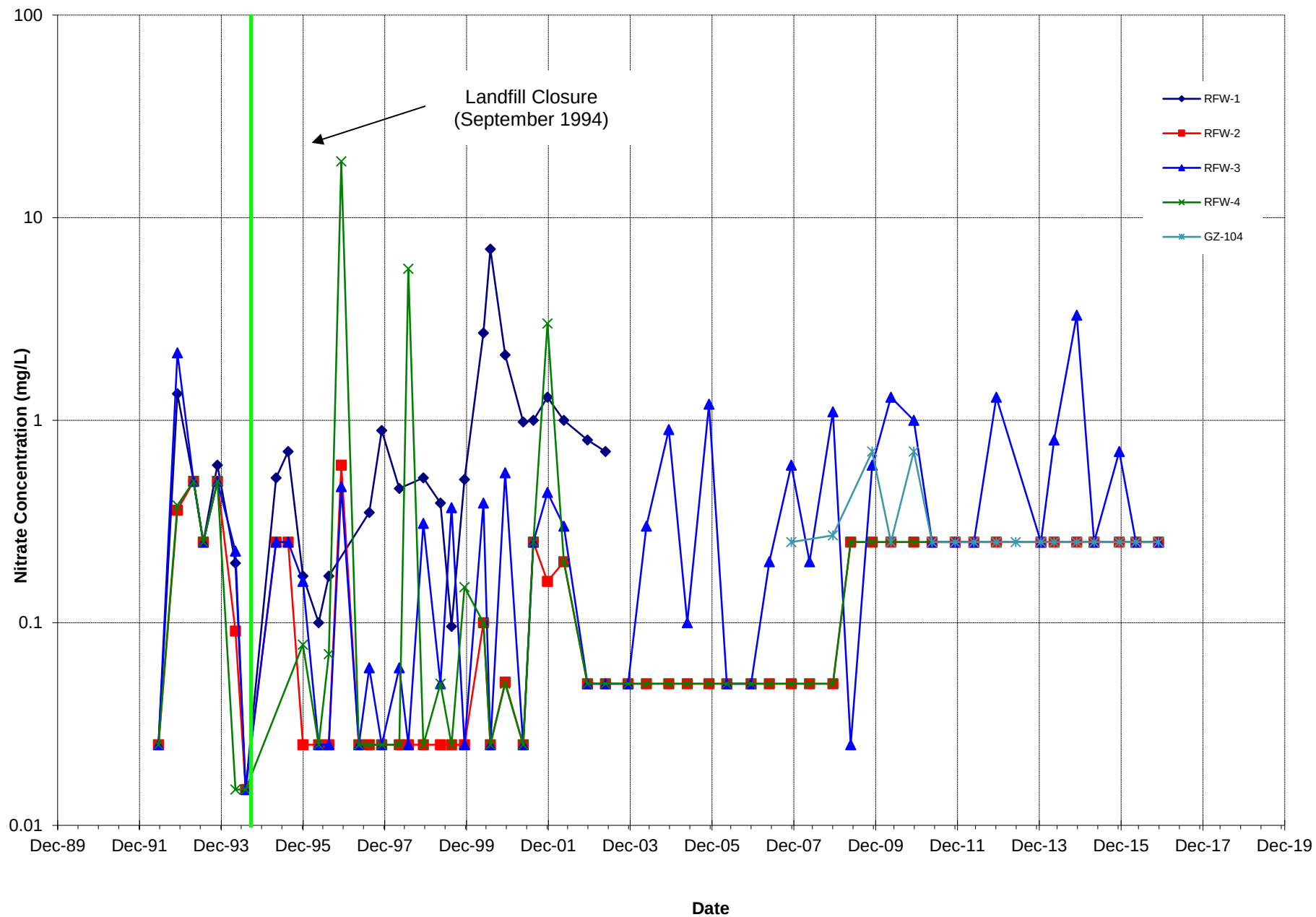
PLOT 4C
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



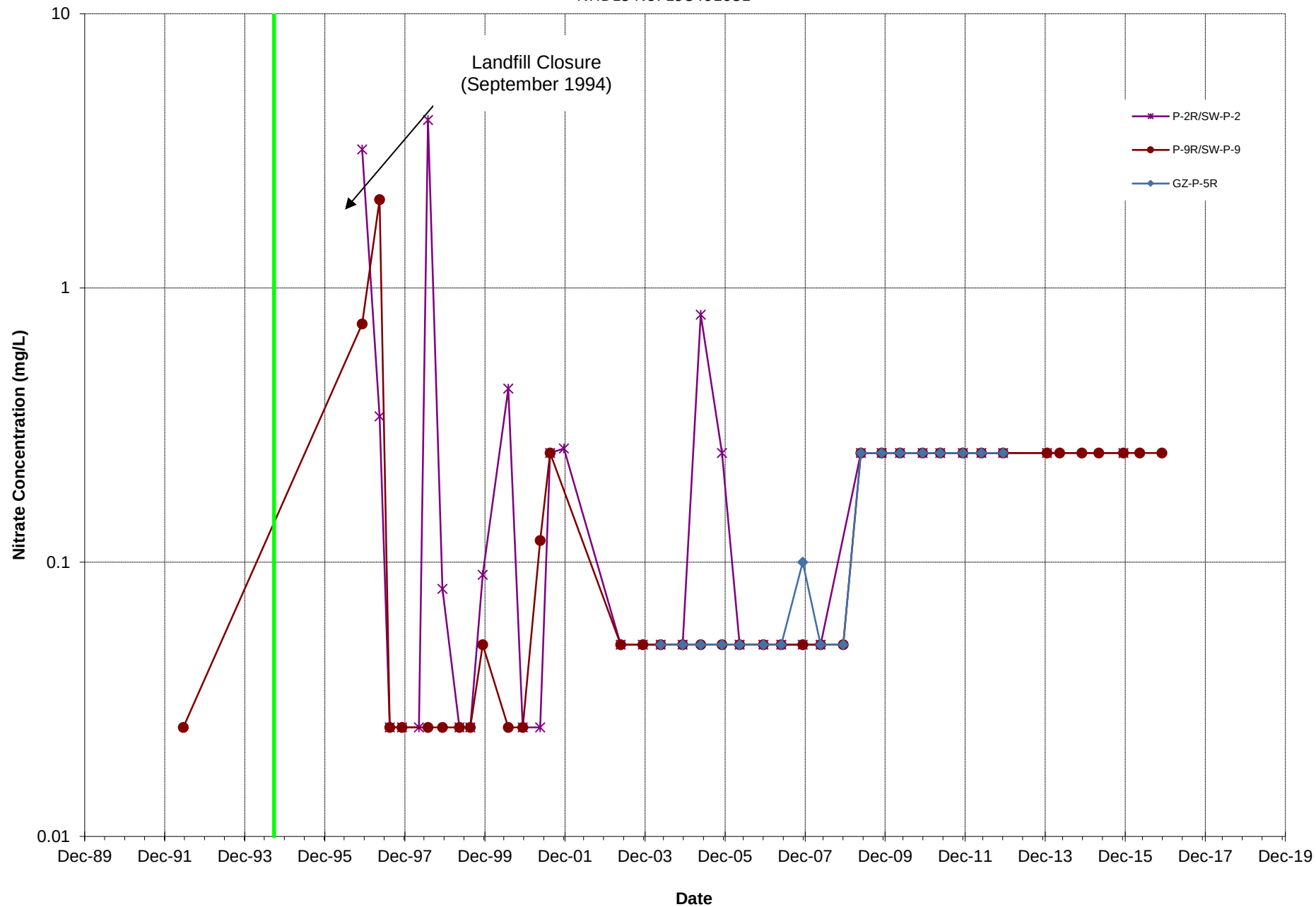
PLOT 4D
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



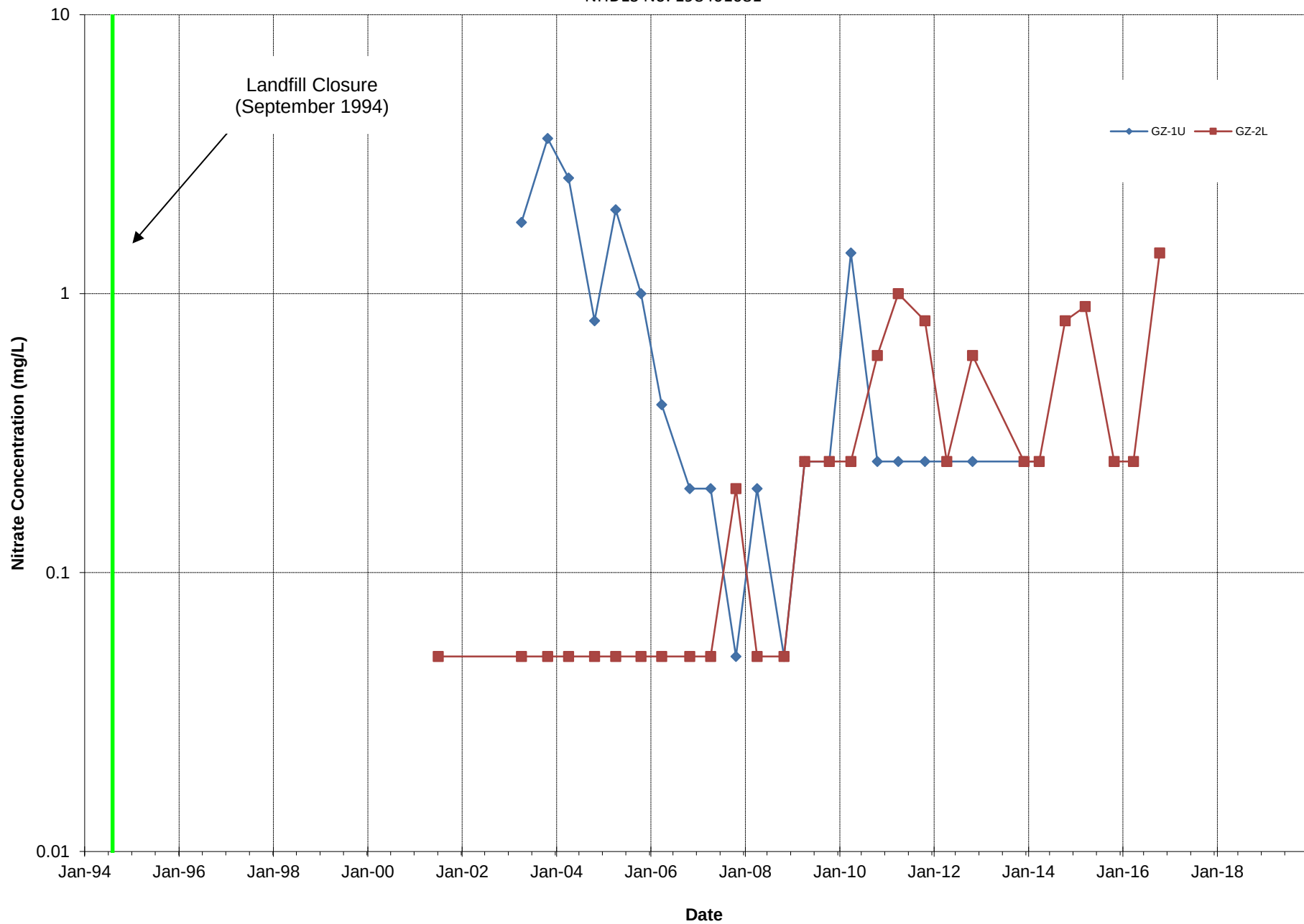
PLOT 5A
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



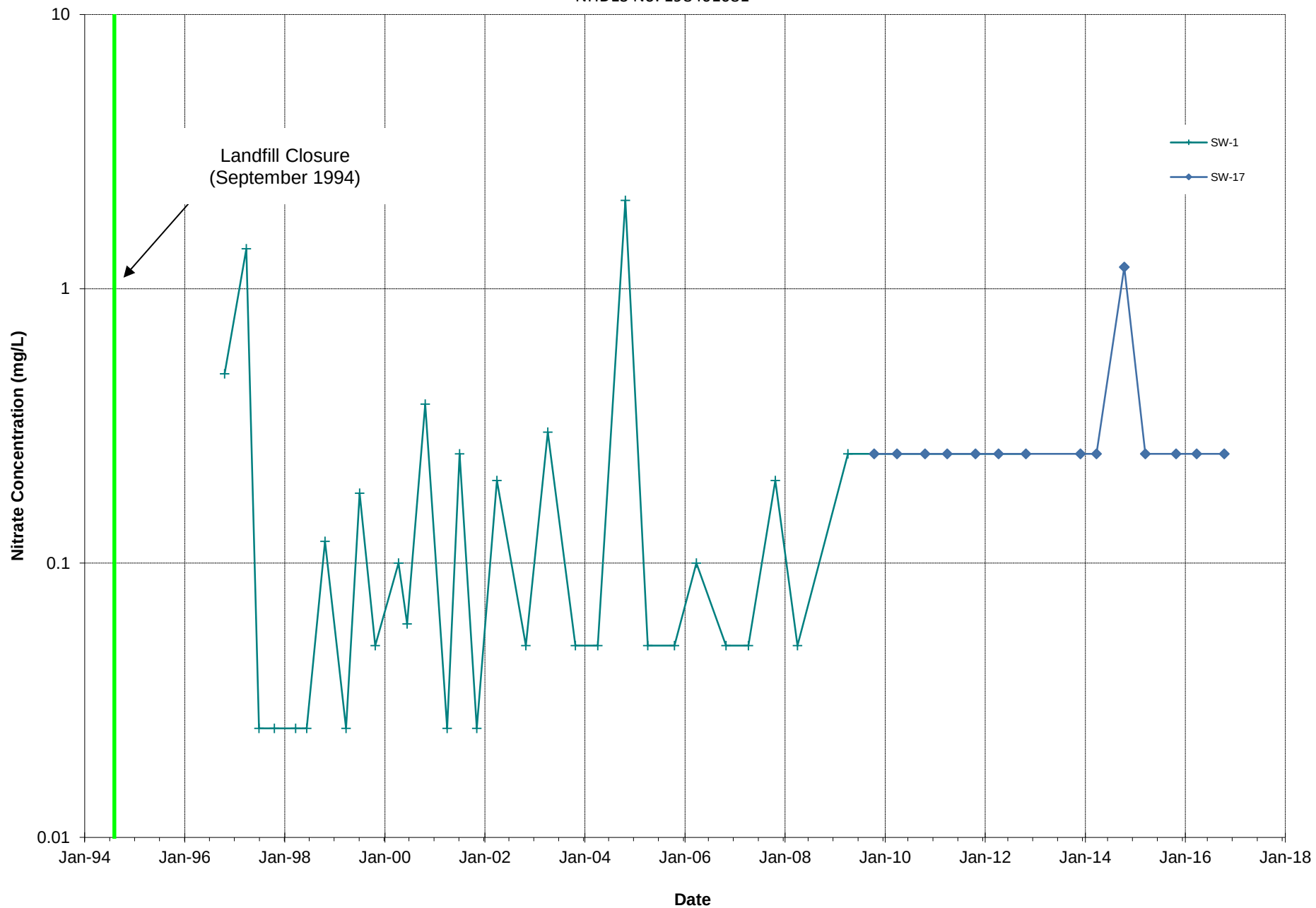
PLOT 5B
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081



PLOT 5C
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081



PLOT 5D
SUMMARY OF CONCENTRATION DATA
Groundwater Sampling Locations
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081





November 2016 Analytical Laboratory Data



Jennifer Mates
Exeter, Town of
Town Office, 13 Newfields Rd.
Exeter, NH 03833-2792



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 162402
Client Identification: Cross Road Landfill | Nov 2016
Date Received: 11/3/2016

Dear Ms. Mates :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

11.11.16
Date

10
of pages (excluding cover letter)



SAMPLE CONDITIONS PAGE

EAI ID#: 162402

Client: Exeter, Town of

Client Designation: Cross Road Landfill | Nov 2016

Temperature upon receipt (°C): 4.3

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

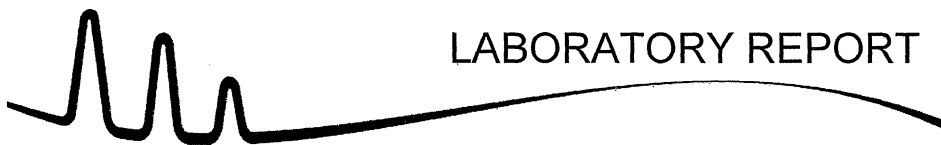
Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
162402.01	RFW-2	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.02	RFW-3	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.03	RFW-4	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.04	GZ-1L	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.05	GZ-2L	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.06	GZ-3L	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.07	GZ-104	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.08	GZ-201	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.09	GZ-202A	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.1	P-9R	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy
162402.11	SW-17	11/3/16	11/2/16	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis. Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th Edition, 1998 and 22nd Edition, 2012
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 2nd edition, 1992



LABORATORY REPORT

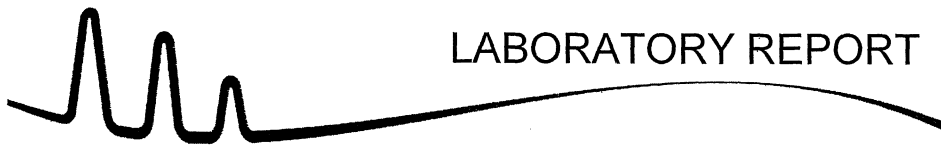
EAI ID#: 162402

Client: Exeter, Town of

Client Designation: Cross Road Landfill | Nov 2016

Sample ID:	RFW-2	RFW-3	RFW-4	GZ-1L				
Lab Sample ID:	162402.01	162402.02	162402.03	162402.04				
Matrix:	aqueous	aqueous	aqueous	aqueous				
Date Sampled:	11/2/16	11/2/16	11/2/16	11/2/16				
Date Received:	11/3/16	11/3/16	11/3/16	11/3/16				
					Units	Analysis		Method Analyst
						Date	Time	
Chloride	59	40	71	120	mg/L	11/04/16	9:31	4500CIE-97 KD
Nitrate-N	< 0.5	< 0.5	< 0.5	1.0	mg/L	11/04/16	9:31	353.2 KD
TKN	4.2	0.6	5.1	< 0.5	mg/L	11/08/16	11:40	4500N _{org} C/N SEL

Sample ID:	GZ-2L	GZ-3L	GZ-104	GZ-201				
Lab Sample ID:	162402.05	162402.06	162402.07	162402.08				
Matrix:	aqueous	aqueous	aqueous	aqueous				
Date Sampled:	11/2/16	11/2/16	11/2/16	11/2/16				
Date Received:	11/3/16	11/3/16	11/3/16	11/3/16				
					Units	Analysis		Method Analyst
						Date	Time	
Chloride	9	18	54	220	mg/L	11/04/16	9:36	4500CIE-97 KD
Nitrate-N	1.4	1.1	< 0.5	2.0	mg/L	11/04/16	9:36	353.2 KD
TKN	3.1	< 0.5	0.9	< 0.5	mg/L	11/08/16	11:40	4500N _{org} C/N SEL



LABORATORY REPORT

EAI ID#: **162402**

Client: **Exeter, Town of**

Client Designation: **Cross Road Landfill | Nov 2016**

Sample ID: GZ-202A P-9R SW-17

Lab Sample ID: 162402.09 162402.1 162402.11

Matrix: aqueous aqueous aqueous

Date Sampled: 11/2/16 11/2/16 11/2/16

Date Received: 11/3/16 11/3/16 11/3/16

Chloride	38	110	50
Nitrate-N	< 0.5	< 0.5	< 0.5
TKN	0.9	2.4	< 0.5

Units	Analysis		Method	Analyst
	Date	Time		
mg/L	11/04/16	9:55	4500CIE-97	KD
mg/L	11/04/16	9:55	353.2	KD
mg/L	11/08/16	11:40	4500N _{org} C/N	SEL



QC REPORT

EAI ID#: 162402

Client: Exeter, Town of

Client Designation: Cross Road Landfill | Nov 2016

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Chloride	< 1	24 (98 %R)	24 (97 %R) (0 RPD)	mg/L	11/4/16	90 - 110	20	4500CIE-97
Nitrate-N	< 0.5	4.9 (98 %R)	4.7 (95 %R) (3 RPD)	mg/L	11/4/16	90 - 110	20	353.2
TKN	< 0.5	10 (102 %R)	9.9 (99 %R) (2 RPD)	mg/L	11/8/16	90 - 111	20	4500N _{org} C/N

Samples were analyzed within holding times unless noted on the sample results page.

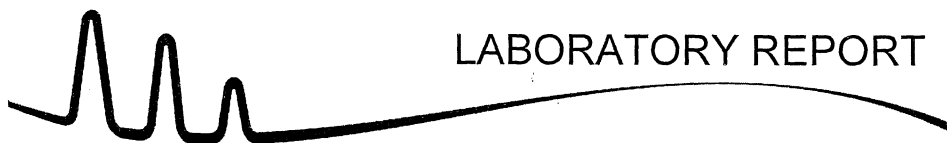
Instrumentation was calibrated in accordance with the method requirements.

The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

*!! Flagged analyte recoveries deviated from the QA/QC limits.



LABORATORY REPORT

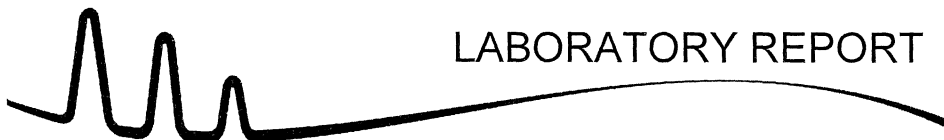
EAI ID#: 162402

Client: **Exeter, Town of**

Client Designation: **Cross Road Landfill | Nov 2016**

Sample ID:	RFW-2	RFW-3	RFW-4	GZ-104					
Lab Sample ID:	162402.01	162402.02	162402.03	162402.07					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	11/2/16	11/2/16	11/2/16	11/2/16	Analytical		Date of		
Date Received:	11/3/16	11/3/16	11/3/16	11/3/16	Matrix	Units	Analysis	Method	Analyst
Arsenic	0.007	0.015	0.089	0.16	AqDis	mg/L	11/8/16	200.8	DS
Iron	4.9	16	55	20	AqDis	mg/L	11/8/16	200.8	DS
Manganese	0.76	2.8	3.9	3.0	AqDis	mg/L	11/8/16	200.8	DS

Sample ID:	GZ-201	GZ-202A	P-9R						
Lab Sample ID:	162402.08	162402.09	162402.1						
Matrix:	aqueous	aqueous	aqueous						
Date Sampled:	11/2/16	11/2/16	11/2/16		Analytical		Date of		
Date Received:	11/3/16	11/3/16	11/3/16		Matrix	Units	Analysis	Method	Analyst
Arsenic	< 0.001	0.15	0.055		AqDis	mg/L	11/8/16	200.8	DS
Iron	< 0.05	30	14		AqDis	mg/L	11/8/16	200.8	DS
Manganese	0.71	2.2	1.2		AqDis	mg/L	11/8/16	200.8	DS



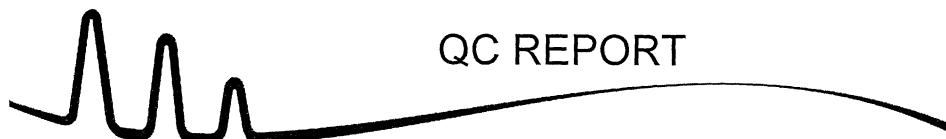
LABORATORY REPORT

EAI ID#: **162402**

Client: **Exeter, Town of**

Client Designation: **Cross Road Landfill | Nov 2016**

Sample ID:	GZ-1L	GZ-2L	GZ-3L	SW-17					
Lab Sample ID:	162402.04	162402.05	162402.06	162402.11					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	11/2/16	11/2/16	11/2/16	11/2/16	Analytical Matrix	Units	Date of Analysis	Method	Analyst
Date Received:	11/3/16	11/3/16	11/3/16	11/3/16					
Arsenic	0.005	0.003	0.006	0.004	AqTot	mg/L	11/8/16	200.8	DS
Iron	2.2	1.9	9.9	0.18	AqTot	mg/L	11/8/16	200.8	DS
Manganese	0.16	11	0.26	2.2	AqTot	mg/L	11/8/16	200.8	DS



QC REPORT

EAI ID#: **162402**

Client: **Exeter, Town of**

Client Designation: **Cross Road Landfill | Nov 2016**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.001	1.0 (100 %R)	NA	mg/L	11/8/16	85 - 115	20	200.8
Iron	< 0.05	11 (103 %R)	NA	mg/L	11/8/16	85 - 115	20	200.8
Manganese	< 0.005	0.94 (94 %R)	NA	mg/L	11/8/16	85 - 115	20	200.8

Samples were analyzed within holding times unless noted on the sample results page.

Instrumentation was calibrated in accordance with the method requirements.

The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

*! Flagged analyte recoveries deviated from the QA/QC limits.

CHAIN-OF-CUSTODY RECORD

162402 ∞

1 of 3 PA 11/4/16

Sample IDs	Date/Time <i>Composites need start and stop dates/times</i>	Matrix	Parameters and Sample Notes	# of containers
RFW-2	11-2-16 12:35	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
RFW-3	11-2-16 13:20	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
RFW-4	11-2-16 12:25	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
GMW-11		aqueous Grab or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn NO SAMPLE - DRY	
☐ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☐				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 31

Project Name Cross Road Landfill | Nov 2016

State NH

Client (Pro Mgr) Jennifer Mates

Customer Exeter, Town of

Address Town Office, 13 Newfields Rd.

City Exeter NH 03833-2792

Phone 778-0591

Fax 772-4709

Email: jmates@exeternh.gov

Direct

Results Needed by: Preferred date _____

Notes:

Attn sampler: Auto chain of custody provided for your convenience, please review for accuracy and write in any needed changes

QC deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ PC

Reporting Options

- ☐ HC ☐ NO FAX
☒ EDD PDF ☐ Partial FAX
☒ EDD email ☒ PDF Invoice
☒ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login Confirmation

PO# 4335222

Quote#: 1013778

Temp 43°C

Ice Y ☒ N ☐

Samples Collected by: BW

Relinquished by

Date/Time

Received by

PS 11-3-16 1:39

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc.

www.eailabs.com | 800.287.0525 | customerservice@eailabs.com

CHAIN-OF-CUSTODY RECORD

162402

EXENH

2 of 3 PA 11/4/16

Sample IDs	Date/Time Composites need start and stop dates/times	Matrix	Parameters and Sample Notes	# of containers
GZ-1L	11-2-16 14:15	aqueous (Grab) or Comp	AqTot/CI/NO3/TKN AqDis/ICPMets.As.Fe.Mn Aq.Tot	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL (HNO ₃) (H ₂ SO ₄) NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☐				
GZ-2L	11-2-16 12:45	aqueous (Grab) or Comp	AqTot/CI/NO3/TKN AqDis/ICPMets.As.Fe.Mn Aq.Tot	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL (HNO ₃) (H ₂ SO ₄) NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☐				
GZ-3L	11-2-16 13:05	aqueous (Grab) or Comp	AqTot/CI/NO3/TKN AqDis/ICPMets.As.Fe.Mn Aq.Tot	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL (HNO ₃) (H ₂ SO ₄) NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☐				
GZ-104	11-2-16 13:45	aqueous (Grab) or Comp	AqTot/CI/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL (HNO ₃) (H ₂ SO ₄) NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 31

Project Name Cross Road Landfill | Nov 2016

State NH

Client (Pro Mgr) Jennifer Mates

Customer Exeter, Town of

Address Town Office, 13 Newfields Rd.

City Exeter NH 03833-2792

Phone 778-0591

Fax 772-4709

Email: jmates@exeternh.gov

Direct

Results Needed by: Preferred date _____

Notes:

Attn sampler: Auto chain of custody provided for your convenience, please review for accuracy and write in any needed changes

QC deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ PC

Reporting Options

- ☐ HC ☐ NO FAX
☒ EDD PDF ☐ Partial FAX
☒ EDD email ☒ PDF Invoice
☒ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login Confirmation

PO# 4335222

Quote#: 1013778

Temp 4.3°C

Ice Y ☒ N ☐

Samples Collected by: BW
 11-3-16 11:30 11-3-16 11:30

Relinquished by PS 11-3-16 1:05 Received by

Relinquished by Date/Time Received by

Eastern Analytical, Inc.

www.eailabs.com | 800.287.0525 | customerservice@eailabs.com

CHAIN-OF-CUSTODY RECORD

162402

EXENH

10

Sample IDs	Date/Time Composites need start and stop dates/times	Matrix	Parameters and Sample Notes	# of containers
GZ-201	11-2-16 14:00	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
GZ-202A	11-2-16 14:30	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
P-9R	11-2-16 12:05	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN AqDis/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☒				
SW-17	11-2-16 13:35	aqueous <u>Grab</u> or Comp	AqTot/Cl/NO3/TKN/ICPMets.As.Fe.Mn	3
☒ Sampler confirms ID and parameters are accurate Circle preservative/s: HCL <u>HNO₃</u> <u>H₂SO₄</u> NaOH MEOH Na ₂ S ₂ O ₃ ICE Dissolved Sample Field Filtered ☐				

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 31

Project Name Cross Road Landfill | Nov 2016

State NH

Client (Pro Mgr) Jennifer Mates

Customer Exeter, Town of

Address Town Office, 13 Newfields Rd.

City Exeter NH 03833-2792

Phone 778-0591

Fax 772-4709

Email: jmates@exeternh.gov

Direct

Results Needed by: Preferred date _____

Notes:

Attn sampler: Auto chain of custody provided for your convenience, please review for accuracy and write in any needed changes

QC deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ PC

Reporting Options

☐ HC ☐ NO FAX
☒ EDD PDF ☐ Partial FAX
☒ EDD email ☒ PDF Invoice
☒ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login Confirmation

PO# 4335222

Quote#: 1013778

Temp 4.3°C

Ice YES ☐ NO ☒

Samples Collected by: BW

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc.

www.eailabs.com | 800.287.0525 | customerservice@eailabs.com