RDMS DocID 109651

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)

WATER PROTECTION AND LAND REUSE
JUL - 9 2010
REMEDIATION DIVISION

Current Human Exposures Under Control

**Facility Name:** Doncasters (Former INCO)
**Facility Address:** 36 Spring Lane, Farmington, CT
**Facility EPA ID #:** CTD059831479

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

X___ If yes - check here and continue with #2 below.

_____ If no - re-evaluate existing data, or

_____ if data are not available skip to #6 and enter "IN" (more information needed) status code.

## BACKGROUND

### Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

### Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

### Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

### Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air media known or reasonably suspected to be **"contaminated"**[1] above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

| | Yes | No | ? | Rationale / Key Contaminants |
|---|---|---|---|---|
| Groundwater | X | | | Hexavalent chromium, nickel |
| Air (indoors)[2] | | X | | |
| Surface Soil (e.g., <2 ft) | X | | | Hexavalent chromium, nickel |
| Surface Water | | X | | |
| Sediment | | X | | |
| Subsurf. Soil (e.g., >2 ft) | X | | | Hexavalent chromium, nickel |
| Air (outdoors) | | X | | |

_____ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

_____ If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

_____ If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s): **Soil** – Residual nickel, and hexavalent and total chromium is present in soils beneath the eastern portions of the building, the result of releases of metal-containing brine solution from "Tank No. 15". This area is subject to an Environmental Land Use Restriction (ELUR), which prohibits the removal of the overlying building. Concentrations of nickel and chromium are documented on page 6 of the February 1997 Environmental Condition Assessment Form (ECAF), (attached). Other releases (nickel) from former facility operations to soils in the electro-chemical machining (ECM) sludge staging area was remediated via excavation in 1994.
**Groundwater** – Overburden groundwater has been documented to have been affected by hexavalent chromium. The present condition of the groundwater is summarized on Table 2 of the 2009 Semi-Annual Natural Attenuation Groundwater Monitoring Report (see attached). The affected overburden groundwater (located primarily in the deep overburden) has not reached any adjacent parcel.
**Surface Water** – Overburden groundwater has not reached or affected surface water, as noted in the 2009 Report (noted above). Groundwater appears to have reached steady state, and no movement of contamination in the overburden aquifer has been observed for a period of at least five (5) years.

Footnotes:

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

| **"Contaminated" Media** | Residents | Workers | Day-Care | Construction | Trespassers | Recreation | Food[3] |
|---|---|---|---|---|---|---|---|
| Groundwater | ___ | ___ | ___ | **No** | | | ___ |
| ~~Air (indoors)~~ | ___ | ___ | ___ | | | | |
| Soil (surface e.g., <2 ft | ___ | ___ | ___ | **No** | ___ | ___ | ___ |
| ~~Surface Water~~ | ___ | ___ | | | ___ | ___ | ___ |
| ~~Sediment~~ | ___ | ___ | | | ___ | ___ | ___ |
| Soil (subsurface e.g., >2 ft) | | | | **No** | | | ___ |
| ~~Air (outdoors)~~ | ___ | ___ | ___ | ___ | ___ | | |

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated") as identified in #2 above.

2. enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

__X__ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

_____ If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

_____ If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code

Rationale and Reference(s): Groundwater condition is essentially "static", with insufficient mass loading of contaminants at the source to affect downgradient or off-site receptors. Affected soil beneath competent slab. Institutional controls in place to preclude disturbance. Reference: Section 4.2.1 of the 1999 "Supplemental Investigation Report, New England Airfoil Facility, 36 Spring Lane, Farmington, CT (portions attached)

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4 Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **"significant"**[4] (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

_____ If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

Rationale and Reference(s): _____

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

5 Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be "unacceptable")- continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

_____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code

Rationale and Reference(s): _____

**Current Human Exposures Under Control**
**Environmental Indicator (EI) RCRIS code (CA725)**

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

   _X_ YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the Doncasters (former New England Airfoil) Facility, EPA ID # (CTD059831479, located at (36 Spring Lane, Farmington, CT) under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

   ____ NO - "Current Human Exposures" are NOT "Under Control."

   ____ IN - More information is needed to make a determination.

Prepared by (signature) _____ Date July 16, 2010
(print) Robert J. Drake, PE, Ph.D., LEP
(title) Senior Project Manager

DEP reviewed by (signature) Sandy Brunelli Date July 26, 2010
(print) SANDY BRUNELLI
(title) EA3

DEP Supervisor (signature) David Ringquist Date 9-27-10
(print) DAVID RINGQUIST
(title) SEA

(EPA Region or State) CTDEP

Reviewed and Approved
Chief
RCRA Corrective Action
USEPA 11/30/10

All References may be found at:
Connecticut Department of Environmental Protection located at 79 Elm Street, Hartford, Connecticut

DEP file room contact telephone and e-mail numbers

Name: Terry Parker
Phone: 860 424-3936
E-mail: terry.parker@ct.gov

**FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.**

## Part V: Contaminants in the Environment (cont.)

6. List for each release area the codes for contaminants of concern, and for each contaminant the following: the number of samples in which the contaminant was detected / the maximum and mean concentrations of the contaminant / and depth at which the maximum concentration was detected: (Check box if an addendum table is used ☒ ) Reference Addendum No. 7

Provide site name, address and town from Part I, Item I: INCO Engineering Products Inc.
36 Spring Lane Farmington, CT. 06032

| Release Area | Contaminants of concern tested | Contaminants in soil/waste | Contaminants in ground water | Contaminants in surface water |
|---|---|---|---|---|
| Brine solution Tank No. 4<br>(Northeast corner of bldg.) | Cl | ND | 4 GW samples<br>30,000mg/l max.<br>10,000mg/l mean | 6 samples<br>30.2mg/l max.<br>11.0mg/l mean |
| Brine solution Tank No. 15<br>(East side of bldg.) | Cl | 6 samples, 0-3ft.<br>1,200mg/kg max.<br>697mg/kg mean | 2 samples<br>3,500mg/l max.<br>2,500mg/l mean | ND |
| | Na | 6 samples, 0-3ft.<br>2,100mg/kg max.<br>1,221mg/kg mean | ND | ND |
| | Cr | 6 samples, 0-3ft.<br>1,110mg/kg max.<br>463mg/kg mean | ND | ND |
| | Ni | 6 samples, 0-3ft.<br>2,350mg/kg max.<br>854mg/kg mean | ND | ND |

# *SUPPLEMENTAL INVESTIGATION REPORT*

*New England Airfoil Facility*
*36 Spring Lane*
*Farmington, Connecticut*

*August 17, 1999*

Prepared For:

**INMETCO, Inc.**
**c/o INCO United States, Inc.**
PO Box 720
245 Portersville Road
Ellwood City, Pennsylvania 16117

Prepared By:

**ENVIRONMENTAL RESOURCES MANAGEMENT, Inc.**
74 Batterson Park Road
Farmington, Connecticut 06032

## 4.0 *EVALUATION OF POTENTIAL RECEPTORS AND CONTAMINATION RISK*

The following issues are addressed in this Section:

- The potential for the presence of an on-going release of contamination at the Site;
- The identification of critical potential receptors of the identified contamination; and
- An evaluation of the likelihood of exposure/risk associated with this contamination.

## 4.1 *EVALUATION OF ON-GOING RELEASE POTENTIAL*

The defined area of residual soil contamination (see "Decision Document", Appendix F) is an area of approximately 50 feet by 210 feet located beneath the eastern wing of the building. This is an area where a brine solution was released from facility operations, and where chromium and nickel are assumed to exceed Direct Exposure Criteria (DEC) and Pollutant Mobility Criteria (PMC). This release area is the subject of an Environmental Land Use Restriction (ELUR).

As noted in the Decision Document, "Such polluted soil does not pose a risk to human health provided the building is not demolished and soil is not excavated or disturbed such that people come into contact with it. Such polluted soil does not pose a risk to groundwater quality provided the building is not demolished".

Based on the foregoing, it appears that there is residual contamination in soils on the Site, but that on-going releases are unlikely, due to the impervious cover provided by the building and surrounding pavement. The tanks from which the historical release of brine occurred have been removed, and no longer serve as an on-going source of contaminants. Review of the Conceptual Model of the Aquifer (Section 3.0) indicates that recharge for the overburden aquifer is derived primarily from areas up-gradient of the identified release areas. The identified release areas, and the areas affected by the contaminant plume in the overburden aquifer, are located beneath buildings or impervious pavement. No direct recharge in these areas, which could mobilize soil contaminants, is indicated.

## 4.2 *CRITICAL POTENTIAL RECEPTORS*

ERM has identified the following critical potential receptors for the contamination identified on the Site:

- Employees of the active facility, who may be exposed to residual contaminants in the Site soils;

- Scott Swamp Brook, the watercourse located east of the Site, which is the assumed discharge location for the overburden aquifer; and

- Connecticut Spring, which may initiate a groundwater recovery/treatment system in the near future, and could be affected by contaminants in the overburden aquifer.

The CT DEP also indicated that various off-site water supply wells, located over 1,000 feet to the south on Spring Lane, should be evaluated as well. However, as no contaminant transport in the bedrock aquifer is indicated, there is no transport mechanism for the contamination to reach these wells, and no further evaluation is indicated.

### *4.2.1 Employees of the Facility*

The primary means of contact for the employees at the facility is direct exposure (dermal and/or ingestion) to contaminated Site soils. However, as noted in the ELUR Decision Document, the presence of the building and the restrictions on its removal and/or disturbance of the identified contaminated soils will serve to prevent such exposure. So long as the ELUR remains in force and its limitations complied with, there is no indication of significant risk associated with the contaminated soil.

### *4.2.2 Scott Swamp Brook*

The concern with this potential receptor is the discharge of brine and/or chromium and nickel to this water body from the overburden aquifer. Based on ERM's analysis of contaminant transport in the overburden aquifer, there is no documented lateral or downgradient movement of significant concentrations of contaminants in the overburden aquifer. The most critical parameter, hexavalent chromium, can be seen to have reached steady state in the overburden aquifer (see Figure 6). Historically, samples collected from Scott Swamp Brook have shown no evidence of brine or chromium.

Based on this absence of transport in the overburden aquifer, there appears to be no significant risk to Scott Swamp Brook.

### *4.2.3 Connecticut Spring*

The concern with this potential receptor is the transport of brine in the capture zone of the groundwater recovery system anticipated for this property. Here, the data indicates that there is no significant transport of contaminants in the overburden aquifer onto this adjacent property. Further, the overburden aquifer along the property boundary is extremely thin, and frequently non-existent. Under these conditions, future

transport of contaminants through the overburden aquifer onto the Connecticut Spring property is not considered likely.

The absence of significant flow in the bedrock aquifer suggests that transport through this medium would be similarly constrained.

Based on the foregoing, there appears to be no significant risk of transport of brine or metals through the overburden or bedrock aquifers onto Connecticut Spring property in quantities which would affect the performance of the anticipated groundwater recovery system.

In summary, the documented soil contamination is isolated form direct exposure through the use of the ELUR, while significant groundwater contamination has not (and appears not to be likely to) spread beyond the property boundary.

Environmental
Resources
Management

77 Hartland Street, Suite 300
East Hartford, CT 06108
(860) 466-8500
(860) 466-8501 (fax)

1 February 2010
Reference: 0101729

Mr. Rich Krystanowicz
Director, Human Resources
Doncasters, Inc.
36 Spring Lane
Farmington, Connecticut 06032

*Re: Semi-Annual Natural Attenuation Groundwater Monitoring Report – Summer & Winter 2009*
*New England Airfoil Facility*
*36 Spring Lane, Farmington, Connecticut*

Dear Mr. Krystanowicz:

ERM Consulting & Engineering, Inc. (ERM) is pleased to submit this *Semi-Annual Natural Attenuation Groundwater Monitoring Report* for the New England Airfoil Facility located at 36 Spring Lane in Farmington, Connecticut (the "Site"). This letter report summarizes the current and historical groundwater quality data, describes the calculated direction of groundwater flow, and provides an assessment of current progress of the natural attenuation process.

## *REVIEW OF MONITORING PROGRAM*

The revised (and approved) Natural Attenuation Monitoring Program (NAMP) consists of the semi-annual collection and analysis of samples from the following locations:

- *Monitoring Wells* MW-6a, MW-8, MW-9, and MW-13.

Sampling of these wells was conducted on July 8 and December 11, 2009. Prior to collection of groundwater samples, groundwater elevations were determined in all accessible on-site and off-site wells. Bedrock elevations were not determined prior to collection of groundwater samples due to accessibility issues. The water level data determinations are included in the attached Table 1.

Laboratory analysis was conducted as follows:

- Sodium, chloride, soluble chromium, and hexavalent chromium at wells MW-6A, MW-9, and MW-13; and
- Total Petroleum Hydrocarbons (TPH) at MW-8 and MW-13.

*FINDINGS AND ANALYSIS*

The following is a summary of the notable observations during the July and December 2009 natural attenuation monitoring events.

*Groundwater Flow Direction*

Figure 1 and Figure 2 show the overburden water table elevation contours for July and December, respectively, flowing to the southeast, similar to historical sampling events.

*Groundwater Analytical Results*

The analytical results from the NAMP sampling and historical analytical results can be found in the attached Table 2. As was the case during the previous sampling events, water samples contained excessive amounts of silt and other fine materials. All samples were filtered in the laboratory and all reported results reflect soluble concentrations only. Based on this data, the following observations are made:

- Soluble chromium was detected in MW-9 and MW-6a at concentrations above the GA Groundwater Protection Criteria (GWPC) of 0.05 milligrams per liter (mg/L) for the July and December 2009 sampling events, respectively. Analytical results for the July 2009 sampling event indicated a decrease in soluble chromium concentrations in groundwater samples collected from MW-6a, MW-9 and MW-13 relative to the previous December 2008 sampling event, however, the concentration of soluble chromium in groundwater samples collected from MW-9 remained above the GWPC at 0.172 mg/L. Analytical results for the December 2009 sampling event indicated an increase in soluble chromium concentrations in groundwater samples collected from MW-6a and MW-13, where the MW-6a sample exceeded the GWPC at 0.0522 mg/L and a decrease in soluble chromium concentrations for the MW-9 sample below laboratory detection limits.

- Hexavalent chromium was detected in groundwater samples collected from MW-6a, MW-9 and MW-13 at concentrations in excess of the SWPC of 0.11 mg/L for the July 2009 sampling event and was not detected in excess of the SWPC of 0.11 mg/L for the December 2009 sampling event. Analytical results for the July 2009 sampling event indicated an increase in hexavalent chromium concentrations in groundwater samples collected from MW-13, a decrease in hexavalent chromium concentrations in groundwater samples collected from MW-9 and hexavalent concentrations remained unchanged in groundwater samples collected from MW-6a relative to the previous December 2008 sampling event. Analytical results for the December 2009 sampling event indicated a decrease in hexavalent chromium concentrations in groundwater samples collected from MW-6a, MW-9 and MW-13 to below the SWPC of 0.11 mg/L.

- As indicated by analytical results, TPH was detected above laboratory Method Detection Limits (MDLs), normally the same value as the GA GWPC, for the July and December 2009 sampling event. TPH in groundwater collected from MW-8 exceeded the GA GWPC value of 0.1 mg/L. Overall, the July and December 2009 sampling events indicated decreasing levels of TPH from the December 2008 sampling event.

*SUMMARY AND CONCLUSIONS*

The sixteenth and seventeenth semi-annual sampling events of the NAMP at the former New England Airfoil facility in Farmington Connecticut were conducted on July 8, 2009 and December 11, 2009. Based on these results and observations, the following assumptions have been made:

- Overburden groundwater samples indicate that concentrations appear to be generally similar to previous levels;

- Groundwater flow directions are consistent with former findings; and

- Continuation of the revised NAMP sampling effort appears warranted, due to residual concentrations of chromium and TPH remaining above applicable standards.

Please call the undersigned with any questions regarding this submittal.

Regards,

Robert Drake, PE, Ph.D., LEP
Senior Project Manager

Michael B. Teetsel, C.P.G.
Principal

Enclosures:

| | |
|---|---|
| Table 1 | Groundwater Elevation Determination |
| Table 2 | Summary of Groundwater Analysis Data Since 1992 |
| Figure 1 | Overburden Groundwater Contours, July 2009 |
| Figure 2 | Overburden Groundwater Contours, December 2009 |
| Appendix A | Laboratory Certificates of Analysis |

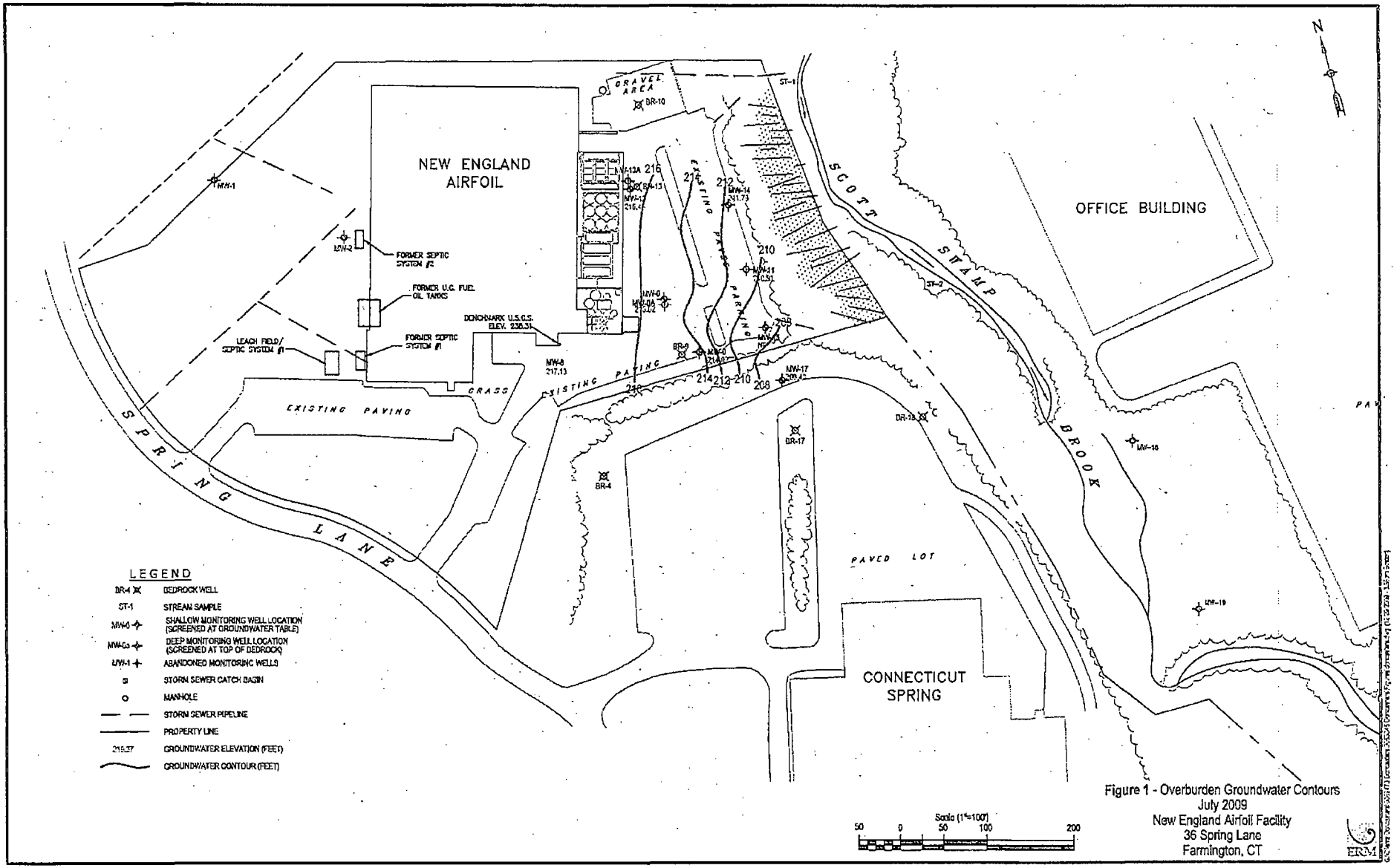


Figure 1 - Overburden Groundwater Contours
July 2009
New England Airfoil Facility
36 Spring Lane
Farmington, CT

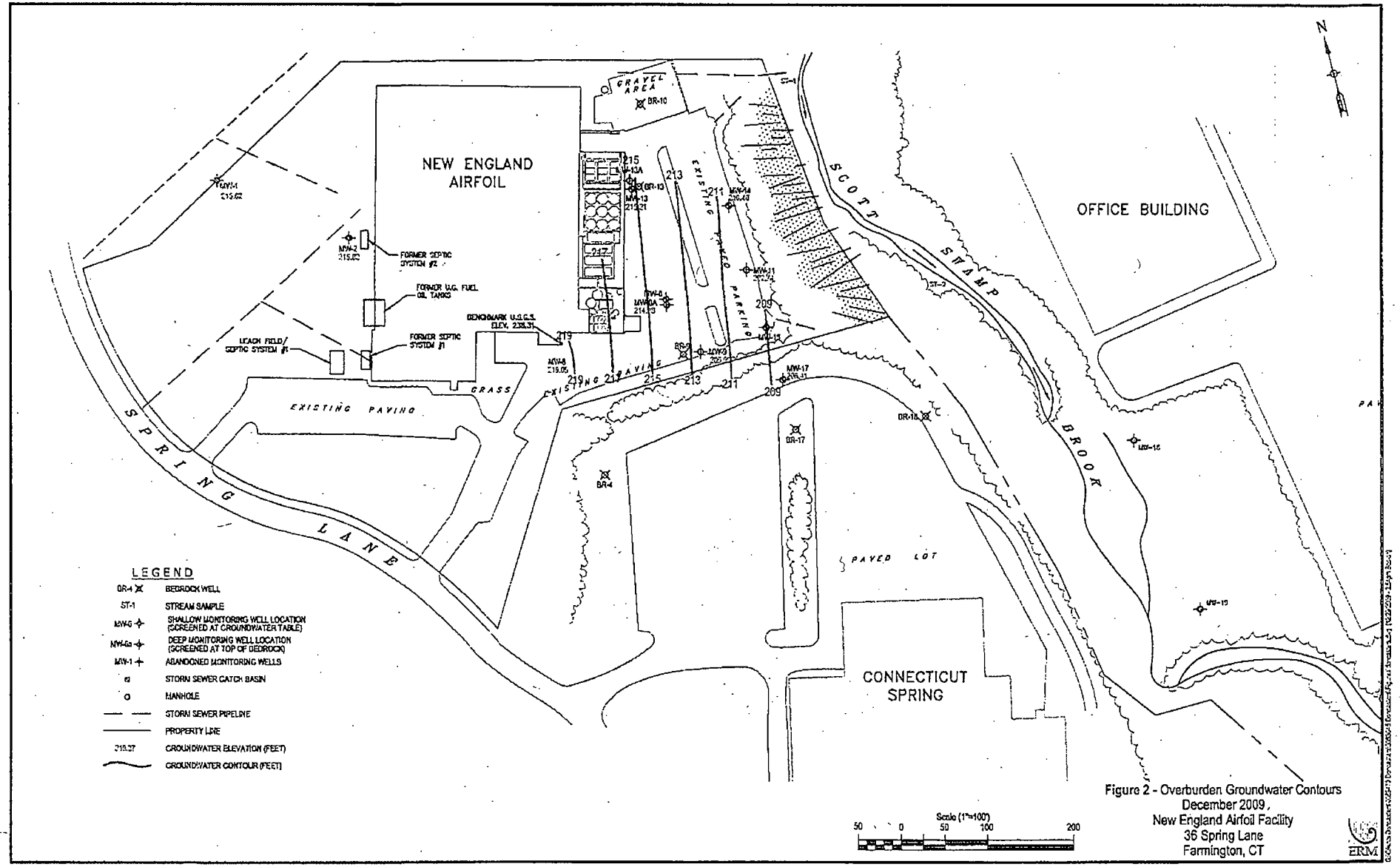


Figure 2 - Overburden Groundwater Contours
December 2009,
New England Airfoil Facility
36 Spring Lane
Farmington, CT

Table 1: Groundwater Elevation Determination
New England Airfoil
36 Spring Lane, Farmington, CT
Work Order No. 0017573

## OVERBURDEN WELL SUMMARY TABLE

| Well ID | Casing Elevation (ft) | DTW (ft) 7/8/2009 | Groundwater Elevation | DTW (ft) 12/11/2009 | Groundwater Elevation |
|---|---|---|---|---|---|
| MW-14 | 228.44 | 16.65 | 211.79 | 17.98 | 210.46 |
| MW-13A | 232.73 | destroyed | | destroyed | |
| MW-13 | 233.11 | 16.61 | 216.5 | 17.9 | 215.21 |
| MW-15 | 226.42 | NF | - | NF | - |
| MW-11 | 227.56 | 22.67 | 204.89 | 24.82 | 202.74 |
| MW-9 | 231.57 | 24.9 | 206.67 | 26.01 | 205.56 |
| MW-6a | 232.27 | 16.03 | 216.24 | 17.29 | 214.98 |
| MW-8 | 233.78 | 14.28 | 219.5 | 14.73 | 219.05 |
| MW-17 | 223.08 | 14.22 | 208.86 | 14.67 | 208.41 |

## BEDROCK WELL SUMMARY TABLE

| Well ID | Casing Elevation (ft) | DTW (ft) 7/8/2009 | Groundwater Elevation | DTW (ft) 12/11/2009 | Groundwater Elevation |
|---|---|---|---|---|---|
| BR-9 | 233.43 | destroyed | | destroyed | |
| BR-17 | 224.3 | NM | - | NM | - |
| BR-18 | 219.52 | NF | - | NF | - |
| BR-4 | 228.50 | NM | - | NM | - |

| Well ID | Casing Elevation (ft) | DTW (ft) 7/8/2009 | DTB (ft) | DTW (ft) 12/11/2009 | DTB (ft) |
|---|---|---|---|---|---|
| MW-1 | Unknown | 16.23 | 24.14 | 17.38 | 24.14 |
| MW-2 | Unknown | 17.27 | 26.03 | 18.4 | 26.03 |
| MW-6 | Unknown | 15.08 | 22.21 | 15.77 | 22.21 |

NM = Not Measured
NF = Not Found

## TABLE 2
## SUMMARY OF INORGANIC GROUND WATER ANALYSIS SINCE 1992
New England Airfoil, 36 Spring Lane, Farmington, CT

**Sampling Date †**

| WELL ID | ANALYTE | GA GWPC mg/l | SWPC mg/l | 19-Jul-93 | 8 & 12-Feb-94 | 18-Jul-94 | 24-Oct-94 | 13-Jan-95 | 7-Jun-95 | 9-Nov-95 | 1-Dec-95 | 4-Jan-96 | 5-Feb-96 *F | 4 & 6-Mar-96 | 10-Apr-96 | 9-May-96 | 10-Jun-96 | 07-Jul-96 | 6-Aug-96 | 10-Sep-96 | 9-Oct-96 | 6-Nov-96 | 11-Dec-96 | 9-Jan-97 | 13-Mar-97 | 12-Mar-97 *F | 4&6-Jun-97 *F | 24 & 25-Sep-97 *F | 3-Feb-98 *F | 10 & 19-Feb-98 *F | 6-May-98 | 25-Jul-98 | 22-Dec-98 | 23&25-Mar-99 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6A | Sodium | NE | NE | 167 | 1,860 | 2,250 | 2,170 | 2,200 | 2,103 | | 1,700 | 1,400 | 1,330 | 680 | 1,875 | 1,810 | 1,900 | 1,900 | 2,100 | 2,000 | 1,900 | 1,900 | 1,700 | 1,700 | 1,700 | 1,600 | 1,900 | 1,400 | 1,170 | | 1,460 | | 1,280 | 494 |
| | Chloride | NE | NE | 1,300 | 3,600 | 2,500 | 3,400 | 4,300 | 3,400 | | 4,018 | 3,550 | 3,270 | 3,900 | 3,550 | 4,300 | 3,800 | 4,200 | 4,100 | 3,500 | 3,700 | 3,500 | 3,200 | 2,900 | 2,500 | | 3,700 | 2,700 | 2,420 | | 2,300 | 2,300 | 1,900 | 1,000 |
| | Total Cr | 0.05 | NE | | | | | | | | 0.83 | 1.50 | 0.91 | 0.97 | 1.59 | 1.20 | 2.70 | 1.60 | 1.40 | 1.60 | 1.60 | 1.90 | 2.20 | 2.00 | 1.80 | 1.70 | 1.70 | 2.40 | 2.42 | | 2.66 | 1.53 | 2.79 | 2.33 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | 0.82 | 0.63 | 0.90 | 0.69 | 0.79 | 0.93 | 1.60 | 1.60 | 1.40 | 1.60 | 1.50 | 1.90 | 2.00 | 2.00 | 1.50 | | | 3.00 | | | 2.80 | 2.30 | 2.40 | 3.40 |
| | Nickel | 0.1 | 0.88 | | | | | | | | 0.14 | 0.20 | 0.01 | 0.03 | 0.31 | 0.12 | 0.15 | 0.14 | 0.08 | <0.05 | 0.07 | 0.11 | 0.07 | <0.05 | <0.05 | <0.05 | | | | | <0.01 | 0.02 | 0.02 | 0.01 |
| MW-8 | TPH | 0.1 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-9 | Sodium | NE | NE | 534 | 2,720 | 3,440 | 3,050 | 2,900 | 2,170 | | 1,030 | ** | 1,125 | 1,300 | 725 | 1,330 | 1,500 | 1,500 | 1,700 | 1,600 | 1,600 | 1,500 | ** | 1,600 | 1,400 | 1,400 | 1,600 | 1,500 | ** | | 1,430 | 1,420 | 1,020 | 322 |
| | Chloride | NE | NE | 3,600 | 4,400 | 2,500 | 3,500 | 4,500 | 2,300 | | 2,450 | | 1,880 | 2,840 | 1,240 | 2,300 | 2,400 | 2,600 | 2,400 | 2,400 | 2,300 | 2,200 | | 2,400 | 2,000 | | 2,400 | 2,600 | | | 1,700 | 1,600 | 1,200 | 1,100 |
| | Total Cr | 0.05 | NE | | | | | | | | 4.36 | | 5.08 | 5.06 | 6.56 | 4.26 | 5.60 | 5.50 | 5.30 | 5.60 | 5.80 | 4.70 | | 4.80 | 4.20 | 4.10 | 4.10 | 3.80 | | | 3.54 | 3.09 | 4.15 | 2.90 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | 5.01 | | 4.79 | 4.52 | 4.58 | 3.87 | 0.50 | 7.50 | 5.30 | 5.30 | 5.60 | 4.60 | | 4.30 | 3.80 | | | 5.00 | | | 3.70 | 3.20 | 2.60 | 3.60 |
| | Nickel | 0.1 | 0.88 | | | | | | | | 0.02 | | <0.01 | 0.11 | 0.30 | 0.07 | 0.13 | 0.09 | 0.07 | 0.03 | 0.08 | <0.05 | | <0.05 | 0.06 | <0.05 | | | | | <0.01 | 0.02 | 0.02 | 0.02 |
| MW-11 | Sodium | NE | NE | 182 | 700 | 810 | 690 | 650 | 490 | | 320 | 350 | 375 | 210 | 300 | 440 | 480 | 410 | 470 | 430 | 450 | 490 | 360 | 330 | 350 | 400 | 380 | 340 | 239 | | 277 | 258 | 308 | 246 |
| | Chloride | NE | NE | 1,400 | 1,200 | 1,000 | 1,000 | 1,000 | 740 | | 637 | 852 | 710 | 673 | 710 | 640 | 680 | 630 | 640 | 560 | 660 | 710 | 470 | 410 | 450 | | 310 | 560 | 520 | | 420 | 280 | 390 | 400 |
| | Total Cr | 0.05 | NE | | | | | | | | 0.02 | 0.30 | 0.03 | 0.05 | 0.19 | 0.05 | 0.12 | 0.09 | 0.12 | 0.09 | 0.12 | 0.12 | 0.09 | 0.08 | 0.09 | 0.07 | 0.06 | 0.08 | 0.104 | | 0.094 | 0.119 | 0.129 | 0.126 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | 0.07 | 0.12 | 0.03 | 0.04 | 0.14 | 0.05 | 0.15 | 0.10 | 0.10 | 0.05 | 0.02 | <0.02 | <0.02 | 0.03 | 0.07 | | | 0.09 | | | 0.07 | 0.11 | 0.11 | 0.12 |
| | Nickel | 0.1 | 0.88 | | | | | | | | 0.02 | 0.10 | <0.01 | 0.02 | 0.10 | 0.04 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | | | | <0.01 | 0.02 | <0.01 | 0.02 |
| MW-13 | TPH | 0.1 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sodium | NE | NE | | 620 | | | | 19,000 | 9,000 | 7,200 | 13,500 | 730 | 280 | 600 | 1,060 | 1,300 | 6,700 | 8,800 | 6,200 | 6,200 | 8,600 | 5,800 | 330 | 5,400 | 1,700 | 3,400 | 2,800 | 2,760 | | 879 | | 1,400 | 763 |
| | Chloride | NE | NE | | 720 | | | | 34,000 | 37,000 | 42,140 | 26,300 | 1,600 | 1,020 | 1,700 | 1,700 | 2,600 | 13,000 | 18,000 | 12,000 | 18,000 | 18,000 | 13,000 | 1,400 | 10,000 | | 7,900 | 6,500 | 5,500 | | 1,200 | | 1,900 | 1,400 |
| | Total Cr | 0.05 | NE | | | | | | | 3.15 | 2.93 | 3.57 | 0.03 | 0.65 | 0.55 | 0.69 | 0.58 | 2.10 | 1.90 | 2.20 | 2.20 | 2.90 | 0.92 | 0.03 | 1.10 | 0.16 | 0.33 | 0.32 | 0.49 | | 0.152 | | 0.36 | 0.34 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | 3.59 | 3.83 | 2.04 | 0.07 | ND | 0.08 | 0.13 | 0.22 | 2.50 | 1.70 | 2.20 | 2.00 | 1.50 | 1.00 | <0.02 | 0.78 | | | 0.40 | | | 0.150 | 0.18 | 0.31 | 0.35 |
| | Nickel | 0.1 | 0.88 | | | | | | | 0.02 | 0.02 | 0.15 | <0.01 | 0.21 | 0.21 | 0.30 | 0.16 | 0.06 | 0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.48 | <0.05 | | | | | 0.024 | | 0.02 | <0.003 |
| MW-13a ‡ | TPH | 0.1 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sodium | NE | NE | | | | | | | | | | | 17,000 | 22,000 | | | | | | | | | | 13,000 | 13,000 | 11,000 | 7,300 | 12,700 | | | 6,850 | 4,870 | 249 |
| | Chloride | NE | NE | | | | | | | | | | | 35,500 | 41,000 | | | | | | | | | | 26,000 | | 27,000 | 18,000 | 28,000 | | | 11,000 | 7,600 | 1,800 |
| | Total Cr | 0.05 | NE | | | | | | | | | | | 3.27 | 7.73 | | | | | | | | | | 2.60 | 1.70 | 1.70 | 0.83 | 0.78 | | | 0.897 | 1.040 | 1.550 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | 1.79 | 1.69 | | | | | | | | | | 2.00 | | | 1.30 | | | | 1.00 | 1.00 | 0.26 |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | 0.45 | 1.55 | | | | | | | | | | 0.23 | <0.05 | | | | | | 0.017 | 0.025 | 0.061 |
| MW-14 ‡ | Sodium | NE | NE | | | | | | | | | | | 170 | | | | | | | | | | | | | 150 | 370 | 99 | | | | | |
| | Chloride | NE | NE | | | | | | | | | | | 550 | | | | | | | | | | | | | 200 | 650 | 220 | | | | | |
| | Total Cr | 0.05 | NE | | | | | | | | | | | 0.07 | | | | | | | | | | | | | <0.03 | 0.07 | 0.025 | | | | | |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | 0.07 | | | | | | | | | | | | | | 0.08 | | | | | | |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | 0.01 | | | | | | | | | | | | | | | | | | | | |
| MW-15 | Nickel | 0.1 | 0.88 | | | | | | | | | | | 0.80 | | | | | | | | | | | 0.14 | <0.05 | | | | | | 0.02 | | 0.06 |
| MW-17 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | 79 | 85 | 67 | | 90 | | 112 | 79 |
| | Chloride | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | 89 | 80 | 57 | | 85 | | 53 | 97 |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | <0.03 | <0.05 | 0.022 | | 0.033 | | 0.073 | 0.092 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | | | | | | | | | | | | | | | 0.03 | | | 0.03 | | 0.2 | 0.02 |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BR-9 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | 251 | 291 | 327 | 345 | 206 | 132 |
| | Chloride | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | 440 | 380 | 450 | 400 | 210 | 150 |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | 0.73 | 0.57 | 0.83 | 0.82 | 0.69 | 0.42 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.09 | 0.83 | 0.90 | 0.45 | 0.44 |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BR-17 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| | Chloride | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 53 |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.008 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ND |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BR-18 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 29.1 |
| | Chloride | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 51.7 |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.018 |
| | Hexavalent Cr | NE | 0.11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0.03 |
| | Nickel | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ST-1 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total Ni | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ST-2 | Sodium | NE | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total Cr | 0.05 | NE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total Ni | 0.1 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**NAMP**

| WELL ID | ANALYTE | 7-Jun-01 | 17-Dec-01 | 18-Jun-02 | 11-Dec-02 | 9-Sep-03 | 22-Dec-03 | 25-Jun-04 | 28-Dec-04 | 31-May-05 | 27-Jun-05 | 23-Dec-05 | 31-July-06 | 26-Dec-06 | 26-Jul-07 | 13-Dec-07 | 14-July-08 | 11-Dec-08 | 8-July-09 (*) | 11-Dec-09 (*) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6A | Sodium | 293 | 64.4 | 33 | 188.0 | 134.0 | 212 | 162 | 434 | 143 | | 161 | 146 | 132 | 138 | 330 | 99.8 | 99.3 | 218 | 151 |
| | Chloride | 380 | 230 | 36 | 292 | 150 | 769 | 241 | 553 | 156 | | 126 | 162 | 142 | 120 | 437 | 58.6 | 116 | 318 | 690 |
| | Total Cr | 1.69 | 1.06 | 0.02 | 0.358 | 0.100 | 0.731 | 0.215 | 0.239 | 0.204 | | 0.4 | 0.21 | 0.252 | 0.166 | 0.166 | 0.0691 | 0.064 | 0.0457 | 0.0533 |
| | Hexavalent Cr | 1.60 | 1.20 | 0.03 | 0.42 | 0.05 | 0.950 | 0.23 | 0.21 | 0.19 | | 0.42 | 0.12 | 0.169 | 0.17 | 0.25 | 0.35 | <0.25 | <0.25 | <0.050 |
| | Nickel | <0.010 | <0.003 | <0.0111 | <0.025 | <0.0030 | <0.0030 | 0.0094 | <0.0173 | <0.0025 | | <0.010 | | | | | | | | |
| MW-8 | TPH | 12 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 1 | <0.1 | <0.1 | | <0.1 | 0.7 | <0.1 | 1.2 | <0.1 | <0.1 | 1.7 | 1.1 | 0.5 |
| MW-9 | Sodium | 550 | 829 | 490 | 366 | 400 | 217 | 393 | 375 | + | 319 | 390 | 277 | 252 | 282 | 286 | 241 | 264 | 721 | 72.6 |
| | Chloride | 900 | 800 | 580 | 610 | 464 | 332 | 528 | 512 | | 193 | 430 | 346 | 247 | 303 | 309 | 291 | 327 | 470 | 201 |
| | Total Cr | 1.67 | 1.56 | 0.856 | 0.993 | 1.000 | 0.323 | 0.46 | 0.545 | | 0.378 | 0.465 | 0.393 | 0.359 | 0.337 | 0.566 | 0.257 | 0.445 | 0.172 | <0.0100 |
| | Hexavalent Cr | 2.00 | 1.70 | 1.15 | 1.20 | 1.27 | 0.900 | 0.57 | 0.66 | | 0.275 | 0.78 | 0.78 | 0.582 | 0.31 | 0.65 | 0.25 | 0.45 | 0.300 | <0.050 |
| | Nickel | <0.010 | <0.005 | <0.0111 | <0.005 | <0.0030 | 0.0063 | 0.005 | <0.0175 | | <0.0026 | <0.0100 | | | | | | | | |
| MW-11 | Sodium | 193 | 31.0 | 220 | 211 | 230 | 229 | 219 | 215 | 220 | | 227 | | | | | | | | |
| | Chloride | 710 | 270 | 130 | 280 | 217 | 240 | 101 | 235 | 233 | | 714 | | | | | | | | |
| | Total Cr | 0.0654 | 0.13 | 0.058 | 0.0996 | 0.0324 | 0.0523 | 0.0361 | 0.0315 | 0.0319 | | 0.0471 | | | | | | | | |
| | Hexavalent Cr | <0.10 | 0.11 | 0.067 | 0.08 | 0.055 | 0.070 | 0.044 | 0.2 | <0.050 | | <0.050 | | | | | | | | |
| | Nickel | <0.010 | <0.005 | <0.0111 | <0.0039 | <0.0050 | <0.0050 | <0.005 | <0.0173 | <0.0025 | | <0.010 | | | | | | | | |
| MW-13 | TPH | + | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | | <0.1 | | | | | <0.1 | <0.1 | <0.1 | <0.1 |
| | Sodium | | 1,120 | 359 | 293 | 511 | 363 | 256 | 454 | 454 | | 232 | | | | | 298 | 195 | 473 | 272 |
| | Chloride | | 1,100 | 370 | 380 | 514 | 434 | 345 | 579 | 473 | | 213 | | | | | 473 | 246 | 1210 | 375 |
| | Total Cr | | 0.127 | 0.035 | 0.0361 | 0.267 | 0.0376 | 0.0344 | 0.0914 | 0.291 | | 0.0631 | | | | | 0.0321 | 0.0472 | <0.0100 | 0.0384 |
| | Hexavalent Cr | | 0.19 | 0.14 | 0.07 | <0.100 | 0.070 | 0.041 | 0.093 | <0.250 | | 0.07 | | | | | <0.125 | <0.005 | <0.250 | <0.050 |
| | Nickel | | <0.005 | <0.005 | <0.017 | <0.0050 | <0.0050 | <0.005 | <0.0175 | <0.0025 | | <0.01 | | | | | | | | |
| MW-13a ‡ | TPH | <0.5 | ++ | ++ | ++ | ++ | ++ | ++ | ++ | ++ | ++ | | <0.1 | <0.2 | 1 | <0.1 | | | | |
| | Sodium | 1,050 | | | | | | | | | | | 299 | 256 | 353 | 296 | | | | |
| | Chloride | 1,900 | | | | | | | | | | | 355 | 207 | 361 | 208 | | | | |
| | Total Cr | 0.494 | | | | | | | | | | | 0.0964 | 0.145 | 0.16 | 0.21 | | | | |
| | Hexavalent Cr | 0.73 | | | | | | | | | | | 0.11 | 0.154 | 0.19 | 0.6 | | | | |
| | Nickel | <0.010 | | | | | | | | | | | | | | | | | | |
| MW-14 ‡ | Sodium | 128 | | | | 127 | 115 | 144 | | 160 | | | | | | | | | | |
| | Chloride | 160 | | | | 107 | 52.8 | 214 | | 247 | | | | | | | | | | |
| | Total Cr | 0.0135 | DRY | DRY | DRY | 0.0147 | 0.0305 | 0.0084 | DRY | 0.0028 | | | | | | | | | | |
| | Hexavalent Cr | 0.12 | | | | <0.100 | <0.500 | 0.016 | | <0.010 | | | | | | | | | | |
| | Nickel | <0.010 | | | | <0.0050 | <0.0050 | <0.005 | | <0.0025 | | | | | | | | | | |
| MW-15 | Nickel | <0.010 | <0.010 | <0.010 | <0.0043 | <0.0100 | + | <0.01 | <0.0175 | <0.0100 | | <0.01 | | | | | | | | |
| MW-17 | Sodium | 15.7 | 40.9 | 29.8 | 22.9 | 29.6 | 29.7 | 43.9 | 33.9 | 62.6 | | 41.2 | | | | | | | | |
| | Chloride | 6.0 | 2.1 | 20 | 6.0 | 14.1 | 29.0 | 53.2 | 33.7 | 134 | | 47.5 | | | | | | | | |
| | Total Cr | <0.010 | <0.005 | <0.0111 | <0.0032 | <0.005 | <0.005 | <0.003 | <0.0340 | <0.0025 | | <0.010 | | | | | | | | |
| | Hexavalent Cr | <0.010 | 0.006 | <0.025 | <0.008 | <0.050 | <0.500 | 0.003 | <0.025 | <0.010 | | <0.010 | | | | | | | | |
| | Nickel | <0.010 | <0.003 | <0.0111 | <0.003 | <0.003 | <0.005 | <0.005 | <0.0173 | 0.008 | | <0.005 | | | | | | | | |
| BR-9 | Sodium | 40.0 | 51.1 | 129 | 123 | 132 | 183 | 232 | 45.3 | 37.2 | | 162 | | | | | | | | |
| | Chloride | 58 | 250 | 120 | 120 | 164 | 443 | 247 | 64 | 66.8 | | 157 | | | | | | | | |
| | Total Cr | 0.02 | 0.41 | 0.18 | 0.184 | 0.136 | 0.0990 | 0.112 | <0.0340 | <0.0025 | | 0.121 | | | | | | | | |
| | Hexavalent Cr | <0.010 | 0.44 | 0.201 | 0.17 | 0.155 | <0.250 | 0.18 | <0.010 | 0.012 | | 0.18 | | | | | | | | |
| | Nickel | <0.010 | <0.003 | <0.0111 | <0.0023 | <0.0030 | <0.0050 | <0.005 | <0.0175 | 0.0084 | | <0.010 | | | | | | | | |
| BR-17 | Sodium | 10.0 | 16.3 | 13.8 | 13.5 | 13.3 | 13.5 | <16 | 13.6 | 13.2 | | | | | | | | | | |
| | Chloride | 44.0 | 41.0 | 44 | 46 | 47.6 | 50.3 | 54.7 | 54.2 | 57.5 | | | | | | | | | | |
| | Total Cr | <0.010 | 0.006 | <0.0111 | <0.0082 | <0.0050 | 0.0063 | <0.005 | <0.0340 | 0.033 | | | | | | | | | | |
| | Hexavalent Cr | <0.010 | 0.01 | <0.005 | 0.01 | <0.0050 | 0.011 | 0.04 | 0.007 | 0.005 | | | | | | | | | | |
| | Nickel | <0.010 | <0.005 | <0.0111 | <0.0041 | <0.0050 | <0.0050 | <0.005 | <0.0175 | <0.0025 | | | | | | | | | | |
| BR-18 | Sodium | 6.30 | 3.42 | 9.41 | 13.0 | 37.0 | 44.0 | 193 | 145 | + | 60.8 | 4.08 | | | | | | | | |
| | Chloride | 8.5 | 1.0 | <0.50 | 16 | 35.9 | 76.5 | 183 | 293 | | 136 | 2.45 | | | | | | | | |
| | Total Cr | <0.010 | <0.005 | <0.0111 | <0.0023 | <0.0050 | <0.0050 | <0.005 | <0.0340 | | <0.0025 | <0.0100 | | | | | | | | |
| | Hexavalent Cr | <0.10 | <0.005 | <0.005 | <0.005 | <0.010 | <0.005 | <0.005 | 0.023 | | <0.025 | <0.005 | | | | | | | | |
| | Nickel | <0.010 | <0.005 | <0.0111 | <0.0116 | 0.0309 | 0.0161 | 0.0053 | <0.0175 | | 0.003 | <0.01 | | | | | | | | |
| ST-1 | Sodium | 11.3 | 51.1 | 18.3 | 15.3 | 14.0 | 74.4 | 20.8 | 15.9 | 14.3 | | 18.6 | | | | | | | | |
| | Total Cr | 0.007 | <0.006 | <0.005 | <0.0023 | <0.0050 | <0.0050 | <0.005 | <0.005 | <0.0025 | | <0.005 | | | | | | | | |
| | Total Ni | <0.005 | <0.003 | <0.005 | <0.0023 | <0.0050 | <0.0050 | <0.005 | <0.005 | <0.0023 | | <0.005 | | | | | | | | |
| ST-2 | Sodium | 11.9 | 42.2 | 19.3 | 19.6 | 14.0 | 14.6 | 21.2 | 16.1 | 15.5 | | 19.8 | | | | | | | | |
| | Total Cr | <0.005 | <0.005 | <0.003 | <0.0015 | <0.0050 | <0.0050 | 0.0056 | <0.005 | <0.0025 | | <0.005 | | | | | | | | |
| | Total Ni | <0.005 | <0.005 | <0.005 | <0.0024 | <0.0050 | <0.0050 | <0.005 | <0.005 | <0.0025 | | <0.005 | | | | | | | | |

Notes

Blank Cell: No analysis performed. ND : Not detected. NE: Criteria not established. Bold type indicates exceedance of one or more criteria

* : Analysis performed according to EPA method SW 846 (Method 200.7 for the metals, 325.2 for chloride) since Nov. 95.

** : Wells were buried under large piles of snow pushed at the edges of the parking lot. Wells could not be accessed.

(*) : Sample was analysed for soluble Cr

"F" : Ground water samples were filtered in the field for the metal analysis (except hexavalent Cr) to compare with unfiltered results.

† : Sampling events conducted by HRP Associates until June 95 and by ERM thereafter.

‡ : Wells installed in February 1996.

+: well could not be accessed

++: Access to MW-13 was available and MW-13a was not sampled

NAMP: Natural Attenuation Monitoring Program