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QUARTERLY MONITORING DATA REPORT OCTOBER 1, 2004, THROUGH DECEMBER 31, 2004, AND 2004 PERFORMANCE EVALUATION REPORT

VAC AIR ALLOYS DIVISION
FREWSBURG, NEW YORK

REF. NO. 2326 (38)

QUARTERLY MONITORING DATA REPORT OCTOBER 1, 2004, THROUGH DECEMBER 31, 2004, AND 2004 PERFORMANCE EVALUATION REPORT

VAC AIR ALLOYS DIVISION
FREWSBURG, NEW YORK

Prepared by:
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New York Department of Environmental Conservation
Division of Environmental Remediation
Region 9 Office-Buffalo

DAILY FIELD REPORT

Date: June 8, 2005
Site Name: VACAIR ALLOYS DIVISION
Site Number: 907016
Location: Frewsburg, Chautauqua Co.
Project Manager: Thomas Biel, NYSDEC - Buffalo
Project Inspector: Thomas Biel, Dave Szymanski
Contractor:
Geologist:

Weather Conditions: Clear around 80 degrees

Description of Work Performed:
Met with Dennis Trostle and Chuck Becker of VACAIR.Toured the monitoring wells and recovery well locations. Viewed the recovery system. Chuck Becker said that MW-2 is being pumped when there is adequate water present. The well has a low yield and slow recharge. Asked about the recent fire at the facility.

Problems/Obsevations Noted:

* The 6/01/05 fire occurred in a pile of titanium turnings located on the concrete pad north of the building. Dennis Trostel thinks that some fine grinding swarf was mixed in with the turnings. They believe that the metal itself was the source of combustion. The fire burned for approximately four hours and was contained on the pad. Water from fire fighting flowed into grates and passed through the oil/water separator prior to discharge.

Respectfully submitted by: Thomas Biel

Site of Titanium oxide fire

Follow-up required for: Quarterly monitoring and sampling.

Distribution: file

From: Martin Doster
To: Biel, Thomas
Date: 6/9/2005 12:51:18 PM
Subject: Re: New Air Stripper for the Town of Carroll

be sure to include this observation in your notes to albany. please have tina copy the file (hard copy) with your notes...thanks

>>> Thomas Biel 6/9/2005 11:00:17 AM >>>
I talked to Natalie Whiteman of the Chautauqua Co. Health Dept. today regarding the air stripper observed yesterday near Vacair. Ms. Whiteman said that the unit is designed to treat water from two municipal wells accross from the Vacair facility(Town wells #1A & #2). The unit is scheduled to go online between July 1st and the 15th after laboratory results are recieved.

I asked Ms. Whiteman if it would be possible to connect the town well near the old landfill (Town well #5). She said that the air stripper is not sized for well #5 and that the piping run from the well to the air stripper would be a nightmare. If we want to propose the treatment option for well #5 down the road it would need to be a separate installation.

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1.0 INTRODUCTION

Keywell L.L.C. (Keywell) has implemented a Remedial Action (RA) at its VacAir Alloys Division Plant (Site) in Frewsburg, New York. The RA for the Site is outlined in the Record of Decision (ROD) dated March 1996 and the "Evaluation of North Soil Area Remedial Alternatives" (North Soil Area Report) as revised July 1996. The RA consists of:

i) institutional controls;
ii) long-term groundwater monitoring;
iii) paving of unpaved areas north of the Plant;
iv) runoff isolation;
v) sediment excavation and off-Site disposal;
vi) groundwater extraction and treatment;
vii) surface water discharge of treated groundwater;
viii) in-situ soil vapor extraction (SVE);
ix) installation of a barrier wall; and
x) extension of the barrier wall as a contingency.

The construction activities associated with items iii) through ix) were performed between mid-1997 and mid-1998.

The key operating components of the RA are the:

i) groundwater extraction system;
ii) groundwater treatment system;
iii) Center Soil Area in-situ SVE system;
iv) north area paving; and
v) runoff isolation systems.

These components are operated and maintained in accordance with the "Operation and Maintenance Plan, Remedial Action" (O&M Plan) dated September 1998.

An effectiveness and performance monitoring program is included in the O&M Plan. The current components of the monitoring program are:

i) hydraulic monitoring;

ii) groundwater quality monitoring;

iii) seep inspections;

iv) treated groundwater discharge monitoring;

v) groundwater treatment system component monitoring; and

vi) Center Soil Area SVE system monitoring.

The monitoring program is conducted in accordance with the Sampling, Analysis, and Monitoring Plan (SAMP) contained in Appendix A of the O&M Plan. Monitoring is conducted at the frequencies shown in Table 1.1 and the data collected are reported quarterly.

The O&M Plan requires that a Performance Evaluation Report be prepared and submitted annually. The content of the evaluation report is to include:

i) analytical results and appropriate quality assurance/quality control (QA/QC) data;

ii) groundwater and surface water hydraulic monitoring data;

iii) a description of Site maintenance activities and problems that required corrective action during the reporting period;

iv) an evaluation of the effectiveness of the groundwater extraction system and the Center Soil Area SVE system; and

v) recommendations for any system or monitoring program revisions.

In addition, the New York State Department of Environmental Conservation (NYSDEC), in the letters from Mr. G.P. Sutton to Mr. D. Trostle (Keywell) dated December 22, 1999, and February 11, 2004, specifically requested that the Performance Evaluation Report document:

i) the inward hydraulic gradient provided by the groundwater extraction system;

ii) that the barrier wall system is functioning as designed;

iii) that the SVE system is functioning as designed and is removing the design loading expected from the Center Soil Area;

iv) the effectiveness of the stormceptor system in isolating runoff; and

v) an evaluation of the potential feasibility of selected in-situ treatment technologies to address chemical presence in the Center Soil Area.

The purpose of this report is to present:

i) the Fourth Quarter Monitoring Data Report, October 1, 2004, through December 31, 2004; and

ii) the 2004 Performance Evaluation Report.

The report is organized as follows:

- Section 1.0 Introduction. An overview of the RA and monitoring programs and a description of the scope of this report is presented in Section 1;
- Section 2.0 Fourth Quarter Report. The fourth quarter 2004 operating and monitoring data are presented in Section 2;
- Section 3.0 Summary of System Operation and Maintenance. A summary of the operating and monitoring data collected since system startup is presented in Section 3;
- Section 4.0 Performance Evaluation. An evaluation of the performance and effectiveness of the RA is presented in Section 4;
- Section 5.0 Alternative Remedial Technologies. An evaluation of alternative remedial technologies is presented in Section 5; and
- Section 6.0 Conclusions and Recommendations. Conclusions regarding the performance and effectiveness of the RA and recommendations for modifications to the operating and monitoring programs are presented in Section 6.

2.0 FOURTH QUARTER 2004 REPORT

The Monitoring Report for the fourth quarter 2004 has been prepared by Keywell and is presented in Appendix A.

3.0 SUMMARY OF 2004 SYSTEM OPERATION AND MAINTENANCE

Details of the operation and maintenance of the groundwater extraction and treatment systems have been presented in previous quarterly reports submitted to NYSDEC. These quarterly reports have been submitted for each calendar quarter beginning with the third quarter (July 1 through September 30) of 1998. The following subsections present compilations of the operating data for the period of January 1, 2004, through December 31, 2004, and summary descriptions of problems encountered and maintenance performed. All information of the type presented herein has been presented previously in the quarterly reports.

3.1 ROUTINE OPERATIONS

Keywell employees operate, monitor, and maintain the SVE, groundwater extraction, and treatment systems, and perform all routine system and environmental monitoring activities. Employees trained and familiar with the Site and the treatment plant operations during this reporting period were:

i) Chuck Becker;

ii) Kevin Niles; and

iii) Dennis Trostle.

Analytical samples are sent to a contract laboratory for analyses. All sample analyses are performed in accordance with the applicable methods.

A summary of the types and frequencies of the routine samples collected during this annual evaluation period is presented in Table 1.1.

3.2 GROUNDWATER TREATMENT SYSTEM OPERATION AND DISCHARGE MONITORING

Treatment of extracted groundwater for permitted discharge is accomplished through air stripping using a shallow tray system. A water treatment system designed to minimize the buildup of iron deposits on the stripper trays was installed on September 14, 1999. This system reduced but did not eliminate the formation of iron deposits; therefore, periodic cleaning of the stripper trays is required. During this annual evaluation period, the air stripper was shut down and the trays cleaned on January 21, April 16, July 12, and October 25.

During 2004, treated water (effluent) samples were analyzed for volatile organic compounds (VOCs) and pH monthly and for oil and grease, aluminum, iron, and zinc semi-annually (see Table 1.1). Tabulations of the effluent monitoring data and calculated discharged loadings are contained in Appendix B.

The treated water analytical data presented in Appendix B has been compared to the effluent discharge limits shown in Table 3.1. This comparison shows that, with the isolated exceptions listed below, the treated effluent was in compliance with the effluent discharge requirements throughout 2004.

i) On May 5, 2004, the measured pH of the treatment plant effluent sample was 5.8 s.u. (the effluent discharge limitation for pH is 6 to 9 s.u.).

ii) On July 15, 2004, the concentration of iron in the treatment plant effluent sample was 2,720 ug/L (the effluent discharge limitation for iron is 2,000 ug/L).

3.3 GROUNDWATER/CREEK HYDRAULIC MONITORING

During 2004, hydraulic monitoring was performed at least quarterly in all extraction wells, monitoring wells, and piezometers. In addition, water levels were measured monthly in extraction wells EW-5 and EW-12 through EW-18. The tabulated water level elevation data are presented in Appendix C. The locations of the monitoring wells and piezometers are shown on Figure 3.1.

3.4 GROUNDWATER QUALITY MONITORING

The current groundwater monitoring program is summarized in Table 1.1 of this report. The locations of the groundwater quality monitoring points are shown on Figure 3.1.

The groundwater quality data and analytical data assessments and validations have been submitted previously in the quarterly reports. A complete and updated groundwater analytical database is presented in Appendix D.

3.5 GROUNDWATER EXTRACTION OPERATION AND RATE

Under normal operating conditions, groundwater extraction occurs automatically and continuously. Flow is regulated through water level measurement and automatic flow control.

Monthly, maximum daily, and/or total volumes of groundwater extracted have been reported in previous quarterly reports. These extraction rate data for 2004 have been compiled and are presented with previous data in Table 3.2. The operating hours of the extraction and SVE systems during 2004 is presented in Table 3.3. These operating times were used in the calculation of average monthly flow. As the information in Table 3.3 shows, with the exception of April 2004, the groundwater extraction system operated nearly 100 percent of the total available time in the reporting period. In April 2004, due to mechanical problems in the extraction pump, the groundwater extraction systems operated only 477 hours, or 66 percent of the available operating hours.

3.6 SVE SYSTEM

3.6.1 OPERATION SUMMARY

During this operating period, the SVE system was operated nearly continuously between January 1 and August 15, 2004. Operating data for the SVE system for 2004 have been compiled and are presented in Appendix E. Data presented in the "Quarterly Monitoring Data Report, October 1, 2003, through December 31, 2003, and 2003 Performance Evaluation Report" dated February 2004 demonstrated that "the mass of TCE removed by the SVE system under optimal operating conditions is insignificant" in contrast to the effectiveness of the groundwater extraction system, and that "the continued operation of the SVE system will not serve to accelerate the restoration of groundwater quality to an appreciable extent." As a result of a joint decision between NYSDEC and Keywell, the SVE system was shut down on August 16, 2004. The NYSDEC approval letter for the SVE shutdown is presented in Appendix F.

The SVE wells were maintained in a dewatered state throughout 2004 as shown by the water level data for the extraction wells presented in Appendix C.

3.6.2 SVE SYSTEM MONITORING

Routine measurement of TCE in vapor samples collected from the SVE system blower exhaust, first carbon drum outlet, and second carbon drum outlet using Draeger tubes was performed at least weekly during the SVE operating period of January 1 through August 15, 2004. A tabulation of the routine SVE monitoring data is presented in Appendix E.

The primary purpose of the Draeger tube screening is to monitor breakthrough from Carbon Bed 1 to allow for replacement of carbon drums in advance of saturation

A schematic diagram of the SVE system including the sample locations is shown on Figure 3.2.

3.7 PREVENTATIVE MAINTENANCE

Preventative maintenance is performed on the SVE, groundwater extraction, and treatment systems on an as-needed basis. The maintenance performed has been discussed in detail in the quarterly reports. A summary of the non-routine maintenance performed during this reporting period is presented in Table 3.4.

3.8 STORM WATER COLLECTION SYSTEM

An inspection of the storm water collection system (referred to as the "stormceptor") is conducted monthly, and the results of these inspections are presented in each quarterly report. Inspections of the stormceptors revealed no excess sediment collection in 2004. Therefore, the storm water collection system operated effectively during this reporting period. No maintenance was necessary during this monitoring period.

Oil residuals in the stormceptors are also checked quarterly as part of our Integrated Contingency Plan for environmental control. Checks are done for both dry and wet weather events. In 2004 the quarterly visual inspections revealed no presence of suspended solids or oil discharging from the effluent pipe.

4.0 PERFORMANCE EVALUATION

The evaluation of the performance of the RA is undertaken to determine:

i) the effectiveness of the SVE system to reduce chemical concentrations in soil from the Center Soil Area and groundwater within the area;

ii) the effectiveness of the barrier wall with respect to its design;

iii) the effectiveness of the extraction system in establishing and maintaining a hydraulic barrier between the source area and Conewango Creek;

iv) the combined effectiveness of the extraction system and barrier wall in preventing the discharge of chemicals in groundwater to Conewango Creek; and

v) the effectiveness of the groundwater extraction and treatment system in removing and treating contaminated groundwater.

In this report, the evaluation of the groundwater extraction system performance and trends in chemical concentrations in groundwater utilizes running or moving average concentrations. A running average was calculated on a well-by-well basis for each set of four data points in the database. For example:

Running Average for sampling result x 4	= average (x_1, x_2, x_3, x_4)
Running Average for sampling result x 5	= average (x_2, x_3, x_4, x_5)
Running Average for sampling result x 6	= average (x_3, x_4, x_5, x_6)

The analytical detection limits for sample analyses at this Site have also been widely variable; therefore, where a compound was not detected, a value equal to the lowest reported detection limit at that location was used in the calculation. When duplicate samples were analyzed, the analytical results of the two samples were averaged and these averages were treated as one data set in the calculation of running averages. Running averages were not calculated for monitoring points with less than four sampling results or for wells not currently included in the monitoring program.

4.1 CENTER SOIL AREA

The SVE system is installed in the Center Soil Area and, while operational, functioned as a dual phase soil vapor/groundwater extraction system. The extraction wells in this area are designed to be dewatered by groundwater pumping with soil vapors extracted through the exposed well screen in the unsaturated interval. The locations of the SVE wells are shown on Figure 3.1.

An extensive evaluation of the effectiveness of the SVE system in removing TCE was conducted in 2003. The results of the evaluation were presented in the "Quarterly Monitoring Data Report October 1, 2003, through December 31, 2003, and 2003 Performance Evaluation Report," dated February 2004. These results demonstrated that the mass of TCE removed by the SVE system under optimal operating conditions is insignificant. Based on this evaluation, Keywell proposed to discontinue operation of the SVE system. The system was shut down with NYSDEC approval on August 16, 2004.

4.1.1 GROUNDWATER

The continuing maintenance of the groundwater extraction wells has optimized the groundwater extraction in the Center Soil Area and thus maintained a dewatered condition in the area. The groundwater contours presented on Figures 4.1 through 4.4 demonstrate that continued operation of the groundwater extraction system has maintained the area of influence of the combined branches of the groundwater extraction system along the northern and eastern boundaries of the Site.

Groundwater quality in the Center Soil Area is evaluated using the data from monitoring well MW-11. The running average concentrations of TCE, 1,2-dichloroethene (DCE), and vinyl chloride in well MW-11 have been calculated and graphed versus time. The graph is presented on Figure 4.5. The graph shows that the running average concentration of TCE has been reduced approximately 94 percent since the startup of the groundwater extraction system (from 46,000 micrograms per liter [µg/L] in October 1998 to 2,664 µg/L in October 2004). The graph also shows that running average concentrations of 1,2-DCE have also decreased 90 percent or more since January 2000 and that running average concentrations of vinyl chloride have been stable or decreasing since October 2000.

4.2 BARRIER WALL EFFECTIVENESS

The barrier wall was constructed along the northern boundary of the Site to prevent the migration of impacted groundwater to Conewango Creek. The effectiveness of the barrier wall is determined based on the results of seep inspections performed along the creek embankment and the hydraulic and water quality monitoring data from monitoring wells and/or piezometers within and outside the barrier wall.

Monitoring well MW-2 and piezometer PZ-3 are both located hydraulically downgradient of the barrier wall.

Prior to construction of the barrier wall and implementation of the groundwater extraction and treatment system (July 1998), seeps were observed along the sloped area between the Site fence and the Conewango River and lowlying wet area. Seep inspections were conducted quarterly during the first year of extraction system operation and semi-annually thereafter. No seeps have been identified since the startup of the groundwater extraction and treatment system.

It was demonstrated previously that fluctuations in the water table elevation at MW-2 and PZ-3 are related to seasonal conditions and not to changes in the operating parameters of the groundwater extraction system. The absence of a response in the water table outside the barrier wall to groundwater pumping within the barrier wall indicates that the slurry wall is an effective hydraulic barrier.

4.3 BARRIER WALL AND NORTHERN ALIGNMENT OF EXTRACTION WELLS

A barrier to groundwater flow toward Conewango Creek is provided by the combination of the barrier wall installed along the north and east boundaries of the Site and the operation of groundwater extraction wells EW-1 through EW-12 located immediately upgradient of the wall. The locations of the barrier wall and extraction wells are shown on Figure 3.1. As described in the previous section, the barrier wall is intact and is functioning as designed. The following section presents an evaluation of the effectiveness of the combined barrier wall/groundwater extraction system in maintaining the containment of the groundwater VOC plume.

As described in Section 3.3, water level data from 19 wells and piezometers are collected routinely and it is primarily these data, which have been used in this evaluation. (The hydraulic monitoring database is contained in Appendix C.) Groundwater chemical data are also used in the evaluation. Trends in chemical concentrations in groundwater are evaluated based on the running average concentrations as described previously in this section of the report.

To determine the presence of the hydraulic barrier during this evaluation period, water level data from the quarterly monitoring events have been plotted on a Site plan and potentiometric contours have been drawn (see Figures 4.1 through 4.4). These contours have then been compared to the contours prepared using data collected during a static (non-pumping) period (Figure 4.6) to determine the effect of the barrier wall/pumping system.

4.3.1 OPERATING PARAMETERS

The operating data presented in Table 3.2 show that the average daily groundwater extraction rates during 2004 ranged between 2.6 and 12.8 gallons per minute (GPM). The average extraction rate during this evaluation period was 8.1 GPM. It is estimated that 415 pounds of VOCs were removed from groundwater through the operation of the combined branches (Center Soil and Barrier Wall Areas) of the groundwater extraction system during 2004. This calculated chemical mass is based on the following equation:

$$\text{Chemical Mass} = \text{Gallons} \times \frac{\text{Conc } (\mu g)}{L} \times \frac{1\,g}{10^6\,\mu g} \times \frac{3.785L}{1\,\text{Gal.}} \times \frac{1\,lb}{453.6\,g}$$

$$= \text{Gallons} \times \text{Conc.} \times 8.34\text{E-}09$$

Where:

Gallons = Total volume extracted, 2004

Conc. = Average VOCs in treatment plant influent

The calculations of the chemical mass removed are summarized in Table 4.1.

The hydraulic monitoring data for the extraction wells presented on Figures 4.1 through 4.4 and in Appendix C show that water levels in the operating extraction wells were generally maintained within the design range.

4.3.2 EVALUATION OF HYDRAULIC CONTAINMENT

The evaluation of hydraulic containment by the groundwater extraction system is made using hydraulic monitoring data, groundwater and surface water analytical data, and the results of the bank (seep) inspections.

4.3.2.1 GROUNDWATER HORIZONTAL FLOW

Figures 4.1 through 4.4 show the potentiometric contours for January 2004, April 2004, July 2004, and October 2004, respectively.

Comparison of the groundwater contours representing groundwater flow under pumping conditions (Figures 4.1 through 4.4) to those representing static or non-pumping conditions (Figure 4.6) clearly demonstrates the effectiveness of the groundwater extraction system in providing hydraulic containment. Prior to the operation of the groundwater extraction system, groundwater flow was from south to

north across the Site toward Conewango Creek (see Figure 4.6). The comparison of the pre-pumping potentiometric contours (Figure 4.6) to the pumping contours (Figures 4.1 through 4.4) shows that the barrier wall combined with the operation of the extraction system have altered the groundwater flow pattern and horizontal hydraulic gradient. With the groundwater extraction system operating, a groundwater depression is evident within the barrier wall and along the extraction well alignment. This cone of influence extends across the SVE area as shown on Figures 4.1 and 4.4. This pattern of groundwater flow demonstrates that a hydraulic barrier between the source area and Conewango Creek is created and maintained by the barrier wall and extraction system. In particular, hydraulic containment is achieved by the groundwater extraction system (EW-1 through EW-4) beyond the limits of the barrier wall.

Horizontal groundwater flow across the Site under static conditions is generally from south to north. The operation of the extraction system has increased the horizontal hydraulic gradient across the Site from 0.01 prior to the operation of the extraction system to approximately 0.10 in October 2004.

The hydraulic monitoring data demonstrate that groundwater flow at the Site is inward toward the extraction wells.

4.3.2.2 GROUNDWATER QUALITY

In addition to the hydraulic data noted above, the groundwater chemical data confirm the maintenance of hydraulic containment. The complete groundwater and surface water analytical database is contained in Appendix D. The Site-related chemicals present in groundwater are primarily VOCs. Therefore, the evaluation of system performance is limited to the evaluation of the presence of VOCs, specifically TCE, 1,2-DCE, and vinyl chloride.

Based on the October 2004 analytical data, concentrations of TCE, 1,2-DCE, and vinyl chloride in wells MW-1, MW-4D, MW-5, MW-5D, MW-6, MW-7, MW-8, and MW-10 meet the standards for Class GA (potable) groundwater.

The running average concentrations of TCE, 1,2-DCE, and vinyl chloride versus time in the wells in which exceedances of standards were detected in 2004 (MW-2 through MW-4, MW-9, and MW-12 through MW-14) have been graphed and the graphs are

presented on Figures 4.7 through 4.13. If linear trend lines were plotted on the graphs they would show the following:

i) stable and low running average concentrations of vinyl chloride in all wells except MW-2;

ii) an increase in running average concentrations of 1,2-DCE and vinyl chloride since October 2002, and an increase in the running average concentration of TCE in MW-2 from October 2004;

iii) decreasing running average concentrations of TCE and 1,2-DCE in wells MW-3, MW-4, MW-9, and MW-13;

iv) a decrease in running average concentration of TCE in MW-12 since October 2001 with increasing concentrations of 1,2-DCE since October 2000, and stable vinyl chloride concentrations throughout; and

v) an overall decreasing concentration in TCE and 1,2-DCE in MW-14 since August 1999 with stable and low concentrations of vinyl chloride. The increase in concentration of 1,2-DCE in the October 2004 sample is inconsistent with previous data. Future sampling will determine whether or not this data is anomalous.

With the groundwater extraction system operating, evaluation of the effectiveness of natural attenuation is difficult. Potential decreases in TCE concentration are masked by higher concentrations drawn into the area through pumping. In addition, the maintenance of the extraction wells in a dewatered condition compromises the naturally occurring anaerobic conditions favorable to the biodegradation of TCE. Nonetheless, where either long- or short-term trends show decreasing concentrations of TCE accompanied by increasing trends of 1,2-DCE and/or vinyl chloride (i.e., MW-12 and MW-14), these trends are indicative of the recovery of the plume of TCE degradation products and/or natural attenuation through degradation of the TCE in the area.

Monitoring well MW-12 is located off-Site beyond the limit of the groundwater extraction system and barrier wall. MW-12 was installed in 1993 as part of the Remedial Investigation at the Site and it was known that the extent of the TCE plume extended west of the well location. The source of the TCE in this area was groundwater migration from the Site, in particular from the MW-4 and MW-13 areas. The pre-Remedial Action TCE concentrations in MW-12 ranged from 3,400 to 6,600 µg/L; the current concentration is 1,100 µg/L. Continued migration of the groundwater contaminant plume away from the Site due to lack of containment, if occurring, would be manifested in MW-12 and the nearest on-Site monitoring wells (MW-4 and MW-13) by increasing

TCE concentrations. To the contrary, evaluation of the graphs of running average concentrations versus time for these wells (Figures 4.9, 4.11, and 4.12) shows that the running average concentrations of TCE, which steadily increased between April 1999 and October 2000, have steadily decreased since October 2001. These trends in VOC concentration demonstrate the recovery of the off-Site plume of VOCs in groundwater. The maintenance of the cone of influence around the extraction system has increased the horizontal hydraulic gradient from the vicinity of MW-12 inward toward the extraction system. This gradient has resulted in the recovery of the chemical plume, which in 1993 was assumed to have migrated beyond MW-12, inward toward MW-12 and eventually to the extraction system.

4.3.2.3 VOC PRESENCE IN MW-2

Following its review of the 2003 Annual Report, NYSDEC expressed concern with the persistence of VOC presence in samples collected from monitoring well MW-2. To address that concern and gather additional data to further evaluate VOC presence in the vicinity of MW-2, Keywell initiated a groundwater extraction program in well MW-2. A letter detailing the proposed extraction of groundwater at MW-2 was submitted to Mr. Greg Sutton of NYSDEC on September 23, 2004. Pumping of well MW-2 commenced with step drawdown tests conducted on September 30, 2004. The pumping test procedures and results are presented in Appendix G. The test indicated that MW-2 is capable of maintaining an initial continuous pumping rate of approximately 0.3 gpm with minimal drawdown.

The second pumping event took place from November 16 through 19, 2004. The purpose of this event was to determine whether MW-2 would sustain several days of continued pumping. Approximately 300 gallons of groundwater were removed from MW-2 over the 4-day pumping period. Based on these results, the planned pumping program was modified to consist of pumping from well MW-2 for eight-hour shifts on 4 to 5 consecutive days each month. VOC sampling was initially planned to be conducted immediately prior to the commencement of each pumping event.

The routine pumping program commenced December 7, 2004. A total of 335 gallons of groundwater was removed during this event. A summary of the pumping data is presented in Table 4.2. The VOC analytical results from the sample collected from MW-2 prior to the commencement of the December pumping event are presented with a summary of historic results in Table 4.3. The running average concentrations of TCE, 1,2-DCE, and vinyl chloride for MW-2 have been plotted on Figure 4.7. The VOC

analytical data from MW-2 show increases in the concentrations of all VOCs following the commencement of pumping in September 2004. These apparent responses to pumping will be further evaluated after additional data have been collected.

Future pumping data and analytical results will be presented in the quarterly reports and evaluated in detail in the 2005 Annual Report.

4.3.2.4 SURFACE WATER QUALITY

No seeps have been observed on the bank of Conewango Creek since the commencement of operation of the extraction system in 1993. Chemical monitoring of surface water in Conewango Creek was discontinued in 2001 since no chemicals were detected in the surface water samples collected during the monitoring program. However, a sample was collected and analyzed for VOCs in April 2004, and no VOCs were detected. These conditions further demonstrate the effectiveness of the remedial system in providing a barrier to groundwater flow to Conewango Creek.

4.4 CONCLUSION

Given the combined effectiveness of the barrier wall and groundwater extraction system in achieving containment of the groundwater VOC plume, there is no need to implement the contingency plan of extending the barrier wall at this time.

5.0 ALTERNATIVE REMEDIAL TECHNOLOGIES

The NYSDEC requested that, beginning in 2004, alternative remedial technologies for the Center Soil Area be evaluated annually. As discussed in Section 4 of the report and shown on the graph of VOC running average concentrations in MW-11 presented on Figure 4.5, groundwater quality in the Center Soil Area appears to have improved significantly immediately prior to and since the shutdown of the SVE system. However, the existing analytical data is insufficient to characterize current groundwater quality in the Center Soil Area or draw firm conclusions. As requested, additional groundwater sampling in the Center Soil Area will be conducted and the technologies evaluation will be performed after sufficient analytical data is acquired to confirm and the water quality in this area.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the review of the operating and monitoring data presented in the previous sections of this report, the following conclusions regarding the effectiveness of the remedial systems and recommendations for modification of the operating and monitoring programs are made.

6.1 CONCLUSIONS

i) The monitoring data demonstrate that the Site remediation system is effective in achieving its goals and objectives, namely:

   a) the containment and removal of VOCs from the groundwater, thus reducing potential human and environmental risk and restoring water quality; and

   b) prevention of discharge of impacted groundwater to Conewango Creek.

ii) The groundwater extraction system has operated reliably since its startup. Both the analytical and hydraulic monitoring data demonstrate that the barrier wall and groundwater extraction system are effective in creating a barrier to the flow of groundwater inside the alignment of these systems to Conewango Creek.

iii) No groundwater seeps have been observed since startup of the groundwater extraction system; therefore, there is no potential for direct discharge of groundwater through the bank to Conewango Creek..

iv) Review of the analytical data in the Center Soil Area demonstrates the effectiveness of the operation of the groundwater extraction system by itself versus in combination with the SVE system.

6.2 RECOMMENDATIONS

The following recommendations are made for the continuing improvement of the operation and monitoring of the existing remediation system:

i) effluent monitoring of the extraction wells in the Center Soil area will be conducted quarterly for the purposes of calculations for mass removal and to aid in the evaluation of alternative remedial technologies;

ii) monitoring of wells in which water quality meets the applicable standards (MW-1, MW-4D, MW-5/5D, MW-6 through 8, and MW-10) will be reduced from annual to biennial (every two years); ✓

iii) the components of the groundwater extraction system will continue to be inspected and repaired as necessary to maintain optimal operation. This will include inspecting and replacing, as necessary, gaskets, valves, etc., on the extraction pump, header, and well heads; ✓

iv) the water level elevations in the extraction wells will be closely monitored and well rehabilitation or repair will be performed as necessary to maintain the drawdown in these wells. ✓

No modifications to the operation of the extraction system are proposed at this time.

(v) Continued pumping and data collection @ MW-2

FIGURES

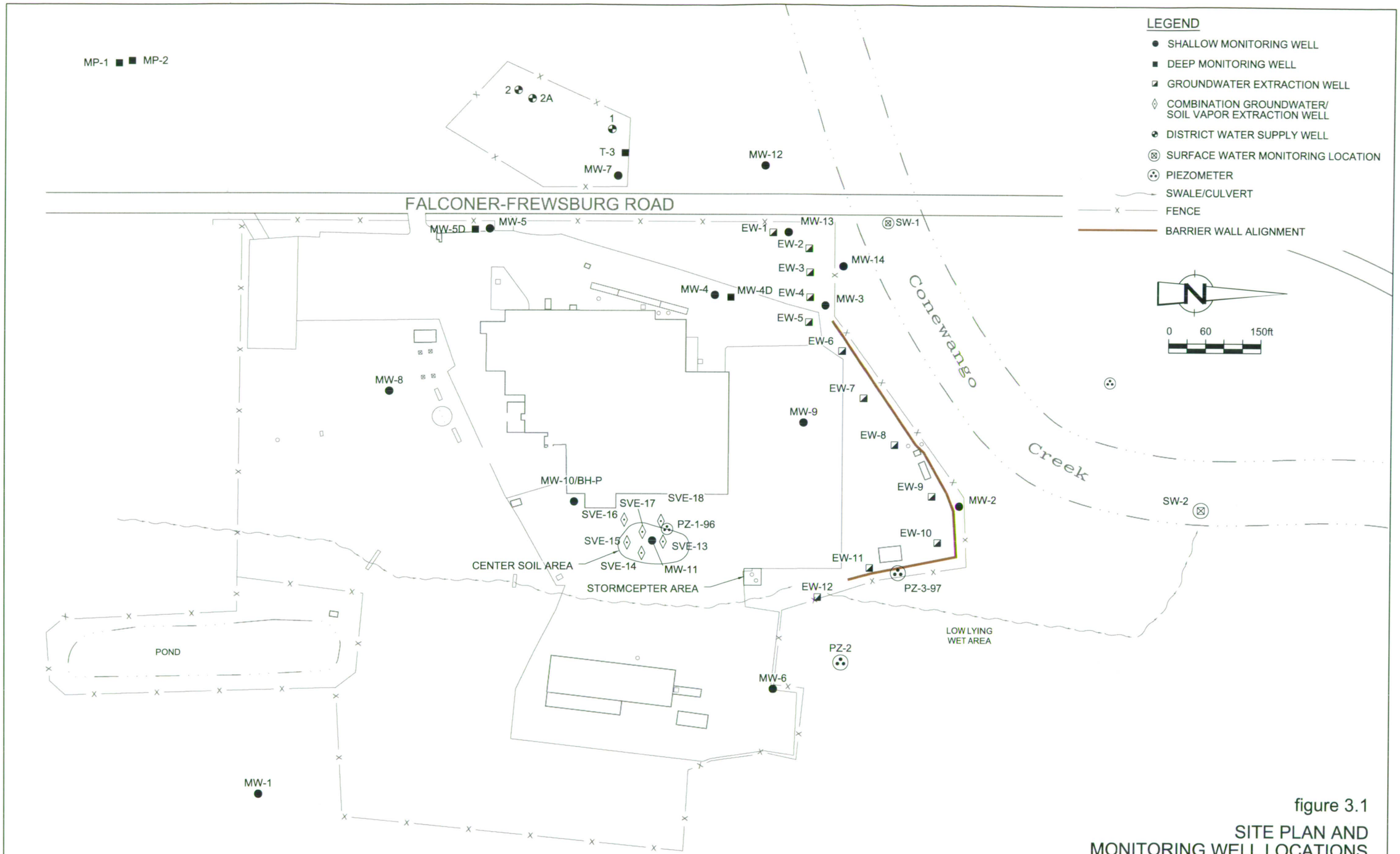

figure 3.1

SITE PLAN AND
MONITORING WELL LOCATIONS
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF001 JAN 19/2005

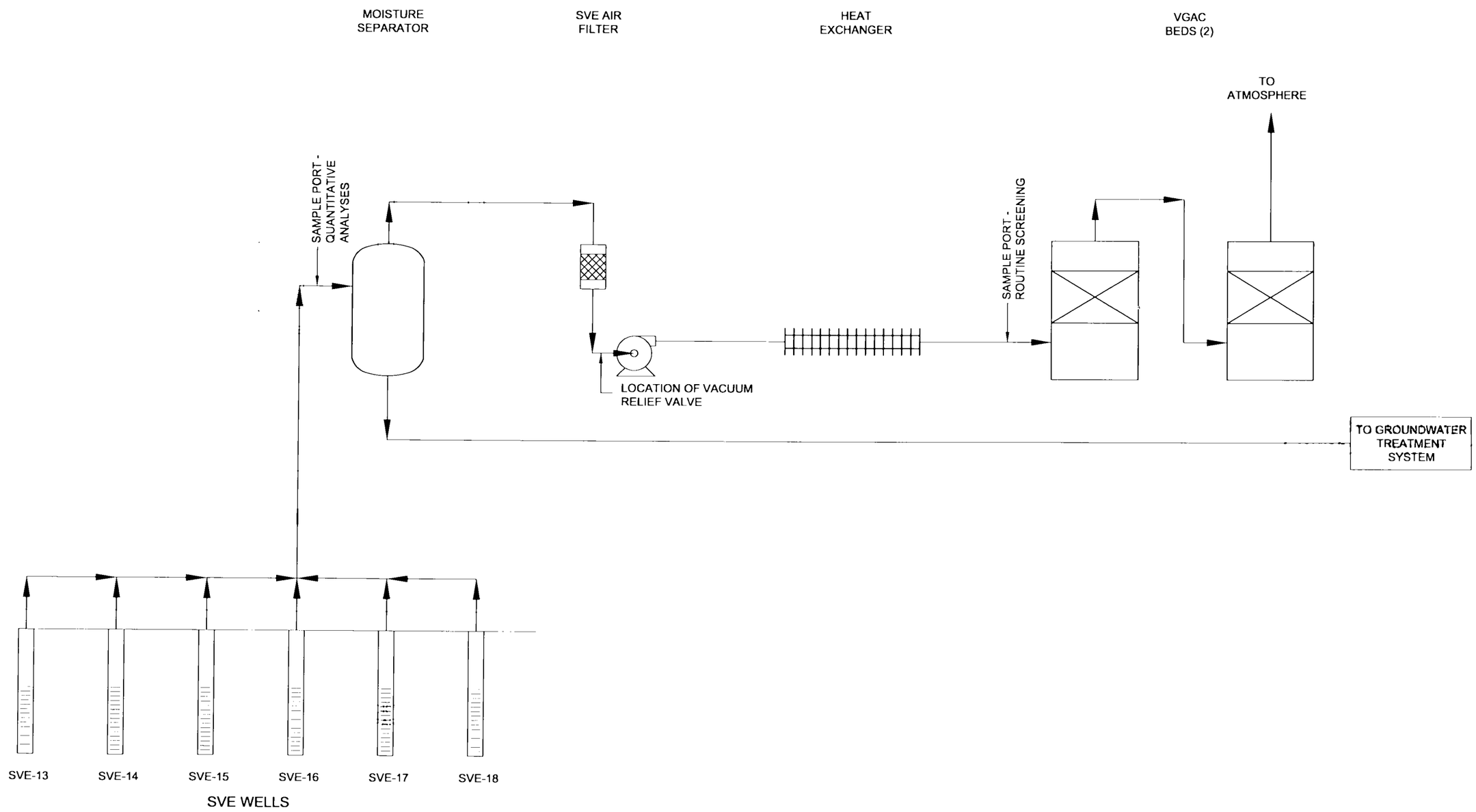

figure 3.2

SVE SYSTEM SCHEMATIC FLOW DIAGRAM
VACAIR ALLOYS DIVISION
Frewsburg, New York

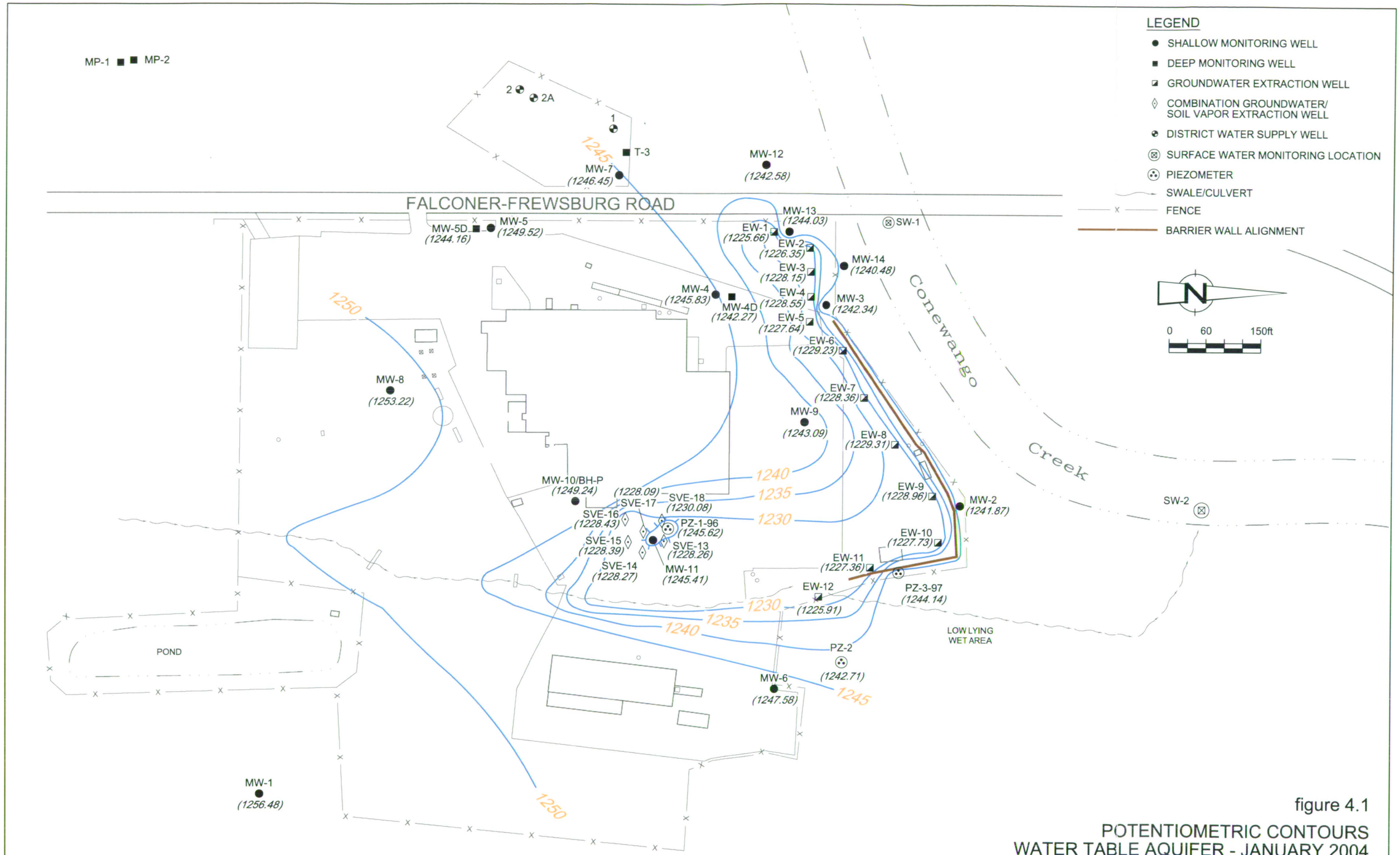

figure 4.1

POTENTIOMETRIC CONTOURS
WATER TABLE AQUIFER - JANUARY 2004
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF003 JAN 18/2005

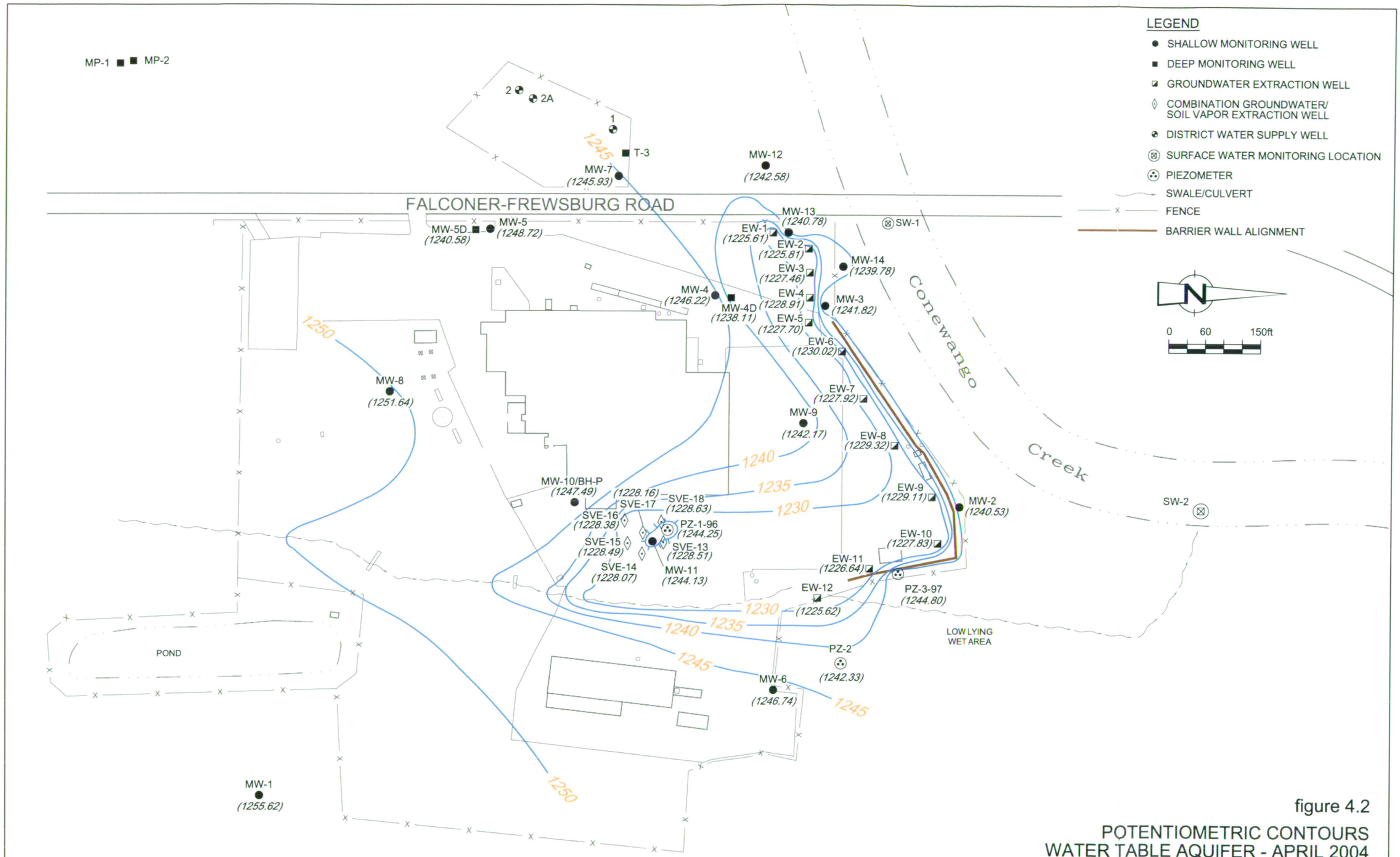

figure 4.2

POTENTIOMETRIC CONTOURS
WATER TABLE AQUIFER - APRIL 2004
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF004 JAN 19/2005

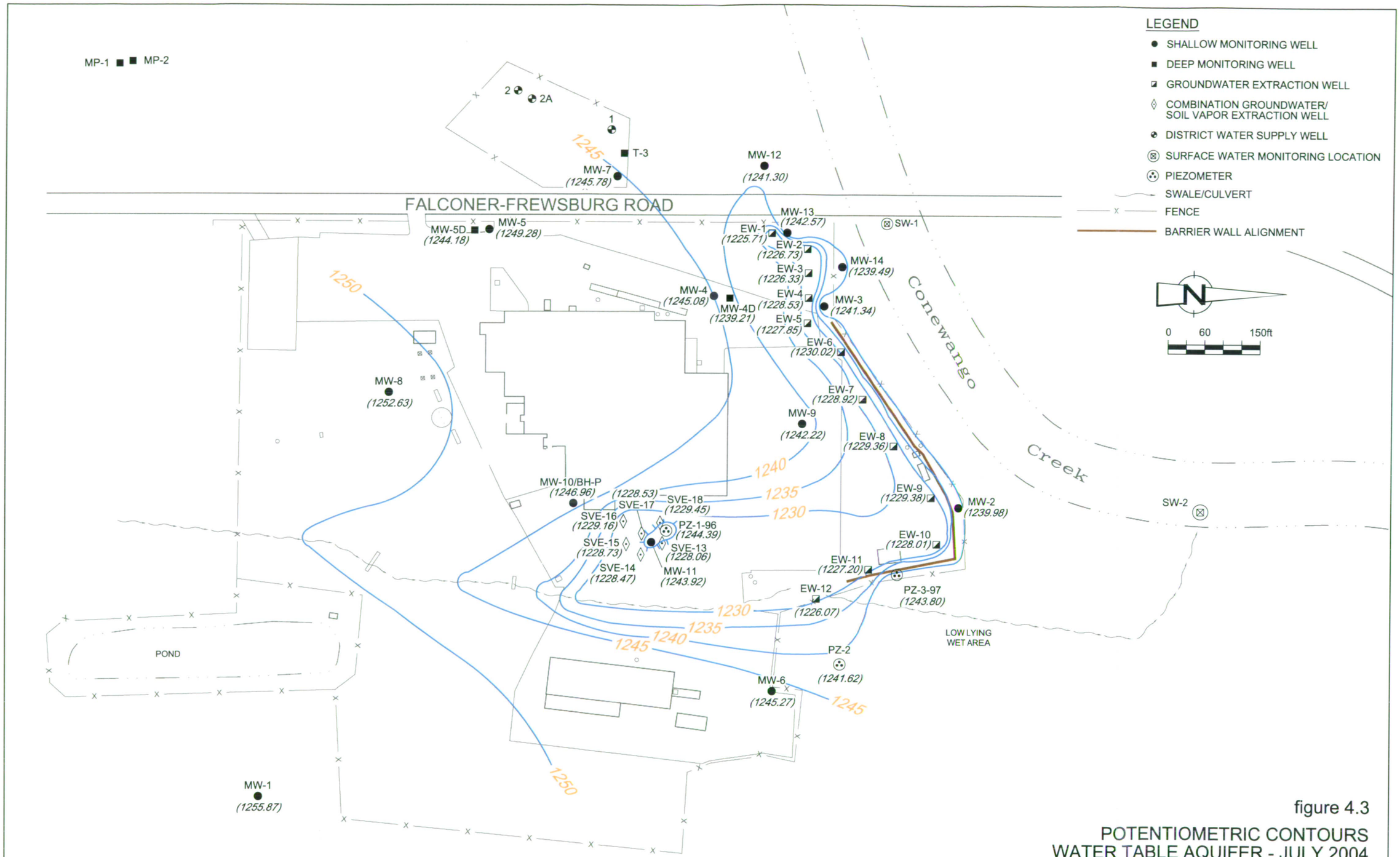

figure 4.3

POTENTIOMETRIC CONTOURS
WATER TABLE AQUIFER - JULY 2004
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF005 JAN 19/2005

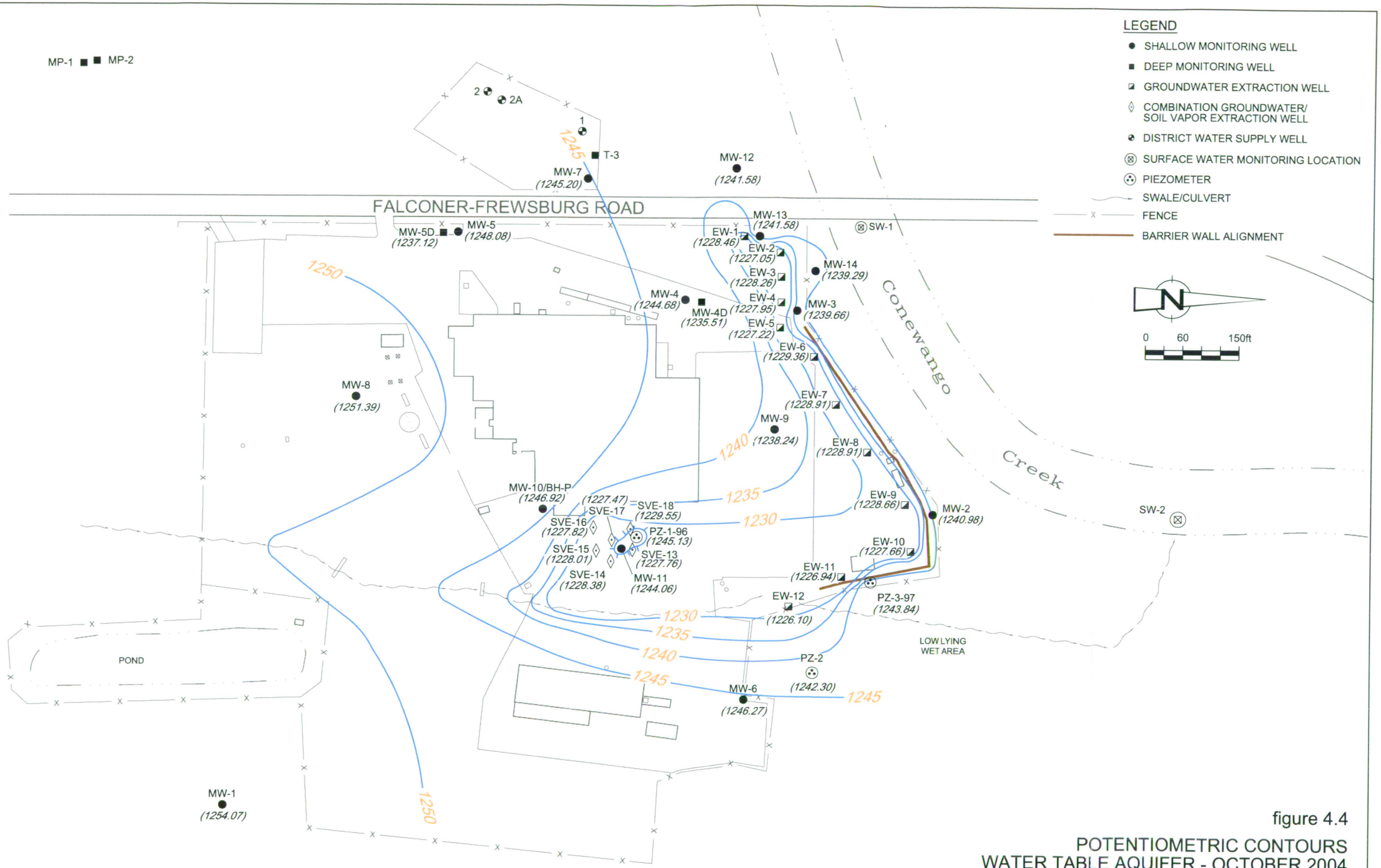

figure 4.4

POTENTIOMETRIC CONTOURS
WATER TABLE AQUIFER - OCTOBER 2004
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF006 JAN 19/2005

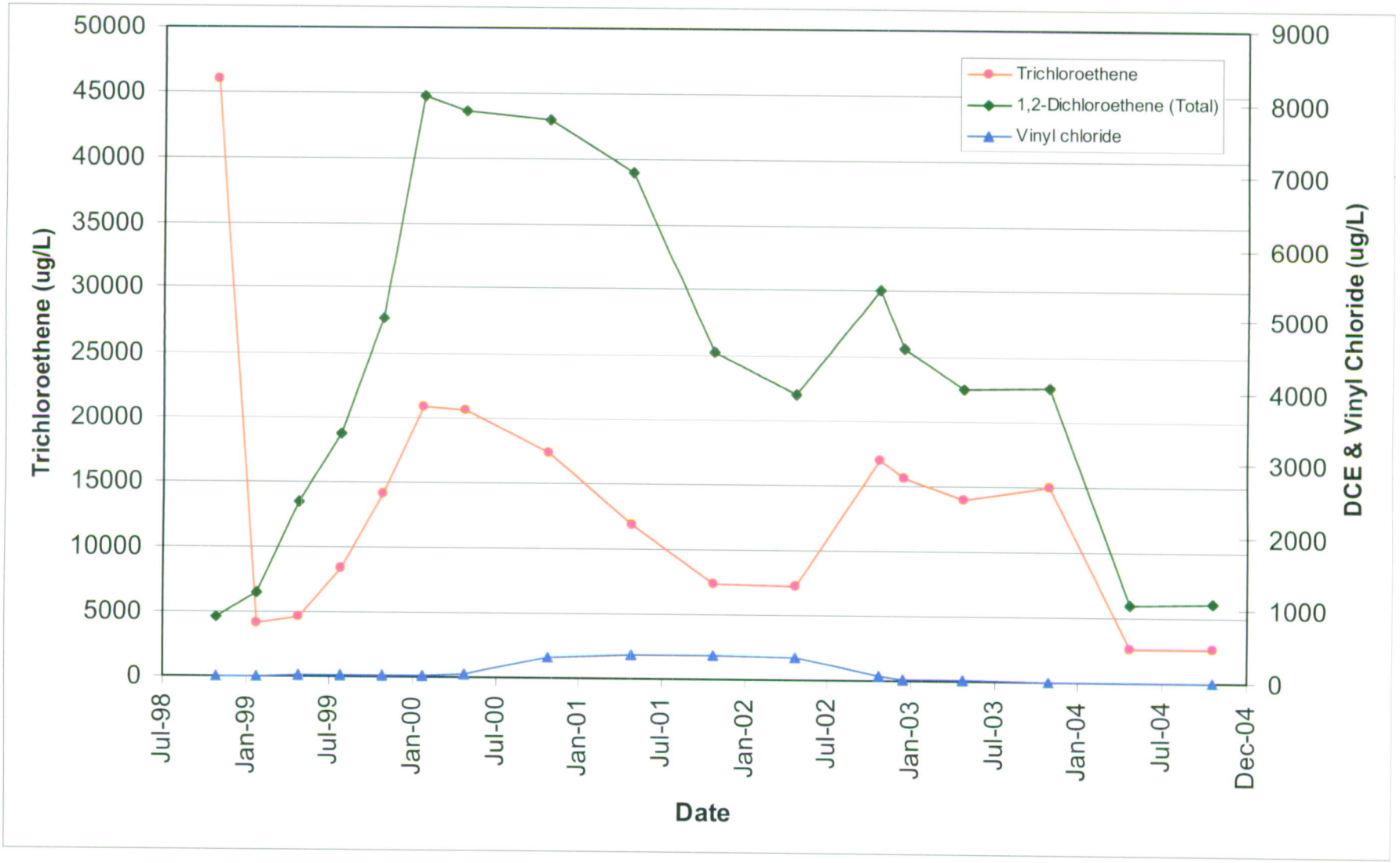

figure 4.5

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-11
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF001 JAN 24/2005

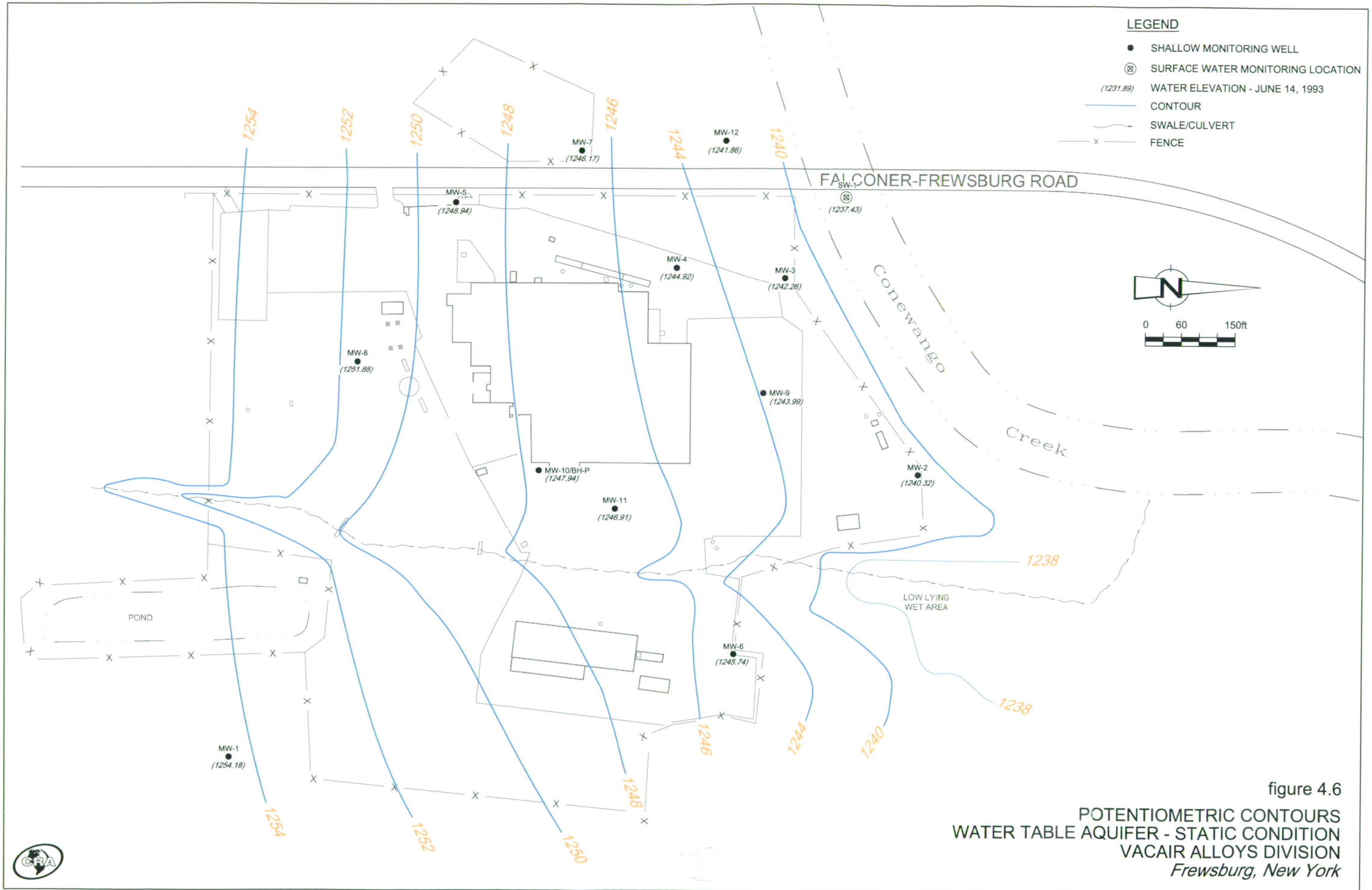

figure 4.6

POTENTIOMETRIC CONTOURS
WATER TABLE AQUIFER - STATIC CONDITION
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)GN-NF007 JAN 19/2005

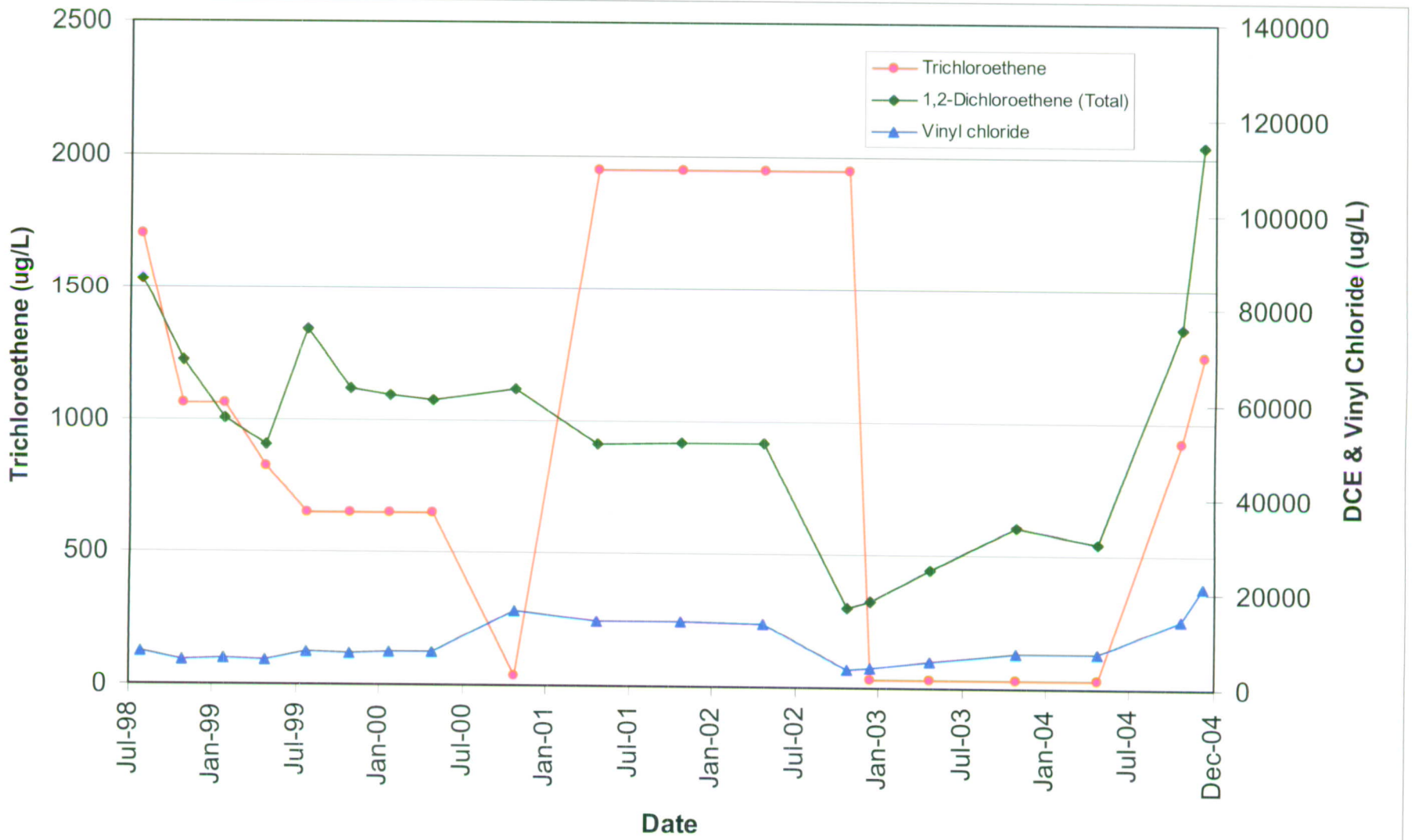

figure 4.7

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-2
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF002 JAN 24/2005

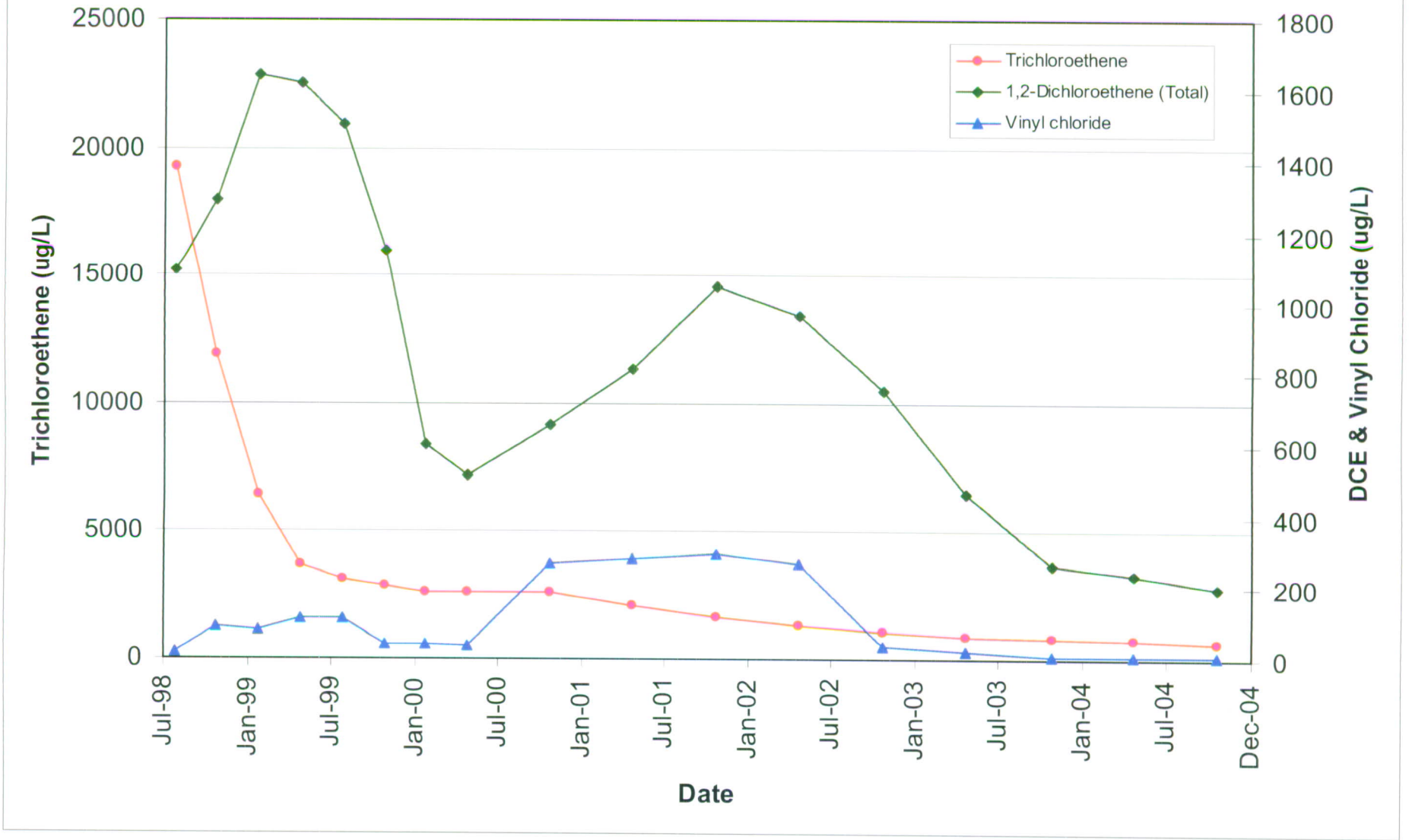

figure 4.8

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-3
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF003 JAN 24/2005

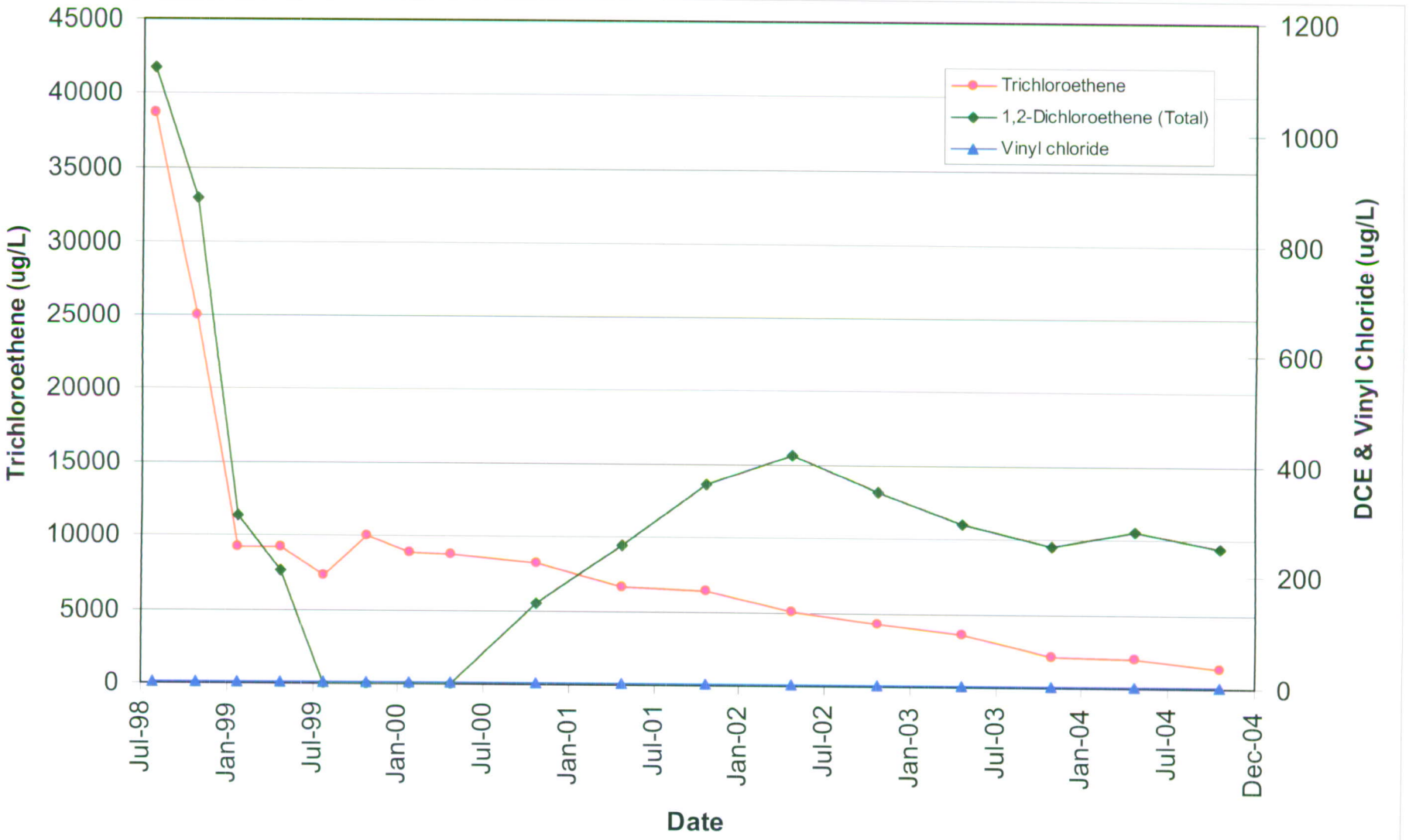

figure 4.9

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-4
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF004 JAN 24/2005

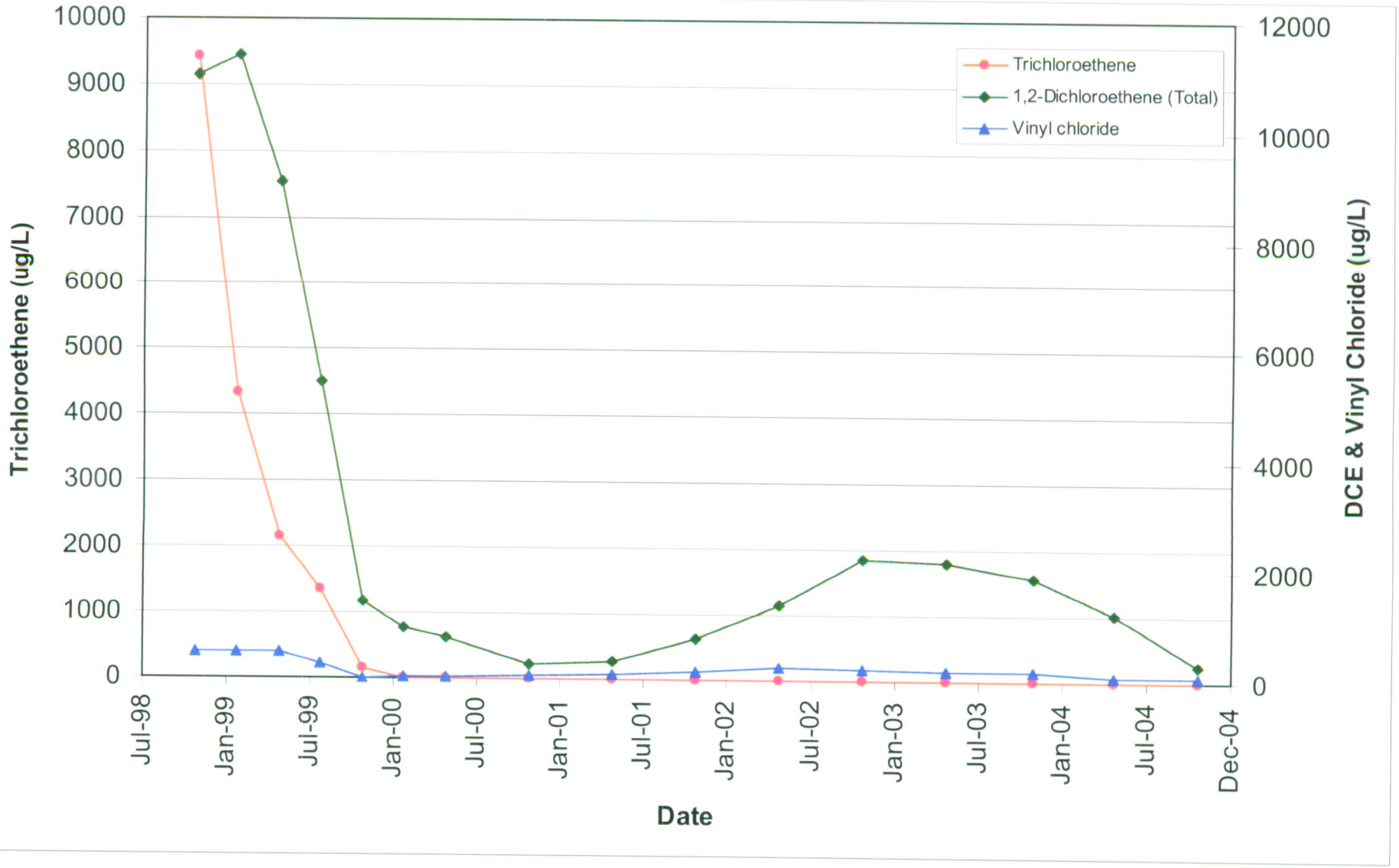

figure 4.10

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-9
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF005 JAN 24/2005

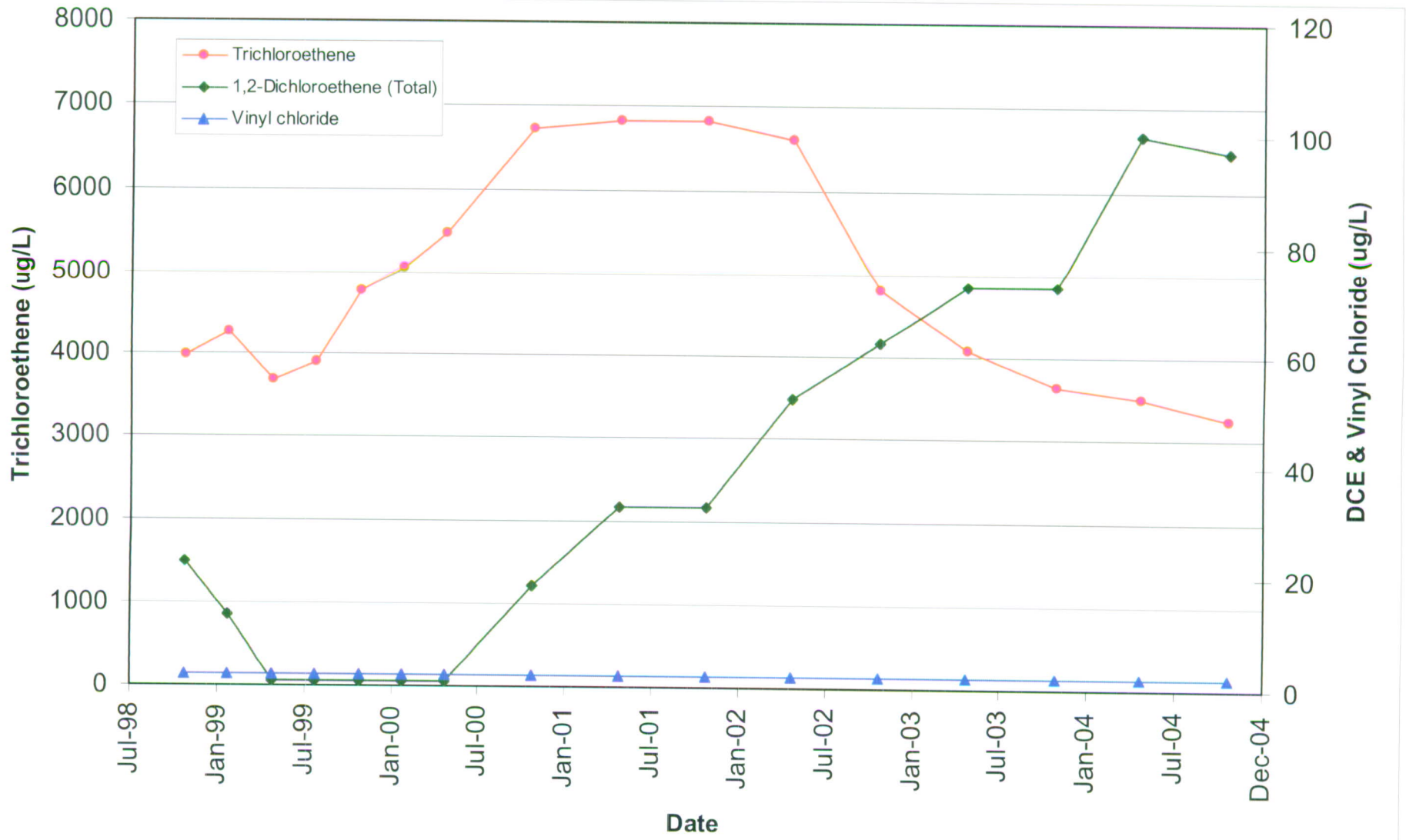

figure 4.11

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-12
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF006 JAN 24/2005

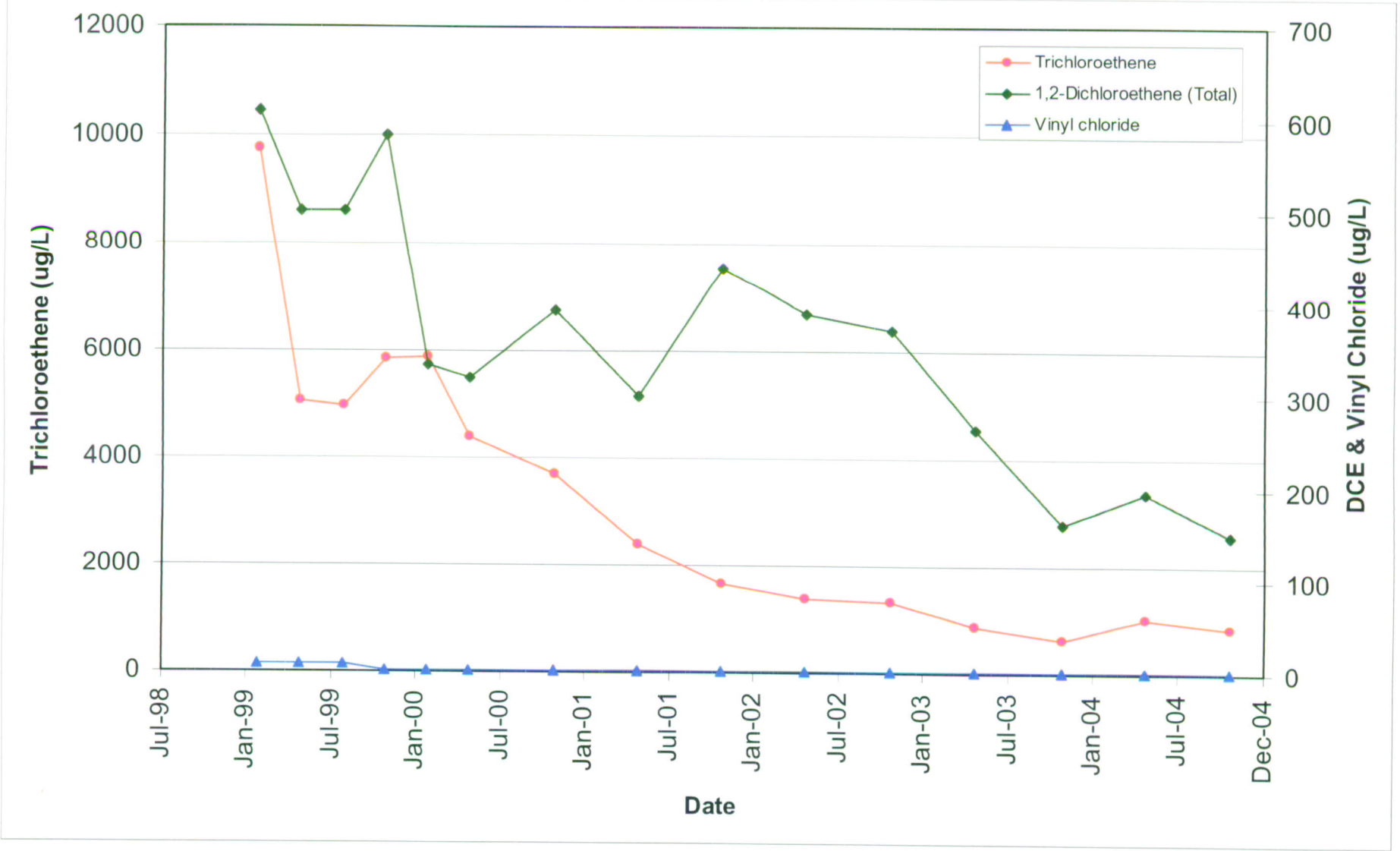

figure 4.12

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-13
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF007 JAN 24/2005

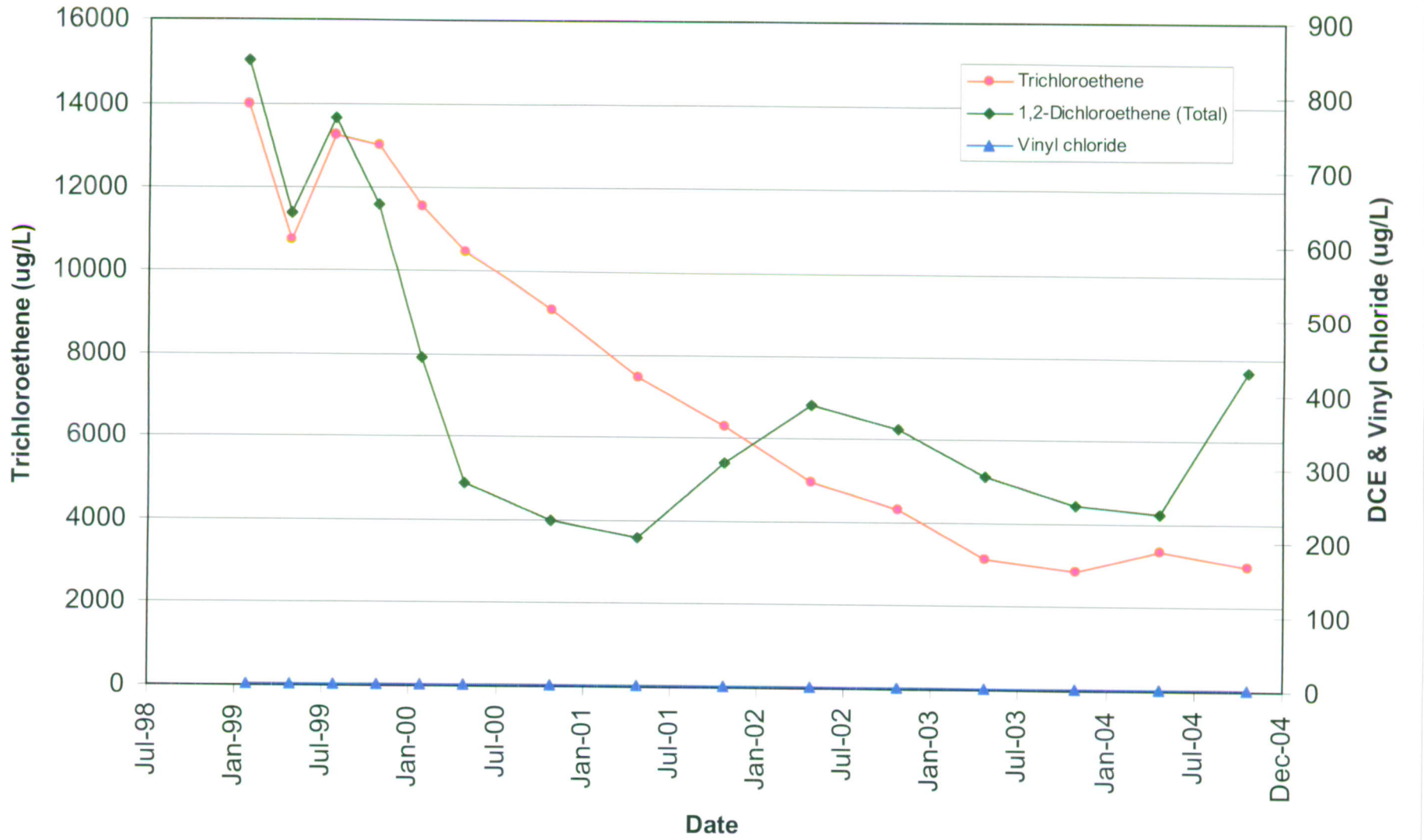

figure 4.13

RUNNING AVERAGE CONCENTRATIONS VERSUS TIME - MW-14
VACAIR ALLOYS DIVISION
Frewsburg, New York

02326-00(038)EX-NF008 JAN 24/2005

TABLE 1.1

INSPECTION, SAMPLING, AND MONITORING FREQUENCIES
VACAIR ALLOYS
FREWSBURG, NEW YORK

Remedial Component	*Activity*	*Frequency*
Site Paving / Wells		
Inspection	Inspect for damage, defects, cracks, ponded water, etc.	Monthly
Repairs		As Needed
Stormwater Systems		
Stormceptor / Catchbasins	Inspect for sediment/oil accumulation	Monthly
	Sediment removal	As Needed
Sewer Bedding Sump	Inspect for proper operation, sediment	Monthly
Groundwater Extraction and Treatment System		
Gauge readings, equipment inspections	Read and record gauge and indicator readings, inspect equipment and piping for operation and leaks, alarms	Daily
Bag Filters	Change at 15 psi pressure (Daily Form 5)	As Needed
NAPL Drum	Change based on NAPL level	As Needed
Air Stripper	Review O&M instructions	Monthly
SVE and Treatment System		
Treated Air Stream	Check breakthrough indicators outlet of each carbon canister to establish change out frequency, monitor influent concentration using sensidyne air gas sampling system	Weekly
Gauge readings, equipment inspections	Read and record gauge and indicator readings, inspect equipment and piping for operation and leaks, alarms	Weekly
Carbon Canister	Check for breakthrough change based on breakthrough indicator	Daily
Environmental Sampling and Monitoring		
Seep Inspections	Inspect seeps for flow	Semi-annually
Seep Sampling	Collect and analyze seep water	After 2 consecutive seeps
Hydraulic Monitoring	• EW-5 and EW-12	Monthly
	• Extraction and SVE Wells	Quarterly
	• Monitoring Wells and Piezometers	Quarterly
	• Conewango Creek	Quarterly

TABLE 1.1

INSPECTION, SAMPLING, AND MONITORING FREQUENCIES
VACAIR ALLOYS
FREWSBURG, NEW YORK

Remedial Component	*Activity*	*Frequency*
Environmental Sampling and Monitoring (Cont'd.)		
Groundwater Quality Monitoring	• Monitoring Wells	Annual: MW-1, MW-4D, MW-5, MW-5D, MW-6, MW-7, MW-8, MW-10* Semi-Annual: MW-2, MW-3, MW-4, MW-9, MW-11, MW-12, MW-13, MW-14*
	• Conewango Creek	None
Discharge Effluent Monitoring	• pH • Oil and Grease, Aluminum, Iron, Zinc • Volatile Organic Compounds	Monthly Semi-Annually Monthly
Site Security, Fencing, Building, Etc.		
Inspection	Inspect for problems/defects	Monthly
Reporting		
Quarterly Environmental Monitoring and Inspection Reports		Quarterly
Annual Performance Evaluation Reports		Annually

Notes:

* Commenced in April 2000, quarterly prior to April 2000.

TABLE 3.1

EFFLUENT DISCHARGE LIMITATIONS
VACAIR ALLOYS
FREWSBURG, NEW YORK

Effluent Parameter	*Daily Average*	*Daily Maximum*	*Units*
Flow	Monitor	50,000	GPD
pH (range)	Monitor	6.0 - 9.0	SU
Oil and Grease	Monitor	15	mg/L
Aluminum, total	Monitor	2700	µg/L
Iron, total	Monitor	2000	µg/L
Zinc, total	Monitor	400	µg/L
VOCs	Monitor	10	µg/L

Notes:

µg/L	Micrograms per Liter.
GPD	Gallons Per Day.
mg/L	Milligrams per Liter.
SU	Standard Units.
VOCs	Volatile Organic Compounds.

TABLE 3.2

GROUNDWATER EXTRACTION VOLUMES AND RATES
VACAIR ALLOYS
FREWSBURG, NEW YORK

Month	End of Month Totalizer Reading (Gallons)	Extracted Volume (Gallons)	Operating Time (Hours)	Maximum Daily Flow (GPM)	Average Monthly Flow (GPM)
December-99	9,361,316				
January-00	9,527,470	166,154	744	16.2	3.7
February-00	9,943,730	416,260	665	15.7	10.4
March-00	10,429,380	485,650	744	20.4	10.9
April-00	10,870,460	441,080	720	20.1	10.2
May-00	11,384,330	513,870	744	20.2	11.5
June-00	11,697,340	313,010	720	15.4	7.2
July-00	11,873,130	175,790	312	18.6	9.4
August-00	12,036,790	163,660	648	18.7	4.2
September-00	12,383,120	346,330	720	17.6	8.0
October-00	12,876,160	493,040	744	21.1	11.0
November-00	13,295,460	419,300	720	13.7	9.7
December-00	13,965,682	670,222	744	19.6	15.0
January-01	14,534,440	568,758	744	18.6	12.7
February-01	14,889,400	354,960	672	18.7	8.8
March-01	15,377,750	488,350	744	12.1	10.9
April-01	15,933,550	555,800	720	18.6	12.9
May-01	16,365,580	432,030	744	16.2	9.7
June-01	16,805,439	439,859	720	12.1	10.2
July-01	17,199,270	393,831	576	17.6	11.4
August-01	17,594,689	395,419	744	12.5	8.9
September-01	17,925,190	330,501	720	16.7	7.7
October-01	18,447,419	522,229	744	11.6	11.7
November-01	18,823,644	376,225	720	12.5	8.7
December-01	19,205,500	381,856	744	9.6	8.6
January-02	19,590,599	385,099	696	14.1	9.2
February-02	20,011,440	420,841	468	22.2	15.0
March-02	20,370,040	358,600	696	26.2	8.6
April-02	20,958,500	588,460	720	14.1	13.6
May-02	21,437,177	478,677	744	22.2	10.7
June-02	21,794,240	357,063	720	26.2	8.3
July-02	22,195,200	400,960	696	14.4	9.6
August-02	22,542,470	347,270	480	26.7	12.1
September-02	22,978,729	436,259	672	21.2	10.8
October-02	23,311,690	332,961	624	19.2	8.9
November-02	23,594,170	282,480	720	10.5	6.5
December-02	23,961,847	367,677	744	13.3	8.2
January-03	24,273,900	312,053	672	9.1	7.7
February-03	24,533,450	259,550	672	7.4	6.4
March-03	24,817,969	284,519	744	14.6	6.4
April-03	25,279,110	461,141	712	12.2	10.8
May-03	25,664,420	385,310	744	10.3	8.6
June-03	26,140,240	475,820	711	14.4	11.2
July-03	26,555,470	415,230	726	16.8	9.5
August-03	26,921,479	366,009	737	18.6	8.3
September-03	27,328,129	406,650	720	10.6	9.4
October-03	27,690,040	361,911	744	10.8	8.1
November-03	27,975,189	285,149	716	6.8	6.6
December-03	28,147,131	171,942	740	3.6	3.9
January-04	28,338,310	191,179	683	3.8	4.7
February-04	28,450,980	112,670	696	2.6	2.7
March-04	28,613,860	162,880	744	2.8	3.6
April-04	28,707,748	93,888	476	6.6	3.3
May-04	29,114,869	407,121	624	6.8	10.9
June-04	29,521,990	407,121	720	10.6	9.4
July-04	30,062,250	540,260	717	9.4	12.6
August-04	30,491,533	429,283	744	12.8	9.6
September-04	30,887,230	395,697	715	9.8	9.2
October-04	31,274,650	387,420	690	10.7	9.4
November-04	31,731,955	457,305	720	9.3	10.6
December-04	32,244,655	512,700	744	7.4	11.5
	To Date:	22,883,339		26.7	9.2

Note:
GPM Gallons Per Minute.

FRA 2326 (3M)

TABLE 3.3

REMEDIATION BRANCH OPERATING TIME - 2004
VACAIR ALLOYS
FREWSBURG, NEW YORK

	EW1-10 (Hours)	*EW11-18 (Hours)*	*SVE 13-18 (Hours)*
January	683	683	624
February	695	695	696
March	744	744	744
April	477	477	720
May	624	624	744
June	720	720	720
July	717	717	744
August	744	744	360*
September	715	715	0*
October	690	690	0*
November	720	720	0*
December	744	744	0*

*Soil Vapor Extraction (SVE) system shut down with prior New York State Department of Environmental Conservation (NYSDEC) approval August 16, 2004.

TABLE 3.4

SUMMARY OF NON-ROUTINE MAINTENANCE
VAC AIR ALLOYS
FREWSBURG, NEW YORK

January 8, 2004	System down 12 hours due to faulty main circuit breaker.
February 26, 2004	System down due to pump losing prime (1 hour down time).
April 30, 2004	System shut down 10 days for pump repair.
May 19, 2004	System down 5 days due to power failure.
September 1, 2004	Check valve in EW8 sticking. Valve was pulled and cleaned. System was down 5 hours.

TABLE 4.1

CALCULATED MONTHLY TOTAL CHEMICAL MASS REMOVED - 2004

VACAIR ALLOYS

FREWSBURG, NEW YORK

Date	*Average VOCs in Treatment Plant Influent* (µg/L)	*Extracted Groundwater Volume* (Gallons)	*Chemical Mass* (Lbs.)
January 2004	17,300	191,179	28
February 2004	8,800	112,670	8
March 2004	3,450	162,880	5
April 2004	11,500	93,888	9
May 2004	7,200	407,121	24
June 2004	12,800	407,121	43
July 2004	15,100	540,260	68
August 2004	14,100	429,283	50
September 2004	10,800	395,697	36
October 2004	11,500	387,420	37
November 2004	11,900	457,305	45
December 2004	14,300	512,700	61
		Total Chemical Mass Removed:	**415**

Notes:

µg/L Micrograms per Liter.

VOCs Volatile Organic Compounds.

Lbs. Pounds.

TABLE 4.2

SUMMARY OF MW-2 PUMPING DATA
VACAIR ALLOYS
FREWSBURG, NEW YORK

Pumping Start Date	*Pumping End Date*	*Total Gallons Purged*	*Comments*
September 30, 2004	September 30, 2004	37	Step-Drawdown test performed.
November 16, 2004	November 19, 2004	300	Pumping only; no sample for VOC analysis
December 7, 2004	December 10, 2004	335	VOC sample obtained prior to pumping.
	Total Gallons Purged	672	

TABLE 4.3

SUMMARY OF VOC ANALYTICAL RESULTS - MW-2
VACAIR ALLOYS
FREWSBURG, NEW YORK

Date	*Units*	*Trichloroethylene*	*cis 1,2-Dichloroethene*	*Vinyl choride*
12/23/1997	ug/L	1,000	31,000	3,000
7/30/1998	ug/L	3,200	82,000	7,400
10/27/1998	ug/L	ND<5000	100,000	9,300
1/25/1999	ug/L	ND<500	13,000	2,700
4/28/1999	ug/L	ND<250	8,500	2,100
7/27/1999	ug/L	2,500	200,000	14,000
10/27/1999	ug/L	ND<2500	49,000	8,300
1/24/2000	ug/L	52	8,100	3,900
4/25/2000	ug/L	ND<250	4,000	1,600
10/25/2000	ug/L	ND<5000	NR	49,000
4/24/2001	ug/L	7700	2,400	ND<100
10/23/2001	ug/L	ND<300	9,800	3,400
4/22/2002	ug/L	ND<100	3,600	1,200
10/23/2002	ug/L	ND<2000	52,000	11,000
12/16/2002	ug/L	ND<330	7,400	1,900
4/23/2003	ug/L	ND<1000	36,000	8,600
10/29/2003	ug/L	ND<1200	40,000	8,200
4/22/2004	ug/L	ND<2000	38,000	11,000
10/29/2004	ug/L	3,600J	190,000	29,000
12/7/2004	ug/L	3,200	190,000	37,000

APPENDIX A

FOURTH QUARTER 2004 MONITORING REPORT

1. Introduction

This Quarterly Status Report summarizes the Operation and Maintenance (O&M) activities performed at the Keywell L.L.C., Vac Air site (Site) for the reporting period from October 1, 2004 of the Site's groundwater remedial system through December 31, 2004. O & M activities performed during this reporting period include routine inspections, hydraulic monitoring, groundwater sampling and the implementation of other routine O & M activities.

The O & M activities were performed in accordance with the "Operations and Maintenance Plan and the Sampling, Analysis and Monitoring Plan" (SAMP) in the approved Final Remedial Design Report for the Site.

2. Groundwater Extraction and Treatment System

2.1 Routine Operations

2.1.1 Operator Training

Keywell employees will operate, monitor and maintain the groundwater extraction and treatment system. Employees trained and familiar with the Site and the treatment plant operations are:

- Chuck Becker
- Kevin Niles
- Dennis Trostle

2.2 Groundwater Treatment System Performance and Discharge Monitoring

Treated groundwater samples were analyzed as per the revised schedule. As an added preventive, VOC's were performed in addition to DEC requirements. Hydraulic Monitoring and Groundwater Quality Monitoring were analyzed as per the revised Operations, Maintenance, Monitoring and Inspections Schedule, Table 5.1 found in Appendix D. Section 2.6 presents the data for the samples collected. Analytical results show compliance with effluent discharge requirements.

2.3 Groundwater/Creek Hydraulic Monitoring

Appendix A1 and A2 presents all water level readings and tabulations for this time period. During this time period sixteen (16) monitoring wells, eighteen (18) extraction wells and three (3) piezometers water level readings were taken as per Table 5.1 found in Appendix D.

2.4 Groundwater Quality Monitoring

Appendix B presents the validated groundwater monitoring well data collected in October 2004.

2.5 Monthly Flow Rate Data and Maximum Daily Flow Rates

Quarterly Reporting Period	End of Month Flow (gal.)	Total Month Flow (gal.)	Maximum Daily Flow (gpm)
October	31,274,650	387,420	9.2
November	31,731,955	457,305	9.3
December	32,244,655	512,700	7.4
Monthly Average		452,475	8.6

2.6 Discharge Loadings from the Facility

October/2004	13,248 gallons
November/2004	13,392 gallons
December/2004	12,384 gallons

Discharge Loadings are as follows:

		1/14/2004	1/14/2004	2/12/2004	2/12/2004	3/10/2004	3/10/2004
COMPOUNDS DETECTED	UNITS	RESULTS	# / DAY DISCHARGED	Results	# / DAY DISCHARGED	Results	# / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00005	ND<1	<.00005	2.1	0.0001
Oil & Grease	mg/L	ND<5	<.25				
Aluminum	ug/L	ND<200	<.01				
Iron	ug/L	881	0.046				
Zinc	ug/L	10.6	0.0005				
pH		8		8.1		8	
Flow	GPM	3.8		2.6		2.8	

COMPOUNDS DETECTED	UNITS	4/7/2004 RESULTS	# / DAY DISCHARGED	5/5/2004 Results	# / DAY DISCHARGED	6/9/2004 Results	# / DAY DISCHARGED
VOC's	ug/L	2.6	<.00007	3.9	<.0004	ND<1	<.00013
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.4		5.8		8	
Flow	GPM	2.2		9.1		11.2	

COMPOUNDS DETECTED	UNITS	7/15/2004 RESULTS	7/15/2004 # / DAY DISCHARGED	8/5/2004 Results	8/5/2004 # / DAY DISCHARGED	9/15/2004 Results	9/15/2004 # / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	ND<1	<.00011	ND<1	<.00011
Oil & Grease	mg/L	ND<5.5	<.6				
Aluminum	ug/L	ND<200	<.02				
Iron	ug/L	2720	0.31				
Zinc	ug/L	12	0.001				
pH		8.2		8.3		8.1	
Flow	GPM	9.4		12.8		9.8	

COMPOUNDS DETECTED	UNITS	10/7/2004 RESULTS	10/7/04 # / DAY DISCHARGED	11/3/2004 Results	11/3/2004 # / DAY DISCHARGED	12/8/2004 Results	12/8/04 # / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	5.7	0.00063	5	0.00052
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.7		8.4		8.2	
Flow	GPM	9.2		9.3		7.4	

2.7. Preventative Maintenance

10/25/04 – Shut down system to clean air stripper and phase separator, system down 54 hours.

3. SVE System

3.1 SVE Maintenance:

The NYSDEC approved the discontinuation of the SVE system. The system was shutdown on 8/16/04. The groundwater extraction wells in the area of the SVE system will continue to be operated.

4. O & M Activities

4.1 Phase Separator

LNAPL collection is minimal (less than one (1) ounce per week).

4.2 Seep Inspections

Prior to system startup, seeps occurred at the break in the slope east of the existing oil/water separator. Routine seep inspections indicated continued absence of groundwater seeps.

4.3 Stormceptors

Stormceptors are checked monthly for settlement. Found 6-8 inches of mud in each. These are cleaned when 1.5 – 2.0 feet is found. No plans for cleaning are necessary at this time. Oil residuals in the Stormceptors are also checked quarterly as part of our Integrated Contingency Plan for environmental control. Checks are done for both dry and wet weather events.

4.4 Bag Filter Change (Groundwater Treatment System)

Bag filter change outs occur on an "as needed" basis. Change outs occurred five (5) times in October, six (6) times in November and six (6) times in December.

4.5 Air Stripper

Air stripper was cleaned 10/25/04.

4.6 Miscellaneous Maintenance

None.

TABLE 1
VOC GROUNDWATER TREATMENT PLANT INFLUENT/EFFLUENT DATA

		INFLUENT		EFFLUENT	
DATE	UNITS	TCE	DCE	TCE	DCE
10/7/2004	ug/L	7700	3800	ND<1	ND<1
10/28/2004	ug/L			ND<1	ND<1
11/3/2004	ug/L	8000	3900	ND<1	ND<1
11/17/2004	ug/L			ND<1	ND<1
12/8/2004	ug/L	11000	3300	5	3.3

Discharge Loading

		1/14/2004	1/14/2004	2/12/2004	2/12/2004	3/10/2004	3/10/2004
COMPOUNDS DETECTED	UNITS	RESULTS	# / DAY DISCHARGED	Results	# / DAY DISCHARGED	Results	# / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00005	ND<1	<.00005	2.1	0.0001
Oil & Grease	mg/L	ND<5	<.25				
Aluminum	ug/L	ND<200	<.01				
Iron	ug/L	881	0.046				
Zinc	ug/L	10.6	0.0005				
pH		8		8.1		8	

		4/7/2004		5/5/2004		6/9/2004	
COMPOUNDS DETECTED	UNITS	RESULTS	# / DAY DISCHARGED	Results	# / DAY DISCHARGED	Results	# / DAY DISCHARGED
VOC's	ug/L	2.6	<.00007	3.9	<.0004	ND<1	<.00013
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.4		5.8		8	
Flow	ug/L	2.2		9.1		11.2	

		7/15/2004	7/15/2004	8/5/2004	8/5/2004	9/15/2004	9/15/2004
COMPOUNDS DETECTED	UNITS	RESULTS	# / DAY DISCHARGED	Results	# / DAY DISCHARGED	Results	# / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	ND<1	<.00011	ND<1	<.00011
Oil & Grease	mg/L	ND<5.5	<.6				
Aluminum	ug/L	ND<200	<.02				
Iron	ug/L	2720	0.31				
Zinc	ug/L	12	0.001				
pH		8.2		8.3		8.1	

		10/7/2004	10.7/04	11/3/2004	11/3/2004	12/8/2004	12.8/04
COMPOUNDS DETECTED	UNITS	RESULTS	# / DAY DISCHARGED	Results	# / DAY DISCHARGED	Results	# / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	5.7	0.00063	5	0.00052
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.7		8.4		8.2	
Flow		9.2		9.3		7.4	

APPENDIX A1
GROUNDWATER HYDRAULIC MONITORING DATA (2004)
MONITORING WELLS AND PIEZOMETERS
KEYWELL - VAC AIR DIVISION
FREWSBURG, NY

Well	Northing	Easting	T.O.C. Elevation	10/19/2004	
MW-1			1260.60	6.53	1254.07
MW-2	5898	5511.1	1251.60	10.62	1240.98
MW-3	5679.3	5188.5	1252.30	12.64	1239.66
MW-4	5501.5	5167.2	1250.10	5.42	1244.68
MW-4D	5510.6	5167.17	1249.37	13.86	1235.51
MW-5	5136.1	5061.9	1256.50	8.42	1248.08
MW-5D	5119.56	5061.06	1255.14	18.02	1237.12
MW-6	5596.50	5805.5	1253.70	7.43	1246.27
MW-7	5340.06	4973.69	1253.76	8.56	1245.20
MW-8			1256.65	5.26	1251.39
MW-9	5640.89	5370.69	1249.2	10.96	1238.24
MW-10	5271.81	5497.41	1253.5	6.58	1246.92
MW-11	5387.37	5578.29	1251.02	6.96	1244.06
MW-12			1243.08	1.5	1241.58
MW-13	5053	5616	1247.8	6.22	1241.58
MW-14	5121	5709	1247.46	8.17	1239.29
PZ-1-96	5411.06	5548.72	1251.09	5.96	1245.13
PZ-2	5725	5720	1247.43	5.13	1242.30
PZ-3			1250.82	6.98	1243.84
Creek			1250.69	19.07	1231.62

APPENDIX A2
GROUNDWATER HYDRAULIC MONITORING DATA (2004)
EXTRACTON AND SVE WELLS
KEYWELL - VAC AIR DIVISION
FREWSBURG, NY

	T.O.C.	10/20/2004		11/9/2004		12/8/2004	
Well	**Elevation (ft. AMSL)**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**
EW-1	1248.63	20.17	1228.46				
EW-2	1248.77	21.72	1227.05				
EW-3	1250.29	22.03	1228.26				
EW-4	1251.11	23.16	1227.95				
EW-5	1250.32	23.10	1227.22	21.78	1228.54	21.42	1228.90
EW-6	1252.14	22.78	1229.36				
EW-7	1251.09	22.18	1228.91				
EW-8	1251.39	22.48	1228.91				
EW-9	1251.52	22.86	1228.66				
EW-10	1250.45	22.79	1227.66				
EW-11	1250.37	23.43	1226.94				
EW-12	1249.11	23.01	1226.10	22.56	1226.55	22.13	1226.98
EW-13	1251.64	23.88	1227.76				
EW-14	1251.34	22.96	1228.38				
EW-15	1251.17	23.16	1228.01				
EW-16	1251.29	23.47	1227.82				
EW-17	1251	23.53	1227.47				
EW-18	1251.41	21.86	1229.55				
Creek							

December 28, 2004

Analytical Data Assessment and Validation
Quarterly Groundwater Sampling
Keywell L.L.C. – Vac Air Division Site
Frewsburg, New York
October – December 2004

The following memo details an assessment and validation of analytical results reported by Severn Trent for groundwater samples collected at the Keywell L.L.C. – Vac Air Site in October 2004 for target compound list (TCL) volatile organic compounds (VOCs) testing. The analytical method used by the laboratory was SW-846 8260B referenced from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, September 1986 and subsequent revisions.

A sample collection summary is presented in Table 1 of Appendix B. The sample results are presented in Table 2 of Appendix B. Evaluation of these data was based on information obtained from the finished data sheets, chain of custody forms, method blanks, and recovery data for surrogate spikes, blank spikes, matrix spikes, and internal standards.

The Quality Assurance/Quality Control (QA/AC) criteria by which these data have been assessed are outlined in the analytical methods, the site-specific Quality Assurance Project Plan (QAPP) in Appendix G of the "Final Remedial Design Report", June 1997, (Attachment G-3), and the document "National Functional Guidelines for Organic Data Review", February 1994, prepared by the United States Environmental Protection Agency (USEPA) Office of Emergency and Remedial Response. The validation document will be referred to as the "Guidelines".

1.0 SAMPLE HOLDING TIMES

In accordance with the "QAPP", water samples preserved with hydrochloric acid to a pH of less than two must be analyzed for VOCs within 14 days of collection. Upon review of the chain of custody documents and analysis reports, it was determined that all investigative samples were analyzed for VOCs within the holding time.

2.0 SURROGATE SPIKE RECOVERIES

Laboratory performance on individual samples is assessed on the basis of surrogate spike recoveries. All water samples submitted for analysis were spiked with the surrogate compounds 4-Bromofluorobenzene, dibromofluoromethane, 1,2-Dichloroethane-d4, and toluene-d_8. All recoveries were within the laboratory control limits.

3.0 INTERNAL STANDARD ANALYSIS

Area count of the internal standards for each sample was within-50 to +100% of the area counts of the daily calibration standard.

4.0 LABORATORY BLANK ANALYSIS

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of sample contamination introduced in the laboratory. Method blanks were reported for each analysis date. No compounds were detected.

5.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS (MS/MSD)

To assess the effects of sample matrices on analytical efficiency, samples are spiked with VOCs in duplicate. The recoveries of MS/MSD analyses are used to evaluate analytical accuracy, while the relative percent difference (RPD) values between the MS and MSD are used to evaluate analytical precision. All recoveries were within control limits.

6.0 BLANK SPIKE (BS) ANALYSIS

Blank spikes are analyzed as samples to assess the analytical efficiency of the method employed, independent of sample matrix effects. Blank spikes were prepared and analyzed, and all recoveries were within laboratory control limits.

7.0 FIELD QA/QC – TRIP BLANK/RINSE BLANK ANALYSES

The purpose of the trip blank analysis is to determine the existence and magnitude of contamination resulting from field sampling activities, sample transport, and storage. One trip blank was submitted for analysis with the investigative samples. All results were non-detect.

8.0 FIELD QA/QC – FIELD DUPLICATE ANALYSIS

To assess sampling and analytical precision, sample GW-2326-1004-006 was collected as a filed duplicate of sample GW-2326-1004-010 and submitted "blind" to the laboratory for analysis. Sample results showed acceptable agreement, demonstrating good sampling and analytical precision.

9.0 CONCLUSION

Based on this QA/QC assessment, the data reported by Severn Trent are acceptable for their intended use without further qualification.

Dennis C. Ruffo
Vice President

1/26/05
Date

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	Sample ID:	GW2326-1004-001	GW2326-1004-002	GW2326-1004-003	GW2326-1004-004	GW2326-1004-005	GW2326-1004-006
	Location ID:	MW7	MW14	MW1	MW11	MW4	MW4D
	Collection Date:	10/20/2004	10/19/2004	10/19/2004	10/20/2004	10/19/2004	10/19/2004
Parameters	**Units**						
TCL Volatiles							
cis-1,2 Dichloroethene	ug/L	ND<1	1000	ND<1	100	190	ND<1
trans-1,2-Dichloroethene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Acetone	ug/L	ND<10	ND<500	ND<10	ND<50	ND<500	ND<10
Benzene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Bromodichloromethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Bromoform	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Bromomethane	ug/L	ND<2	ND<100	ND<2	ND<10	ND<100	ND<2
2-Butanone	ug/L	ND<5	ND<250	ND<5	ND<25	ND<250	ND<5
Carbon disulfide	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Carbon tetrachloride	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Chlorobenzene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Dibromochloromethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Chloroethane	ug/L	ND<2	ND<100	ND<2	ND<10	ND<100	ND<2
Chloroform	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Chloromethane	ug/L	ND<2	ND<100	ND<2	ND<10	ND<100	ND<2
1,1-Dichloroethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
1,2-Dichloroethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
1,1-Dichloroethene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
1,2-Dichloropropane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
cis-1,3-Dichloropropene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
trans-1,3-Dichloropropene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Ethylbenzene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
2-Hexanone	ug/L	ND<5	ND<250	ND<5	ND<25	ND<250	ND<5
Methylene chloride	ug/L	ND<2	ND<100	ND<2	ND<10	ND<100	ND<2
4-Methyl-2-pentanone	ug/L	ND<5	ND<250	ND<5	ND<25	ND<250	ND<5
Styrene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
1,1,2,2-Tetrachloroethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Tetrachloroethene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Toluene	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
1,1,1-Trichloroethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	Sample ID:	GW2326-1004-001	GW2326-1004-002	GW2326-1004-003	GW2326-1004-004	GW2326-1004-005	GW2326-1004-006
	Location ID:	MW7	MW14	MW1	MW11	MW4	MW4D
	Collection Date:	10/20/2004	10/19/2004	10/19/2004	10/20/2004	10/19/2004	10/19/2004
Parameters	**Units**						
TCL Volatiles							
1,1,2-Trichloroethane	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1
Trichloroethene	ug/L	ND<1	1400	ND<1	7.7	1300	ND<1
Vinyl chloride	ug/L	ND<2	ND<100	ND<2	ND<10	ND<100	ND<2
Xylene (total)	ug/L	ND<1	ND<50	ND<1	ND<5	ND<50	ND<1

Notes:

ND - Non-detect at associated value

E-Estimated result. Result concentration exceeds the calibration range.

J-Estimated result. Result is less than RL.

B-Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	GW2326-1004-007	GW2326-1004-007	GW2326-1004-008	GW2326-1004-009	GW2326-1004-010	GW2326-1004-011	GW2326-1004-012
	MW13		MW2	MW8	MW4D	RINSE	MW12
	10/19/2004	10/19/2004	10/20/2004	10/20/2004	10/19/2004	10/19/2004	10/20/2004
Parameters							
TCL Volatiles							
cis-1,2 Dichloroethene	47E	47	190000	ND<1	ND<1	ND<1	98
trans-1,2-Dichloroethene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Acetone	ND<10	ND<20	ND<50000	ND<10	ND<10	ND<10	ND<500
Benzene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Bromodichloromethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Bromoform	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Bromomethane	ND<2	ND<4	ND<10000	ND<2	ND<2	ND<2	ND<100
2-Butanone	ND<5	ND<10	ND<25000	ND<5	ND<5	ND<5	ND<250
Carbon disulfide	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Carbon tetrachloride	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Chlorobenzene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Dibromochloromethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Chloroethane	ND<2	ND<4	ND<10000	ND<2	ND<2	ND<2	ND<100
Chloroform	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Chloromethane	ND<2	ND<4	ND<10000	ND<2	ND<2	ND<2	ND<100
1,1-Dichloroethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
1,2-Dichloroethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
1,1-Dichloroethene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
1,2-Dichloropropane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
cis-1,3-Dichloropropene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
trans-1,3-Dichloropropene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Ethylbenzene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
2-Hexanone	ND<5	ND<10	ND<25000	ND<5	ND<5	ND<5	ND<250
Methylene chloride	ND<2	ND<4	ND<10000	ND<2	ND<2	ND<2	ND<100
4-Methyl-2-pentanone	ND<5	ND<10	ND<25000	ND<5	ND<5	ND<5	ND<250
Styrene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
1,1,2,2-Tetrachloroethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Tetrachloroethene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Toluene	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
1,1,1-Trichloroethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	GW2326-1004-007	GW2326-1004-007	GW2326-1004-008	GW2326-1004-009	GW2326-1004-010	GW2326-1004-011	GW2326-1004-012
	MW13		MW2	MW8	MW4D	RINSE	MW12
	10/19/2004	10/19/2004	10/20/2004	10/20/2004	10/19/2004	10/19/2004	10/20/2004
Parameters							
TCL Volatiles							
1,1,2-Trichloroethane	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50
Trichloroethene	48E	46	3600J	1.1	ND<1	ND<1	1100
Vinyl chloride	ND<2	ND<4	29000	ND<2	ND<2	ND<2	ND<100
Xylene (total)	ND<1	ND<2	ND<5000	ND<1	ND<1	ND<1	ND<50

Notes:
ND - Non-detect at associated value
E-Estimated result. Result concentration exceeds the calibration range.
J-Estimated resutl. Result is less than RL.
B-Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	GW2326-1004-013	GW2326-1004-014	GW2326-1004-015	GW2326-1004-016	GW2326-1004-017	GW2326-1004-017	GW2326-1004-018
	MW3	MW10	MW6	MW5	MW9		MW5D
	10/19/2004	10/20/2004	10/20/2004	10/19/2004	10/20/2004	10/20/2004	10/19/2004
Parameters							
TCL Volatiles							
cis-1,2 Dichloroethene	110	ND<1	ND<1	ND<1	21	17	ND<1
trans-1,2-Dichloroethene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Acetone	ND<100	ND<10	ND<10	ND<10	430E	370	ND<10
Benzene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Bromodichloromethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Bromoform	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Bromomethane	ND<20	ND<2	ND<2	ND<2	ND<10	ND<20	ND<2
2-Butanone	ND<50	ND<5	ND<5	ND<5	42	ND<50	ND<5
Carbon disulfide	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Carbon tetrachloride	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Chlorobenzene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Dibromochloromethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Chloroethane	ND<20	ND<2	ND<2	ND<2	ND<10	ND<20	ND<2
Chloroform	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Chloromethane	ND<20	ND<2	ND<2	ND<2	ND<10	ND<20	ND<2
1,1-Dichloroethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
1,2-Dichloroethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
1,1-Dichloroethene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
1,2-Dichloropropane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
cis-1,3-Dichloropropene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
trans-1,3-Dichloropropene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Ethylbenzene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
2-Hexanone	ND<50	ND<5	ND<5	ND<5	ND<25	ND<50	ND<5
Methylene chloride	ND<20	ND<2	ND<2	ND<2	ND<10	ND<20	ND<2
4-Methyl-2-pentanone	ND<50	ND<5	ND<5	ND<5	ND<25	ND<50	ND<5
Styrene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
1,1,2,2-Tetrachloroethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Tetrachloroethene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Toluene	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
1,1,1-Trichloroethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1

Table 2
Analytical Summary Quarterly Groundwater Sampling
Vac Air Frewsburg NY
Fourth Quarter 2004

	GW2326-1004-013	GW2326-1004-014	GW2326-1004-015	GW2326-1004-016	GW2326-1004-017	GW2326-1004-017	GW2326-1004-018
	MW3	MW10	MW6	MW5	MW9		MW5D
	10/19/2004	10/20/2004	10/20/2004	10/19/2004	10/20/2004	10/20/2004	10/19/2004
Parameters							
TCL Volatiles							
1,1,2-Trichloroethane	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Trichloroethene	260	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1
Vinyl chloride	ND<10	ND<2	ND<2	ND<2	ND<10	ND<20	ND<2
Xylene (total)	ND<10	ND<1	ND<1	ND<1	ND<5	ND<10	ND<1

Notes:
ND - Non-detect at associated value
E-Estimated result. Result concentration exceeds the calibration range.
J-Estimated result. Result is less than RL.
B-Method blank contamination. The associated method blank contains the target analyte at a reportable level.

APPENDIX D

TABLE 5.1

MONITORING SCHEDULE
VAC AIR
FREWSBURG NY

Monitoring Task	*Frequency*
Hydraulic Monitoring	
• EW-5 and EW-12	Monthly
• Extraction and SVE Wells	Quarterly
• Monitoring Wells & Piezometers	Quarterly
Groundwater Quality Monitoring	
• Monitoring Wells	Annual (MW-1, MW-4D, MW-5, MW-5D, MW-6, MW-7, MW-8, MW-10) To be done in October
	Semi-Annual (MW-2, MW-3 MW-4, MW-9, MW-11, MW-12, MW-13, MW-14) To be in April & October
• Conewango Creek	None
Discharge Effluent Monitoring	
• pH	Monthly
• Oil and Grease, Aluminum, Iron, and Zinc	Semi-Annually
• Volatile Organic compounds (VOC)	Monthly

Notes:

NR Not Required

TABLE 2.1

DER Site No.: 907015

Part 1, Page 1 of 1

Air Alloys Site, Carroll(T), Chautauqua County

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning January 1, 1997

and lasting until December 31, 2002

The discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations Daily Avg.	Daily Max.	Units	Minimum Monitoring Requirements Measurement Frequency	Sample Type
Outfall 001 - Air Stripper Treatment and Discharge of Contaminated Groundwater					
Flow	Monitor	50,000	GPD	Daily	Tot
pH (range)	Monitor	6.0-9.0	SU	Weekly	Gra
Oil & Grease	Monitor	15	mg/l	Monthly	Gra
Aluminum, Total	Monitor	2700	ug/l	Monthly	Gra
Iron, Total	Monitor	2000	ug/l	Monthly	Gra
Zinc, Total	Monitor	400	ug/l	Monthly	Gra
VOCs(1)	Monitor	10	ug/l	Monthly	Gra

Special Conditions and Notes:

(1) VOCs are defined as all Target Compound List (TCL) compounds detected by EPA method 8260. Each individual compound detected by this method must be at or below 5 ug/l in order to demonstrate compliance these limitations. The laboratory must be ELAP certified and Contract Laboratory Protocols procedures (AS #95-1) must be utilized.

(2) Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A re for renewal must be received 6 months prior to the expiration date to allow for review of monitoring data and reassessment of monitoring requirements.

(3) Only site generated groundwater is authorized for treatment and discharge.

(4) Monitoring location - Samples and measurements, shall be taken from the treated effluent of the Air Stripp prior to discharge to Conewango Creek.

Remediation, Region 9
Avenue, Buffalo, New York, 14203-2999
7220 • FAX: (716) 851-7226
dec.state.ny.us

Environmental Conservation
30 YEARS
John P. Cahill
Commissioner

February 29, 2000

Mr. Dennis Trostle
General Manager
P.O. Box 650
Frewsburg, New York 14738

Dear Mr. Trostle:

Vac Air Alloys Site
Carroll(T), Chautauqua County
Site No. 907016

I have completed a review of the report entitled, "Quarterly Monitoring Data Report - October 1, 1999 through December 31, 1999 and Performance Evaluation Report", dated February 17, 2000 by Conestoga-Rovers & Associates. The report and your continuing investigation of the Soil Vapor Extraction (SVE) System adequately addresses the concerns expressed in my letter of December 21, 1999.

As we discussed on February 29, 2000, the report is satisfactory. It was noted, however, that there are several items that are conflicting in the report, specifically dealing with the proposed monitoring requirements in Section 5.2.2.2 and Table 5.1. To clarify the revised monitoring frequencies that we discussed, a revised Table 5.1 is attached.

As we also discussed, Keywell will continue to refine the operation of the SVE unit and provice a progress report with the submission of the next quarterly report. If you have any questions, please feel free to contact me at (716)851-7220.

Sincerely,

Gregory P. Sutton, P.E.
Project Engineer
Hazardous Waste Remediation

GPS/lj

cc: Mr. Martin Doster, NYSDEC, DER
Mr. Cameron O'Connor, NYSDOH

NEW YORK STATE CENSUS 2000

APPENDIX B

EFFLUENT MONITORING DATA AND CALCULATED DISCHARGE LOADINGS

TABLE 1
VOC GROUNDWATER TREATMENT PLANT INFLUENT/EFFLUENT DATA

		INFLUENT		EFFLUENT	
DATE	UNITS	TCE	DCE	TCE	DCE
1/14/2004	ug/L	12000	5300	1.3	4.4
2/2/2004	ug/L			1.3	ND<1
2/12/2004	ug/L	7100	1700	55*	55*
2/20/2004	ug/L			1.7	ND<1
2/25/2004	ug/L			1.5	ND<1
3/10/2004	ug/L	2700	750	2.1	1.4
3/24/2004	ug/L			5.3	3.5
4/7/2004	ug/L	8000	3500	2.6	1.8
4/22/2004	ug/L			ND<1	ND<1
5/5/2004	ug/L	5400	1800	3.9	2.9
5/18/2004	ug/L			ND<1	ND<1
6/9/2004	ug/L	8700	4100	ND<1	ND<1
6/23/2004	ug/L			3.6	2.8
7/15/2004	ug/L	12000	3100	3.4	1.9
7/28/2004	ug/L			ND<1	ND<1
8/5/2004	ug/L	10000	4100	ND<1	ND<1
8/26/2004	ug/L			ND<1	ND<1
9/15/2004	ug/L	7000	3800	ND<1	ND<1
9/29/2004	ug/L			ND<1	ND<1

TABLE 1
VOC GROUNDWATER TREATMENT PLANT INFLUENT/EFFLUENT DATA

10/7/2004	ug/L	7700	3800		ND<1	ND<1
10/28/2004	ug/L				ND<1	ND<1
11/3/2004	ug/L	8000	3900		ND<1	ND<1
11/17/2004	ug/L				ND<1	ND<1
12/8/2004	ug/L	11000	3300		5	3.3
12/20/2004	ug/L				5.1	4.9

Notes:

* Contamination suspected; re-sampled 2/20/04.

Discharge Loading

COMPOUNDS DETECTED	UNITS	1/14/2004 RESULTS	1/14/2004 # / DAY DISCHARGED	2/12/2004 Results	2/12/2004 # / DAY DISCHARGED	3/10/2004 Results	3/10/2004 # / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00005	ND<1	<.00005	2.1	0.0001
Oil & Grease	mg/L	ND<5	<.25				
Aluminum	ug/L	ND<200	<.01				
Iron	ug/L	881	0.046				
Zinc	ug/L	10.6	0.0005				
pH		8		8.1		8	

COMPOUNDS DETECTED	UNITS	4/7/2004 RESULTS	# / DAY DISCHARGED	5/5/2004 Results	# / DAY DISCHARGED	6/9/2004 Results	# / DAY DISCHARGED
VOC's	ug/L	2.6	<.00007	3.9	<.0004	ND<1	<.00013
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.4		5.8		8	
Flow	ug/L	2.2		9.1		11.2	

COMPOUNDS DETECTED	UNITS	7/15/2004 RESULTS	7/15/2004 # / DAY DISCHARGED	8/5/2004 Results	8/5/2004 # / DAY DISCHARGED	9/15/2004 Results	9/15/2004 # / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	ND<1	<.00011	ND<1	<.00011
Oil & Grease	mg/L	ND<5.5	<.6				
Aluminum	ug/L	ND<200	<.02				
Iron	ug/L	2720	0.31				
Zinc	ug/L	12	0.001				
pH		8.2		8.3		8.1	

COMPOUNDS DETECTED	UNITS	10/7/2004 RESULTS	10.7/04 # / DAY DISCHARGED	11/3/2004 Results	11/3/2004 # / DAY DISCHARGED	12/8/2004 Results	12.8/04 # / DAY DISCHARGED
VOC's	ug/L	ND<1	<.00011	5.7	0.00063	5	0.00052
Oil & Grease	mg/L						
Aluminum	ug/L						
Iron	ug/L						
Zinc	ug/L						
pH		7.7		8.4		8.2	
Flow		9.2		9.3		7.4	

APPENDIX C

HYDRAULIC MONITORING DATA

APPENDIX A1
GROUNDWATER HYDRAULIC MONITORING DATA (2004)
MONITORING WELLS AND PIEZOMETERS
KEYWELL - VAC AIR DIVISION
FREWSBURG, NY

Well	Northing	Easting	T.O.C. Elevation	1/14/2004		4/22/2004		7/15/2004		10/19/2004	
MW-1			1260.60	4.12	1256.48	4.98	1255.62	4.73	1255.87	6.53	1254.07
MW-2	5898	5511.1	1251.60	9.73	1241.87	11.07	1240.53	11.62	1239.98	10.62	1240.98
MW-3	5679.3	5188.5	1252.30	9.96	1242.34	10.48	1241.82	10.96	1241.34	12.64	1239.66
MW-4	5501.5	5167.2	1250.10	4.27	1245.83	3.88	1246.22	5.02	1245.08	5.42	1244.68
MW-4D	5510.6	5167.17	1249.37	7.1	1242.27	11.26	1238.11	10.16	1239.21	13.86	1235.51
MW-5	5136.1	5061.9	1256.50	6.98	1249.52	7.78	1248.72	7.22	1249.28	8.42	1248.08
MW-5D	5119.56	5061.06	1255.14	10.98	1244.16	14.56	1240.58	10.96	1244.18	18.02	1237.12
MW-6	5596.50	5805.5	1253.70	6.12	1247.58	6.96	1246.74	8.43	1245.27	7.43	1246.27
MW-7	5340.06	4973.69	1253.76	7.31	1246.45	7.83	1245.93	7.98	1245.78	8.56	1245.20
MW-8			1256.65	3.43	1253.22	5.01	1251.64	4.02	1252.63	5.26	1251.39
MW-9	5640.89	5370.69	1249.2	6.11	1243.09	7.03	1242.17	6.98	1242.22	10.96	1238.24
MW-10	5271.81	5497.41	1253.5	4.26	1249.24	6.01	1247.49	6.54	1246.96	6.58	1246.92
MW-11	5387.37	5578.29	1251.02	5.61	1245.41	6.89	1244.13	7.1	1243.92	6.96	1244.06
MW-12			1243.08	0.5	1242.58	0.5	1242.58	1.78	1241.30	1.5	1241.58
MW-13	5053	5616	1247.8	3.77	1244.03	7.02	1240.78	5.23	1242.57	6.22	1241.58
MW-14	5121	5709	1247.46	6.98	1240.48	7.68	1239.78	7.97	1239.49	8.17	1239.29
PZ -1-96	5411.06	5548.72	1251.09	5.47	1245.62	6.84	1244.25	6.7	1244.39	5.96	1245.13
PZ- 2	5725	5720	1247.43	4.72	1242.71	5.1	1242.33	5.81	1241.62	5.13	1242.30
PZ-3			1250.82	6.68	1244.14	6.02	1244.80	7.02	1243.80	6.98	1243.84
Creek			1250.69							19.07	1231.62

APPENDIX A2
GROUNDWATER HYDRAULIC MONITORING DATA (2004)
EXTRACTON AND SVE WELLS
KEYWELL - VAC AIR DIVISION
FREWSBURG, NY

	T.O.C.	1/14/2004		2/12/2004		3/11/2004		4/23/2004		5/12/2004		6/10/2004	
Well	**Elevation (ft. AMSL)**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**
EW-1	1248.63	22.97	1225.66					23.02	1225.61				
EW-2	1248.77	22.42	1226.35					22.96	1225.81				
EW-3	1250.29	22.14	1228.15					22.83	1227.46				
EW-4	1251.11	22.56	1228.55					22.14	1228.97				
EW-5	1250.32	22.68	1227.64	21.22	1229.10	20.82	1229.50	22.62	1227.70	22.96	1227.36	23.1	1227.22
EW-6	1252.14	22.91	1229.23					22.12	1230.02				
EW-7	1251.09	22.73	1228.36					23.17	1227.92				
EW-8	1251.39	22.08	1229.31					22.07	1229.32				
EW-9	1251.52	22.56	1228.96					22.41	1229.11				
EW-10	1250.45	22.72	1227.73					22.62	1227.83				
EW-11	1250.37	23.01	1227.36					23.73	1226.64				
EW-12	1249.11	23.2	1225.91	21.17	1227.94	21.43	1227.68	23.48	1225.63	22.73	1226.38	22.88	1226.23
EW-13	1251.64	23.38	1228.26	21.17	1230.47	20.96	1230.68	23.13	1228.51				
EW-14	1251.34	23.07	1228.27	21.84	1229.50	21.03	1230.31	23.27	1228.07				
EW-15	1251.17	22.78	1228.39	20.98	1230.19	20.78	1230.39	22.68	1228.49				
EW-16	1251.29	22.86	1228.43	21.62	1229.67	21.16	1230.13	22.91	1228.38				
EW-17	1251	22.91	1228.09	20.36	1230.64	20.73	1230.27	22.84	1228.16				
EW-18	1251.41	21.33	1230.08	20.13	1231.28	20.12	1231.29	22.78	1228.63				
Creek	1250.69	13.27	1237.42					16.42	1234.27			16.07	1234.62

APPENDIX A2
GROUNDWATER HYDRAULIC MONITORING DATA (2004)
EXTRACTON AND SVE WELLS
KEYWELL - VAC AIR DIVISION
FREWSBURG, NY

	T.O.C.	7/15/2004		8/12/2004		9/15/2004		10/20/2004		11/9/2004		12/8/2004	
Well	**Elevation (ft. AMSL)**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**	**Level**	**Elevation**
EW-1	1248.63	22.86	1225.77					20.17	1228.46				
EW-2	1248.77	22.04	1226.73					21.72	1227.05				
EW-3	1250.29	23.96	1226.33					22.03	1228.26				
EW-4	1251.11	22.58	1228.53					23.16	1227.95				
EW-5	1250.32	22.47	1227.85	22.86	1227.46	21.83	1228.49	23.10	1227.22	21.78	1228.54	21.42	1228.90
EW-6	1252.14	22.12	1230.02					22.78	1229.36				
EW-7	1251.09	22.17	1228.92					22.18	1228.91				
EW-8	1251.39	22.03	1229.36					22.48	1228.91				
EW-9	1251.52	22.14	1229.38					22.86	1228.66				
EW-10	1250.45	22.44	1228.01					22.79	1227.66				
EW-11	1250.37	23.17	1227.20					23.43	1226.94				
EW-12	1249.11	23.04	1226.07	23.17	1225.94	22.47	1226.64	23.01	1226.10	22.56	1226.55	22.13	1226.98
EW-13	1251.64	23.58	1228.06					23.88	1227.76				
EW-14	1251.34	22.87	1228.47					22.96	1228.38				
EW-15	1251.17	22.44	1228.73					23.16	1228.01				
EW-16	1251.29	22.13	1229.16					23.47	1227.82				
EW-17	1251	22.47	1228.53					23.53	1227.47				
EW-18	1251.41	21.96	1229.45					21.86	1229.55				
Creek	1250.69	18.76	1231.93					19.07	1231.62				

APPENDIX D

GROUNDWATER ANALYTICAL DATABASE

TCL VOC ANALYTICAL
DATABASE - CONEWANGO CREEK
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

SW-1

TCL Volatiles	Collection Date: / Units	01/02/98	07/30/98	10/27/98	01/25/99	04/28/99	07/27/99	10/27/99	01/26/00	10/24/02	10/29/03	04/22/04
Chloromethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	0.32J	ND 2	ND 2
Vinyl chloride	µg/L	ND 2	ND 2	ND 2	ND 1	ND 2	ND 1	ND 2	ND 2	ND 2	ND 2	ND 2
Chloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2
Bromomethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2
1,1-Dichloroethene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Acetone	µg/L	ND 5	ND 15	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	2.6J	ND 10	ND 10
Carbon disulfide	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Methylene chloride	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 1
trans-1,2-Dichloroethene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
1,1-Dichloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
cis-1,2-Dichloroethene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	NR
Chloroform	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
1,1,1-Trichloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Carbon tetrachloride	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Benzene	µg/L	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 1	ND 1	ND 1
1,2-Dichloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Trichloroethene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	0.20J	ND 1	ND 1
1,2-Dichloropropane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Bromodichloromethane	µg/L	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
cis-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Methyl isobutyl ketone	µg/L	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	NR
Toluene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
trans-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
1,1,2-Trichloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Tetrachloroethene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
2-Hexanone	µg/L	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Dibromochloromethane	µg/L	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Chlorobenzene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Ethylbenzene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
p-Xylene/m-Xylene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	NR	NR
o-Xylene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Styrene	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
Bromoform	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1

Notes:

ND Non-detect at associated value.

NR Not Reported.

TCL Target Compound List.

VOC Volatile Organic Compounds.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-1

TCL Volatiles	Units	Collection Date: 04/30/91	12/16/92	12/22/97	07/30/98	10/27/98	01/25/99	04/28/99	07/26/99	10/27/99	01/25/00	10/25/00	10/23/01	10/23/02	10/29/03	10/29/04
Chloromethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
Vinyl chloride	µg/L	ND 10	ND 10	ND 2	ND 2	ND 2	ND 1	ND 2	ND 1	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
Chloroethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
Bromomethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
1,1-Dichloroethene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Acetone	µg/L	ND 12	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Methylene chloride	µg/L	ND 17	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
trans-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	ND 1	ND 1	ND 1	ND 1
1,1-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	ND 1	ND 1	ND 1	ND 1
1,2-Dichloroethene (Total)	µg/L	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	1.1	NR	NR	NR	ND 1
Methyl ethyl ketone	µg/L	ND 10R	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 1	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR
Chloroform	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,1-Trichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Carbon tetrachloride	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Benzene	µg/L	ND 5	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1
1,2-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Trichloroethene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	0.37J	ND 1	0.20J	ND 1	ND 1
1,2-Dichloropropane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Bromodichloromethane	µg/L	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Methyl isobutyl ketone	µg/L	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR
Toluene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
trans-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2-Trichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Tetrachloroethene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
2-Hexanone	µg/L	ND 10	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5
Dibromochloromethane	µg/L	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Chlorobenzene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Ethylbenzene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
p-Xylene/m-Xylene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	NR	NR	NR
o-Xylene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1
Styrene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Bromoform	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-2

Collection Date:		04/30/91	12/18/92	12/23/97	07/30/98	10/27/98	01/25/99	04/28/99	07/27/99	10/27/99	01/24/00	04/25/00	10/25/00
TCL Volatiles	Units												
Chloromethane	µg/L	ND 100	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 10000
Vinyl chloride	µg/L	17000	1200	3000	7400	9300	2700	2100	14000	8300	3900	1600	49000
Chloroethane	µg/L	ND 100	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 10000
Bromomethane	µg/L	ND 100	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 10000
1,1-Dichloroethene	µg/L	450	170	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	18	ND 250	ND 5000
Acetone	µg/L	ND 320	ND 10J	ND 1000	ND 2500	ND 5000	ND 2500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 50000
Carbon disulfide	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Methylene chloride	µg/L	ND 140	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 10000
trans-1,2-Dichloroethene	µg/L	NA	NA	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 11	ND 250	NR
1,1-Dichloroethane	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
cis-1,2-Dichloroethene	µg/L	NA	NA	31000	82000	1E+05	13000	8500	2E+05	49000	8100	4000	NR
1,2-Dichloroethene (Total)	µg/L	170000	62000	NR	NR	NR	NR	NR	NR	NR	NR	NR	190000
Methyl ethyl ketone	µg/L	ND 100R	ND 10J	ND 1000	ND 2500	ND 5000	ND 2500	ND 250	ND 5000	ND 2500	ND 5	ND 250	ND 25000
Chloroform	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
1,1,1-Trichloroethane	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Carbon tetrachloride	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Benzene	µg/L	ND 50	11	ND 140	ND 350	ND 700	ND 500	ND 35	ND 140	ND 350	3	ND 35	ND 5000
1,2-Dichloroethane	µg/L	19J	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Trichloroethene	µg/L	2600J	ND 2000	1000	3200	ND 5000	ND 500	ND 250	2500	ND 2500	52	ND 250	ND 5000
1,2-Dichloropropane	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Bromodichloromethane	µg/L	ND 50	ND 10	ND 2000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 25000
cis-1,3-Dichloropropene	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Methyl isobutyl ketone	µg/L	ND 100	ND 10J	ND 1000	ND 2500	ND 5000	ND 1000	ND 250	ND 2000	ND 2500	ND 5	ND 250	ND 25000
Toluene	µg/L	12J	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
trans-1,3-Dichloropropene	µg/L	ND 50	ND	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
1,1,2-Trichloroethane	µg/L	13J	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Tetrachloroethene	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
2-Hexanone	µg/L	ND 100	ND 10J	ND 2000	2900	2900	ND 1000	ND 500	ND 2000	ND 5000	ND 10	ND 500	ND 25000
Dibromochloromethane	µg/L	ND 50	ND 10	ND 2000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Chlorobenzene	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Ethylbenzene	µg/L	14J	6J	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
p-Xylene/m-Xylene	µg/L	NA	NA	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	NR
o-Xylene	µg/L	NA	NA	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	NR
Xylene (Total)	µg/L	ND 50	17	NR	NR	NR	NR	NR	NR	NR	NR	NR	ND 5000
Styrene	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
Bromoform	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000
1,1,2,2-Tetrachloroethane	µg/L	ND 50	ND 10	ND 1000	ND 2500	ND 5000	ND 500	ND 250	ND 1000	ND 2500	ND 5	ND 250	ND 5000

Notes:
NA Not Applicable.
NDx Not detected at or above x.
NR Not Reported.

		MW-2 (Cont'd.)									MW-3					
Collection Date:		04/24/01	10/23/01	04/22/02	10/23/02	12/16/02	4/23/2003	10/29/2003	4/21/2004	10/20/2004	04/30/91	12/21/92	12/23/97	07/30/98	10/27/98	01/25/99
TCL Volatiles	Units															
Chloromethane	µg/L	ND 100	ND 600	ND 200	ND 4000		ND 2000	ND 2500	ND 4000	ND 10000	ND 2000	ND 10	ND 250	ND 500	ND 120	ND 500
Vinyl chloride	µg/L	ND 100	3400	1200	11000	1900	8600	8200	11000	29000	ND 2000	50	ND 100	ND 200	300	ND 500
Chloroethane	µg/L	ND 100	ND 300	ND 200	ND 4000		ND 2000	ND 2500	ND 4000	ND 10000	ND 2000	ND 10	ND 250	ND 500	ND 120	ND 500
Bromomethane	µg/L	ND 100	ND 600	ND 200	ND 4000		ND 2000	ND 2500	ND 4000	ND 10000	ND 2000	ND 10	ND 250	ND 500	ND 120	ND 500
1,1-Dichloroethene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	6J	ND 250	ND 500	ND 120	ND 500
Acetone	µg/L	ND 500	ND 3000	ND 1000	ND 20000		ND 10,000	8700 J	ND 20000	ND 50000	ND 5100	ND 10J	ND 250	ND 500	ND 120	ND 2500
Carbon disulfide	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Methylene chloride	µg/L	ND 100	ND 600	45JB	ND 4000		ND 2000	ND 2500	ND 4000	ND 10000	ND 3100	ND 10J	ND 250	ND 500	ND 120	ND 500
trans-1,2-Dichloroethene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	NA	NA	ND 250	ND 500	ND 120	ND 500
1,1-Dichloroethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
cis-1,2-Dichloroethene	µg/L	2400	9800	3600	52000	7400	36000	40000	38000	2E+05	NA	NA	1200	980	2200	2200
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	1400	800J	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 250	ND 1500	ND 500	ND 10000		ND 5000	ND 6200	NR	NR	ND 2000R	ND 10J	ND 250	ND 500	ND 120	ND 2500
Chloroform	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
1,1,1-Trichloroethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Carbon tetrachloride	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Benzene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 35	ND 70	ND 18	ND 500
1,2-Dichloroethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Trichloroethene	µg/L	7700	ND 300	ND 100	ND 2000	ND 330	ND 1000	ND 1200	ND 2000	3600J	34000	26000	13000	4100J	4600	4000
1,2-Dichloropropane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Bromodichloromethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 500	ND 500	ND 120	ND 500
cis-1,3-Dichloropropene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Methyl isobutyl ketone	µg/L	ND 250	ND 1500	ND 500	ND 10000		ND 5000	ND 6200	NR	NR	ND 2000	ND 10J	ND 250	ND 500	ND 120	ND 1000
Toluene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
trans-1,3-Dichloropropene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
1,1,2-Trichloroethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	16	ND 250	ND 500	ND 120	ND 500
Tetrachloroethene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	5J	ND 250	ND 500	ND 120	ND 500
2-Hexanone	µg/L	ND 250	ND 1500	ND 500	ND 10000		ND 5000	ND 6200	ND 10000	ND 25000	ND 2000	ND 10J	ND 500	2900	2900	ND 1000
Dibromochloromethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 500	ND 500	ND 120	ND 500
Chlorobenzene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Ethylbenzene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
p-Xylene/m-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NA	NA	NA	ND 500	ND 120	ND 500
o-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NA	NA	NA	ND 500	ND 120	ND 500
Xylene (Total)	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	NR	NR	NR	NR
Styrene	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
Bromoform	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500
1,1,2,2-Tetrachloroethane	µg/L	ND 50	ND 300	ND 100	ND 2000		ND 1000	ND 1200	ND 2000	ND 5000	ND 1000	ND 10	ND 250	ND 500	ND 120	ND 500

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

MW-3 (Cont'd.)

Collection Date:		*04/27/99*	*07/27/99*	*10/27/99*	*01/24/00*	*04/25/00*	*10/25/00*	*04/24/01*	*10/23/01*	*04/22/02*	*10/22/02*	*4/22/2003*	*10/28/2003*	*04/21/04*	*10/19/04*
TCL Volatiles	*Units*														
Chloromethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100	ND 150	ND 100	ND 50	ND 80	ND 60	ND 80	ND 50	ND 20
Vinyl chloride	µg/L	130	ND 200	ND 200	ND 200	110	950j	70j	54j	ND 50	ND 80	ND 60	ND 80	ND 50	ND 10
Chloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100	ND 150	ND 100	ND 50	ND 80	ND 60	ND 80	ND 50	ND 20
Bromomethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100	ND 150	ND 100	ND 50	ND 80	ND 60	ND 80	ND 50	ND 20
1,1-Dichloroethene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Acetone	µg/L	ND 250	ND 2500	ND 500	ND 500	ND 100	ND 500	ND 750	ND 500	ND 250	ND 400	ND 300	ND 400	ND 250	ND 100
Carbon disulfide	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Methylene chloride	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100	ND 150	ND 100	ND 50	ND 80	ND 60	ND 80	ND 50	ND 20
trans-1,2-Dichloroethene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	NR	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
1,1-Dichloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
cis-1,2-Dichloroethene	µg/L	1100	530	790	ND 500	750	NR	1400	950	410	270	230	150	310	110
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	1100	NR	NR	NR	NR	NR	NR	ND 25	ND 10
Methyl ethyl ketone	µg/L	ND 250	ND 2500	ND 500	ND 500	ND 100	ND 250	ND 380	ND 250	ND 120	ND 200	ND 150	ND 200	NR	NR
Chloroform	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
1,1,1-Trichloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Carbon tetrachloride	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Benzene	µg/L	ND 35	ND 70	ND 70	ND 70	ND 14	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
1,2-Dichloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Trichloroethene	µg/L	2000	1900	3500	3100	2000	1900	1500	1100	900	830	670	870	660	260
1,2-Dichloropropane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Bromodichloromethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
cis-1,3-Dichloropropene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Methyl isobutyl ketone	µg/L	ND 250	ND 1000	ND 500	ND 500	ND 100	ND 250	ND 380	ND 250	ND 120	ND 200	ND 150	ND 200	NR	NR
Toluene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
trans-1,3-Dichloropropene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
1,1,2-Trichloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Tetrachloroethene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
2-Hexanone	µg/L	ND 250	ND 1000	ND 1000	ND 1000	ND 200	ND 250	ND 380	ND 250	ND 120	ND 200	ND 150	ND 200	ND 120	ND 50
Dibromochloromethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Chlorobenzene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Ethylbenzene	µg/L	ND 250	ND 500	ND 500	ND 1000	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
p-Xylene/m-Xylene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	NR	NR	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Styrene	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
Bromoform	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10
1,1,2,2-Tetrachloroethane	µg/L	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50	ND 75	ND 50	ND 25	ND 40	ND 30	ND 40	ND 25	ND 10

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-4

TCL Volatiles	Units	Collection Date: 04/30/91	12/21/92	12/19/97	07/30/98	10/27/98	01/25/99	04/27/99	07/27/99	10/26/99	01/25/00	01/25/00 (Duplicate	04/25/00	04/25/00 (Duplicate	10/25/00	04/24/01	10/23/01
Chloromethane	µg/L	2J	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 2	ND 600
Vinyl chloride	µg/L	8J	6J	ND 2	ND 200	ND 1000	ND 500	ND 200	ND 200	ND 200	ND 200	ND 200	ND 200	ND 400	ND 500	ND 2	ND 600
Chloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 2	ND 600
Bromomethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 500	ND 2	ND 600
1,1-Dichloroethene	µg/L	2J	4J	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Acetone	µg/L	ND 25	ND 10J	ND 5	ND 500	ND 1000	ND 2500	ND 500	ND 2500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 2500	ND 1	ND 300
Carbon disulfide	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Methylene chloride	µg/L	ND 5	ND 10J	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 500	ND 2	ND 600
trans-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	NR	ND 1	ND 300
1,1-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
cis-1,2-Dichloroethene	µg/L	NA	NA	400J	810	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	520	ND 1000	NR	430	440
1,2-Dichloroethene (Total)	µg/L	940J	2300J	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	580	NR	NR
Methyl ethyl ketone	µg/L	ND 10R	ND 10J	ND 5	ND 500	ND 1000	ND 2500	ND 500	ND 2500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 1200	ND 5	ND 1500
Chloroform	µg/L	2J	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 500	ND 1	ND 300
1,1,1-Trichloroethane	µg/L	3J	3J	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Carbon tetrachloride	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Benzene	µg/L	ND 5	ND 10	ND 0.7	ND 70	ND 140	ND 500	ND 70	ND 70	ND 70	ND 70	ND 70	ND 70	ND 140	ND 250	ND 1	ND 3000
1,2-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 500	16000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Trichloroethene	µg/L	55000	74000	8600	17000	ND 1000	11000	8500	9400	11000	7000	6600	6900	8700	7100	4900	5700
1,2-Dichloropropane	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Bromodichloromethane	µg/L	4J	ND 10	ND 10	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
cis-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Methyl isobutyl ketone	µg/L	ND 10	ND 10J	ND 5	ND 500	ND 1000	ND 1000	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 1200	ND 5	ND 1500
Toluene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
trans-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
1,1,2-Trichloroethane	µg/L	ND 5	29	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Tetrachloroethene	µg/L	10	4J	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
2-Hexanone	µg/L	ND 10	ND 10J	ND 10	ND 500	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 1000	ND 2000	ND 1200	ND 5	1500
Dibromochloromethane	µg/L	ND 5	ND 10	ND 10	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 500	ND 1	ND 300
Chlorobenzene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Ethylbenzene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
p-Xylene/m-Xylene	µg/L	NA	NA	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	NR	NR	NR
o-Xylene	µg/L	NA	NA	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	NR	NR	NR
Xylene (Total)	µg/L	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	ND 250	ND 1	ND 300
Styrene	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
Bromoform	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 10	ND 5	ND 500	ND 1000	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 250	ND 1	ND 300

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

		MW-4 (Cont'd.)							MW-4D							
Collection Date:		04/22/02	04/22/02 (Duplicate)	10/22/02	4/22/2003	10/28/2003	04/21/04	10/19/04	04/15/92	12/18/92	12/18/92 (Duplicate)	01/14/93	01/14/93 (Duplicate)	12/19/97	07/30/98	10/27/98
TCL Volatiles	Units															
Chloromethane	µg/L	ND 200	ND 200	ND 200	ND 200	ND 400	ND 200	ND 100	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Vinyl chloride	**µg/L**	**ND 200**	**ND 200**	**ND 200**	**ND 200**	**ND 400**	**ND 100**	**ND 100**	**ND 0.5**	**ND 10**	**ND 10**	**ND 10**	**ND 10**	**ND 2**	**ND 2**	**ND 2**
Chloroethane	µg/L	ND 200	ND 200	ND 200	ND 200	ND 400	ND 200	ND 100	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Bromomethane	µg/L	ND 200	ND 200	ND 200	ND 200	ND 400	ND 200	ND 100	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
1,1-Dichloroethene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Acetone	µg/L	250	310J	ND 1000	ND 1000	ND 2000	ND 1000	ND 500	NA	ND 10J	ND 10J	7J	6J	28	ND 11	ND 5
Carbon disulfide	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	NA	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Methylene chloride	µg/L	ND 200	ND 200	ND 200	ND 200	ND 400	ND 200	ND 100	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
trans-1,2-Dichloroethene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	NA	NA	NA	NA	ND 5	ND 5	ND 5
1,1-Dichloroethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
cis-1,2-Dichloroethene	µg/L	230	210	310	210	280	330	190	ND 0.5	NA	NA	NA	NA	ND 5	18	6
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	ND 100	ND 50	NR	NR	10	ND 10	ND 10	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 500	ND 500	ND 500	ND 500	ND 1000	NR	NR	NA	ND 10J	ND 10J	ND 10	ND 10	ND 5	ND 5	NR
Chloroform	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
1,1,1-Trichloroethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	1J	1J	ND 5	ND 5	ND 5
Carbon tetrachloride	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Benzene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	3.6	ND 10	ND 10	ND 10	ND 10	ND 0.7	ND 0.7	ND 0.7
1,2-Dichloroethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Trichloroethene	µg/L	2700	2500	3900	2000	ND 200	2100	1300	ND 0.5	ND 10	4J	ND 10	ND 10	ND 5	ND 5	ND 5
1,2-Dichloropropane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Bromodichloromethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5
cis-1,3-Dichloropropene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Methyl isobutyl ketone	µg/L	ND 500	ND 500	ND 500	ND 500	ND 1000	NR	NR	NA	ND 10J	ND 10J	ND 10	ND 10	ND 5	ND 5	ND 5
Toluene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
trans-1,3-Dichloropropene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
1,1,2-Trichloroethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Tetrachloroethene	µg/L	ND 100	ND 100	ND 100	ND 100	3400	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
2-Hexanone	µg/L	ND 500	ND 500	ND 500	ND 500	ND 1000	ND 500	ND 250	NA	ND 10J	ND 10J	ND 10	ND 10	ND 10	ND 5	ND 5
Dibromochloromethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5
Chlorobenzene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Ethylbenzene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
p-Xylene/m-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	ND 0.5	NA	NA	NA	NA	ND 5	ND 5	ND 5
o-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	ND 0.5	NA	NA	NA	NA	ND 5	ND 5	ND 5
Xylene (Total)	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	NR	NR	NR	ND 10	2J	NR	NR	NR
Styrene	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
Bromoform	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5
1,1,2,2-Tetrachloroethane	µg/L	ND 100	ND 100	ND 100	ND 100	ND 200	ND 100	ND 50	ND 0.5	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

MW-4D (Cont'd.)

Collection Date:		01/25/99	04/27/99	07/27/99	10/26/99	01/25/00	10/25/00	10/25/00 Duplicate	10/23/01	10/22/02	10/22/02 Duplicate	10/28/2003	10/28/2003 Duplicate	10/19/04	10/19/04 Duplicate
TCL Volatiles	Units														
Chloromethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	0.32J	0.32J	ND 2	ND 2	ND 2	ND 2
Vinyl chloride	µg/L	ND 5	ND 2	ND 1	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
Chloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
Bromomethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
1,1-Dichloroethene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	1.3	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Acetone	µg/L	ND 25	ND 5	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Methylene chloride	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
trans-1,2-Dichloroethene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	NR	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
1,1-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,2-Dichloroethene	µg/L	ND 5	ND 5	1	ND 5	ND 5	NR	NR	NR	NR	NR	ND 1	ND 1	ND 1	ND 1
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	1.3	1.3	1.3	ND 1	ND 1	NR	NR	ND 1	ND 1
Methyl ethyl ketone	µg/L	ND 25	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	NR
Chloroform	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,1-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Carbon tetrachloride	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Benzene	µg/L	ND 5	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
1,2-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Trichloroethene	µg/L	ND 5	ND 5	ND 5	ND 5	ND 5	21	22	22	ND 1	0.37J	ND 1	ND 1	ND 1	ND 1
1,2-Dichloropropane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Bromodichloromethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Methyl isobutyl ketone	µg/L	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	NR
Toluene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
trans-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Tetrachloroethene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
2-Hexanone	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5
Dibromochloromethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Chlorobenzene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Ethylbenzene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
p-Xylene/m-Xylene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Styrene	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
Bromoform	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1	ND 1

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-5

Collection Date: / TCL Volatiles	Units	04/30/91	12/17/92	12/19/97	07/30/98	10/27/98	01/25/99	04/27/99	07/27/99	10/26/99	01/24/00	10/25/00	10/23/01	10/22/02	10/28/2003	10/19/2004
Chloromethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	0.32J	ND 2	ND 2
Vinyl chloride	µg/L	ND 10	ND 10	ND 2	ND 2	ND 2	ND 1	ND 2	ND 1	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2	ND 2
Chloroethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
Bromomethane	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
1,1-Dichloroethene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Acetone	µg/L	ND 10	ND 10J	24	ND 11	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Methylene chloride	µg/L	ND 7	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2
trans-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1
1,1-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1
1,2-Dichloroethene (Total)	µg/L	1J	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	ND 1	ND 1	NR	NR	ND 1
Methyl ethyl ketone	µg/L	ND 10R	ND 10J	6	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR
Chloroform	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,1-Trichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Carbon tetrachloride	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Benzene	µg/L	ND 5	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1
1,2-Dichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Trichloroethene	µg/L	41	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	0.30J	0.30J	ND 1	ND 1	ND 1
1,2-Dichloropropane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Bromodichloromethane	µg/L	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
cis-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Methyl isobutyl ketone	µg/L	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR
Toluene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
trans-1,3-Dichloropropene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2-Trichloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Tetrachloroethene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
2-Hexanone	µg/L	ND 10	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5
Dibromochloromethane	µg/L	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Chlorobenzene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Ethylbenzene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
p-Xylene/m-Xylene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	ND 1	NR	NR
o-Xylene	µg/L	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	NR	NR	ND 1	NR	NR
Xylene (Total)	µg/L	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1
Styrene	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
Bromoform	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-6

Collection Date:		04/30/91	04/30/91 (Duplicate)	12/16/92	12/22/97	07/30/98	10/27/98	01/25/99	04/28/99	07/27/99	10/27/99	01/24/00	10/25/00
TCL Volatiles	Units												
Chloromethane	µg/L	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2
Vinyl chloride	**µg/L**	**ND 10**	**ND 10**	**ND 10**	**ND 2**	**ND 2**	**ND 2**	**ND 5**	**ND 2**	**ND 1**	**ND 2**	**ND 2**	**ND 2**
Chloroethane	µg/L	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2
Bromomethane	µg/L	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2
1,1-Dichloroethene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Acetone	µg/L	ND 10	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 25	ND 5	ND 10	ND 5	ND 5	2.2J
Carbon disulfide	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Methylene chloride	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 2
trans-1,2-Dichloroethene	µg/L	NA	NA	NA	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	NR
1,1-Dichloroethane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
cis-1,2-Dichloroethene	µg/L	NA	NA	NA	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	NR
1,2-Dichloroethene (Total)	µg/L	ND 5	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	ND 1
Methyl ethyl ketone	µg/L	ND 10R	ND 10R	ND 10J	ND 5	ND 5	ND 5	ND 25	ND 5	ND 10	ND 5	ND 5	ND 5
Chloroform	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
1,1,1-Trichloroethane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Carbon tetrachloride	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Benzene	µg/L	ND 5	ND 5	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 5	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 1
1,2-Dichloroethane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Trichloroethene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	0.26J
1,2-Dichloropropane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Bromodichloromethane	µg/L	ND 5	ND 5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
cis-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Methyl isobutyl ketone	µg/L	ND 10	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5	ND 5	ND 5
Toluene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
trans-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
1,1,2-Trichloroethane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Tetrachloroethene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
2-Hexanone	µg/L	ND 10	ND 10	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 5
Dibromochloromethane	µg/L	ND 5	ND 5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Chlorobenzene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Ethylbenzene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
p-Xylene/m-Xylene	µg/L	NA	NA	NA	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	NR
o-Xylene	µg/L	NA	NA	NA	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	NR
Xylene (Total)	µg/L	ND 5	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	ND 1
Styrene	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
Bromoform	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 5	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

Collection Date:		MW-6 (Cont'd.)				MW-7								
TCL Volatiles	Units	10/24/01	10/23/02	10/29/2003	10/20/2004	08/24/91	12/16/92	12/22/97	07/30/98	10/27/98	01/25/99	04/27/99	07/26/99	10/26/99
Chloromethane	µg/L	ND 2	ND 2	ND 2	ND 2	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Vinyl chloride	**µg/L**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 10**	**ND 10**	**ND 2**	**ND 2**	**ND 2**	**ND 1**	**ND 2**	**ND 1**	**ND 2**
Chloroethane	µg/L	ND 2	ND 2	ND 2	ND 2	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Bromomethane	**µg/L**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 10**	**ND 10**	**ND 5**	**ND 5**	**ND 5**	**ND 1**	**ND 5**	**ND 1**	**ND 5**
1,1-Dichloroethene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Acetone	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10J	10	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5
Carbon disulfide	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Methylene chloride	µg/L	ND 1	ND 2	ND 2	ND 2	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
trans-1,2-Dichloroethene	µg/L	ND 1	ND 1	ND 1	ND 1	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,1-Dichloroethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
cis-1,2-Dichloroethene	µg/L	ND 1	ND 1	ND 1	ND 1	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	ND 1	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 5	ND 5	ND 5	NR	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5
Chloroform	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,1,1-Trichloroethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Carbon tetrachloride	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Benzene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7
1,2-Dichloroethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Trichloroethene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,2-Dichloropropane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Bromodichloromethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
cis-1,3-Dichloropropene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Methyl isobutyl ketone	µg/L	ND 5	ND 5	ND 5	NR	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5	ND 10	ND 5
Toluene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
trans-1,3-Dichloropropene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,1,2-Trichloroethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Tetrachloroethene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
2-Hexanone	µg/L	ND 1	ND 5	ND 5	ND 5	ND 10	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10
Dibromochloromethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Chlorobenzene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Ethylbenzene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
p-Xylene/m-Xylene	µg/L	ND 1	ND 1	NR	NR	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
o-Xylene	µg/L	ND 1	ND 1	NR	NR	NA	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Xylene (Total)	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	NR	NR	NR	NR	NR	NR	NR
Styrene	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
Bromoform	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5
1,1,2,2-Tetrachloroethane	µg/L	ND 1	ND 1	ND 1	ND 1	ND 5	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 1	ND 5

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

		MW-7 (Cont'd.)							MW-8					
Collection Date:		10/26/99 (Duplicate)	01/24/00	10/25/00	10/24/01	10/22/02	10/28/2003	10/20/2004	12/16/92	12/22/97	07/30/98	10/27/98	01/25/99	04/28/99
TCL Volatiles	Units													
Chloromethane	µg/L	ND 5	ND 5	ND 2	ND 2	0.32J	ND 2	ND 2	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Vinyl chloride	**µg/L**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 10**	**ND 2**	**ND 2**	**ND 2**	**ND 1**	**ND 2**
Chloroethane	µg/L	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Bromomethane	**µg/L**	**ND 5**	**ND 5**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 10**	**ND 5**	**ND 5**	ND 5	ND 1	ND 5
1,1-Dichloroethene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Acetone	µg/L	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5
Carbon disulfide	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Methylene chloride	µg/L	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
trans-1,2-Dichloroethene	µg/L	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1	NA	ND 5	ND 5	ND 5	ND 1	ND 5
1,1-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
cis-1,2-Dichloroethene	µg/L	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1	NA	ND 5	ND 5	ND 5	ND 1	ND 5
1,2-Dichloroethene (Total)	µg/L	NR	NR	ND 1	ND 1	NR	NR	ND 1	ND 10	NR	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5
Chloroform	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
1,1,1-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Carbon tetrachloride	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Benzene	µg/L	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 0.7
1,2-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Trichloroethene	µg/L	ND 5	ND 5	0.28J	0.28J	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
1,2-Dichloropropane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Bromodichloromethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5
cis-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Methyl isobutyl ketone	µg/L	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 5
Toluene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
trans-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
1,1,2-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Tetrachloroethene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
2-Hexanone	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10
Dibromochloromethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5
Chlorobenzene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Ethylbenzene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
p-Xylene/m-Xylene	µg/L	ND 5	ND 5	NR	NR	ND 1	NR	NR	NA	ND 5	ND 5	ND 5	ND 1	ND 5
o-Xylene	µg/L	ND 5	ND 5	NR	NR	ND 1	NR	NR	NA	ND 5	ND 5	ND 5	ND 1	ND 5
Xylene (Total)	µg/L	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	NR	NR	NR	NR	NR
Styrene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
Bromoform	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1.	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

Collection Date:		MW-8 (Cont'd)								MW-9			
TCL Volatiles	Units	07/27/99	10/27/99	01/26/00	10/25/00	10/23/01	10/23/02	10/29/2003	10/20/2004	12/21/92	12/21/92 (Duplicate)	12/23/97	12/23/97 (Duplicate)
Chloromethane	µg/L	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 10	ND 500	ND 500
Vinyl chloride	**µg/L**	**ND 1**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**53**	**61**	**ND 200**	**280**
Chloroethane	µg/L	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 10	ND 500	ND 500
Bromomethane	**µg/L**	**ND 1**	**ND 5**	**ND 5**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	ND 10	ND 10	ND 500	ND 500
1,1-Dichloroethene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	11	12	ND 500	ND 500
Acetone	µg/L	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10J	ND 10J	ND 500	ND 500
Carbon disulfide	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Methylene chloride	µg/L	ND 1	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 10	ND 500	ND 500
trans-1,2-Dichloroethene	µg/L	ND 1	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1	NA	NA	ND 500	ND 500
1,1-Dichloroethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
cis-1,2-Dichloroethene	µg/L	ND 1	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1	NA	NA	10000	10000
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	ND 1	ND 1	NR	NR	ND 1	1100J	670J	NR	NR
Methyl ethyl ketone	µg/L	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	ND 10J	ND 500	ND 500
Chloroform	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
1,1,1-Trichloroethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Carbon tetrachloride	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Benzene	µg/L	ND 0.7	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 70	100
1,2-Dichloroethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Trichloroethene	µg/L	ND 1	ND 5	ND 5	0.44J	ND 1	ND 1	ND 1	1.1	18000	####	8400	9000
1,2-Dichloropropane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Bromodichloromethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 1000	ND 1000
cis-1,3-Dichloropropene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Methyl isobutyl ketone	µg/L	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	ND 10J	ND 500	ND 500
Toluene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
trans-1,3-Dichloropropene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND	ND 500	ND 500
1,1,2-Trichloroethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	4J	ND 10	ND 500	ND 500
Tetrachloroethene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	4J	4J	ND 500	ND 500
2-Hexanone	µg/L	ND 10	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 10J	ND 10J	ND 1000	ND 1000
Dibromochloromethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 1000	ND 1000
Chlorobenzene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Ethylbenzene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
p-Xylene/m-Xylene	µg/L	ND 1	ND 5	ND 5	NR	NR	ND 1	NR	NR	NA	NA	ND 500	ND 500
o-Xylene	µg/L	ND 1	ND 5	ND 5	NR	NR	ND 1	NR	NR	NA	NA	ND 500	ND 500
Xylene (Total)	µg/L	NR	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	NR	NR
Styrene	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
Bromoform	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500
1,1,2,2-Tetrachloroethane	µg/L	ND 1	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 500	ND 500

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-9 (Cont'd)

Collection Date:		07/30/98	10/27/98	01/25/99	04/28/99	07/26/99	10/27/99	01/25/00	04/25/00	10/25/00	04/25/01	10/24/01	04/23/02
TCL Volatiles	Units												
Chloromethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 100	ND 2	ND 150	ND 200
Vinyl chloride	**µg/L**	**770**	**1100**	**ND 500**	**ND 100**	**ND 200**	**10**	**50**	**35**	**150**	**130**	**340**	**330**
Chloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 100	4.7	ND 150	ND 200
Bromomethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 100	ND 2	ND 150	ND 200
1,1-Dichloroethene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Acetone	µg/L	ND 1200	ND 5000	ND 2500	ND 250	ND 2500	410	1100	2200 E	2200	550	290J	ND 1000
Carbon disulfide	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Methylene chloride	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 100	ND 2	ND 150	ND 200
trans-1,2-Dichloroethene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	NR	1.2	ND 75	ND 100
1,1-Dichloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
cis-1,2-Dichloroethene	µg/L	17000	16000	2400	890	2300	87	440	150	NR	320	2100	2700
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	370	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 500	ND 1000	ND 2500	ND 250	ND 2500	ND 25	ND 50	ND 25	ND 250	24	ND 380	ND 500
Chloroform	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
1,1,1-Trichloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Carbon tetrachloride	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Benzene	µg/L	ND 70	ND 140	ND 500	ND 35	ND 70	ND 4	ND 7	ND 4	ND 50	ND 1	ND 75	ND 100
1,2-Dichloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Trichloroethene	µg/L	3200	4800	600	ND 250	ND 500	ND 25	ND 50	ND 25	29.00J	ND 10	ND 75	ND 100
1,2-Dichloropropane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Bromodichloromethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
cis-1,3-Dichloropropene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Methyl isobutyl ketone	µg/L	ND 500	ND 1000	ND 1000	ND 250	ND 1000	ND 25	ND 50	ND 25	ND 250	370	560	ND 500
Toluene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
trans-1,3-Dichloropropene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
1,1,2-Trichloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Tetrachloroethene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
2-Hexanone	µg/L	2900	ND 2000	ND 1000	ND 250	ND 1000	ND 50	ND 100	ND 50	ND 250	110	ND 380	ND 500
Dibromochloromethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Chlorobenzene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Ethylbenzene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
p-Xylene/m-Xylene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	NR	NR	NR	NR
o-Xylene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	NR	NR	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	ND 50	ND 1	ND 75	ND 100
Styrene	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
Bromoform	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100
1,1,2,2-Tetrachloroethane	µg/L	ND 500	ND 1000	ND 500	ND 250	ND 500	ND 25	ND 50	ND 25	ND 50	ND 1	ND 75	ND 100

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL VOC ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

		MW-9 (Cont'd)					MW-10								
Collection Date:		10/24/02	4/23/2003	10/29/2003	4/22/2004	10/20/2004	12/17/92	12/22/97	07/30/98	10/27/98	01/25/99	01/25/99 (Duplicate)	04/28/99	07/27/99	07/27/99 (Duplicate)
TCL Volatiles	Units														
Chloromethane	µg/L	ND 400	ND 8	ND 100	ND 5	ND 20	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Vinyl chloride	**µg/L**	**ND 400**	**8 J**	**340**	**ND 5**	**ND 20**	**ND 10**	**ND 2**	**ND 2**	**ND 2**	**ND 1**	**ND 5**	**ND 2**	**ND 1**	**ND 1**
Chloroethane	µg/L	ND 400	ND 8	ND 100	ND 5	ND 20	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Bromomethane	µg/L	ND 400	ND 8	ND 100	ND 5	ND 20	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,1-Dichloroethene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Acetone	µg/L	ND 2000	42 B	360 JB	ND 130	370	ND 10J	20	ND 6	ND 5	ND 10	ND 25	ND 5	ND 10	ND 10
Carbon disulfide	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Methylene chloride	µg/L	ND 400	ND 8	ND 100	ND 5	ND 20	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
trans-1,2-Dichloroethene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,1-Dichloroethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
cis-1,2-Dichloroethene	µg/L	3700	82	1100	6.6	17	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	ND 2.5	ND 10	ND 10	NR	NR	NR	NR	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 1000	ND 20	ND 250	NR	NR	ND 10J	12	ND 5	ND 5	ND 10	ND 25	ND 5	ND 10	ND 10
Chloroform	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,1,1-Trichloroethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Carbon tetrachloride	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Benzene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 0.7	ND 0.7	ND 0.7	ND 0.7	ND 5	ND 0.7	ND 0.7	ND 0.7
1,2-Dichloroethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Trichloroethene	µg/L	ND 200	18	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,2-Dichloropropane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Bromodichloromethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
cis-1,3-Dichloropropene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Methyl isobutyl ketone	µg/L	ND 1000	ND 20	ND 250	NR	NR	ND 10J	ND 5	ND 5	ND 5	ND 10	ND 10	ND 5	ND 10	ND 10
Toluene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	2J	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
trans-1,3-Dichloropropene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,1,2-Trichloroethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Tetrachloroethene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
2-Hexanone	µg/L	ND 1000	ND 20	ND 250	78	ND 50	ND 10J	ND 10	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10
Dibromochloromethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 10	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Chlorobenzene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Ethylbenzene	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
p-Xylene/m-Xylene	µg/L	NR	NR	NR	NR	NR	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
o-Xylene	µg/L	NR	NR	NR	NR	NR	NA	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Xylene (Total)	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	4J	NR	NR	NR	NR	NR	NR	NR	NR
Styrene	µg/L	ND 200	ND 4	ND 50	ND 12	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
Bromoform	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1
1,1,2,2-Tetrachloroethane	µg/L	ND 200	ND 4	ND 50	ND 2.5	ND 10	ND 10	ND 5	ND 5	ND 5	ND 1	ND 5	ND 5	ND 1	ND 1

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

		MW-10 (Cont'd.)							MW-11					
Collection Date:		10/27/99	01/24/00	10/25/00	10/23/01	10/23/02	10/29/2003	10/20/2004	12/21/92	12/22/97	07/30/98	07/30/98 (Duplicate)	10/27/98	01/25/99
TCL Volatiles	Units													
Chloromethane	µg/L	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Vinyl chloride	**µg/L**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**9J**	**ND 2**	**ND 400**	**ND 400**	**ND 100**	**ND 500**
Chloroethane	µg/L	ND 5	ND 5	ND 2	ND 2	0.33J	ND 2	ND 2	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Bromomethane	**µg/L**	**ND 5**	**ND 5**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 2**	**ND 10**	**ND 5**	**ND 1000**	**ND 1000**	**ND 250**	**ND 500**
1,1-Dichloroethene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	5J	ND 5	ND 1000	ND 1000	ND 250	ND 500
Acetone	µg/L	ND 5	ND 5	ND 10	ND 10	ND 10	ND 10	ND 10	ND 10J	32	ND 1000	ND 1000	ND 1200	ND 2500
Carbon disulfide	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Methylene chloride	µg/L	ND 5	ND 5	ND 2	ND 2	ND 2	ND 2	ND 2	ND 10J	ND 5	ND 1000	ND 1000	ND 250	ND 500
trans-1,2-Dichloroethene	µg/L	ND 5	ND 5	NR	NR	NR	ND 1	ND 1	NA	ND 5	ND 1000	ND 1000	ND 250	ND 500
1,1-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	4J	ND 5	ND 1000	ND 1000	ND 250	ND 500
cis-1,2-Dichloroethene	µg/L	ND 5	ND 5	NR	NR	ND 1	ND 1	ND 1	NA	200	2800	2700	ND 250	1700
1,2-Dichloroethene (Total)	µg/L	NR	NR	ND 1	ND 1	ND 1	NR	ND 1	380	NR	NR	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	12	ND 1000	ND 1000	ND 1200	ND 2500
Chloroform	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
1,1,1-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Carbon tetrachloride	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Benzene	µg/L	ND 0.7	ND 0.7	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 0.7	ND 350	ND 350	ND 35	ND 500
1,2-Dichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	7J	ND 5	ND 1000	ND 1000	ND 250	ND 500
Trichloroethene	µg/L	ND 5	ND 5	0.25J	ND 1	ND 1	ND 1	ND 1	170000	1000	7900	8300	5000	2200
1,2-Dichloropropane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Bromodichloromethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 1000	ND 1000	ND 250	ND 500
cis-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Methyl isobutyl ketone	µg/L	ND 5	ND 5	ND 5	ND 5	ND 5	ND 5	NR	ND 10J	5	ND 1000	ND 1000	ND 500	ND 1000
Toluene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	4J	ND 5	ND 1000	ND 1000	ND 250	ND 500
trans-1,3-Dichloropropene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
1,1,2-Trichloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Tetrachloroethene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	57	ND 5	ND 1000	ND 1000	ND 250	ND 500
2-Hexanone	µg/L	ND 10	ND 10	ND 5	ND 5	ND 5	ND 5	ND 5	ND 10J	ND 10	2900	2900	ND 500	ND 1000
Dibromochloromethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 10	ND 1000	ND 1000	ND 250	ND 500
Chlorobenzene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Ethylbenzene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	6J	ND 5	ND 1000	ND 1000	ND 250	ND 500
p-Xylene/m-Xylene	µg/L	ND 5	ND 5	NR	NR	NR	NR	NR	NA	ND 5	ND 1000	ND 1000	ND 250	ND 500
o-Xylene	µg/L	ND 5	ND 5	NR	NR	NR	NR	NR	NA	ND 5	ND 1000	ND 1000	ND 250	ND 500
Xylene (Total)	µg/L	NR	NR	ND 1	ND 1	ND 1	ND 1	ND 1	24	NR	NR	NR	NR	NR
Styrene	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
Bromoform	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500
1,1,2,2-Tetrachloroethane	µg/L	ND 5	ND 5	ND 1	ND 1	ND 1	ND 1	ND 1	ND 10	ND 5	ND 1000	ND 1000	ND 250	ND 500

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

MW-11 (Cont'd.)

Collection Date:		*04/28/99*	*07/26/99*	*10/27/99*	*01/25/00*	*04/25/00*	*10/25/00*	*04/25/01*	*10/23/01*	*04/22/02*	*10/23/02*	*4/23/2003*	*10/29/2003*	4/22/2004	10/20/2004
TCL Volatiles	*Units*														
Chloromethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 1000	ND 500	ND 1000	ND 200	ND 4000	ND 400	ND 400	ND 5	ND 10
Vinyl chloride	**µg/L**	**110**	**ND 1000**	**ND 1000**	**ND 200**	**170**	**950J**	**220J**	**ND 1000**	**67J**	**ND 4000**	**ND 400**	**ND 400**	**9.4**	**ND 10**
Chloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 1000	ND 250	ND 1000	ND 200	ND 4000	ND 400	ND 400	ND 5	ND 10
Bromomethane	µg/L	**ND** 250	**ND** 2500	**ND** 2500	**ND** 500	**ND** 250	**ND** 1000	**ND** 500	**ND** 1000	**ND** 200	ND 4000	ND 400	ND 400	ND 5	ND 10
1,1-Dichloroethene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Acetone	µg/L	ND 250	ND 13000	ND 2500	ND 500	ND 250	1100J	ND 2500	ND 5000	250J	ND 20000	ND 2000	ND 2000	ND 25	ND 50
Carbon disulfide	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Methylene chloride	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 1000	ND 500	720J	ND 200	ND 4000	ND 400	ND 400	ND 5	ND 10
trans-1,2-Dichloroethene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	NR	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
1,1-Dichloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
cis-1,2-Dichloroethene	µg/L	5200	6600	6400	14000	4400	NR	3500	4000	2100	12000	1800	2200	52	100
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	6200	NR	NR	NR	NR	NR	NR	ND 2.5	ND 5
Methyl ethyl ketone	µg/L	ND 250	ND 13000	ND 2500	ND 500	ND 250	ND 2500	ND 1200	ND 2500	ND 500	ND 10000	ND 1000	ND 1000	NR	NR
Chloroform	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
1,1,1-Trichloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Carbon tetrachloride	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Benzene	µg/L	ND 35	ND 350	ND 350	ND 70	ND 35	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
1,2-Dichloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Trichloroethene	µg/L	3100	23000	28000	29000	2400	9800	6000	11000	2000	49000	4300	5900	12	7.7
1,2-Dichloropropane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Bromodichloromethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
cis-1,3-Dichloropropene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Methyl isobutyl ketone	µg/L	ND 250	ND 5000	ND 2500	ND 500	ND 500	ND 2500	ND 1200	ND 2500	ND 500	ND 10000	ND 1000	ND 1000	NR	NR
Toluene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
trans-1,3-Dichloropropene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
1,1,2-Trichloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Tetrachloroethene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
2-Hexanone	µg/L	ND 500	ND 5000	ND 5000	ND 1000	ND 500	ND 2500	ND 1200	ND 2500	ND 500	ND 10000	ND 1000	ND 1000	ND 12	ND 25
Dibromochloromethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Chlorobenzene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Ethylbenzene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
p-Xylene/m-Xylene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	NR	NR	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
Styrene	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 12	ND 5
Bromoform	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5
1,1,2,2-Tetrachloroethane	µg/L	ND 250	ND 2500	ND 2500	ND 500	ND 250	ND 500	ND 250	ND 500	ND 100	ND 2000	ND 200	ND 200	ND 2.5	ND 5

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-12

Collection Date: / TCL Volatiles	Units	06/14/93	06/14/93 (Duplicate)	12/19/97	07/27/98	10/27/98	01/25/99	04/28/99	07/27/99	10/26/99	01/26/00	04/25/00	10/25/00	04/24/01	10/24/01	04/22/02
Chloromethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 50	ND 2	ND 400	ND 500
Vinyl chloride	µg/L	ND 10	ND 10	ND 2	ND 200	ND 100	ND 500	ND 100	ND 200	ND 200	ND 200	ND 200	ND 50	ND 2	ND 400	ND 500
Chloroethane	**µg/L**	**ND 10**	**ND 10**	**ND 5**	**ND 500**	**ND 250**	**ND 500**	**ND 250**	ND 500	ND 500	ND 500	ND 500	ND 50	ND 2	ND 400	ND 500
Bromomethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 50	ND 2	ND 400	ND 500
1,1-Dichloroethene	**µg/L**	**ND 10**	**ND 10**	**ND 5**	**ND 500**	**ND 250**	**ND 500**	**ND 250**	**ND 500**	**ND 500**	**ND 500**	**ND 500**	**ND 25**	**ND 1**	**ND 200**	**ND 250**
Acetone	µg/L	ND 10	ND 10	26	ND 1000	ND 1200	ND 2500	ND 250	ND 2500	ND 500	ND 500	ND 500	ND 250	ND 10	ND 2000	650J
Carbon disulfide	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Methylene chloride	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 50	ND 2	ND 400	ND 500
trans-1,2-Dichloroethene	µg/L	NA	NA	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	NR	ND 1	ND 200	ND 250
1,1-Dichloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
cis-1,2-Dichloroethene	µg/L	NA	NA	48	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	NR	58J	ND 200	80J
1,2-Dichloroethene (Total)	µg/L	41	37	NR	NR	NR	NR	NR	NR	NR	NR	NR	70	NR	NR	NR
Methyl ethyl ketone	µg/L	ND 10	ND 10	ND 5	ND 2500	ND 1200	ND 2500	ND 250	ND 2500	ND 500	ND 500	ND 500	ND 120	ND 5	ND 4000	ND 1200
Chloroform	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
1,1,1-Trichloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Carbon tetrachloride	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Benzene	µg/L	ND 10	ND 10	ND 0.7	ND 70	ND 35	ND 500	ND 35	ND 70	ND 70	ND 70	ND 70	ND 25	ND 1	ND 200	ND 250
1,2-Dichloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Trichloroethene	µg/L	3400	3500	6600	3400	2500	4500	4300	4300	5900	5700	6000	9300E	6300	5700	5100
1,2-Dichloropropane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Bromodichloromethane	µg/L	ND 10	ND 10	ND 10	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
cis-1,3-Dichloropropene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Methyl isobutyl ketone	µg/L	ND 10	ND 10	ND 5	ND 1000	ND 500	ND 1000	ND 250	ND 1000	ND 500	ND 500	ND 500	ND 70	ND 5	ND 1000	ND 1200
Toluene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
trans-1,3-Dichloropropene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
1,1,2-Trichloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Tetrachloroethene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
2-Hexanone	µg/L	ND 10	ND 10	ND 10	ND 500	ND 500	ND 1000	ND 500	ND 1000	ND 1000	ND 1000	ND 1000	ND 120	ND 5	ND 1000	ND 1200
Dibromochloromethane	µg/L	ND 10	ND 10	ND 10	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Chlorobenzene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Ethylbenzene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
p-Xylene/m-Xylene	µg/L	NA	NA	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	NR	NR	NR	NR
o-Xylene	µg/L	NA	NA	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	NR	NR	NR	NR
Xylene (Total)	µg/L	ND 10	ND 10	NR	NR	NR	NR	NR	NR	NR	NR	NR	ND 25	ND 1	ND 200	ND 250
Styrene	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
Bromoform	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250
1,1,2,2-Tetrachloroethane	µg/L	ND 10	ND 10	ND 5	ND 500	ND 250	ND 500	ND 250	ND 500	ND 500	ND 500	ND 500	ND 25	ND 1	ND 200	ND 250

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

MW-12 Cont'd.

Collection Date:		10/22/02	4/22/2003	10/28/2003	4/21/2004	10/20/2004
TCL Volatiles	Units					
Chloromethane	µg/L	ND 200	ND 200	ND 400	ND 250	ND 100
Vinyl chloride	µg/L	ND 200	ND 200	ND 400	ND 250	ND 100
Chloroethane	**µg/L**	**ND 200**	**ND 200**	**ND 400**	**ND 250**	**ND 100**
Bromomethane	µg/L	ND 200	ND 200	ND 400	ND 250	ND 100
1,1-Dichloroethene	**µg/L**	**ND 100**	**ND 100**	**ND 200**	**ND 120**	ND 50
Acetone	µg/L	ND 1000	ND 1000	ND 2000	ND 1200	ND 500
Carbon disulfide	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Methylene chloride	µg/L	ND 200	ND 200	ND 400	ND 120	ND 100
trans-1,2-Dichloroethene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
1,1-Dichloroethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
cis-1,2-Dichloroethene	µg/L	110	99 J	ND 200	190	98
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	ND 120	ND 50
Methyl ethyl ketone	µg/L	ND 500	ND 500	ND 1000	NR	NR
Chloroform	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
1,1,1-Trichloroethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Carbon tetrachloride	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Benzene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
1,2-Dichloroethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Trichloroethene	µg/L	2100	3400	4000	4500	1100
1,2-Dichloropropane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Bromodichloromethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
cis-1,3-Dichloropropene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Methyl isobutyl ketone	µg/L	ND 500	ND 500	ND 1000	NR	NR
Toluene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
trans-1,3-Dichloropropene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
1,1,2-Trichloroethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Tetrachloroethene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
2-Hexanone	µg/L	ND 500	ND 500	ND 1000	ND 620	ND 250
Dibromochloromethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Chlorobenzene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Ethylbenzene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
p-Xylene/m-Xylene	µg/L	NR	NR	NR	NR	NR
o-Xylene	µg/L	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Styrene	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
Bromoform	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50
1,1,2,2-Tetrachloroethane	µg/L	ND 100	ND 100	ND 200	ND 120	ND 50

MW-13

12/23/97	07/30/98	10/27/98	01/25/99	04/27/99	04/27/99 (Duplicate)	07/27/99	10/26/99	01/24/00	04/25/00	10/25/00
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100
ND 200	ND 2	28	ND 500	ND 100	ND 100	ND 200	ND 200	ND 200	ND 40	ND 100
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100
ND 500	ND 5	ND 25	ND 2500	ND 250	ND 250	ND 2500	ND 500	ND 500	ND 100	140 J
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 100
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	NR
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
870	ND 5	570	1000	440	440	ND 500	890	ND 500	380	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	300
ND 500	ND 5	ND 25	ND 2500	ND 250	ND 250	ND 2500	ND 500	ND 500	ND 100	ND 250
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 70	ND 0.7	ND 4	ND 500	ND 35	ND 35	ND 70	ND 70	ND 70	ND 14	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
27000	4100	3700J	4300	8000	8100	3800	7200	4400	2100	1000
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 1000	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 1000	ND 250	ND 250	ND 1000	ND 500	ND 500	ND 100	ND 250
ND 500	ND 5	ND 25	ND 1000	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 1000	ND 5	ND 25	ND 1000	ND 500	ND 500	ND 1000	ND 1000	ND 1000	ND 200	ND 50
ND 1000	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50
ND 500	ND 5	ND 25	ND 500	ND 250	ND 250	ND 500	ND 500	ND 500	ND 100	ND 50

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

		MW-13 Cont'd.									
Collection Date:		04/24/01	04/24/01	10/24/01	10/23/01	04/22/02	10/22/02	4/22/2003	10/28/2003	4/21/2004	10/19/2004
TCL Volatiles	Units			Duplicate		Duplicate					
Chloromethane	µg/L	ND 150	ND 200	ND 100	ND 150	ND 100	ND 50	ND 20	ND 40	ND 200	ND 4
Vinyl chloride	µg/L	ND 150	ND 200	ND 100	ND 150	ND 100	ND 50	ND 20	ND 40	ND 200	ND 4
Chloroethane	µg/L	ND 150	ND 200	ND 100	ND 150	ND 100	ND 50	ND 20	ND 40	ND 200	ND 4
Bromomethane	µg/L	ND 150	ND 200	ND 100	ND 150	ND 100	ND 50	ND 20	ND 40	ND 200	ND 4
1,1-Dichloroethene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Acetone	µg/L	ND 750	ND 1000	ND 500	ND 75	130J	ND 250	ND 100	ND 200	ND 1000	ND 20
Carbon disulfide	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Methylene chloride	µg/L	ND 150	ND 200	ND 100	ND 150	ND 100	ND 50	ND 20	ND 40	ND 200	ND 4
trans-1,2-Dichloroethene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
1,1-Dichloroethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
cis-1,2-Dichloroethene	µg/L	520	510	530	600	180	230	82	160	310	47
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	ND 100	ND 2
Methyl ethyl ketone	µg/L	ND 380	ND 500	ND 250	ND 380	ND 250	ND 120	ND 50	ND 100	NR	NR
Chloroform	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
1,1,1-Trichloroethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Carbon tetrachloride	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Benzene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
1,2-Dichloroethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Trichloroethene	µg/L	2100	2000	1500	1400	1100	760	240	390	2700	46
1,2-Dichloropropane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Bromodichloromethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
cis-1,3-Dichloropropene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Methyl isobutyl ketone	µg/L	ND 380	ND 500	ND 250	ND 380	ND 250	ND 120	ND 50	ND 100	NR	NR
Toluene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
trans-1,3-Dichloropropene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
1,1,2-Trichloroethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Tetrachloroethene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
2-Hexanone	µg/L	ND 380	ND 500	ND 250	ND 380	ND 250	ND 120	ND 50	ND 100	ND 500	ND 10
Dibromochloromethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Chlorobenzene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Ethylbenzene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
p-Xylene/m-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	µg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Styrene	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
Bromoform	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2
1,1,2,2-Tetrachloroethane	µg/L	ND 75	ND 100	ND 50	ND 75	ND 50	ND 25	ND 10	ND 20	ND 100	ND 2

MW-14					
12/23/97	07/30/98	10/27/98	01/25/99	04/27/99	07/27/99
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 200	ND 2	ND 200	ND 200	ND 2	ND 200
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 2500	ND 2500	ND 5	ND 2500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
1500	42	1000	840	680	550
NR	NR	NR	NR	NR	NR
ND 500	ND 5	ND 2500	ND 2500	ND 5	ND 2500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 70	ND 0.7	ND 70	ND 500	ND 0.7	ND 70
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
26000	1000J	14000	15000	13000J	11000
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 1000	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 1000	ND 1000	ND 5	ND 1000
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 1000	ND 5	ND 1000	ND 1000	ND 10	ND 1000
ND 1000	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
NR	NR	NR	NR	NR	NR
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500
ND 500	ND 5	ND 500	ND 500	ND 5	ND 500

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

TCL ANALYTICAL DATABASE - GROUNDWATER
VAC AIR ALLOYS SITE
FREWSBURG, NEW YORK

MW-14 (Cont'd.)

Collection Date:		10/26/99	01/26/00	04/25/00	10/25/00	04/25/01	10/23/01	04/23/02	10/21/02	4/22/2003	4/22/2003 Duplicate	10/28/2003	4/21/2004	10/19/2004
TCL Volatiles	*Units*													
Chloromethane	µg/L	ND 500	ND 500	ND 1000	ND 400	ND 400	ND 400	ND 200	ND 300	ND 200	ND 200	ND 400	ND 500	ND 100
Vinyl chloride	µg/L	ND 200	ND 200	ND 400	ND 400	ND 400	ND 400	ND 200	ND 300	ND 200	ND 200	ND 400	ND 500	ND 100
Chloroethane	**µg/L**	**ND 500**	**ND 500**	**ND 1000**	**ND 400**	**ND 400**	**ND 400**	**ND 200**	**ND 300**	**ND 200**	**ND 200**	**ND 400**	**ND 500**	**ND 100**
Bromomethane	µg/L	ND 500	ND 500	ND 1000	ND 400	ND 400	ND 400	ND 200	ND 300	ND 200	ND 200	ND 400	ND 500	ND 100
1,1-Dichloroethene	**µg/L**	**ND 500**	**ND 500**	**ND 1000**	**ND 200**	**ND 200**	**ND 200**	**ND 100**	**ND 150**	**ND 100**	**ND 100**	**ND 200**	**ND 250**	**ND 50**
Acetone	µg/L	ND 500	ND 500	ND 1000	1200J	ND 2000	ND 2000	ND 1000	ND 1500	ND 1000	ND 1000	ND 2000	ND 2500	ND 500
Carbon disulfide	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Methylene chloride	µg/L	ND 500	ND 500	ND 1000	ND 400	ND 400	ND 400	ND 200	ND 300	ND 200	ND 200	ND 400	ND 500	ND 100
trans-1,2-Dichloroethene	µg/L	ND 500	ND 500	ND 1000	NR	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
1,1-Dichloroethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
cis-1,2-Dichloroethene	µg/L	540	ND 500	ND 1000	NR	450	410	320	230	190	200	250	310	1000
1,2-Dichloroethene (Total)	µg/L	NR	NR	NR	350	NR	NR	NR	NR	NR	NR	NR	ND 250	ND 50
Methyl ethyl ketone	µg/L	ND 500	ND 500	ND 1000	ND 1000	ND 1000	ND 1000	ND 500	ND 750	ND 500	ND 500	ND 1000	NR	NR
Chloroform	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
1,1,1-Trichloroethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Carbon tetrachloride	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Benzene	µg/L	ND 70	ND 70	ND 140	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
1,2-Dichloroethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Trichloroethene	µg/L	13000	9200	8700	5300	6700	4500	3300	2800	1900	2200	3300	5400	1400
1,2-Dichloropropane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Bromodichloromethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
cis-1,3-Dichloropropene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Methyl isobutyl ketone	µg/L	ND 500	ND 500	ND 1000	ND 1000	ND 1000	ND 1000	ND 500	ND 750	ND 500	ND 500	ND 1000	NR	NR
Toluene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
trans-1,3-Dichloropropene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
1,1,2-Trichloroethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Tetrachloroethene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
2-Hexanone	µg/L	ND 1000	ND 1000	ND 2000	ND 1000	ND 1000	ND 1000	ND 500	ND 750	ND 500	ND 500	ND 1000	ND 1200	ND 250
Dibromochloromethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Chlorobenzene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Ethylbenzene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
p-Xylene/m-Xylene	µg/L	ND 500	ND 500	ND 1000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
o-Xylene	µg/L	ND 500	ND 500	ND 1000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene (Total)	µg/L	NR	NR	NR	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Styrene	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
Bromoform	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 200	ND 200	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50
1,1,2,2-Tetrachloroethane	µg/L	ND 500	ND 500	ND 1000	ND 200	ND 1000	ND 1000	ND 100	ND 150	ND 100	ND 100	ND 200	ND 250	ND 50

Notes:

NA Not Applicable.

NDx Not detected at or above x.

NR Not Reported.

ADDITIONAL VOC PARAMETERS
VACAIR ALLOYS SITE
FREWSBURG, NEW YORK

		MW-4D					MW-5D	
Collection Date:		04/15/92	12/18/92	12/18/92 (Duplicate)	01/14/93	01/14/93 (Duplicate)	04/15/92	12/17/92
TCL Volatiles	Units							
Vinyl acetate	**µg/L**	**NA**	**ND 10**	**ND** 10	**ND** 10	ND 10	**NA**	**ND** 10
Dichlorodifluoromethane	µg/L	ND 0.5	ND 10	10	ND 10	ND 10	ND 0.5	NA
Trichlorofluoromethane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
Bromochloromethane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,1-Dichloropropene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
2,2-Dichloropropane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
Dibromomethane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,3-Dichloropropane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,1,1,2-Tetrachloroethene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,2,3-Trichloropropane	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
Bromobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
o-Chlorotoluene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
p-Chlorotoluene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
m-Dichlorobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
p-Dichlorobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
o-Dichlorobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,2,4-Trichlorobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
Hexachlorobutadiene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,2,3-Trichlroobenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
Isopropylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
n-Propylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,3,5-Trimethylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
tert. Butylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
1,2,4-Trimethylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
sec-Butylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
p-Isopropyltoluene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA
n-Butylbenzene	µg/L	ND 0.5	NA	NA	NA	NA	ND 0.5	NA

Notes:

NA Not Analyzed.
ND Non-detect at associated value.
VOC Volatile Organic Compound.

APPENDIX E

SVE DRAEGER MONITORING DATA

SVE Draeger Air Sampling

Wells	Date	Time	TCE (ppm)	TCE SCFM	Vacuum
All Wells	1/5/04	6:45 a.m.	0	16	8
All Wells	1/7/04	8:20 a.m.	0	18	8
All Wells	1/9/04	10:45 a.m.	0	18	8
All Wells	1/12/04	9:50 a.m.	0	16	8
All Wells	1/14/04	8:20 a.m.	0	18	8
All Wells	1/16/04	10:15 a.m.	0	16	8
All Wells	1/19/04	8:45 a.m.	0	17	8
All Wells	1-20-/1-25	system shut down			
All Wells	1/26/04	9:45 a.m.	0	16	8
All Wells	2/2/04	7:45 a.m.	0	16	8
All Wells	2/4/04	9:50 a.m.	0	18	8
All Wells	2/6/04	8:20 a.m.	0	17	8
All Wells	2/11/04	9:45 a.m.	0	18	8
All Wells	2/13/04	8:15 a.m.	0	18	8
All Wells	2/16/04	9:10 a.m.	0	17	8
All Wells	2/20/04	9:50 a.m.	0	18	8
All Wells	2/23/04	8:00 a.m.	0	18	8
All Wells	3/1/04	8:30 a.m.	0	18	8
All Wells	3/5/04	9:10 a.m.	0	18	8
All Wells	3/8/04	10:20 a.m.	0	18	8
All Wells	3/12/04	11:20 a.m.	0	16	8
All Wells	3/15/04	10:00 a.m.	0	18	8
All Wells	3/19/04	8:45 a.m.	0	18	8
All Wells	3/22/04	2:15 p.m.	0	18	8
All Wells	3/24/04	8:45 a.m.	0	17	8
All Wells	3/29/04	8:30 a.m.	0	18	8
All Wells	4/1/04	7:45 a.m.	0	18	8

SVE Draeger Air Sampling

Wells	Date	Time	TCE (ppm)	TCE SCFM	Vacuum
All Wells	4/5/2004	8:30 a.m.	0	18	7
All Wells	4/9/2004	9:15 a.m.	0	18	7
All Wells	4/12/2004	8:30 a.m.	0	18	7
All Wells	4/16/2004	10:20 a.m.	0	17	7
All Wells	4/23/2004	9:50 a.m.	0	18	7
All Wells	4/30/2004	7:45 a.m.	0	18	7
All Wells	5/17/2004	9:45 a.m.	0	15	6
All Wells	5/24/2004	8:20 a.m.	0	16	7
All Wells	6/1/2004	8:40 a.m	0	16	7
All Wells	6/7/2004	7:30 a.m	0	16	7
All Wells	6/16/2004	7:45 a.m	0	15	7
All Wells	6/23/2004	8:15 a.m.	0	15	7

Wells	Date	Time	TCE (ppm)	TCE SCFM	Vacuum
All Wells	7/6/2004	8:15 a.m.	0	14	7
All Wells	7/12/2004	7:20 a.m	0	14	7
All Wells	7/20/2004	2:45 p.m.	0	14	7
All Wells	7/26/2004	7:00 a.m.	0	14	7
All Wells	8/2/2004	12:45 p.m.	0	14	7
All Wells	8/9/2004	9:50 a.m	0	14	7
All Wells	8/16/2004	shutdown	0	shutdown	shutdown

APPENDIX F

NYSDEC APPROVAL LETTER FOR SVE SYSTEM SHUTDOWN

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 FAX: (716) 851-7226
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

August 4, 2004

Mr. Dennis Trostle
General Manager
P.O. Box 650
Frewsburg, New York 14738

Dear Mr. Trostle:

Vac Air Alloys Site
Carroll (T), Chautauqua County
Site No. 907016

As per our conversation of July 29, 2004, I am in agreement that, as per your letter of July 9, 2004 and our discussions during our meeting of May 12, 2004, the use of the Soil Vapor Extraction (SVE) system can be discontinued at this time.

It is understood that the extraction wells in the area of the SVE system will continue to be operated to provide groundwater treatment in that area. In addition, the SVE equipment shall remain on site and be properly maintained in the event monitoring data indicates that the use of SVE system would again be beneficial to the long-term remediation of the site.

If you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely,

Gregory P. Sutton, P.E.
Project Engineer
Environmental Remediation

GPS/tl

cc: Mr. Cameron O'Connor - NYSDOH

APPENDIX G

MW-2 STEP-DRAWDOWN TEST AND RESULTS

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: Carol Barron

REF. NO.: 2326

FROM: Jon Williams

DATE: October 19, 2004

C.C.:

RE: **MW-2 Short Term Pumping Test**

VacAir Site

Frewsburg, New York

INTRODUCTION

This memorandum presents the details and results of a short-term pumping test conducted at monitoring well MW-2 at the VacAir Site in Frewsburg, New York. This pumping test was performed on September 30, 2004 in order to determine the feasibility of continuous pumping from this monitoring well.

PUMPING TEST PROCEDURES

The most suitable type of pumping test for determining an appropriate pumping rate for continuous pumping is the step drawdown test. Typically this type of test is performed by pumping from a well at three increasing pumping rates with each pumping rate having a duration of one-hour.

For the pumping test at MW-2, a 2-inch diameter electric submersible pump with a variable speed controller was used for pumping. Flow rates were measured using a graduated container and stopwatch. Water level monitoring was performed continuously using a telog recorder and pressure transducer and periodically using a water level indicator.

The Telog was installed to the bottom of the well and the submersible pump was then lowered to approximately 3-inches above the bottom of the well. Prior to commencing pumping water level data were collected to establish static conditions. The pumping test consisted of three pumping steps each with a duration of one-hour and a fourth pumping step with a duration of eight minutes. The fourth pumping step resulted in an increase in pumping rate followed by a sharp decline as the water level was drawn down to the pump intake. A summary of the pumping rates and associated drawdown is tabulated below.

Pumping Step	*Duration*	*Pumping Rate*	*Drawdown*
1	1 hour	0.075 gpm	0.84 feet
2	1 hour	0.2 gpm	1.23 feet
3	1 hour	0.33 gpm	2.39 feet
4	8 minutes	0.36 gpm (average)	3.41 feet

A hydrograph of the entire pumping test including pre-test static data and post-test recovery data is presented on Figure 1.

RESULTS

As can be seen on Figure 1, pumping step one did not result in a stabilized water level. This may indicate the presence of a perched water table that is being de-watered. Pumping steps two, three and four each result in a stabilized water level near the end of each pumping step. This is indicative of typical drawdown in an aquifer.

Figure 2 presents a plot of pumping rates versus drawdown. This type of plot is useful for estimating the necessary pumping rate to achieve a desired drawdown. A statistical linear best-fit line has been added to the plot using data from pumping steps two, three and four. Data from pumping step one was not used as this pumping step did not result in a stabilized water level.

From the linear best-fit line, an estimate of specific capacity for the well was calculated. The specific capacity is defined as unit pumping rate per unit drawdown. The specific capacity estimated for MW-2 is 0.08 gpm per 1 foot of drawdown. The maximum drawdown available during this pumping test was 3.97 feet (static water level depth to pump intake depth). Using the specific capacity of 0.08 and multiplying by the maximum drawdown of 3.97 feet yields a maximum achievable pumping rate of 0.32 gpm. This pumping rate is consistent with the data collected from the pumping test.

CONCLUSIONS AND RECOMENDATIONS

It can be concluded from this pumping test that MW-2 is capable of maintaining a continuous pumping rate of approximately 0.3 gpm for an extended period of pumping.

In order for MW-2 to be pumped continuously for any period of time it is recommended that an electric submersible pump with a variable speed controller be used. For the pumping test a Pro-Active P-10300 "mini-monsoon" pump with a Pro-Active low-flow sampling controller was used. This pump and controller combination is well suited for the low flow rate required for MW-2. This pump is powered by a 12-volt source such as a deep-cycle marine battery.

During the pumping test, pumped water was collected in a 55-gallon steel drum for subsequent treatment through the On-site treatment facility. For a longer duration of pumping (greater than three hours), it would be recommended that pumped water be collected in a 55-gallon drum equipped with a sump pump with a float switch. The discharge from the sump pump would be plumbed into the On-site treatment facility. This would allow for unattended operation of the pump.

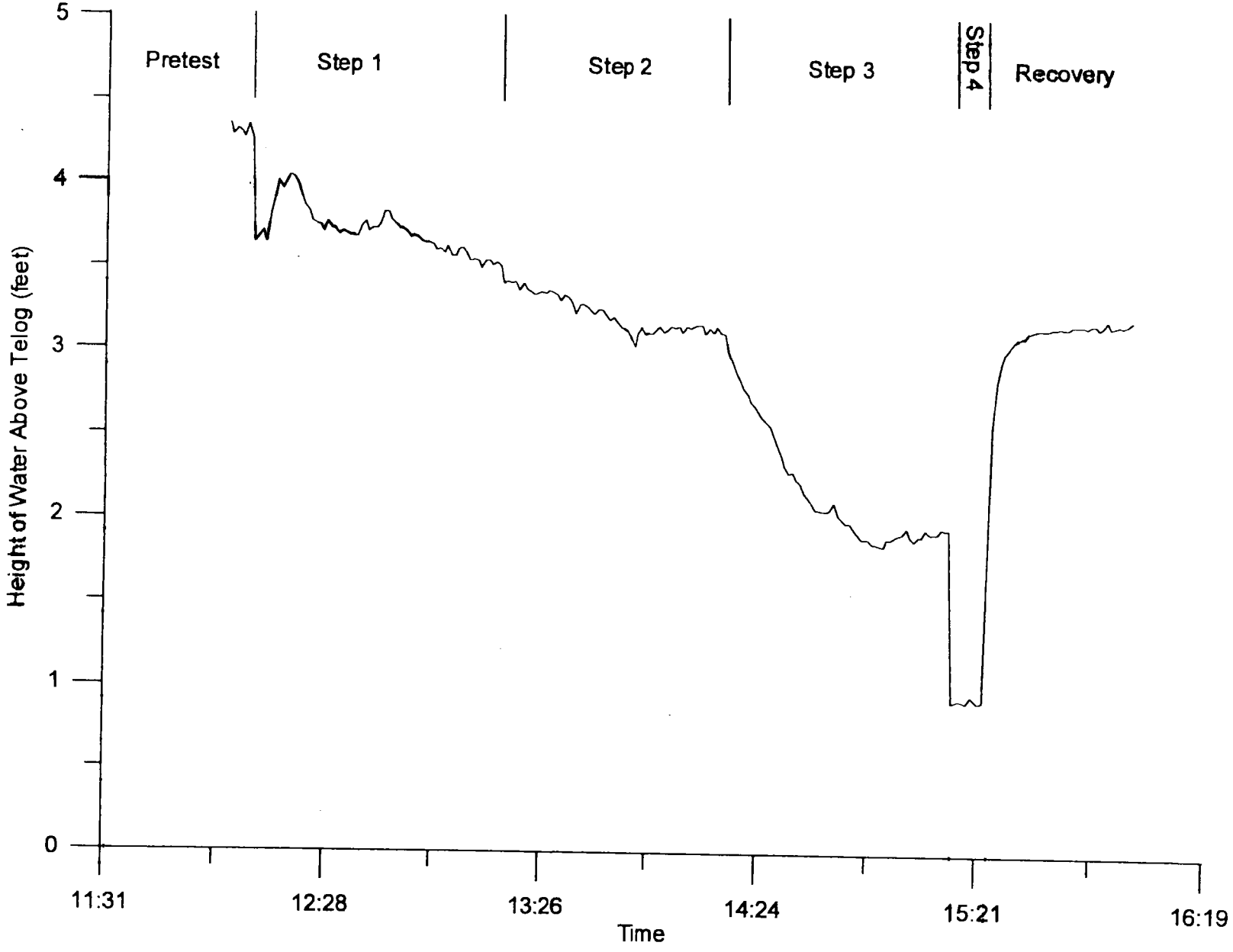

Figure 1
MW-2 Pumping Test
VacAir Site
Frewsburg, New York

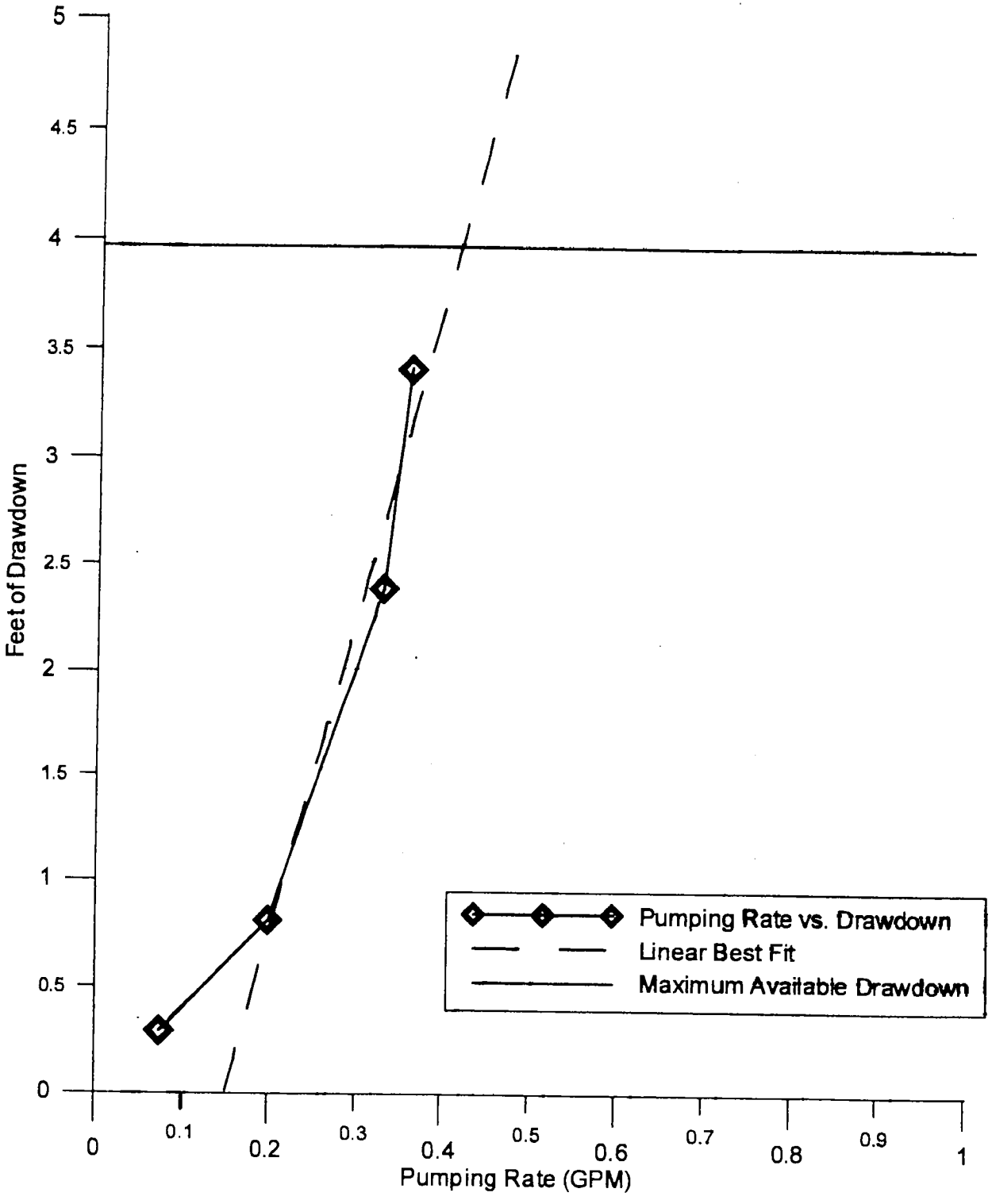

Figure 2
MW-2 Pumping Rate vs. Drawdown
VacAir Site
Frewsburg, New York