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September 2, 2009

Reference No. 006029-50

Mr. Regan S. Williams
State Project Coordinator
Ohio EPA - Division of
Emergency & Remedial Response
2110 East Aurora Road
Twinsburg, Ohio 44087

Dear Mr. Williams:

Re: April 2009 Groundwater Monitoring Report
Summit National Superfund Site
Deerfield, Ohio

In accordance with the Consent Decree and Statement of Work (SOW) requirements for the Summit National Superfund Site (Site) in Deerfield, Ohio, the Summit National Facility Trust (SNFT) herewith submits two copies of the 2009 annual groundwater monitoring results, as required by the Groundwater Monitoring Program for the Site. The groundwater hydraulic monitoring and sampling was conducted during the period of April 20 to 24, 2009. This report includes the 15th year groundwater monitoring report, as well as the 2005 to 2009 groundwater extraction system shutdown evaluation.

As discussed in Section G of this report, there is no indication of adverse impact to the off-Site groundwater in any of the groundwater units either before any remedial action at the Site, since the 11 years of active groundwater pump and treatment operations, or since the shutdown of the water table unit (WTU) pipe and media drain system in 2005. Therefore, it is requested that the WTU pipe and media drain groundwater extraction system remain off while the SNFT continues to implement the Groundwater Monitoring Program detailed in Section H. If future monitoring results indicate a significant increase of Site-related constituents in the off-Site WTU groundwater monitoring wells or if the concentration of any Site Specific Indicator Parameter List (SSIPL) volatile organic compounds (VOCs) detected in the off-Site downgradient WTU monitoring wells are confirmed to exceed their respective maximum contaminant level (MCL), SNFT will contact the Ohio Environmental Protection Agency (OEPA) to discuss appropriate measures including additional groundwater sampling, possibly reinstating the operation of the pipe and media drain system, or alternate measures to address the apparent migration.

Based on the very few detects of pesticides and polychlorinated biphenyls (PCBs) in the on- and off-Site groundwater monitoring wells (see Section G), it is evident that these compounds are not compounds of concern in the groundwater, and the SNFT requests that these parameters be removed from the analytical requirements for the Site.

A. GROUNDWATER QUALITY MONITORING

As required by the SOW, the April 2009 round of groundwater sampling included sampling of the WTU, upper intermediate unit (UIU), lower intermediate unit (LIU), and upper Sharon unit (USU) monitoring wells. Consistent with the SOW, the samples collected during the April 2009 round of groundwater quality monitoring were analyzed by Accutest of Dayton, New Jersey for the full Target Compound List/Target Analyte List (TCL/TAL) as one of the five-year, expansive sampling events.

Included in **Attachment A** is a memorandum summarizing the field activities for the April 2009 groundwater quality monitoring program. Six of the 19 WTU wells, 10 of the 12 UIU wells, two of the 14 LIU wells, and five of the six USU wells were purged dry. All wells recovered sufficiently for complete sample sets to be obtained. The fact that these wells purged dry is indicative that there is very little groundwater movement in each of the groundwater units.

Included in **Attachment B** are the analytical results for the detected compounds in the groundwater samples collected in April 2009, as follows:

Analytical Results

- Table B.1 - Detected TCL/TAL parameters
- Table B.2 - Rinsate blanks
- Table B.3 - Trip blanks

CRA's data quality assessment and validation for the April 2009 groundwater analyses is included in **Attachment C**. The data were determined to be usable with the qualifications noted in **Attachment C**.

Included in **Attachment D** is a compact disc with an electronic copy of all the historical groundwater quality and water level elevation data for the Site. The data is accessible through a data access tool called e:DAT. The e:DAT file integrates a site map with groundwater monitoring locations, historical groundwater analytical data, and historical groundwater level data. Instructions on installing e:DAT and viewing the historical groundwater data are included on the compact disc. This electronic presentation of the historical groundwater monitoring data is provided in lieu of printing all the data.

A summary of the detected VOCs, Semi-Volatile Organic Compounds (SVOCs), Pesticides, and PCB compounds for the five-year groundwater monitoring events (1994, 1999, 2004, and 2009), and for the 2006 post-shutdown sampling event in the WTU, UIU, LIU, and USU are presented on **Figures 1 through 4**, respectively.

A comparison of the 2004 (previous five-year sampling event) and 2009 groundwater concentrations (excluding inorganic compounds) is provided below for each hydrogeologic unit at the Site.

Water Table Unit:

On-Site Wells

Concentrations trends for each on-Site well from west to east are summarized as follows:

- MW-104 and MW-105: Except for bis(2-ethylhexyl)phthalate at MW-105, concentrations of all compounds continue to be non-detect. The concentration of bis(2-ethylhexyl)phthalate at MW-105 was estimated (J qualifier) at 1.9 micrograms per liter (µg/L) in 2004, and was not detected at a detection limit of 2 µg/L in 2009.
- MW-106: The concentrations of the three detected VOCs have increased, however, the only SVOC that was detected in 2004 [bis(2-ethylhexyl)phthalate] reduced in concentration from 6.1 µg/L in 2004 to 2.1 µg/L in 2009. Pesticides and PCBs continue to be non-detect.
- MW-111: All VOCs detected have decreased in concentration. SVOCs, pesticides and PCBs continue to be non-detect.
- MW-107: Except for 1,1,1-Trichloroethane (1,1,1-TCA) and toluene, all VOCs detected increased in concentration, whereas all SVOCs decreased in concentration, except for 4-chloro-3-methylphenol. Pesticides and PCBs continue to be non-detect.
- MW-11: Concentrations of VOCs remained generally constant with some small increases and decreases. SVOCs, pesticides, and PCBs continue to be non-detect.
- MW-108: All detected VOCs concentrations have increased except for acetone. SVOCs, pesticides, and PCBs continue to be non-detect.
- MW-113: VOCs, SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was estimated at 1.6J µg/L.

Off-Site Wells

Concentrations trends for each off-Site well from west to east are summarized as follows:

Background Wells:

- MW-101: VOCs, SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was 4.3 µg/L.

- MW-102 and MW-103: All compounds continue to be non-detect.

Downgradient Wells:

- MW-114, MW-117, MW-4, and MW-110: All compounds continue to be non-detect.
- MW-116: Bis(2-ethylhexyl)phthalate was the only compound detected at this well (at a concentration of 2.7 µg/L). All other compounds continue to be non-detect.
- MW-115: Concentrations of 1,1-Dichloroethane (1,1-DCA), cis-1,2-Dichloroethene (cis-1,2-DCE), and bis(2-ethylhexyl)phthalate increased in 2009. All other VOCs, pesticides and PCBs continue to be non-detect.
- MW-118: The concentrations of 1,2-DCA, and bis(2-ethylhexyl)phthalate have remained constant. All other VOCs, SVOCs, pesticides and PCBs continue to be non-detect.
- MW-109: VOCs, SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was estimated at 1.5J µg/L.

Upper Intermediate Unit:

On-Site Wells

Concentrations trends for each on-Site well from west to east are summarized as follows:

- MW-203, MW-206, and MW-224: All compounds continue to be non-detect. Although MW-224 is on Site, it is on the downgradient site boundary and, therefore, can also be considered a downgradient well.
- MW-219: VOCs, SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was estimated at 1.6J µg/L.
- MW-207: All VOCs detected in 2004 are non detect in 2009. The only SVOCs detected in 2004 [bis(2-ethylhexyl)phthalate] has decreased in concentration in 2009. Pesticides and PCBs continue to be non-detect.
- MW-223: Concentrations of detected VOCs have decreased. SVOCs, pesticides, and PCBs continue to be non-detect.

Off-Site Wells

Concentrations trends for each off-Site well from west to east are summarized as follows:

Background Wells:

- MW-201 and MW-202: All compounds, except for bis(2-ethylhexyl)phthalate at MW-201, continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was estimated at 1.2J µg/L.
- MW-204: VOCs, SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of bis(2-ethylhexyl)phthalate was 2.7 µg/L.

Downgradient Wells:

- MW-205 and MW-220: All compounds continue to be non-detect.
- MW-209: VOCs (except for acetone), SVOCs [except for bis(2-ethylhexyl)phthalate], pesticides, and PCBs continue to be non-detect. In 2009, the concentration of acetone was 14.4 µg/L (higher than in 2004, but lower than in 2006), and the concentration of bis(2-ethylhexyl)phthalate was estimated at 1.9J µg/L.

Lower Intermediate Unit:

No significant changes in VOC, pesticide, or PCB concentrations were observed.

Bis(2-Ethylhexl)phthalate was detected in five on-Site wells (MW-306, MW-307, MW-321, MW-323, and MW-324) at estimated concentrations of 1.3J µg/L, 1.8J/2.9 µg/L, 2.67 µg/L, 1.6J µg/L, and 1.9J µg/L, respectively, and in two off site wells MW-304 (background well), and MW-309 at estimated concentrations of 1.4J µg/L and 1.6J µg/L, respectively.

The only VOC detected in 2009 was at on-Site well MW-321 (1,2-DCA at 2.0 µg/L).

Upper Sharon Unit:

No significant changes in VOC, SVOC, Pesticide, or PCB concentrations were observed.

Bis(2-Ethylhexl)phthalate) was detected in one on-Site well (MW-401 at 2.5/1.4J µg/L), and in one off-Site well (MW-402 at 2.5µg/L). The presence of this compound at low levels in multiple samples from the WTU, UIU, LIU and USU wells, including background wells, as well as in a laboratory method blank sample, suggests that it may be a laboratory contaminant.

B. GROUNDWATER HYDRAULIC MONITORING

Groundwater levels in the WTU, UIU, LIU, and USU monitoring wells and piezometers at the Site were measured on April 20, 2009, and are presented in **Attachment E**. The groundwater hydraulic data were reduced to elevations and entered into a computer database as required by the SOW. Groundwater contours for the WTU, UIU, LIU, and the USU for the April 2009 monitoring event also are presented on figures in **Attachment E**. Groundwater hydrographs for the period of November 1994 to April 2009 for each of the wells and piezometers used for hydraulic monitoring are included electronically in the e:DAT in **Attachment D**.

The groundwater contours presented in **Attachment E** were prepared incorporating an exponential variogram and a linear drift function with the kriging interpolation method (as implemented in SURFER for Windows, Golden Software, Inc., Golden, Colorado, 2004).

The groundwater elevation contours for the April 2009 hydraulic monitoring demonstrate that the horizontal direction of groundwater flow is generally southeasterly in the WTU, as has been consistently observed in the past. The groundwater flow direction in all of the bedrock units (i.e., UIU, LIU, and USU) appears to be in a generally easterly direction, and is consistent with both the post-shutdown and the pre-shutdown groundwater flow direction in these units. The on-Site potable water well groundwater elevation is not considered to be representative of the groundwater flow patterns in the USU.

C. SURFACE WATER AND SEDIMENT SAMPLING

A surface water and sediment sample was collected from the confluence of the south and east drainage ditches in April 2009. The analytical results are provided in **Table F.1** of **Attachment F.**

During sampling, "orange" staining was observed in the south and east drainage ditches. The surface water analytical data, including lack of organic detects above detection limits, confirm that there is no significant influence on surface water quality from the Site. Although not required by the SOW, based on discussions with OEPA, the surface water sample was also analyzed for metals using left over sample volume. The iron concentration of 1,320 µg/L in the surface water sample is considerably lower than what is typically seen in the groundwater samples (5,000 to 60,000 µg/l). This is expected as the iron will precipitate out of the groundwater seeps fairly quickly as it is exposed to air. The background concentration for iron in the WTU is greater than 85,000 µg/L, indicating that iron is not related to the previous waste disposal activities at the Site. Therefore, the "orange" staining is likely the result of the iron precipitating out of the groundwater, and is also evident in other drainage ditches in the area.

D. RESIDENTIAL WELLS

The three residential wells (Carver, Duly, and Oyster) located east of the Site were sampled on April 21 and 22, 2009. Analytical results of the residential well samples are included in **Attachment G**. No SSIPL VOCs were detected in the residential well samples. The groundwater hydraulic and quality monitoring data collected from the Site and from the residential wells indicate that there is no evidence of migration of contaminated groundwater to the residential wells.

E. GROUNDWATER PERFORMANCE STANDARDS

As required by the Consent Decree for the Site, the groundwater performance standards for the Site must be attained at each of the WTU, UIU, LIU, and USU monitoring wells (except for those wells designated as background wells). The groundwater performance standards for the Site are as follows (whichever occurs first):

- An individual 10^{-6} increased lifetime cancer risk and a cumulative non-carcinogenic Hazard Index (HI) less than one, or
- Background

Included in **Attachment H** is a table that presents the carcinogenic performance standards to be achieved at each groundwater monitoring well (except background wells). Included in **Attachment I** is an evaluation of the non-carcinogenic performance standards and the background groundwater concentrations for the April 2009 groundwater sampling event. A summary of each monitoring well's compliance or non-compliance with the performance standards for the Site is included on **Table 1** for the April 2009 groundwater monitoring event.

Based on review of Table 1, the groundwater performance standards have not been attained at select wells, and therefore groundwater monitoring will continue as outlined in Section H.

F. EXTRACTION SYSTEM SHUTDOWN EVALUATION

In the 2004 10-year groundwater evaluation (CRA, March 16, 2005), the SNFT requested permission to shutdown the groundwater extraction system based on the continued stable on-Site groundwater plume, and no indication of adverse impact to the off-Site groundwater in any of the groundwater units either before any remedial action at the site or since the 11 years of active groundwater pump and treatment operations. On June 10, 2005, CRA submitted a Work Plan for Groundwater Migration Evaluation to OEPA. The Work Plan was approved by OEPA on July 18, 2005. On August 31, 2005, the groundwater extraction and treatment system

was shut down by SNFT, which commenced the shutdown evaluation. Semi-annual groundwater monitoring conducted at the Site from February 2006 to April 2009 confirmed that the on-Site contaminated groundwater is not migrating off-Site, even under the non pumping scenario. The shutdown evaluation reports submitted to OEPA during the shutdown evaluation period were as follows:

- August 2005 Pre-Shutdown Groundwater Monitoring Report (CRA, December 20, 2005)
- Six-Month Groundwater Conditions Monitoring Report (CRA, June 6, 2006)
- August 2006 Groundwater Monitoring Report (CRA, January 19, 2007)
- April 2007 Groundwater Monitoring Report (CRA, July 23, 2007)
- November 2007 Groundwater Monitoring Report (CRA, February 6, 2008)
- April 2008 Groundwater Monitoring Report (CRA, July 18, 2008)
- November 2008 Groundwater Monitoring Report (CRA, March 2, 2009)

Figures 5 and 6 present a summary of the detected SSIPL VOC concentrations for the shutdown evaluation period of 2004 through 2009 for the WTU and UIU, respectively.

Except for the expected increasing groundwater levels in the vicinity of the pipe and media drain after shutdown of the groundwater extraction system in August 2005, no significant changes in the groundwater flow patterns have been noted since the system shutdown.

The concentrations of SSIPL VOCs in downgradient off-Site monitoring wells have remained either non-detect or within the range of concentrations detected in the baseline sampling event for the shutdown evaluation. Concentration trend charts for select monitoring wells and chemical parameters are provided in **Attachment D**. Additional trends are available through the data access tool (e:DAT), also included in **Attachment D**.

In order to confirm the qualitative evaluation of concentration trends both on and off site, CRA performed a statistical trend evaluation of detected concentrations at select on- and off-Site monitoring wells for the following time periods:

- Overall (1994-2009)
- Pre-shutdown (1994-2005)
- Post-shutdown (2005-2009)

The wells considered in the statistical analyses were those having detectable concentrations of SSIPL parameters on a, somewhat, regular basis and included the following wells:

- On-Site, WTU wells MW-11, MW-106, MW-107, MW-108, and MW-111
- On-Site, UIU well MW-223
- Off-Site, WTU wells MW-4, MW-109, MW-115, and MW-118
- Off-Site, UIU well MW-209

Three statistical evaluations were performed, as follows:

- Trend Testing: Concentration trend testing was conducted using the Mann-Kendall test, as discussed in Section 4.3 of USEPA (2006), Chapter 12 of Helsel & Hirsch (1992) and other relevant guidance and reference texts. (See Section 3.1 in **Attachment J** for additional details for the applicability of and selection of the Mann-Kendall test for trend analysis).
- Post-Shutdown vs. Pre-Shutdown Comparisons: Evaluation of the post-shutdown monitoring data against pre-shutdown conditions was performed using statistical control analyses and, specifically, the Shewhart-CUSUM control charts. (See Section 3.2 in **Attachment J** for details for the results of the Shewhart-CUSUM control charts analysis).
- Off-Site vs. On-Site Comparisons Along Groundwater Flowpath: Evaluation of parameter concentrations between on-Site wells (upgradient) and their corresponding off-Site wells (downgradient) along the observed groundwater flow path was accomplished using correlation analyses where sufficient data were available (i.e., when monitored parameters were detected in more than half the samples in each well). (See Section 3.3 in **Attachment J** for the results of correlation analysis).

Details of the statistical evaluation are provided in **Attachment J** and the trend testing results are presented below.

Trend Testing Results:

Of the 528 data sets considered (16 parameters x 11 wells x 3 time periods for overall, pre-shutdown and post-shutdown periods), 401 data sets were not suitable for trend testing due to insufficient data (fewer than four data points) or low detection frequencies (50-100 percent non-detects). In particular, no trend tests were performed for any SSIPL parameters at wells MW-4 and MW-109. Of the remaining 127 data sets subjected to trend testing, 75 had no statistically significant trends, while 52 did have significant (decreasing or increasing) trends. Parameters that had significant trends are listed below.

A total of 7 **decreasing** trends were observed as follows:

1. On-Site wells:
   - Overall (1994-2009):
     - 1,1,1-trichloroethane at MW-11 (WTU)
     - 1,2-dichloroethane at MW-223 (UIU)
   - Pre-shutdown (1999-2005):
     - 1,1,1-trichloroethane at well MW-11 (WTU)
     - 2-butanone and acetone at MW-107 (WTU)
     - 1,2-dichloroethane at well MW-223 (UIU)
   - Post-shutdown (2005-2009):
     - No significant trends identified
2. Off-Site wells:
   - Overall (1994-2009):
     - cis-1,2-dichloroethene at MW-115 (WTU)
   - Pre-shutdown (1999-2005):
     - No significant trends identified
   - Post-shutdown (2005-2009):
     - No significant trends identified

A total of 45 **increasing** trends were observed as follows:

1. On-Site wells:
   - Overall (1994-2009):
     - 1,1,1-trichloroethane at MW-106 and MW-108 (WTU)
     - 1,1-dichloroethane at MW-107, MW-108, and MW-111 (WTU)
     - 1,2-dichloroethane at MW-108 (WTU)
     - 1,2-dichloroethene (total) at MW-11, MW-108, and MW-111 (WTU)
     - Benzene at MW-11, MW-107, and MW-108 (WTU)
     - cis-1,2-dichloroethene at MW-107, MW-108, and MW-111 (WTU)
     - Ethylbenzene, toluene, and xylenes at MW-107 (WTU)
     - Trans-1,2-dichloroethene at MW-108 (WTU)
     - Trichloroethene at MW-11 and MW-108 (WTU)

- Vinyl chloride at MW-11, MW-107, MW-108, and MW-111 (WTU)

- Pre-shutdown (1999-2005):
  - 1,1,1-trichloroethane, 1,1-dichloroethane at MW-111 (WTU)
  - 1,2-dichloroethene (total) at MW-11 and MW-111 (WTU)
  - Benzene, ethylbenzene, toluene, and xylenes at MW-107 (WTU)
  - Trichloroethene at MW-11 (WTU)
  - Vinyl chloride at MW-11 and MW-111 (WTU)
- Post-shutdown (2005-2009):
  - 1,1-dichloroethane, 1,2-dichloroethene (total), benzene, cis-1,2-dichloroethene, Trans-1,2-dichloroethene, and trichloroethene at MW-108 (WTU)
  - Vinyl chloride at MW-11 and MW-108 (WTU)

2. Off-Site wells:
   - Overall (1994-2009):
     - No significant trends identified
   - Pre-shutdown (1999-2005):
     - 1,2-dichloroethene (total) at MW-115 (WTU)
   - Post-shutdown (2005-2009):
     - No significant trends identified

The only increasing trend at an off-Site well was identified at MW-115 for the pre-shutdown dataset (i.e. prior to shutdown of the groundwater extraction system) for 1,2-dichloroethene (total). No increasing trends were identified at any off-Site well based on the post shutdown dataset (i.e. after shutdown of the groundwater extraction system). The concentration of 1,2-dichloroethene (total) in 2009 was 8.7/5.6 µg/L (original/duplicate sample), which is considerably lower than the MCL for both cis-1,2-dichloroethene (70 µg/L) and trans-1,2-dichloroethene (100 µg/L).

G. DISCUSSION

The overall findings at the trend tests show that many of the monitored parameters at most of the wells considered are either not present at detectable levels or are present at stable (no trends) or decreasing concentrations. However, certain parameters/wells, primarily on-Site, have been identified exhibiting increasing patterns over time comparing post-shutdown to pre-shutdown conditions.

Of the five on-Site wells evaluated, four had parameters with increasing trends and/or post-shutdown concentrations above pre-shutdown conditions during the post-shutdown period. The location with the most evidence of increasing contaminant concentrations was on-Site monitoring well MW-108, with nine parameters found to be increasing or above control limits. The fact that these parameter concentrations had increasing trends and were above their control limits shows a clear evidence of increasing parameter concentration during the post-shutdown period relative to earlier levels. A similar pattern was observed at on-Site monitoring wells MW-107 and MW-11, with seven and four parameters, respectively, found to be increasing or above pre-shutdown conditions. However, in these cases, one or two parameter concentrations were found to have decreased, providing a mixed picture.

Off-Site downgradient monitoring wells have generally not found these parameters above their reporting limit, indicating that although some increasing parameter concentrations have been occurring on Site, these are contained within the Site boundary and are not migrating off-Site.

There was one increasing trend found in a well located outside the Site boundary: Total 1,2-dichloroethene concentrations during the pre-shutdown period at off-Site monitoring well MW-115. However, no significant trends were found, considering the overall or post-shutdown periods for this parameter, and the statistical control analysis (see Post-Shutdown vs. Pre-Shutdown Comparisons in Appendix J) found that post-shutdown concentrations were within the pre-shutdown control limits. Correlation analysis performed between off-Site monitoring well MW-115 and on-Site monitoring well MW-11 found no statistically significant relationship in 1,2-dichloroethene concentrations between the two wells (see Off-Site vs. On-Site Comparisons Along Groundwater Flowpath in Appendix J). Based on this evidence, it does not appear that the shutdown of the treatment system has resulted in additional migration of 1,2-dichloroethene to off-Site monitoring well MW-115.

In summary, although the vast majority of data sets considered show the absence of SSIPL parameters, or their presence at apparently stable conditions or decreasing conditions, certain parameters in certain on-Site monitoring wells have been found to be increasing during the system's post-shutdown period and/or are elevated compared to pre-shutdown conditions. However, the contaminants do not show signs of migration beyond the site boundaries based on the groundwater monitoring data obtained and, therefore, any concentration increases appear to be contained inside the Site.

Vinyl chloride and total-1,2-dichloroethene appear to be consistently increasing, considering both trends and statistical control analyses, across a number of on-Site monitoring wells (MW-11, MW-107, MW-108 and MW-111). These two parameters are daughter products of trichloroethene degradation, and the fact that their concentrations are increasing during the post-shutdown period appears to indicate that natural degradation is taking place on Site.

Considering the results of the statistical analyses performed, there appears to be evidence that natural attenuation of SSIPL parameters has been occurring at the Site after the shutdown of the treatment system. The majority of the parameters at on-Site monitoring wells have concentrations below their reporting limit, had no trends identified or were decreasing, and are below control limits. Some of the parameters found to be increasing more consistently across a number of on-Site monitoring wells are breakdown products of other SSIPL parameters. The well with clearest patterns of elevated concentrations following the system's shutdown is on-Site monitoring well MW-108, although on-Site monitoring wells MW-11, MW-107, and MW-111 also had several parameters still increasing. However, these parameters all appear to be well-contained inside the Site boundary and, therefore, are not posing a migration risk to the surrounding area.

Eleven years of groundwater pumping and treatment (1994 to 2005) followed by four years of no groundwater extraction (2005 to 2009) at the Site have had no effect on the off-Site groundwater quality, and very little effect in the on-Site groundwater quality, with the exception of on-Site WTU monitoring wells MW-107, MW-108, MW-111, and MW-11.

There have been no significant changes in VOCs or SVOCs in the UIU, during the 11 years of pumping and treatment at the Site or since the shutdown in August 2005, confirming that there is no downward migration of VOCs from the WTU to the UIU. Acetone continues to be detected in MW-209, however, there is no indication of a significant increasing trend in the concentration of acetone at this well. No pesticides or PCBs were detected in any of the UIU wells in April 2009.

Based on the continued stable on-Site groundwater plume, and no indication of adverse impact to the off-Site groundwater in any of the groundwater units either before any remedial action at the Site, since the 11 years of active groundwater pump and treatment operations or during the four-year shutdown evaluation period, it is recommended that the extraction and treatment system remain off for the next five-year evaluation period. If future monitoring results indicate a significant increase of Site-related constituents in the off-Site groundwater monitoring wells, SNFT will contact OEPA to discuss appropriate measures including additional groundwater sampling, possibly reinstating the operation of the pipe and media drain system, or alternate measures to address the apparent migration.

Included in **Attachment K** are tables summarizing the number of detections of individual compounds in the WTU, UIU, LIU, and USU. Based on the minimal detections of pesticides and PCBs in the wells associated with the Site, SNFT requests that these parameters be removed from the groundwater analytical requirements for the Site.

H. GROUNDWATER MONITORING SCHEDULE

Based on the shutdown evaluation as discussed above, it is recommended that groundwater hydraulic and quality monitoring continue on an annual basis, with groundwater analyses for the SSIPL (see Section I below) for the next four years, and for the TCL VOC, TCL SVOC, and TAL parameters for the fifth year, as follows:

Sampling Date	*Monitoring Wells*	*Analytical Parameter*
April 2010	Shutdown Wells	SSIPL VOCs
April 2011	Shutdown Wells	SSIPL VOCs
April 2012	Shutdown Wells	SSIPL VOCs
April 2013	Shutdown Wells	SSIPL VOCs
April 2014	WTU, UIU, LIU, and USU	TCL VOC, TCL SVOC, TAL

The "shutdown wells" to be monitored from 2010 through 2013 are as follows:

1. WTU Wells:
   - On-Site wells: MW-11, MW-107, MW-108, and MW-111
   - Off-Site downgradient wells: MW-4, MW-113, MW-114, and MW-115
2. UIU Wells:
   - On-Site wells: MW-207
   - Off-Site downgradient wells: MW-209, MW-220, and MW-224

A re-evaluation of the SSIPL and groundwater monitoring schedule will be made following the October 2014 groundwater sampling event.

In addition, as required by the Consent Decree, a surface water and sediment sample will be collected from the confluence of the south and east drainage ditches annually, and will be analyzed for TCL VOCs and TCL SVOCs. The next residential well samples will be collected in 2014, and will be analyzed for SSIPL VOCs and SVOCs.

I. SITE-SPECIFIC INDICATOR PARAMETER LIST (SSIPL)

Included in **Attachment K** is a summary of the number of groundwater samples, number of times each compound has been detected, and the maximum and minimum detected concentrations for the WTU, UIU, LIU, and USU from 1994 to 2009. Based on a review of the detected compounds in the April 2009 groundwater samples and the compounds typically monitored to determine the occurrence of natural attenuation in groundwater, the following SSIPL is proposed for the next four rounds of groundwater monitoring:

SSIPL VOCs

1,1,1-Trichloroethane	Chloroethane
1,1-Dichloroethane	cis-1,2-Dichloroethylene
1,2-Dichloroethane	Ethylbenzene
1,2-Dichloroethylene (total)	Toluene
Acetone	Trichloroethylene
Benzene	Vinyl Chloride
Chlorobenzene	Xylene

SNFT trusts this letter report is sufficient for the groundwater effectiveness monitoring requirements, as required by the SOW for the Site. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Steve Whillier

SAW/tld/Will-061

Attachments

cc: Pablo Valentin (USEPA) (2 copies)
Kenneth Walanski, SNFT
Jeff Sussman, SNFT
Joe Montello, SNFT
Mike Mateyk, CRA (e-copy)
Jack Michels, CRA (e-copy)

FIGURES

MW-101	10/6/2004	8/23/2005	2/22/2006	8/15/2006	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	4.3
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-102	10/6/2004	8/24/2005	2/22/2006	8/16/2006	4/22/2009
1,1,1-Trichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)/ND(2.1)	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)/ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-110	10/4/2004	8/22/2005	2/22/2006	8/14/2006	4/20/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	5.7	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-103	10/6/2004	8/23/2005	2/22/2006	8/15/2006	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0) LU	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-105	10/7/2004	8/24/2005	2/24/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	1.9 J	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-106	10/7/2004	8/25/2005	3/6/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	1.5	ND(1.0)	2.2/1.9	1.3	4.2/4.2
1,1-Dichloroethane	1.0	ND(1.0)	1.2/1.1	1.0	2.3/2.2
1,2-Dichloroethane	ND(1.0)	ND(1.0)	0.66 J/0.79 J	0.71 J	1.6/1.5
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)/ND(5.0)	3.0 J	ND(5.0)/ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
bis(2-Ethylhexyl)phthalate	6.1	-	-	ND(2.0)	ND(2.0)/2.1
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)/ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Toluene	ND(1.0)	ND(1.0)	1.2/1.3	ND(1.0)	ND(1.0)/ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)

MW-108	10/7/2004	8/24/2005	2/24/2006	8/17/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/23/2009
1,1,1-Trichloroethane	3.0	2.5	2.4	6.0	8.0/8.5	5.8	8.5	5.75,7	8.8
1,1-Dichloroethane	50.7	44.7	41.3	87.2	116/119	148	180	165/164	213
1,2-Dichloroethane	59.4	52.0	34.6	61.1	67.8/70.5	87.5	75.5	89.1/90.2	68.9
1,2-Dichloroethene (total)	54.8	43.4	45.1	69.2	75.3/76.6	96.7	110	98.1/98.2	132
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)
Acetone	5.4 J	ND(5.0)	ND(5.0)	8.4	ND(5.0)/ND(5.0)	ND(5.0)	5.7	ND(5.0)/ND(5.0)	3.8 J
Benzene	10.7	9.4	10.4	24.4	31.6/31.4	35.5	63.5	45.7/45.7	77.2
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	ND(2.0)/ND(2.0)	-	ND(2.0)	ND(2.0)/ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	52.8	43.4	43.3	66.0	72.9/74.3	94.1	106	95.9/94.9	128
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	0.45 J	ND(1.0)/ND(1.0)	0.54 J
Toluene	ND(1.0)	ND(1.0)	0.28 J	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	0.45 J	0.36 J/0.37 J	0.59 J
trans-1,2-Dichloroethene	2.0	ND(1.0)	1.8	3.2	2.4/2.3	2.7	3.8	3.2/3.3	4.2
Trichloroethene	10.8	8.9	8.4	14.5	16.4/16.5	16.0	24.6	21.2/21.3	30.1
Vinyl chloride	5.5	5.5	6.5	16.8	24.7/25.5	31.4	38.7	41.5/41.4	53.2
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)

MW-109	10/4/2004	8/22/2005	2/21/2006	8/14/2006	4/20/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	1.5 J
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-104	10/7/2004	8/24/2005	2/24/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	0.27 J	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

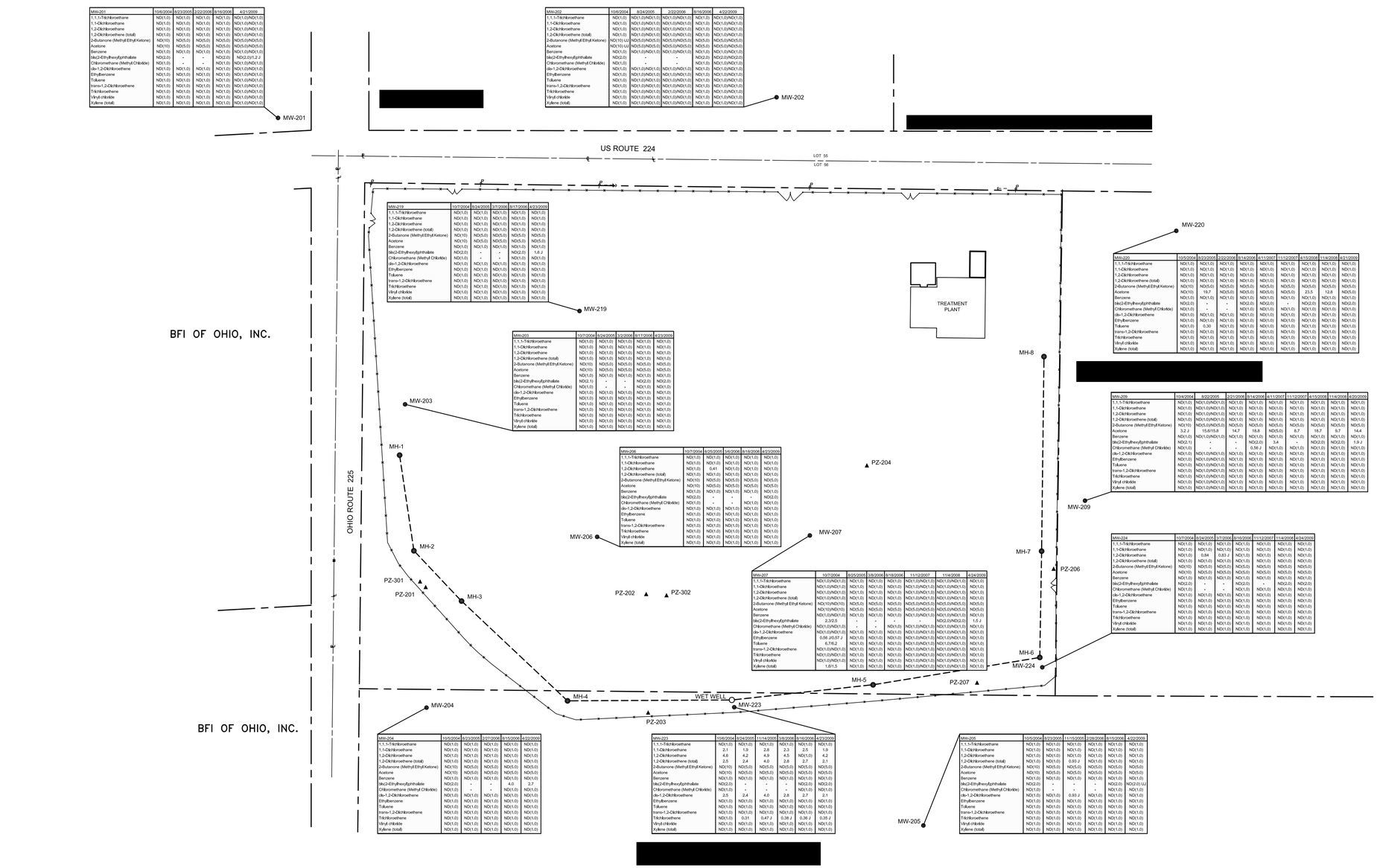
MW-107	10/7/2004	8/25/2005	3/8/2006	8/18/2006	11/12/2007	4/15/2008	11/4/2008	4/24/2009
1,1,1-Trichloroethane	195	122/117	165	180/182	142	141	84.2	134
1,1-Dichloroethane	1200	1050/1040	1330	1430/1460	1530	1360	1030	1320
1,2-Dichloroethane	265	247/240	223	244/246	326	273	271	291
1,2-Dichloroethene (total)	281	249/258	362	378/386	324	360	231	369
2-Butanone (Methyl Ethyl Ketone)	ND(50)	ND(250)/ND(250)	ND(500)	ND(50)/ND(50)	ND(250)	ND(250)	ND(100)	ND(250)
Acetone	ND(50)	ND(250)/ND(250)	ND(500)	ND(50)/ND(50)	ND(250)	ND(250)	ND(100)	ND(250)
Benzene	76.2	73.0/71.4	86.5 J	105/108	86.0	104	67.3	97.8
bis(2-Ethylhexyl)phthalate	2.3	-	-	-	-	ND(2.0)	ND(2.1)	1.5 J
Chloromethane (Methyl Chloride)	ND(50)	-	-	ND(10)/ND(10)	ND(50)	ND(50)	ND(20)	ND(50)
cis-1,2-Dichloroethene	281	249/258	362	366/374	324	360	231	369
Ethylbenzene	830	971/991	1130	1390/1420	1150	1240	921	1230
Toluene	8710	8590 J/8500 J	9950	11600/11400	7380	6810	2500	5370
trans-1,2-Dichloroethene	ND(50)	ND(50)/ND(50)	ND(100)	ND(10)/4.3 J	ND(50)	ND(50)	ND(20)	ND(50)
Trichloroethene	ND(50)	ND(50)/ND(50)	ND(100)	6.2 J/6.4 J	ND(50)	ND(50)	4.2 J	ND(50)
Vinyl chloride	ND(50)	60.0/63.5	81.8 J	110/109	120	93.3	84.2	131
Xylene (total)	2760	3180/3230	3640	4920/4950	3810	3990	3110	4120

MW-4	10/4/2004	8/22/2005	2/21/2006	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	2.1	-	-	ND(2.0)/ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-111	10/7/2004	8/24/2005	11/14/2005	2/24/2006	8/16/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/23/2009
1,1,1-Trichloroethane	5.6	1.6	1.4	1.2	3.1	3.1	ND(1.0)	2.2	2.0	2.3
1,1-Dichloroethane	47.1	19.3	20.1	17.0	37.3	36.8	36.6	33.3	31.7	31.4
1,2-Dichloroethane	144	35.1	32.5	22.9	86.9	105	71.5	88.3	76.8	69.1
1,2-Dichloroethene (total)	6.2	3.6	4.0	3.7	7.1	7.4	6.4	6.7	5.8	6.3
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	0.34 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	ND(2.0)	2.6	-	ND(2.0)	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	6.2	3.6	4.0	3.7	7.1	7.4	6.4	6.7	5.8	6.3
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	8.6	2.8	3.2	2.9	7.2	7.9	7.3	6.3	6.3	5.2
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-113	10/7/2004	8/24/2005	11/14/2005	2/24/2006	8/16/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/20/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	7.4	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	2.9	ND(2.0)	-	ND(2.0)	ND(2.0)	1.6 J
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-114	10/5/2004	8/23/2005	11/15/2005	2/28/2006	8/15/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	-	2.4	ND(2.0)	ND(2.0)	ND(2.0



MW-201	10/6/2004	8/23/2005	2/22/2006	8/16/2006	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	ND(2.0)1.2 J
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)

MW-202	10/6/2004	8/24/2005	2/22/2006	8/16/2006	4/22/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10) LJ	ND(5.0)ND(5.0)	ND(5.0)ND(5.0)	ND(5.0)	ND(5.0)ND(5.0)
Acetone	ND(10) LJ	ND(5.0)ND(5.0)	ND(5.0)ND(5.0)	ND(5.0)	ND(5.0)ND(5.0)
Benzene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	ND(2.0)ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Toluene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)ND(1.0)

MW-219	10/7/2004	8/24/2005	3/7/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	1.6 J
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-220	10/6/2004	8/23/2005	2/22/2006	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/21/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	19.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	21.5	12.8	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	-	-	ND(2.0)	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	0.39	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-203	10/7/2004	8/24/2005	3/2/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-209	10/4/2004	8/22/2005	2/21/2006	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	4/20/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	3.2 J	15.6/15.8	14.7	16.8	ND(5.0)	8.7	16.7	9.7	14.4
Benzene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.1)	-	-	ND(2.0)	3.4	-	ND(2.0)	ND(2.0)	1.9 J
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	0.56 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-206	10/7/2004	8/25/2005	3/8/2006	8/18/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	0.41	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	-	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-207	10/7/2004	8/25/2005	3/8/2006	8/18/2006	11/1/2007	11/4/2008	4/24/2009
1,1,1-Trichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)
Acetone	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)
Benzene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	2.3/2.5	-	-	-	-	ND(2.0)/ND(2.0)	1.5 J
Chloromethane (Methyl Chloride)	ND(1.0)/ND(1.0)	-	-	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Ethylbenzene	0.56 J/0.57 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Toluene	0.7/0.2	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Xylene (total)	1.6/1.5	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)

MW-224	10/7/2004	8/24/2005	3/7/2006	8/16/2006	11/12/2007	11/4/2008	4/24/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	0.84	0.83 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-204	10/5/2004	8/23/2005	2/27/2006	8/15/2006	4/22/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	4.0	2.7
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-223	10/6/2004	8/24/2005	11/14/2005	3/8/2006	8/16/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	2.1	1.9	2.8	2.3	2.5	1.9
1,2-Dichloroethane	4.6	4.2	4.9	4.5	ND(1.0)	4.2
1,2-Dichloroethene (total)	2.5	2.4	4.0	2.8	2.7	2.1
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	2.5	2.4	4.0	2.8	2.7	2.1
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	0.31	0.47 J	0.38 J	0.36 J	0.35 J
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-205	10/5/2004	8/23/2005	11/15/2005	2/28/2006	8/15/2006	4/22/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	0.93 J	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	-	-	-	ND(2.0)	ND(2.0) LU
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	0.93 J	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL
- MW-220 MONITORING WELL
- PZ-206 PIEZOMETER

WELL DESIGNATION — SAMPLING DATE

MW-203	10/7/2004	8/24/2005	3/2/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.1)	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

CHEMICAL CONCENTRATIONS IN µg/L

NOTE: ONLY DETECTED ORGANIC COMPOUNDS SHOWN.

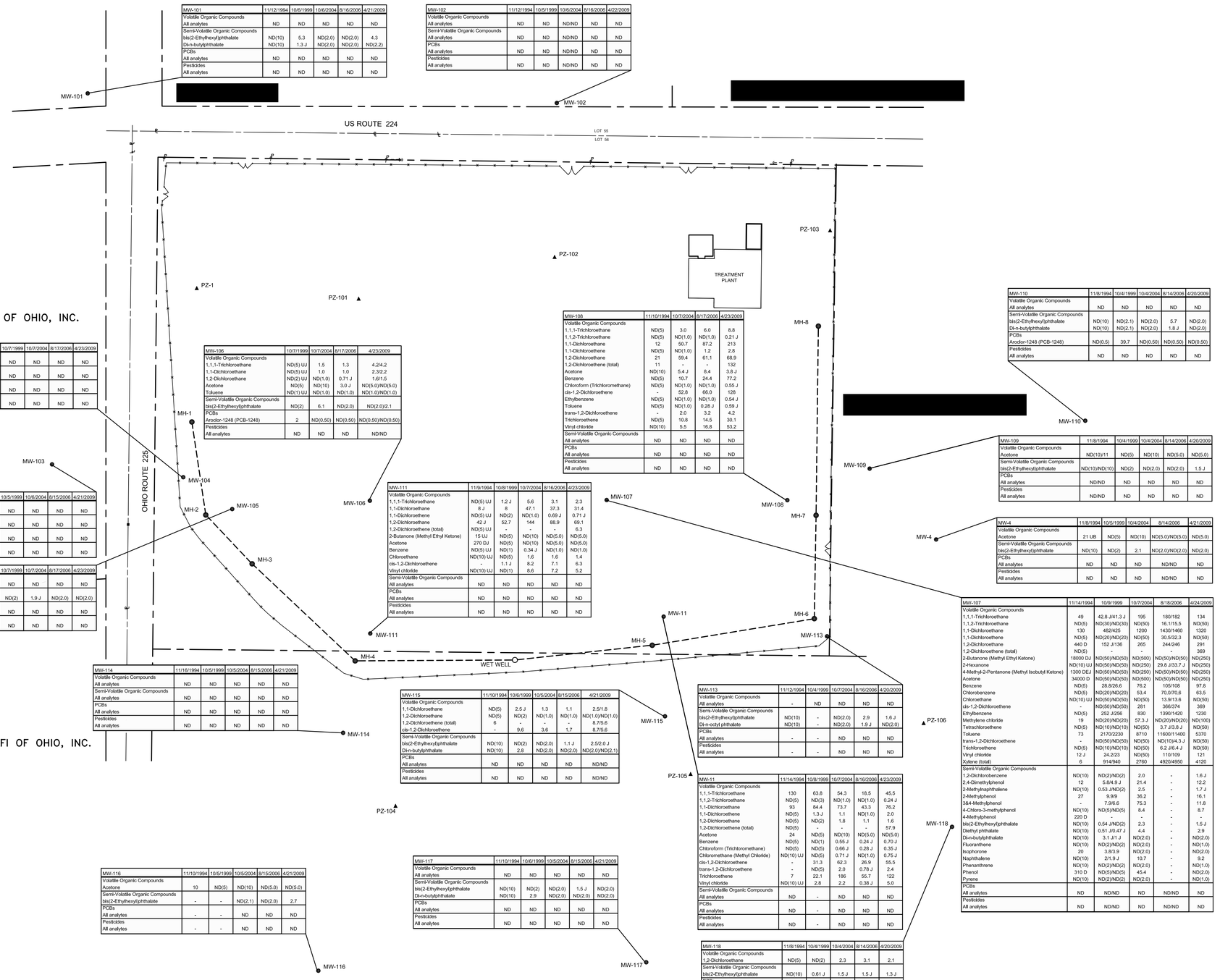
CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND( )	THE ANALYTE WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
NE	NO EXCEEDANCES
NS	NOT SAMPLED
µg/L	MICROGRAMS PER LITER
U	THE ANALYTE WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE ANALYTE WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.

figure 6

UPPER INTERMEDIATE UNIT
SHUTDOWN GROUNDWATER MONITORING (2004-2009)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(WILL053)GN-PX002 JUL 16/2009



MW-101	11/12/1994	10/6/1999	10/6/2004	8/16/2006	4/21/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	5.3	ND(2.0)	ND(2.0)	4.3
Di-n-butylphthalate	ND(10)	1.3 J	ND(2.0)	ND(2.0)	ND(2.2)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-102	11/12/1994	10/5/1999	10/6/2004	8/16/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND/ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND/ND	ND	ND
PCBs					
All analytes	ND	ND	ND/ND	ND	ND
Pesticides					
All analytes	ND	ND	ND/ND	ND	ND

MW-104	11/11/1994	10/7/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-103	11/11/1994	10/5/1999	10/6/2004	8/15/2006	4/21/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-105	11/9/1994	10/7/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	1.9 J	ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-106	10/7/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds				
1,1,1-Trichloroethane	ND(5) UJ	1.5	1.3	4.2/4.2
1,1-Dichloroethane	ND(5) UJ	1.0	1.0	2.3/2.2
1,2-Dichloroethane	ND(2) UJ	ND(1.0)	0.71 J	1.6/1.5
Acetone	ND(5)	ND(10)	3.0 J	ND(5.0)/ND(5.0)
Toluene	ND(1) UJ	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	ND(2)	6.1	ND(2.0)	ND(2.0)/2.1
PCBs				
Aroclor-1248 (PCB-1248)	2	ND(0.50)	ND(0.50)	ND(0.50)/ND(0.50)
Pesticides				
All analytes	ND	ND	ND	ND/ND

MW-108	11/10/1994	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds				
1,1,1-Trichloroethane	ND(5)	3.0	6.0	8.8
1,1,2-Trichloroethane	ND(5)	ND(1.0)	ND(1.0)	0.21 J
1,1-Dichloroethane	12	50.7	87.2	213
1,1-Dichloroethene	ND(5)	ND(1.0)	1.2	2.8
1,2-Dichloroethane	21	59.4	61.1	68.9
1,2-Dichloroethene (total)	11	-	-	132
Acetone	ND(10)	5.4 J	8.4	3.8 J
Benzene	ND(5)	10.7	24.4	77.2
Chloroform (Trichloromethane)	ND(5)	ND(1.0)	ND(1.0)	0.55 J
cis-1,2-Dichloroethene	-	52.8	66.0	128
Ethylbenzene	ND(5)	ND(1.0)	ND(1.0)	0.54 J
Toluene	ND(5)	ND(1.0)	0.28 J	0.59 J
trans-1,2-Dichloroethene	-	2.0	3.2	4.2
Trichloroethene	ND(5)	10.8	14.5	30.1
Vinyl chloride	ND(10)	5.5	16.8	53.2
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-110	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2.1)	ND(2.0)	5.7	ND(2.0)
Di-n-butylphthalate	ND(10)	ND(2.1)	ND(2.0)	1.8 J	ND(2.0)
PCBs					
Aroclor-1248 (PCB-1248)	ND(0.5)	39.7	ND(0.50)	ND(0.50)	ND(0.50)
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-109	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
Acetone	ND(10)/11	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)/ND(10)	ND(2)	ND(2.0)	ND(2.0)	1.5 J
PCBs					
All analytes	ND/ND	ND	ND	ND	ND
Pesticides					
All analytes	ND/ND	ND	ND	ND	ND

MW-4	11/8/1994	10/5/1999	10/4/2004	8/14/2006	4/21/2009
Volatile Organic Compounds					
Acetone	21 UB	ND(5)	ND(10)	ND(5.0)/ND(5.0)	ND(5.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	2.1	ND(2.0)/ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND/ND	ND
Pesticides					
All analytes	ND	ND	ND	ND/ND	ND

MW-111	11/9/1994	10/8/1999	10/7/2004	8/16/2006	4/23/2009
Volatile Organic Compounds					
1,1,1-Trichloroethane	ND(5) UJ	1.2 J	5.6	3.1	2.3
1,1-Dichloroethane	8 J	8	47.1	37.3	31.4
1,1-Dichloroethene	ND(5) UJ	ND(2)	ND(1.0)	0.69 J	0.71 J
1,2-Dichloroethane	42 J	52.7	144	88.9	69.1
1,2-Dichloroethene (total)	ND(5) UJ	-	-	-	6.3
2-Butanone (Methyl Ethyl Ketone)	15 UJ	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Acetone	270 DJ	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Benzene	ND(5) UJ	ND(1)	0.34 J	ND(1.0)	ND(1.0)
Chloroethane	ND(10) UJ	ND(5)	1.6	1.6	1.4
cis-1,2-DichloroeIhene	-	1.1 J	8.2	7.1	6.3
Vinyl chloride	ND(10) UJ	ND(1)	8.6	7.2	5.2
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-107	11/14/1994	10/9/1999	10/7/2004	8/18/2006	4/24/2009
Volatile Organic Compounds					
1,1,1-Trichloroethane	49	42.8 J/41.3 J	195	180/182	134
1,1,2-Trichloroethane	ND(5)	ND(30)/ND(30)	ND(50)	16.1/15.5	ND(50)
1,1-Dichloroethane	130	482/425	1200	1430/1460	1320
1,1-Dichloroethene	ND(5)	ND(20)/ND(20)	ND(50)	30.5/32.3	ND(50)
1,2-Dichloroethane	440 D	152 J/136	265	244/246	291
1,2-Dichloroethene (total)	ND(5)	-	-	-	369
2-Butanone (Methyl Ethyl Ketone)	18000 DJ	ND(50)/ND(50)	ND(500)	ND(50)/ND(50)	ND(250)
2-Hexanone	ND(10) UJ	ND(50)/ND(50)	ND(250)	29.8 J/33.7 J	ND(250)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1300 DEJ	ND(50)/ND(50)	ND(250)	ND(50)/ND(50)	ND(250)
Acetone	34000 D	ND(50)/ND(50)	ND(500)	ND(50)/ND(50)	ND(250)
Benzene	ND(5)	28.8/26.6	76.2	105/108	97.8
Chlorobenzene	ND(5)	ND(20)/ND(20)	53.4	70.0/70.6	63.5
Chloroethane	ND(10) UJ	ND(50)/ND(50)	ND(50)	13.9/13.6	ND(50)
cis-1,2-Dichloroethene	-	ND(50)/ND(50)	281	366/374	369
Ethylbenzene	ND(5)	252 J/256	830	1390/1420	1230
Methylene chloride	19	ND(20)/ND(20)	57.3 J	ND(20)/ND(20)	ND(100)
Tetrachloroethene	ND(5)	ND(10)/ND(10)	ND(50)	3.7 J/3.8 J	ND(50)
Toluene	73	2170/2230	8710	11600/11400	5370
trans-1,2-Dichloroethene	-	ND(50)/ND(50)	ND(50)	ND(10)/4.3 J	ND(50)
Trichloroethene	ND(5)	ND(10)/ND(10)	ND(50)	6.2 J/6.4 J	ND(50)
Vinyl chloride	12 J	24.2/23	ND(50)	110/109	121
Xylene (total)	6	914/940	2760	4920/4950	4120
Semi-Volatile Organic Compounds					
1,2-Dichlorobenzene	ND(10)	ND(2)/ND(2)	2.0	-	1.6 J
2,4-Dimethylphenol	12	5.8/4.9 J	21.4	-	12.2
2-Methylnaphthalene	ND(10)	0.53 J/ND(2)	2.5	-	1.7 J
2-Methylphenol	27	9.9/9	36.2	-	16.1
3&4-Methylphenol	-	7.9/6.6	75.3	-	11.8
4-Chloro-3-methylphenol	ND(10)	ND(5)/ND(5)	8.4	-	8.7
4-Methylphenol	220 D	-	-	-	-
bis(2-Ethylhexyl)phthalate	ND(10)	0.54 J/ND(2)	2.3	-	1.5 J
Diethyl phthalate	ND(10)	0.51 J/0.47 J	4.4	-	2.9
Di-n-butylphthalate	ND(10)	3.1 J/1 J	ND(2.0)	-	ND(2.0)
Fluoranthene	ND(10)	ND(2)/ND(2)	ND(2.0)	-	ND(1.0)
Isophorone	20	3.8/3.9	ND(2.0)	-	ND(2.0)
Naphthalene	ND(10)	2/1.9 J	10.7	-	9.2
Phenanthrene	ND(10)	ND(2)/ND(2)	ND(2.0)	-	ND(1.0)
Phenol	310 D	ND(5)/ND(5)	45.4	-	ND(2.0)
Pyrene	ND(10)	ND(2)/ND(2)	ND(2.0)	-	ND(1.0)
PCBs					
All analytes	ND	ND/ND	ND	ND/ND	ND
Pesticides					
All analytes	ND	ND/ND	ND	ND/ND	ND

MW-114	11/16/1994	10/5/1999	10/5/2004	8/15/2006	4/21/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-115	11/10/1994	10/6/1999	10/5/2004	8/15/2006	4/21/2009
Volatile Organic Compounds					
1,1-Dichloroethane	ND(5)	2.5 J	1.3	1.1	2.5/1.8
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
1,2-Dichloroethene (total)	8	-	-	-	8.7/5.6
cis-1,2-Dichloroethene	-	9.6	3.6	1.7	8.7/5.6
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)	1.1 J	2.5/2.0 J
Di-n-butylphthalate	ND(10)	2.8	ND(2.0)	ND(2.0)	ND(2.0)/ND(2.1)
PCBs					
All analytes	ND	ND	ND	ND	ND/ND
Pesticides					
All analytes	ND	ND	ND	ND	ND/ND

MW-113	11/12/1994	10/4/1999	10/7/2004	8/16/2006	4/20/2009
Volatile Organic Compounds					
All analytes	-	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	-	ND(2.0)	2.9	1.6 J
Di-n-octyl phthalate	ND(10)	-	ND(2.0)	1.9 J	ND(2.0)
PCBs					
All analytes	-	-	ND	ND	ND
Pesticides					
All analytes	-	-	ND	ND	ND

MW-11	11/14/1994	10/8/1999	10/7/2004	8/16/2006	4/23/2009
Volatile Organic Compounds					
1,1,1-Trichloroethane	130	63.8	54.3	18.5	45.5
1,1,2-Trichloroethane	ND(5)	ND(3)	ND(1.0)	ND(1.0)	0.24 J
1,1-Dichloroethane	93	84.4	73.7	43.3	76.2
1,1-Dichloroethene	ND(5)	1.3 J	1.1	ND(1.0)	2.0
1,2-Dichloroethane	ND(5)	ND(2)	1.8	1.1	1.6
1,2-Dichloroethene (total)	ND(5)	-	-	-	57.9
Acetone	24	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	0.55 J	0.24 J	0.70 J
Chloroform (Trichloromethane)	ND(5)	ND(5)	0.66 J	0.28 J	0.35 J
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(5)	0.71 J	ND(1.0)	0.75 J
cis-1,2-Dichloroethene	-	31.3	62.3	26.9	55.5
trans-1,2-Dichloroethene	-	ND(5)	2.0	0.78 J	2.4
Trichloroethene	7	22.1	186	55.7	122
Vinyl chloride	ND(10) UJ	2.8	2.2	0.38 J	5.0
Semi-Volatile Organic Compounds					
All analytes	ND	-	ND	ND	ND
PCBs					
All analytes	ND	-	ND	ND	ND
Pesticides					
All analytes	ND	-	ND	ND	ND

MW-118	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
1,2-Dichloroethane	ND(5)	ND(2)	2.3	3.1	2.1
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	0.61 J	1.5 J	1.5 J	1.3 J
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-116	11/10/1994	10/5/1999	10/5/2004	8/15/2006	4/21/2009
Volatile Organic Compounds					
Acetone	10	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	-	-	ND(2.1)	ND(2.0)	2.7
PCBs					
All analytes	-	-	ND	ND	ND
Pesticides					
All analytes	-	-	ND	ND	ND

MW-117	11/10/1994	10/6/1999	10/5/2004	8/15/2006	4/21/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)	1.5 J	ND(2.0)
Di-n-butylphthalate	ND(10)	2.9	ND(2.0)	ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL
- MW-104 MONITORING WELL
- PZ-103 PIEZOMETER

WELL DESIGNATION — SAMPLING DATE

MW-113	11/12/1994	10/4/1999	10/7/2004	8/16/2006	4/20/2009
Volatile Organic Compounds					
All analytes	-	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	-	ND(2.0)	2.9	1.6 J
Di-n-octyl phthalate	ND(10)	-	ND(2.0)	1.9 J	ND(2.0)
PCBs					
All analytes	-	-	ND	ND	ND
Pesticides					
All analytes	-	-	ND	ND	ND

CHEMICAL CONCENTRATIONS IN $\mu g/L$

NOTE: ONLY DETECTED ORGANIC COMPOUNDS SHOWN.

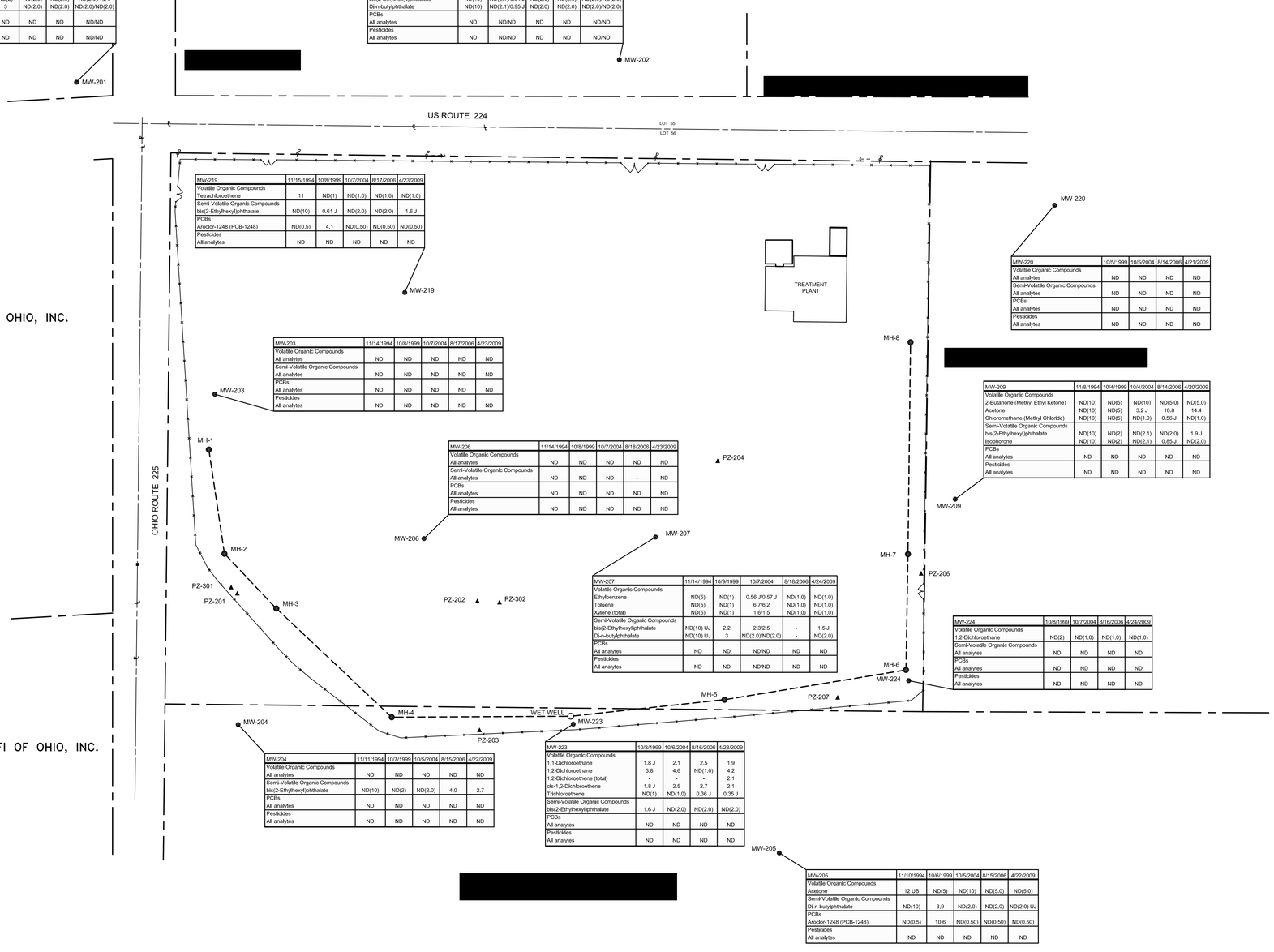
CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND ( )	THE ANALYTE WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
NE	NO EXCEEDANCES
NS	NOT SAMPLED
$\mu g/L$	MICROGRAMS PER LITER
U	THE ANALYTE WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE ANALYTE WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.

figure 1

WATER TABLE UNIT
5 YEAR GROUNDWATER MONITORING (2004-2009)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(WILL053)GN-PX003 JUL 16/2009



MW-201	11/12/1994	10/6/1999	10/6/2004	8/16/2006	4/21/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND/ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)	ND(2.0)	ND(2.0)/1.2 J
Di-n-butylphthalate	ND(10)	3	ND(2.0)	ND(2.0)	ND(2.0)/ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND/ND
Pesticides					
All analytes	ND	ND	ND	ND	ND/ND

MW-202	11/12/1994	10/5/1999	10/6/2004	8/16/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND/ND	ND	ND	ND/ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2.1)/0.64 J	ND(2.0)	ND(2.0)	ND(2.0)/ND(2.0)
Di-n-butylphthalate	ND(10)	ND(2.1)/0.95 J	ND(2.0)	ND(2.0)	ND(2.0)/ND(2.0)
PCBs					
All analytes	ND	ND/ND	ND	ND	ND/ND
Pesticides					
All analytes	ND	ND/ND	ND	ND	ND/ND

MW-219	11/15/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
Tetrachloroethene	11	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	0.61 J	ND(2.0)	ND(2.0)	1.6 J
PCBs					
Aroclor-1248 (PCB-1248)	ND(0.5)	4.1	ND(0.50)	ND(0.50)	ND(0.50)
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-220	10/5/1999	10/5/2004	8/14/2006	4/21/2009
Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-203	11/14/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-209	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	3.2 J	18.8	14.4
Chloromethane (Methyl Chloride)	ND(10)	ND(5)	ND(1.0)	0.56 J	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.1)	ND(2.0)	1.9 J
Isophorone	ND(10)	ND(2)	ND(2.1)	0.85 J	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-206	11/14/1994	10/8/1999	10/7/2004	8/18/2006	4/23/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	-	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-207	11/14/1994	10/9/1999	10/7/2004	8/18/2006	4/24/2009
Volatile Organic Compounds					
Ethylbenzene	ND(5)	ND(1)	0.56 J/0.57 J	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	6.7/6.2	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	1.6/1.5	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10) UJ	2.2	2.3/2.5	-	1.5 J
Di-n-butylphthalate	ND(10) UJ	3	ND(2.0)/ND(2.0)	-	ND(2.0)
PCBs					
All analytes	ND	ND	ND/ND	ND	ND
Pesticides					
All analytes	ND	ND	ND/ND	ND	ND

MW-224	10/8/1999	10/7/2004	8/16/2006	4/24/2009
Volatile Organic Compounds				
1,2-Dichloroethane	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-204	11/11/1994	10/7/1999	10/5/2004	8/15/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)	4.0	2.7
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-223	10/8/1999	10/6/2004	8/16/2006	4/23/2009
Volatile Organic Compounds				
1,1-Dichloroethane	1.8 J	2.1	2.5	1.9
1,2-Dichloroethane	3.8	4.6	ND(1.0)	4.2
1,2-Dichloroethene (total)	-	-	-	2.1
cis-1,2-Dichloroethene	1.8 J	2.5	2.7	2.1
Trichloroethene	ND(1)	ND(1.0)	0.36 J	0.35 J
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	1.6 J	ND(2.0)	ND(2.0)	ND(2.0)
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-205	11/10/1994	10/6/1999	10/5/2004	8/15/2006	4/22/2009
Volatile Organic Compounds					
Acetone	12 UB	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Semi-Volatile Organic Compounds					
Di-n-butylphthalate	ND(10)	3.9	ND(2.0)	ND(2.0)	ND(2.0) UJ
PCBs					
Aroclor-1248 (PCB-1248)	ND(0.5)	10.6	ND(0.50)	ND(0.50)	ND(0.50)
Pesticides					
All analytes	ND	ND	ND	ND	ND

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL WET WELL
- MW-220 MONITORING WELL
- PZ-206 PIEZOMETER

WELL DESIGNATION — SAMPLING DATE

MW-209	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	3.2 J	18.8	14.4
Chloromethane (Methyl Chloride)	ND(10)	ND(5)	ND(1.0)	0.56 J	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.1)	ND(2.0)	1.9 J
Isophorone	ND(10)	ND(2)	ND(2.1)	0.85 J	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

CHEMICAL CONCENTRATIONS IN $\mu g/L$

NOTE: ONLY DETECTED ORGANIC COMPOUNDS SHOWN.

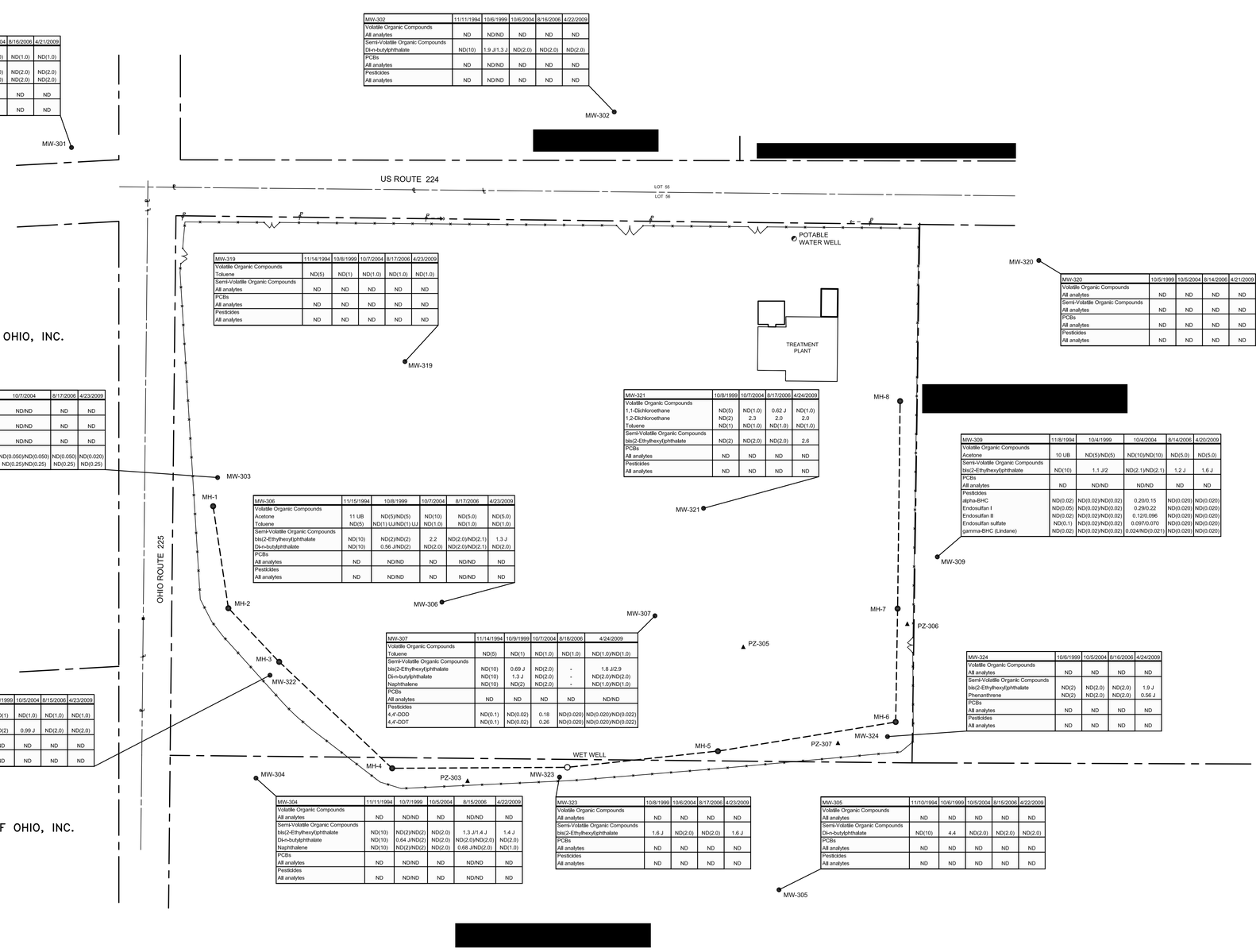
CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND( )	THE ANALYTE WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
NE	NO EXCEEDANCES
NS	NOT SAMPLED
$\mu g/L$	MICROGRAMS PER LITER
U	THE ANALYTE WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE ANALYTE WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.

figure 2

5 YEAR GROUNDWATER MONITORING (2004-2009)
UPPER INTERMEDIATE UNIT
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(WILL053)GN-PX004 JUL 16/2009



MW-301	11/11/1994	10/6/1999	10/6/2004	8/16/2006	4/21/2009
Volatile Organic Compounds					
Toluene	ND(5) UJ	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	2.9	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	ND(10)	1.3 J	ND(2.0)	ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-302	11/11/1994	10/6/1999	10/6/2004	8/16/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND/ND	ND	ND	ND
Semi-Volatile Organic Compounds					
Di-n-butylphthalate	ND(10)	1.9 J/1.3 J	ND(2.0)	ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND/ND	ND	ND	ND
Pesticides					
All analytes	ND	ND/ND	ND	ND	ND

MW-319	11/14/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

MW-320	10/5/1999	10/5/2004	8/14/2006	4/21/2009
Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-322	10/6/1999	10/5/2004	8/15/2006	4/23/2009
Volatile Organic Compounds				
Toluene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	ND(2)	0.99 J	ND(2.0)	ND(2.0)
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

WELL DESIGNATION

SAMPLING DATE

CHEMICAL CONCENTRATIONS IN µg/L

NOTE: ONLY DETECTED ORGANIC COMPOUNDS SHOWN.

MW-303	11/14/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND/ND	ND	ND
Semi-Volatile Organic Compounds					
All analytes	ND	ND	ND/ND	ND	ND
PCBs					
All analytes	ND	ND	ND/ND	ND	ND
Pesticides					
Methoxychlor	1	ND(0.05)	ND(0.050)/ND(0.050)	ND(0.050)	ND(0.020)
Toxaphene	2	ND(2)	ND(0.25)/ND(0.25)	ND(0.25)	ND(0.25)

MW-321	10/8/1999	10/7/2004	8/17/2006	4/24/2009
Volatile Organic Compounds				
1,1-Dichloroethane	ND(5)	ND(1.0)	0.62 J	ND(1.0)
1,2-Dichloroethane	ND(2)	2.3	2.0	2.0
Toluene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	ND(2)	ND(2.0)	ND(2.0)	2.6
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-309	11/8/1994	10/4/1999	10/4/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
Acetone	10 UB	ND(5)/ND(5)	ND(10)/ND(10)	ND(5.0)	ND(5.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	1.1 J/2	ND(2.1)/ND(2.1)	1.2 J	1.6 J
PCBs					
All analytes	ND	ND/ND	ND/ND	ND	ND
Pesticides					
alpha-BHC	ND(0.02)	ND(0.02)/ND(0.02)	0.20/0.15	ND(0.020)	ND(0.020)
Endosulfan I	ND(0.05)	ND(0.02)/ND(0.02)	0.29/0.22	ND(0.020)	ND(0.020)
Endosulfan II	ND(0.02)	ND(0.02)/ND(0.02)	0.12/0.096	ND(0.020)	ND(0.020)
Endosulfan sulfate	ND(0.1)	ND(0.02)/ND(0.02)	0.097/0.070	ND(0.020)	ND(0.020)
gamma-BHC (Lindane)	ND(0.02)	ND(0.02)/ND(0.02)	0.024/ND(0.021)	ND(0.020)	ND(0.020)

MW-306	11/15/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
Acetone	11 UB	ND(5)/ND(5)	ND(10)	ND(5.0)	ND(5.0)
Toluene	ND(5)	ND(1) UJ/ND(1) UJ	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)/ND(2)	2.2	ND(2.0)/ND(2.1)	1.3 J
Di-n-butylphthalate	ND(10)	0.56 J/ND(2)	ND(2.0)	ND(2.0)/ND(2.1)	ND(2.0)
PCBs					
All analytes	ND	ND/ND	ND	ND/ND	ND
Pesticides					
All analytes	ND	ND/ND	ND	ND/ND	ND

MW-307	11/14/1994	10/9/1999	10/7/2004	8/18/2006	4/24/2009
Volatile Organic Compounds					
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	0.69 J	ND(2.0)	-	1.8 J/2.9
Di-n-butylphthalate	ND(10)	1.3 J	ND(2.0)	-	ND(2.0)/ND(2.0)
Naphthalene	ND(10)	ND(2)	ND(2.0)	-	ND(1.0)/ND(1.0)
PCBs					
All analytes	ND	ND	ND	ND	ND/ND
Pesticides					
4,4'-DDD	ND(0.1)	ND(0.02)	0.18	ND(0.020)	ND(0.020)/ND(0.022)
4,4'-DDT	ND(0.1)	ND(0.02)	0.26	ND(0.020)	ND(0.020)/ND(0.022)

MW-324	10/6/1999	10/5/2004	8/16/2006	4/24/2009
Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	ND(2)	ND(2.0)	ND(2.0)	1.9 J
Phenanthrene	ND(2)	ND(2.0)	ND(2.0)	0.56 J
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-304	11/11/1994	10/7/1999	10/5/2004	8/15/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND/ND	ND	ND/ND	ND
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)/ND(2)	ND(2.0)	1.3 J/1.4 J	1.4 J
Di-n-butylphthalate	ND(10)	0.64 J/ND(2)	ND(2.0)	ND(2.0)/ND(2.0)	ND(2.0)
Naphthalene	ND(10)	ND(2)/ND(2)	ND(2.0)	0.68 J/ND(2.0)	ND(1.0)
PCBs					
All analytes	ND	ND/ND	ND	ND/ND	ND
Pesticides					
All analytes	ND	ND/ND	ND	ND/ND	ND

MW-323	10/8/1999	10/6/2004	8/17/2006	4/23/2009
Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
Semi-Volatile Organic Compounds				
bis(2-Ethylhexyl)phthalate	1.6 J	ND(2.0)	ND(2.0)	1.6 J
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-305	11/10/1994	10/6/1999	10/5/2004	8/15/2006	4/22/2009
Volatile Organic Compounds					
All analytes	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds					
Di-n-butylphthalate	ND(10)	4.4	ND(2.0)	ND(2.0)	ND(2.0)
PCBs					
All analytes	ND	ND	ND	ND	ND
Pesticides					
All analytes	ND	ND	ND	ND	ND

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL WET WELL
- MW-301 MONITORING WELL
- PZ-306 PIEZOMETER

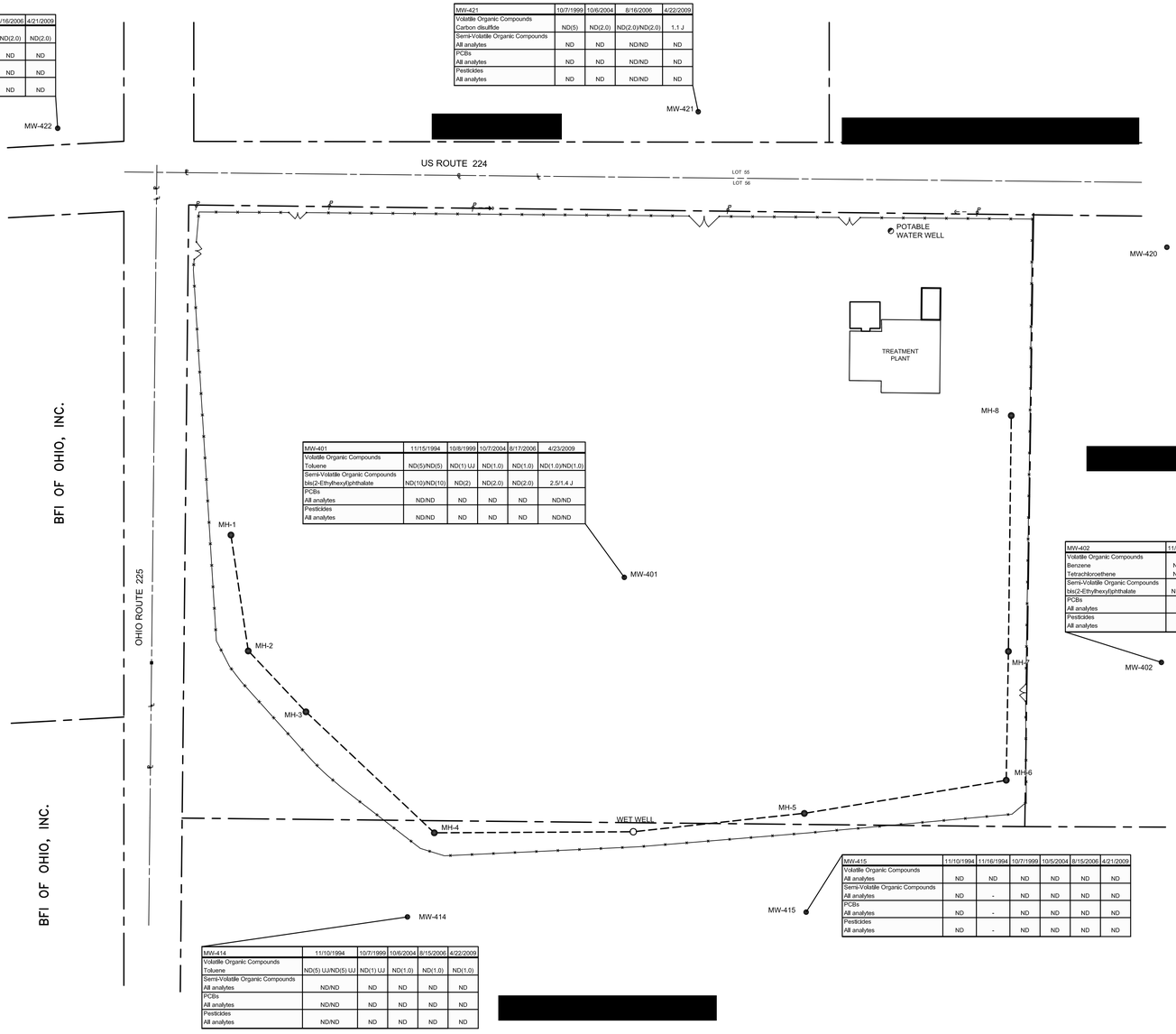
CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND( )	THE ANALYTE WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
NE	NO EXCEEDANCES
NS	NOT SAMPLED
µg/L	MICROGRAMS PER LITER
U	THE ANALYTE WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE ANALYTE WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.

figure 3

LOWER INTERMEDIATE UNIT
5 YEAR GROUNDWATER MONITORING (2004-2009)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(WILL053)GN-PX005 JUL 16/2009



MW-422	10/6/1999	10/6/2004	8/16/2006	4/21/2009
Volatile Organic Compounds				
Carbon disulfide	ND(5)	0.81 J	ND(2.0)	ND(2.0)
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

MW-421	10/7/1999	10/6/2004	8/16/2006	4/22/2009
Volatile Organic Compounds				
Carbon disulfide	ND(5)	ND(2.0)	ND(2.0)/ND(2.0)	1.1 J
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND/ND	ND
PCBs				
All analytes	ND	ND	ND/ND	ND
Pesticides				
All analytes	ND	ND	ND/ND	ND

MW-401	11/15/1994	10/8/1999	10/7/2004	8/17/2006	4/23/2009
Volatile Organic Compounds					
Toluene	ND(5)/ND(5)	ND(1) UJ	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)/ND(10)	ND(2)	ND(2.0)	ND(2.0)	2.5/1.4 J
PCBs					
All analytes	ND/ND	ND	ND	ND	ND/ND
Pesticides					
All analytes	ND/ND	ND	ND	ND	ND/ND

MW-402	11/9/1994	10/5/1999	10/5/2004	8/14/2006	4/20/2009
Volatile Organic Compounds					
Benzene	ND(5)	ND(1)	ND(1.0)/0.31 J	ND(1.0)	0.36 J
Tetrachloroethene	ND(5)	ND(1)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)/ND(2.0)	ND(2.0)	2.5
PCBs					
All analytes	ND	ND	ND/ND	ND	ND
Pesticides					
All analytes	ND	ND	ND/ND	ND	ND

MW-415	11/10/1994	11/16/1994	10/7/1999	10/5/2004	8/15/2006	4/21/2009
Volatile Organic Compounds						
All analytes	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds						
All analytes	ND	-	ND	ND	ND	ND
PCBs						
All analytes	ND	-	ND	ND	ND	ND
Pesticides						
All analytes	ND	-	ND	ND	ND	ND

MW-414	11/10/1994	10/7/1999	10/6/2004	8/15/2006	4/22/2009
Volatile Organic Compounds					
Toluene	ND(5) UJ/ND(5) UJ	ND(1) UJ	ND(1.0)	ND(1.0)	ND(1.0)
Semi-Volatile Organic Compounds					
All analytes	ND/ND	ND	ND	ND	ND
PCBs					
All analytes	ND/ND	ND	ND	ND	ND
Pesticides					
All analytes	ND/ND	ND	ND	ND	ND

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL WET WELL
- MW-402 MONITORING WELL

WELL DESIGNATION — SAMPLING DATE

MW-422	10/6/1999	10/6/2004	8/16/2006	4/21/2009
Volatile Organic Compounds				
Carbon disulfide	ND(5)	0.81 J	ND(2.0)	ND(2.0)
Semi-Volatile Organic Compounds				
All analytes	ND	ND	ND	ND
PCBs				
All analytes	ND	ND	ND	ND
Pesticides				
All analytes	ND	ND	ND	ND

CHEMICAL CONCENTRATIONS IN µg/L

NOTE: ONLY DETECTED ORGANIC COMPOUNDS SHOWN.

CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES. WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND( )	THE ANALYTE WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
NE	NO EXCEEDANCES
NS	NOT SAMPLED
µg/L	MICROGRAMS PER LITER
U	THE ANALYTE WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE ANALYTE WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.

figure 4

UPPER SHARON UNIT
5 YEAR GROUNDWATER MONITORING (2004-2009)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(WILL053)GN-PX006 AUG 14/2009

TABLES

TABLE 1

SUMMARY OF INDIVIDUAL WELL COMPLIANCE WITH PERFORMANCE STANDARDS
APRIL 2009 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

		SUMMARY OF HAZARD INDICES (1)			CARCINOGENIC PERFORMANCE STANDARD EXCEEDENCES		
Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*	*Chemical of Potential Concern (COPC)*	Actual Concentration ***2009***	Compliance Concentration (2)
						(ug/L)	(ug/L)
WATER TABLE UNIT							
MW-4	4/21/2009	2.88E-03	--	--	--	--	--
MW-11	4/23/2009	7.80E-01	--	--	1,1-Dichloroethane	76.2	14.94
					1,2-Dichloroethane	1.6	0.94
					Trichloroethene	122	6.55
MW-104	4/23/2009	1.90E-04	--	--	Arsenic	3.1	0.06
MW-105	4/23/2009	**1.56E+01**	**Arsenic**	**18**	Arsenic	30.5	0.06
			Cadmium	1			
			Iron	**55**			
			Manganese	**27**			
MW-106	4/23/2009	**6.17E+00**	**Iron**	**99**	Arsenic	5.1/4.3	0.06
					1,2-Dichloroethane	1.5/1.6	0.94
MW-107	4/24/2009	**9.70E+00**	**Arsenic**	**35**	Arsenic	36.7	0.06
			1,1-Dichloroethane	2	1,1-Dichloroethane	1320	14.94
			1,2-Dichloroethane	4	1,2-Dichloroethane	291	0.94
			Benzene	7	Benzene	97.8	1.55
			cis-1,2-Dichloroethylene	10	Ethylbenzene	1230	7.74
			Ethylbenzene	3	Vinyl chloride	121	0.12
			Toluene	**19**			
			Vinyl Chloride	**11**			
			Xylenes, total	6			

TABLE 1

SUMMARY OF INDIVIDUAL WELL COMPLIANCE WITH PERFORMANCE STANDARDS
APRIL 2009 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

		SUMMARY OF HAZARD INDICES (1)			CARCINOGENIC PERFORMANCE STANDARD EXCEEDENCES		
Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*	*Chemical of Potential Concern (COPC)*	Actual Concentration ***2009***	Compliance Concentration (2)
						(ug/L)	(ug/L)
WATER TABLE UNIT (CONT.)							
MW-108	4/23/2009	**4.61E+00**	**Arsenic**	**65**	Arsenic	32.6	0.06
			1,2-Dichloroethane	2	1,1-Dichloroethane	213	14.94
			Benzene	11	1,2-Dichloroethane	68.9	0.94
			cis-1,2-Dichloroethylene	8	Benzene	77.2	1.55
			Trichloroethene (dated)	3	Trichloroethene	30.1	6.55
			Vinyl Chloride	11	Vinyl chloride	53.2	0.12
MW-109	4/20/2009	1.87E-01	--	--	Arsenic	3.3	0.06
MW-110	4/20/2009	NC	--	--	--	--	--
MW-111	4/23/2009	**8.18E+00**	**Iron**	**97**	Arsenic	9.1	0.06
					1,1-Dichloroethane	32.4	14.94
					1,2-Dichloroethane	69.1	0.94
					Vinyl chloride	5.2	0.12
MW-113	4/20/2009	4.73E-04	--	--	Arsenic	8.9	0.06
MW-114	4/21/2009	**1.04E+01**	**Arsenic**	**55**	Arsenic	62.9	0.06
			Iron	**44**			
MW-115	4/21/2009	2.30E-02	--	--	--	--	--
MW-116	4/21/2009	3.70E-03	--	--	Arsenic	3.1	0.06
MW-117	4/21/2009	NC	--	--	Arsenic	4.7	0.06
MW-118	4/20/2009	2.88E-03	--	--	1,2-Dichloroethane	2.1	0.94

TABLE 1

SUMMARY OF INDIVIDUAL WELL COMPLIANCE WITH PERFORMANCE STANDARDS
APRIL 2009 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

		SUMMARY OF HAZARD INDICES (1)			CARCINOGENIC PERFORMANCE STANDARD EXCEEDENCES		
Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*	*Chemical of Potential Concern (COPC)*	Actual Concentration ***2009*** (ug/L)	Compliance Concentration (2) (ug/L)
UPPER INTERMEDIATE UNIT							
MW-202	4/22/2009	4.90E-02	--	--	--	--	--
MW-203	4/23/2009	NC	--	--	--	--	--
MW-206	4/23/2009	**1.73E+00**	Aluminum	23	Arsenic	10.8	0.06
			Arsenic	57			
			Barium	2			
			Cadmium	8			
			Copper	5			
			Nickel	5			
MW-207	4/24/2009	NC	--	--	--	--	--
MW-209	4/20/2009	4.38E-04	--	--	Arsenic	3.3	0.06
MW-219	4/23/2009	NC	--	--	--	--	--
MW-220	4/21/2009	NC	--	--	--	--	--
MW-223	4/23/2009	**8.61E+00**	**Iron**	**56**	1,2-Dichloroethane	4.2	0.94
			Manganese	**44**			
MW-224	4/24/2009	4.83E-02	--	--	--	--	--

TABLE 1

SUMMARY OF INDIVIDUAL WELL COMPLIANCE WITH PERFORMANCE STANDARDS
APRIL 2009 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

		SUMMARY OF HAZARD INDICES (1)			CARCINOGENIC PERFORMANCE STANDARD EXCEEDENCES		
Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*	*Chemical of Potential Concern (COPC)*	Actual Concentration ***2009*** (ug/L)	Compliance Concentration (2) (ug/L)
LOWER INTERMEDIATE UNIT							
MW-303	4/23/2009	NC	--	--	--	--	--
MW-305	4/22/2009	**1.57E+00**	Iron	30	--	--	--
			Manganese	**70**			
MW-306	4/23/2009	2.19E-03	--	--	--	--	--
MW-307	4/24/2009	3.22E-03	--	--	--	--	--
MW-309	4/20/2009	2.19E-03	--	--	--	--	--
MW-319	4/23/2009	NC	--	--	--	--	--
MW-320	4/21/2009	5.86E-02	--	--	--	--	--
MW-321	4/24/2009	6.30E-03	--	--	1,2-Dichloroethane	2.0	0.94
MW-322	4/23/2009	NC	--	--	--	--	--
MW-323	4/23/2009	5.45E-02	--	--	--	--	--
MW-324	4/24/2009	4.55E-01	--	--	--	--	--

TABLE 1

SUMMARY OF INDIVIDUAL WELL COMPLIANCE WITH PERFORMANCE STANDARDS
APRIL 2009 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

		SUMMARY OF HAZARD INDICES (1)			CARCINOGENIC PERFORMANCE STANDARD EXCEEDENCES		
Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*	*Chemical of Potential Concern (COPC)*	Actual Concentration *2009*	Compliance Concentration (2)
						(ug/L)	(ug/L)
UPPER SHARON UNIT							
MW-401	4/23/2009	1.03E-01	--	--	--	--	--
MW-402	4/20/2009	**1.38E+00**	Aluminum	6	--	--	--
			Barium	2			
			Copper	1			
			Iron	**79**			
			Manganese	6			
			Nickel	4			
MW-421	4/22/2009	1.47E-02	--	--	--	--	--

Notes:

NC = Not Calculated
Bolded chemical name indicates respective HQ >1.0.

eg. Aluminum HQ >1
Aluminum HQ<1

1. See Attachment I
2. See Attachment H

ATTACHMENT A

SAMPLING MEMO

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

Sent via email

TO: Stephen Whillier

REF. NO.: 006029-50

FROM: David Tyran/adh/1 DST

DATE: May 8, 2009
Rev. May 11, 2009

c.c.: Nancy Bergstrom, Steve Day

Received - CRA, Inc.
MAY 13 2009
Phoenix, Arizona

RE: **Hydraulic Monitoring and Groundwater Quality Monitoring**
April 2009
Summit National Superfund Site
Deerfield Township of Portage County, Ohio

The following is a brief summary of the Site activities associated with the April 2009 round of groundwater sampling conducted from April 20 to April 24, 2009, at the Summit National Superfund Site (Site) in Deerfield Township of Portage County, Ohio.

On-Site Personnel

Field activities were conducted by Conestoga-Rovers & Associates' (CRA's) Shawn Gardner and David Tyran.

Water Levels

A complete round of water level readings were taken from all on-Site and off-Site monitoring wells and collection manholes on April 20, 2009, using a Solinst electronic water level tape. The water level tape was decontaminated between water level measurements at each monitoring well. The decontamination sequence involved first rinsing the tape with potable water, and final rinsing with deionized water. A water level reading was also taken from the potable water supply well just north of the treatment plant. Well depths were sounded using a weighted measuring tape.

Purging and Sampling of Monitoring Wells

During purging of all monitoring wells, readings of pH, specific conductivity, temperature, and turbidity (dependent on field observations) were taken after the removal of each standing well volume. A summary of the well development data is provided in Table 1. The quality of the evacuated water was also noted for color and clarity. All purge waters (approximately 987 gallons) from the monitoring wells were containerized and transported to a large holding tank located directly behind the treatment building.

Once the monitoring wells were purged, groundwater samples were collected for analyses of the Target Compound List (TCL) for volatile organic compounds (VOCs), pesticides, polychlorinated biphenyls

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(PCBs), and semi-volatile organic compounds (SVOCs). Groundwater samples were also collected for cyanide and Target Analyte List (TAL) metals.

Monitoring wells that were purged using dedicated Waterra foot valves and tubing were sampled using a precleaned stainless steel bailer (as detailed below). Once purging of the monitoring well was completed, the tubing was removed from the well and drained. After sampling of the well was completed, the tubing was placed back down the well.

A majority of the Lower Intermediate Unit (LIU) and Upper Sharon Unit (USU) monitoring wells were purged using a precleaned 2-inch diameter Grundfos pump (as detailed below) with dedicated tubing. Once purging of the monitoring well was completed, the pump and tubing were removed. Sampling was completed using a pre-cleaned stainless steel bailer after allowing the standing water to settle. After sampling of the well was completed, the tubing was placed back down the well.

Collected samples were labeled and placed in a cooler and maintained cool with ice. The samples were shipped daily by Federal Express to Accutest Laboratories in Dayton, New Jersey, under chain of custody (COC) protocols. Copies of the COCs are provided in Attachment A.

Decontamination Procedures

Stainless steel bailers were cleaned between monitoring wells by using the following decontamination sequence:

i) clean with brush in potable water and Alconox detergent;
ii) rinse thoroughly with potable water;
iii) rinse thoroughly with deionized water; and
iv) allow the bailer to air dry on clean aluminum foil.

Once the bailers were allowed to air dry thoroughly, they were wrapped in aluminum foil prior to use at each monitoring well.

The Grundfos pump was cleaned between monitoring wells by using the following decontamination sequence:

i) run pump in a pail filled with potable water and Alconox (pump discharge water back into pail);
ii) run pump in a pail filled with potable water (pump discharge water back into pail);
iii) rinse pump with deionized water; and
iv) wipe pump with clean paper towel and wrap in aluminum foil.

Water Table Unit (WTU) Monitoring Well Sampling

All of the WTU monitoring wells, except MW-101, MW-102, MW-103, MW-104, MW-106, and MW-116 were purged using dedicated Waterra foot valves and tubing. Monitoring wells MW-101, MW-102, MW-103, MW-104, MW-106, and MW-116 were purged using a precleaned stainless steel bailer.

As shown in Table 1, 6 out of the 19 WTU monitoring wells were purged dry. All dry wells recovered sufficiently for complete sample sets to be taken.

Upper Intermediate Unit (UIU) Monitoring Well Sampling

All of the UIU monitoring wells except MW-207 were purged using a precleaned 2-inch diameter Grundfos pump. Monitoring well MW-207 was purged using a dedicated Waterra foot valve and tubing. As shown in Table 1, 10 of the 12 UIU monitoring wells went dry before reaching stabilization. All ten wells recovered sufficiently for complete sample sets to be taken.

Lower Intermediate Unit (LIU) Monitoring Well Sampling

The LIU monitoring wells were purged using either a precleaned 2-inch diameter Grundfos pump with dedicated tubing or dedicated Waterra foot valve and tubing. As shown in Table 1, only monitoring wells MW-305 and MW-306 had sufficient recharge to allow stabilization by purging three or more volumes. The remaining 12 wells were purged dry. All 12 wells recovered sufficiently for complete sample sets to be taken.

Upper Sharon Unit (USU) Monitoring Well Sampling

All six USU monitoring wells were purged using a precleaned 2-inch diameter Grundfos pump with dedicated tubing. With the exception of monitoring well MW-421, all wells were purged dry. The dry wells recovered sufficiently for complete sample sets to be taken.

Field Quality Assurance/Quality Control (QA/QC) Program

Field QA/QC samples collected during the April 2009 round of groundwater sampling included a total of six blind field duplicates and six stainless steel bailer rinsate blanks. Three matrix spike and matrix spike duplicates (MS/MSDs) were also collected. One trip blank was sent with each shipment of samples to the laboratory by placing all VOC samples in the same cooler with the trip blank.

Stainless steel bailer rinsate blanks were collected by pouring lab-supplied deionized water into a precleaned bailer and then filling the sample containers.

Surface Water/Sediment Sample

Surface water and sediment samples were collected at the confluence of the south and east drainage ditches (see Table 2).

Purge Water Sample

At the conclusion of the sampling round, a wastewater sample was taken from the holding tank for characterization of the water prior to disposal.

Site Conditions

It was noted during sampling activities that the ditch running along the east side of the Site had a fair amount of orange staining. The surface water sample taken at the south end of that ditch had a pH of 9.41.

Residential Sampling

Also included in this year's sampling round were samples from three residential wells (see Table 2). Samples were obtained by running the well for 15 minutes (before any pretreatment) and then filling the sample bottles. All three residents have requested a copy of their results when they become available.

TABLE 1

SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-4	04/21/09	12	12	09:20	3.15	6.93	9.06	61.5		Grundfos/SS bailer	Well dry @ 1 volume
	04/21/09		Sample	17:20					Clear, colorless	for all parameters	
MW-11	04/23/09	2.8	2.8	11:02	2.950	6.53	8.96	23.3		Waterra/SS bailer	Good recharge
			5.6	11:05	2.365	6.64	9.09	10.4		for all parameters	
			8.4	11:08	2.290	6.70	9.06	24.3			
			11.2	11:11	2.270	6.65	8.92	14.2	Clear, colorless		
	04/23/09		Sample	17:40							
MW-101	04/21/09	2.2	2.2	11:08	2.95	7.12	10.5	614.9		SS bailer/SS bailer	Well dry @ 2 volume
			4.4	11:12	2.89	6.12	11.2	723.6		for all parameters	
	04/21/09		Sample	16:50					Clear, colorless		
MW-102	04/22/09	2.8	2.8	10:09	2.04	6.65	9.38	639.0		SS bailer/SS bailer	Good recharge
			5.6	10:13	2.04	6.60	9.45	701.7		for all parameters	
			8.4	10:16	2.05	4.61	9.72	776.2			
			11.2	10:19	2.06	4.49	9.82	377.2			
			14	10:22	2.06	4.48	9.75	577.6			
	04/22/09		Sample	17:10					Clear, colorless		
MW-103	04/21/09	2.9	2.9	11:47	2.27	6.55	9.01	340.8		SS bailer/SS bailer	Good recharge
			5.8	11:51	2.31	6.57	8.94	214.8		for all parameters	
			8.7	11:53	2.29	6.58	9.02	157.4			
	04/21/09		Sample	15:30					Clear, Light Gray Tint		
MW-104	04/23/09	2.8	2.8	10:18	4.36	7.30	7.36	35.6		SS bailer/SS bailer	Good recharge
			5.6	10:22	4.49	7.15	7.88	23.2		for all parameters	
			8.4	-	6.98	4.51	8.00	21.7			
	04/23/09		Sample	16:40					Clear, colorless		

TABLE 1

SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-105	04/23/09	2.4	2.4	10:35	3.819	5.96	9.82	58		Waterra/SS bailer	Good recharge
			4.8	10:38	3.800	5.80	10.31	43		for all parameters	
			7.2	10:39	3.820	5.85	10.58	48			
	04/23/09		Sample	16:10					Clear, Red/Brown Tint		
MW-106	04/23/09	3.2	3.2	12:57	3.21	6.12	10.7	135.1		SS bailer/SS bailer	Good recharge
			6.4	13:02	3.28	6.03	10.8	46.3		for all parameters	
			9.6	13:06	3.28	6.00	10.8	21.7			
	04/23/09		Sample	17:20					Clear, colorless		
MW-107	04/24/09	3.40	3.4	10:00	3.40	6.88	11.4	20.5		Waterra/SS bailer	Good recharge
			6.8	11:11	3.41	6.98	11.3	12.1		for all parameters	
			10.2	11:19	3.43	6.90	11.4	7.7			
	04/24/09		Sample	13:20					Clear, colorless, strong chemical odor		
MW-108	04/23/09	2.1	2.1	11:19	2.023	6.65	8.30	358		Waterra/SS bailer	Good recharge
			4.2	11:21	2.057	6.71	8.62	104.8		for all parameters	
			6.3	11:26	2.083	6.79	9.09	67.4			
	04/23/09		Sample	19:00					Cloudy, red/brown		
MW-109	04/20/09	1.2	1.2	14:05	2.79	8.04	8.28	522		Waterra/SS bailer	Well dry @ 3.5 gal.
			2.4	14:08	3.03	7.34	7.96	715		for all parameters	
	04/20/09		Sample	16:30					Slightly cloudy, light brown		
MW-110	04/20/09	1.5	1.5	12:28	0.708	8.14	8.54	85.2		Waterra/SS bailer	Well dry @ 3.5 gal.
			3.0	12:30	0.692	7.90	7.77	142		for all parameters	
	04/20/09		Sample	17:00					Slightly cloudy, light brown		

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SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-111	04/23/09	2.7	2.7	10:48	4.178	5.88	10.03	34		Waterra/SS bailer	Good recharge
			5.4	10:51	4.236	5.93	10.72	7.6		for all parameters	
			8.1	10:53	4.244	5.96	10.84	10.1			
	04/23/09		Sample	18:00					Clear, colorless		
MW-113	04/20/09	1.8	1.8	14:20	4.01	8.12	8.45	480		Waterra/SS bailer	Well dry @ 3.3 gal.
	04/20/09		Sample	16:50					Slightly cloudy, light brown	for all parameters	
MW-114	04/21/09	2.2	2.2	13:28	3.00	6.22	9.69	216.1		Waterra/SS bailer	Well dry @ 3.9 gal.
	04/21/09		Sample	16:20					Cloudy, red/brown	for all parameters	
MW-115	04/21/09	3.9	3.9	12:37	2.51	7.87	11.4	13.3		Grundfos/SS bailer	Good recharge
			7.8	12:39	2.54	7.69	11.5	3.4		for all parameters	
			11.7	12:41	2.56	7.66	11.5	1.6			
			15.6	12:43	2.55	7.63	11.6	1.2			
	04/21/09		Sample	16:10					Clear, colorless		
MW-116	04/20/09	0.70	0.70	18:02	5.49	7.94	13.01	396		SS bailer/SS bailer	Well dry @ 4 volumes
			NM		NM	NM	NM	NM		for all parameters	
			NM		NM	NM	NM	NM			
			NM		NM	NM	NM	NM			
	04/21/09		Sample	15:40					Clear, colorless		
MW-117	04/21/09	3.2	3.2	13:08	3.30	6.34	11.9	19.6			
			6.4	13:10	3.31	6.30	12.0	5.3			
			9.6	13:11	3.29	6.28	11.9	4.3			
	04/21/09		Sample	18:10					Clear, colorless	Grundfos/SS bailer	Good recharge
										for all parameters	

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SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-118	04/20/09	2.2	2.2	11:28	2.89	7.22	11.41	60.8		Grundfos/SS bailer	Good recharge
			4.4	11:30	2.93	7.14	11.60	118		for all parameters	
			6.6	11:31	3.05	7.08	11.62	>1000			
			8.8	11:33	3.07	7.04	11.73	875			
	04/20/09		Sample	16:20					Clear, colorless		
MW-201	04/21/09	8.4	8.4	10:58	4.82	8.60	12.3	9.1		Grundfos/SS bailer	Well dry @ 13.9 gal.
	04/21/09		Sample	16:30					Clear, colorless	for all parameters	
MW-202	04/22/09	4.3	4.3	09:57	1.77	8.94	10.9	45.1		Grundfos/SS bailer	Well dry @ 10.8 gal.
			8.6	09:59	1.90	8.80	11.4	40.0		for all parameters	
	04/22/09		Sample	16:10					Clear, colorless		
MW-203	04/23/09	7.1	7.1	10:03	3.72	9.73	9.46	9.4		Grundfos/SS bailer	Well dry @ 10 gal.
	04/23/09		Sample	16:00					Clear, colorless	for all parameters	
MW-204	04/22/09	5.8	5.8	12:51	3.49	7.23	10.3	11.3		Grundfos/SS bailer	Well dry @ 9.5 gal.
	04/22/09		Sample	17:20					Clear, colorless	for all parameters	
MW-205	04/22/09	5.8	5.8	12:22	2.95	6.40	11.2	18.5		Grundfos/SS bailer	Good recharge
			11.6	12:24	3.10	6.35	11.5	7.3		for all parameters	
			17.4	12:26	3.15	6.32	11.5	2.8			
	04/22/09		Sample	16:00					Clear, colorless		
MW-206	04/23/09	6	6	12:24	3.50	9.14	11.1	9.5		Grundfos/SS bailer	Well dry @ 10.5 gal.
	04/23/09		Sample	18:30					Cloudy, dark gray	for all parameters	

TABLE 1

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SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-207	04/24/09	6.4	6.4	10:10	3.73	7.26	11.3	42.6		Waterra/SS bailer	Good recharge
			12.8	10:17	3.75	7.22	11.7	31.4		for all parameters	
			19.2	10:23	3.75	7.20	12.0	12.9			
	04/24/09		Sample	13:40					Clear, colorless		
MW-209	04/20/09	5.3	5.3	12:51	3.43	7.60	9.65	46.1	Clear, colorless	Grundfos/SS bailer	Well dry @ 8.5 gal.
	04/20/09		Sample	16:10						for all parameters	
MW-219	04/20/09	7	7	09:46	3.09	9.10	11.1	6.7		Grundfos/SS bailer	Well dry @ 11 gal.
	04/20/09		Sample	18:20					Clear, colorless	for all parameters	
MW-220	04/21/09	5.0	5	08:30	3.97	5.74	9.69	13.7		Grundfos/SS bailer	Well dry @ 8.2 gal.
	04/21/09		Sample	17:00					Clear, colorless	for all parameters	
MW-223	04/23/09	5.5	5.5	14:00	2.33	8.46	10.0	16.7		Grundfos/SS bailer	Well dry @ 12.8 gal.
			11	14:03	3.96	7.05	11.1	69.4		for all parameters	
	04/23/09		Sample	17:10					Clear, colorless		
MW-224	04/24/09	4.1	4.1	11:19	3.66	8.56	12.2	54.7		Grundfos/SS bailer	Well dry at 12.5 gal.
			8.2	11:20	3.64	8.00	12.1	447.6		for all parameters	
			12.3	11:21	3.63	7.96	12.8	136.8	Clear, colorless		
	04/24/09		Sample	13:30							
MW-301	04/21/09	8.5	8.5	10:42	4.02	9.22	12.7	9.5		Grundfos/SS bailer	Well dry at 2 volume
			17	10:44	4.16	8.44	12.7	18.4		for all parameters	
	04/21/09		Sample	17:30					Clear, colorless		

TABLE 1

SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-302	04/22/09	8.8	8.8	11:23	1.71	8.93	10.7	74.8		Grundfos/SS bailer	Well dry @ 12.3 gal.
	04/22/09		Sample	16:30					Cloudy, gray	for all parameters	
MW-303	04/23/09	7	7	12:08	3.33	8.51	11.8	9.2		Grundfos/SS bailer	Well dry @ 9.5 gal.
	04/23/09		Sample	16:30					Clear, colorless	for all parameters	
MW-304	04/22/09	9.3	9.3	13:56	3.81	8.57	11.5	3.9		Grundfos/SS bailer	Well dry @ 23 gal.
			18.6	14:00	3.80	8.40	11.6	6.5		for all parameters	
	04/22/09		Sample	17:00					Clear, colorless		
MW-305	04/22/09	6.5	6.5	11:56	3.60	7.24	10.9	3.7		Grundfos/SS bailer	
			13	12:01	3.62	7.19	11.5	1.1		for all parameters	Good recharge
			19.5	12:06	3.63	7.18	11.3	1.2			
	04/22/09		Sample	17:30					Clear, colorless		
MW-306	04/23/09	10.5	10.5	12:40	2.89	9.08	11.6	3.1		Grundfos/SS bailer	Good recharge
			21	12:44	2.88	9.04	11.9	1.6		for all parameters	
			31.5	12:48	2.90	9.03	11.7	1.4			
	04/23/09		Sample	18:50					Clear, colorless		
MW-307	04/24/09	8.3	8.4	09:53	3.02	8.70	12.26	143.3		Waterra/SS bailer	Well dry @ 12.5 gal.
	04/24/09		Sample	13:00					Clear, colorless	for all parameters	
MW-309	04/24/09	7.8	7.8	13:54	7.8	11.19	11.41	22.6		Grundfos/SS bailer	Well dry @ 11 gal.
	04/24/09		Sample	16:40					Clear, colorless	for all parameters	
MW-319	04/23/09	9.3	9.3	09:41	2.56	12.3	10.7	49.7		Grundfos/SS bailer	Well dry @ 11.8 gal.
	04/23/09		Sample	18:10					Clear, colorless	for all parameters	

TABLE 1

SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-320	04/21/09 04/21/09	13.2	13.2 Sample	08:40 16:00	1.90	7.16	11.1	9.2	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 15.8 gal.
MW-321	04/24/09 04/24/09	8.2	8.2 Sample	10:53 13:40	2.47	9.12	12.8	4.2	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 10 gal.
MW-322	04/23/09 04/23/09	9	9 Sample	13:20 17:00	2.93	9.20	10.8	7.1	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 11 gal.
MW-323	04/23/09 04/23/09	9.8	9.8 Sample	13:51 18:40	2.60	9.53	11.5	31.1	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 10.5 gal.
MW-324	04/24/09 04/24/09	11.6	11.6 Sample	11:08 13:50	2.81	9.34	12.4	5.6	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 15 gal.
MW-401	04/24/09 04/24/09	72.9	72.9 Sample	08:47 18:35	2.26	7.78	11.7	36.2	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 120 gal.
MW-402	04/20/09 04/20/09	67.2	67.2 Sample	12:10 16:00	2.17	10.12	11.89	58.7	Clear, black tint	Grundfos/SS bailer for all parameters	Well dry 1 vol.
MW-414	04/22/09 04/22/09	52.3	52.3 Sample	13:34 17:40	2.69	9.43	11.4	123.1	Clear, colorless	Grundfos/SS bailer for all parameters	Well dry @ 55 gal.

TABLE 1

SUMMARY OF MONITORING WELL DEVELOPMENT DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-415	04/21/09	40.4	40.4	12:33	2.24	9.56	12.1	45.7		Grundfos/SS bailer	Well dry 1 vol.
	04/21/09		Sample	16:40					Clear, colorless	for all parameters	
MW-421	04/22/09	50.1	50.1	09:05	2.55	7.98	10.5	13.7		Grundfos/SS bailer	Good recharge
			100.2	09:34	2.53	8.01	10.7	14.5		for all parameters	
			150.3	09:46	2.50	8.05	10.8	9.4			
	04/22/09		Sample	16:50					Clear, colorless		
MW-422	04/21/09	56.2	56.2	10:34	4.20	9.93	12.5	90.8		Grundfos/SS bailer	Well dry @ 44 gal.
	04/21/09		Sample	17:50					Clear, colorless	for all parameters	

Notes:
NM - Not Measured.
SS - Stainless Steel.

TABLE 2

SUMMARY OF RESIDENTIAL WELL AND SURFACE WATER DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Well I.D.	*Date Sampled*	*Property Owner*		*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Sampling Method*	*Comments*
Residential #1	04/21/09	Carver	Sample	19:45	1.86	7.48	12.7	7.8	Clear, colorless	Direct fill	Basement spigot
Residential #2	04/22/09	Oyster	Sample	19:15	NM	NM	NM	NM	Clear, colorless	Direct fill	Garage spigot
Residential #3	04/22/09	Duley	Sample	19:45	1.70	7.83	12.6	8.2	Clear, colorless	Direct fill	Outside spigot
Surface Water	04/20/09	SE Corner	Sample	17:10	1.078	9.41	12.02	58.3	Clear, light brown tint	Direct fill	

Notes:
NM - Not Measured.

ATTACHMENT B

GROUNDWATER ANALYTICAL RESULTS

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*MW-4*	*MW-11*	*MW-101*	*MW-102*	*MW-103*	*MW-104*	*MW-105*	*MW-106*	*MW-106*	*MW-107*	*MW-108*
Sample Name		*WG-6029-042109-022*	*WG-6029-042309-051*	*WG-6029-042109-018*	*WG-6029-042209-038*	*WG-6029-042109-009*	*WG-6029-042309-045*	*WG-6029-042309-042*	*WG-6029-042309-043*	*WG-6029-042309-049*	*WG-6029-042409-063*	*WG-6029-042309-062*
Sample Date		*4/21/2009*	*4/23/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*
									Duplicate			
	Units											
Metals												
Aluminum	µg/L	ND(200)	ND(200)	ND(200)	1720	1700	301	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Antimony	µg/L	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)
Arsenic	µg/L	ND(3.0)	ND(3.0)	8.1	5.7	19.6	3.1	30.5	5.1	4.3	36.7	32.6
Barium	µg/L	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	298	ND(200)
Beryllium	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Cadmium	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.5	1.3	1.1	ND(1.0)	ND(1.0)
Calcium	µg/L	375000	295000	290000	175000	264000	209000	414000	347000	338000	228000	187000
Chromium	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	10.4	ND(10)	ND(10)	ND(10)	12.4	ND(10)
Cobalt	µg/L	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Copper	µg/L	ND(10)	ND(10)	28.1	56.0 J	27.0	ND(10)	ND(10)	ND(10)	ND(10)	45.4	61.3
Iron	µg/L	1440	16100	46200	73100	28500	21700	217000	159000	153000	391	45400
Lead	µg/L	ND(3.0)	ND(3.0)	ND(3.0)	3.1	ND(3.0)	4.0	4.6	5.1	ND(3.0)	ND(3.0)	ND(3.0)
Magnesium	µg/L	231000	68400	152000	85400	71300	54600	174000	133000	129000	109000	57400
Manganese	µg/L	617	4460	4440	1490	3950	2500	7180	6350	6160	693	1810
Mercury	µg/L	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Nickel	µg/L	ND(20)	ND(20)	68.9	70.5 J	ND(20)	ND(20)	41.3	30.2	29.3	ND(20)	ND(20)
Potassium	µg/L	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	10100	ND(10000)	ND(10000)	ND(10000)
Selenium	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Silver	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Sodium	µg/L	13500	47700	36000	29500	34300	480000	62500	47300	46500	170000	116000
Thallium	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Vanadium	µg/L	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Zinc	µg/L	ND(20)	ND(20)	147	216	ND(20)	39.8	93.2	30.1	30.6	ND(20)	ND(20)
PCBs												
Aroclor-1016 (PCB-1016)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1221 (PCB-1221)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1232 (PCB-1232)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1242 (PCB-1242)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1248 (PCB-1248)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1254 (PCB-1254)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Aroclor-1260 (PCB-1260)	µg/L	ND(0.50)	ND(0.52)	ND(0.55)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.53)
Pesticides												
4,4'-DDD	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
4,4'-DDE	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
4,4'-DDT	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Aldrin	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
alpha-BHC	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
alpha-Chlordane	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
beta-BHC	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
delta-BHC	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Dieldrin	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endosulfan I	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endosulfan II	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endosulfan sulfate	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endrin	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endrin aldehyde	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Endrin ketone	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*MW-4*	*MW-11*	*MW-101*	*MW-102*	*MW-103*	*MW-104*	*MW-105*	*MW-106*	*MW-106*	*MW-107*	*MW-108*
Sample Name		*WG-6029-042109-022*	*WG-6029-042309-051*	*WG-6029-042109-018*	*WG-6029-042209-038*	*WG-6029-042109-009*	*WG-6029-042309-045*	*WG-6029-042309-042*	*WG-6029-042309-043*	*WG-6029-042309-049*	*WG-6029-042409-063*	*WG-6029-042309-062*
Sample Date		*4/21/2009*	*4/23/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*
									Duplicate			
	Units											
Pesticides (cont'd)												
gamma-BHC (Lindane)	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
gamma-Chlordane	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Heptachlor	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Heptachlor epoxide	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Methoxychlor	µg/L	ND(0.020)	ND(0.021)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)
Toxaphene	µg/L	ND(0.25)	ND(0.26)	ND(0.27)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.27)
Semi-Volatile Organic Compounds												
1,2,4-Trichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	1.6 J	ND(2.0)
1,3-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,4-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,4,5-Trichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4,6-Trichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dimethylphenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	12.2	ND(5.0)
2,4-Dinitrophenol	µg/L	ND(20)	ND(20)	ND(22)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
2,4-Dinitrotoluene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,6-Dinitrotoluene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Chloronaphthalene	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Chlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Methylnaphthalene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	1.7 J	ND(2.0)
2-Methylphenol	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	16.1	ND(2.0)
2-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Nitrophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3&4-Methylphenol	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	11.8	ND(2.0)
3,3'-Dichlorobenzidine	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4,6-Dinitro-2-methylphenol	µg/L	ND(20)	ND(20)	ND(22)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
4-Bromophenyl phenyl ether	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Chloro-3-methylphenol	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	8.7	ND(5.0)
4-Chloroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chlorophenyl phenyl ether	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Nitrophenol	µg/L	ND(10)	ND(10)	ND(11)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Acenaphthene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Acenaphthylene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(b)fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(g,h,i)perylene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(k)fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Chloroethoxy)methane	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Chloroethyl)ether	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND(2.0)	ND(2.0)	4.3	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	2.1	ND(2.0)	1.5 J	ND(2.0)
Butyl benzylphthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbazole	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chrysene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*MW-4*	*MW-11*	*MW-101*	*MW-102*	*MW-103*	*MW-104*	*MW-105*	*MW-106*	*MW-106*	*MW-107*	*MW-108*
Sample Name		*WG-6029-042109-022*	*WG-6029-042309-051*	*WG-6029-042109-018*	*WG-6029-042209-038*	*WG-6029-042109-009*	*WG-6029-042309-045*	*WG-6029-042309-042*	*WG-6029-042309-043*	*WG-6029-042309-049*	*WG-6029-042409-063*	*WG-6029-042309-062*
Sample Date		*4/21/2009*	*4/23/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*
									Duplicate			
	Units											
Semi-Volatile Organic Compounds (cont'd)												
Dibenz(a,h)anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenzofuran	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Diethyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	2.9	ND(2.0)
Dimethyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-octyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Fluorene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Hexachlorobutadiene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorocyclopentadiene	µg/L	ND(20)	ND(20)	ND(22)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	R	ND(20)
Hexachloroethane	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Isophorone	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Naphthalene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	9.2	ND(1.0)
Nitrobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodi-n-propylamine	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodiphenylamine	µg/L	ND(5.0)	ND(5.0)	ND(5.6)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Pentachlorophenol	µg/L	ND(10)	ND(10)	ND(11)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Phenanthrene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Phenol	µg/L	ND(2.0)	ND(2.0)	ND(2.2)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Volatile Organic Compounds												
1,1,1-Trichloroethane	µg/L	ND(1.0)	45.5	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	4.2	4.2	134	8.8
1,1,2,2-Tetrachloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
1,1,2-Trichloroethane	µg/L	ND(1.0)	0.24 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	0.21 J
1,1-Dichloroethane	µg/L	ND(1.0)	76.2	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.2	2.3	1320	213
1,1-Dichloroethene	µg/L	ND(1.0)	2.0	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	2.8
1,2-Dichloroethane	µg/L	ND(1.0)	1.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.5	1.6	291	68.9
1,2-Dichloroethene (total)	µg/L	ND(1.0)	57.9	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	369	132
1,2-Dichloropropane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(250)	ND(5.0)
2-Hexanone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(250)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(250)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(250)	3.8 J
Benzene	µg/L	ND(1.0)	0.70 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	97.8	77.2
Bromodichloromethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Bromoform	µg/L	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(200)	ND(4.0)
Bromomethane (Methyl Bromide)	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(100)	ND(2.0)
Carbon disulfide	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(100)	ND(2.0)
Carbon tetrachloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Chlorobenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	63.5	ND(1.0)
Chloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Chloroform (Trichloromethane)	µg/L	ND(1.0)	0.35 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	0.55 J
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	0.75 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	55.5	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	369	128
cis-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Dibromochloromethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1230	0.54 J

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*MW-4*	*MW-11*	*MW-101*	*MW-102*	*MW-103*	*MW-104*	*MW-105*	*MW-106*	*MW-106*	*MW-107*	*MW-108*
Sample Name		*WG-6029-042109-022*	*WG-6029-042309-051*	*WG-6029-042109-018*	*WG-6029-042209-038*	*WG-6029-042109-009*	*WG-6029-042309-045*	*WG-6029-042309-042*	*WG-6029-042309-043*	*WG-6029-042309-049*	*WG-6029-042409-063*	*WG-6029-042309-062*
Sample Date		*4/21/2009*	*4/23/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*
	Units								*Duplicate*			
Volatile Organic Compounds (cont'd)												
Methylene chloride	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(100)	ND(2.0)
Styrene	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(250)	ND(5.0)
Tetrachloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	5370	0.59 J
trans-1,2-Dichloroethene	µg/L	ND(1.0)	2.4	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	4.2
trans-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	122	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(50)	30.1
Vinyl chloride	µg/L	ND(1.0)	5.0	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	121	53.2
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	4120	ND(1.0)
General Chemistry												
Cyanide (total)	mg/L	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	R	ND(0.010)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-109*	*MW-110*	*MW-111*	*MW-113*	*MW-114*	*MW-115*	*MW-115*	*MW-116*	*MW-117*	*MW-118*	*MW-201*	*MW-201*
Sample Name	*WG-6029-042009-004*	*WG-6029-042009-007*	*WG-6029-042309-053*	*WG-6029-042009-006*	*WG-6029-042109-014*	*WG-6029-042109-013*	*WG-6029-042109-017*	*WG-6029-042109-010*	*WG-6029-042109-025*	*WG-6029-042009-003*	*WG-6029-042109-016*	*WG-6029-042109-023*
Sample Date	*4/20/2009*	*4/20/2009*	*4/23/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009 Duplicate*	*4/21/2009*	*4/21/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009 Duplicate*
Metals												
Aluminum	2440	691	ND(200)	1990	706	ND(200)	ND(200)	630	ND(200)	692	ND(200)	ND(200)
Antimony	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)
Arsenic	3.3	ND(3.0)	9.1	8.9	62.9	ND(3.0)	ND(3.0)	3.1	4.7	ND(3.0)	ND(3.0)	ND(3.0)
Barium	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Beryllium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Cadmium	2.2	ND(1.0)	1.2	ND(1.0)	1.5	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Calcium	420000	92600	447000	534000	425000	326000	328000	434000	413000	347000	94500	94800
Chromium	ND(10)	ND(10)	ND(10)	25.9	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Cobalt	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Copper	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	28.2	ND(10)	ND(10)	ND(10)	ND(10)
Iron	8400	1350	203000	10300	118000	14300	14500	2170	24200	11800	2340	2070
Lead	ND(3.0)	ND(3.0)	ND(3.0)	5.5	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Magnesium	208000	25700	155000	216000	27100	84700	84600	475000	130000	129000	44500	44600
Manganese	5690	180	4780	5970	1850	3850	3840	1420	5720	4920	101 J	102 J
Mercury	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Nickel	73.9	ND(20)	28.7	39.3	39.2	ND(20)	ND(20)	ND(20)	34.0	ND(20)	ND(20)	ND(20)
Potassium	ND(10000)	ND(10000)	ND(10000)	ND(10000)	27500	ND(10000)	ND(10000)	13200	13800	ND(10000)	13300	13200
Selenium	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Silver	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Sodium	ND(10000)	ND(10000)	96300	166000	130000	67000	66400	171000	57000	83200	851000	839000
Thallium	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Vanadium	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Zinc	232	ND(20)	25.6	20.1	155	ND(20)	ND(20)	ND(20)	79.0	48.3	ND(20)	ND(20)
PCBs												
Aroclor-1016 (PCB-1016)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1221 (PCB-1221)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1232 (PCB-1232)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1242 (PCB-1242)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1248 (PCB-1248)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1254 (PCB-1254)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1260 (PCB-1260)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.52)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Pesticides												
4,4'-DDD	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDE	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDT	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Aldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
beta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
delta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Dieldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan I	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan II	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan sulfate	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin aldehyde	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin ketone	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-109*	*MW-110*	*MW-111*	*MW-113*	*MW-114*	*MW-115*	*MW-115*	*MW-116*	*MW-117*	*MW-118*	*MW-201*	*MW-201*
Sample Name	*WG-6029-042009-004*	*WG-6029-042009-007*	*WG-6029-042309-053*	*WG-6029-042009-006*	*WG-6029-042109-014*	*WG-6029-042109-013*	*WG-6029-042109-017*	*WG-6029-042109-010*	*WG-6029-042109-025*	*WG-6029-042009-003*	*WG-6029-042109-016*	*WG-6029-042109-023*
Sample Date	*4/20/2009*	*4/20/2009*	*4/23/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*
							Duplicate					*Duplicate*
Pesticides (cont'd)												
gamma-BHC (Lindane)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
gamma-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor epoxide	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Methoxychlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.021)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Toxaphene	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.26)	ND(0.25)	ND(0.27)	ND(0.25)	ND(0.27)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
Semi-Volatile Organic Compounds												
1,2,4-Trichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,3-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,4-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,4,5-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4,6-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dimethylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dinitrophenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(21)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
2,4-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,6-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Chloronaphthalene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Chlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Methylnaphthalene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Nitrophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3&4-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
3,3'-Dichlorobenzidine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4,6-Dinitro-2-methylphenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(21)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
4-Bromophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Chloro-3-methylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chloroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chlorophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Nitrophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Acenaphthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Acenaphthylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(b)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(g,h,i)perylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(k)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Chloroethoxy)methane	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Chloroethyl)ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Ethylhexyl)phthalate	1.5 J	ND(2.0)	ND(2.0)	1.6 J	ND(2.0)	2.5	2.0 J	2.7	ND(2.0)	1.3 J	ND(2.0)	1.2 J
Butyl benzylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbazole	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chrysene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-109*	*MW-110*	*MW-111*	*MW-113*	*MW-114*	*MW-115*	*MW-115*	*MW-116*	*MW-117*	*MW-118*	*MW-201*	*MW-201*
Sample Name	*WG-6029-042009-004*	*WG-6029-042009-007*	*WG-6029-042309-053*	*WG-6029-042009-006*	*WG-6029-042109-014*	*WG-6029-042109-013*	*WG-6029-042109-017*	*WG-6029-042109-010*	*WG-6029-042109-025*	*WG-6029-042009-003*	*WG-6029-042109-016*	*WG-6029-042109-023*
Sample Date	*4/20/2009*	*4/20/2009*	*4/23/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*
							Duplicate					*Duplicate*
Semi-Volatile Organic Compounds (cont'd)												
Dibenz(a,h)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenzofuran	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Diethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Dimethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-octyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Fluorene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Hexachlorobutadiene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorocyclopentadiene	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(21)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Hexachloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Indeno(1,2,3-cd)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Isophorone	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Naphthalene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Nitrobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodi-n-propylamine	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodiphenylamine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.2)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Pentachlorophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Phenanthrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Phenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Volatile Organic Compounds												
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	2.3	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2,2-Tetrachloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	31.4	ND(1.0)	ND(1.0)	2.5	1.8	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	ND(1.0)	ND(1.0)	0.71 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	69.1	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.1	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	6.3	ND(1.0)	ND(1.0)	8.7	5.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloropropane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Hexanone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromoform	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Bromomethane (Methyl Bromide)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon disulfide	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon tetrachloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chlorobenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroethane	ND(1.0)	ND(1.0)	1.4	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroform (Trichloromethane)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	6.3	ND(1.0)	ND(1.0)	8.7	5.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibromochloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-109*	*MW-110*	*MW-111*	*MW-113*	*MW-114*	*MW-115*	*MW-115*	*MW-116*	*MW-117*	*MW-118*	*MW-201*	*MW-201*
Sample Name	*WG-6029-042009-004*	*WG-6029-042009-007*	*WG-6029-042309-053*	*WG-6029-042009-006*	*WG-6029-042109-014*	*WG-6029-042109-013*	*WG-6029-042109-017*	*WG-6029-042109-010*	*WG-6029-042109-025*	*WG-6029-042009-003*	*WG-6029-042109-016*	*WG-6029-042109-023*
Sample Date	*4/20/2009*	*4/20/2009*	*4/23/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009*	*4/21/2009 Duplicate*	*4/21/2009*	*4/21/2009*	*4/20/2009*	*4/21/2009*	*4/21/2009 Duplicate*
Volatile Organic Compounds (cont'd)												
Methylene chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Styrene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	5.2	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
General Chemistry												
Cyanide (total)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-202*	*MW-202*	*MW-203*	*MW-204*	*MW-205*	*MW-206*	*MW-207*	*MW-209*	*MW-219*	*MW-220*	*MW-223*	*MW-224*
Sample Name	*WG-6029-042209-029*	*WG-6029-042209-031*	*WG-6029-042309-041*	*WG-6029-042209-032*	*WG-6029-042209-028*	*WG-6029-042309-057*	*WG-6029-042409-065*	*WG-6029-042009-002*	*WG-6029-042309-056*	*WG-6029-042109-020*	*WG-6029-042309-048*	*WG-6029-042409-064*
Sample Date	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/23/2009*	*4/24/2009*
		Duplicate										
Metals												
Aluminum	ND(200)	267	ND(200)	ND(200)	ND(200)	14400	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	288
Antimony	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)
Arsenic	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	7.8	10.8	ND(3.0)	3.3	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Barium	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	301	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Beryllium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Cadmium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Calcium	13100	12400	7460	242000	353000	22700	383000	274000	7920	406000	369000	115000
Chromium	ND(10)	19.4	ND(10)	ND(10)	ND(10)	55.1	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Cobalt	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Copper	ND(10)	60.3 J	ND(10)	ND(10)	ND(10)	116	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	59.0
Iron	372 J	1210 J	ND(100)	2860	86300	43700	41300	8210	312	105	123000	1900
Lead	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	13.8	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Magnesium	7240	6760	ND(5000)	104000	105000	10600	154000	134000	ND(5000)	26800	133000	42800
Manganese	16.9	24.2	ND(15)	422	5310	953	2200	3660	ND(15)	ND(15)	6440	219
Mercury	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Nickel	ND(20)	ND(20)	ND(20)	ND(20)	21.3 J	57.1	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Potassium	ND(10000)	ND(10000)	ND(10000)	16300	10400	11900	17400	15000	ND(10000)	17000	16500	13300
Selenium	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Silver	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Sodium	587000	540000	739000	391000	104000	532000	174000	204000	587000	303000	182000	448000
Thallium	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Vanadium	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Zinc	ND(20)	ND(20)	ND(20)	ND(20)	75.1	122	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	48.7
PCBs												
Aroclor-1016 (PCB-1016)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1221 (PCB-1221)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1232 (PCB-1232)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1242 (PCB-1242)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1248 (PCB-1248)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1254 (PCB-1254)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1260 (PCB-1260)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Pesticides												
4,4'-DDD	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDE	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDT	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Aldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
beta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
delta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Dieldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan I	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan II	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan sulfate	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin aldehyde	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin ketone	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-202*	*MW-202*	*MW-203*	*MW-204*	*MW-205*	*MW-206*	*MW-207*	*MW-209*	*MW-219*	*MW-220*	*MW-223*	*MW-224*
Sample Name	*WG-6029-042209-029*	*WG-6029-042209-031*	*WG-6029-042309-041*	*WG-6029-042209-032*	*WG-6029-042209-028*	*WG-6029-042309-057*	*WG-6029-042409-065*	*WG-6029-042009-002*	*WG-6029-042309-056*	*WG-6029-042109-020*	*WG-6029-042309-048*	*WG-6029-042409-064*
Sample Date	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/23/2009*	*4/24/2009*
		Duplicate										
Pesticides (cont'd)												
gamma-BHC (Lindane)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
gamma-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor epoxide	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Methoxychlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Toxaphene	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
Semi-Volatile Organic Compounds												
1,2,4-Trichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,3-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,4-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,4,5-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2,4,6-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2,4-Dichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2,4-Dimethylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2,4-Dinitrophenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)UJ	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
2,4-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,6-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Chloronaphthalene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2-Chlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2-Methylnaphthalene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
2-Nitrophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
3&4-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
3,3'-Dichlorobenzidine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
3-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
4,6-Dinitro-2-methylphenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)UJ	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
4-Bromophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Chloro-3-methylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
4-Chloroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
4-Chlorophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
4-Nitrophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)UJ	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Acenaphthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Acenaphthylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(b)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(g,h,i)perylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(k)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Chloroethoxy)methane	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Chloroethyl)ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	ND(2.0)	ND(2.0)	2.7	ND(2.0)UJ	ND(2.0)	1.5 J	1.9 J	1.6 J	ND(2.0)	ND(2.0)	ND(2.0)
Butyl benzylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbazole	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chrysene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-202*	*MW-202*	*MW-203*	*MW-204*	*MW-205*	*MW-206*	*MW-207*	*MW-209*	*MW-219*	*MW-220*	*MW-223*	*MW-224*
Sample Name	*WG-6029-042209-029*	*WG-6029-042209-031*	*WG-6029-042309-041*	*WG-6029-042209-032*	*WG-6029-042209-028*	*WG-6029-042309-057*	*WG-6029-042409-065*	*WG-6029-042009-002*	*WG-6029-042309-056*	*WG-6029-042109-020*	*WG-6029-042309-048*	*WG-6029-042409-064*
Sample Date	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/23/2009*	*4/24/2009*
		Duplicate										
Semi-Volatile Organic Compounds (cont'd)												
Dibenz(a,h)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenzofuran	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
Diethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Dimethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-octyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Fluorene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Hexachlorobutadiene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorocyclopentadiene	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)UJ	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Hexachloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
Indeno(1,2,3-cd)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Isophorone	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Naphthalene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Nitrobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodi-n-propylamine	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodiphenylamine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)UJ	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.1)	ND(5.0)	ND(5.0)
Pentachlorophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)UJ	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Phenanthrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Phenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Volatile Organic Compounds												
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2,2-Tetrachloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	1.9	ND(1.0)
1,1-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	4.2	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.1	ND(1.0)
1,2-Dichloropropane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Hexanone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	14.4	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromoform	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Bromomethane (Methyl Bromide)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon disulfide	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon tetrachloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chlorobenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroform (Trichloromethane)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.1	ND(1.0)
cis-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibromochloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-202*	*MW-202*	*MW-203*	*MW-204*	*MW-205*	*MW-206*	*MW-207*	*MW-209*	*MW-219*	*MW-220*	*MW-223*	*MW-224*
Sample Name	*WG-6029-042209-029*	*WG-6029-042209-031*	*WG-6029-042309-041*	*WG-6029-042209-032*	*WG-6029-042209-028*	*WG-6029-042309-057*	*WG-6029-042409-065*	*WG-6029-042009-002*	*WG-6029-042309-056*	*WG-6029-042109-020*	*WG-6029-042309-048*	*WG-6029-042409-064*
Sample Date	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/23/2009*	*4/24/2009*
		Duplicate										
Volatile Organic Compounds (cont'd)												
Methylene chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Styrene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.35 J	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
General Chemistry												
Cyanide (total)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-301*	*MW-302*	*MW-303*	*MW-304*	*MW-305*	*MW-306*	*MW-307*	*MW-307*	*MW-309*	*MW-319*	*MW-320*	*MW-321*
Sample Name	*WG-6029-042109-019*	*WG-6029-042209-033*	*WG-6029-042309-046*	*WG-6029-042209-030*	*WG-6029-042209-034*	*WG-6029-042309-061*	*WG-6029-042409-050*	*WG-6029-042409-052*	*WG-6029-042009-005*	*WG-6029-042309-054*	*WG-6029-042109-011*	*WG-6029-042409-067*
Sample Date	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/24/2009*
								Duplicate				
Metals												
Aluminum	ND(200)	7490	ND(200)	ND(200)	ND(200)	ND(200)	823	983	ND(200)	309	259	ND(200)
Antimony	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)
Arsenic	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Barium	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Beryllium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Cadmium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Calcium	18500	ND(5000)	28900	52800	330000	6700	7210	7170	12600	10100	ND(5000)	9500
Chromium	ND(10)	15.1	ND(10)	ND(10)	ND(10)	ND(10)	11.6	ND(10)	ND(10)	ND(10)	11.2	ND(10)
Cobalt	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Copper	ND(10)	84.1 J	ND(10)	ND(10)	ND(10)	ND(10)	63.0	61.1	ND(10)	ND(10)	85.5	ND(10)
Iron	740	15700	177	172	11900	111	1340	1050	ND(100)	337	2270	145
Lead	ND(3.0)	5.8	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	3.3	ND(3.0)	ND(3.0)	ND(3.0)	6.0	ND(3.0)
Magnesium	8140	ND(5000)	12500	29500	108000	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)
Manganese	41.1	415	29.5	22.0	1890	ND(15)	28.9	23.3	ND(15)	ND(15)	22.3	ND(15)
Mercury	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Nickel	ND(20)	20.8 J	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Potassium	ND(10000)	ND(10000)	10100	10700	12600	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)
Selenium	ND(10)	ND(10)	ND(10)UJ	ND(10)	ND(10)	ND(10)UJ	ND(10)	ND(10)	ND(10)	ND(10)UJ	ND(10)	ND(10)
Silver	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Sodium	763000	318000	769000	664000	296000	565000	626000	629000	900000	562000	365000	647000
Thallium	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Vanadium	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Zinc	ND(20)	39.1	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
PCBs												
Aroclor-1016 (PCB-1016)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1221 (PCB-1221)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1232 (PCB-1232)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1242 (PCB-1242)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1248 (PCB-1248)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1254 (PCB-1254)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Aroclor-1260 (PCB-1260)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.51)
Pesticides												
4,4'-DDD	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDE	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDT	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Aldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
beta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
delta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Dieldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan I	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan II	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan sulfate	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin aldehyde	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin ketone	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-301*	*MW-302*	*MW-303*	*MW-304*	*MW-305*	*MW-306*	*MW-307*	*MW-307*	*MW-309*	*MW-319*	*MW-320*	*MW-321*
Sample Name	*WG-6029-042109-019*	*WG-6029-042209-033*	*WG-6029-042309-046*	*WG-6029-042209-030*	*WG-6029-042209-034*	*WG-6029-042309-061*	*WG-6029-042409-050*	*WG-6029-042409-052*	*WG-6029-042009-005*	*WG-6029-042309-054*	*WG-6029-042109-011*	*WG-6029-042409-067*
Sample Date	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/24/2009*
								Duplicate				
Pesticides (cont'd)												
gamma-BHC (Lindane)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
gamma-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor epoxide	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Methoxychlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Toxaphene	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.27)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.26)
Semi-Volatile Organic Compounds												
1,2,4-Trichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,3-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,4-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,4,5-Trichlorophenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4,6-Trichlorophenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dichlorophenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dimethylphenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dinitrophenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
2,4-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,6-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Chloronaphthalene	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Chlorophenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Methylnaphthalene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Nitroaniline	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Nitrophenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3&4-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
3,3'-Dichlorobenzidine	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3-Nitroaniline	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4,6-Dinitro-2-methylphenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
4-Bromophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Chloro-3-methylphenol	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chloroaniline	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chlorophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Nitroaniline	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Nitrophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Acenaphthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Acenaphthylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(b)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(g,h,i)perylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(k)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Chloroethoxy)methane	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Chloroethyl)ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Ethylhexyl)phthalate	ND(2.0)	ND(2.0)	ND(2.0)	1.4 J	ND(2.0)	1.3 J	1.8 J	2.9	1.6 J	ND(2.0)	ND(2.0)	2.6
Butyl benzylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbazole	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chrysene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-301*	*MW-302*	*MW-303*	*MW-304*	*MW-305*	*MW-306*	*MW-307*	*MW-307*	*MW-309*	*MW-319*	*MW-320*	*MW-321*
Sample Name	*WG-6029-042109-019*	*WG-6029-042209-033*	*WG-6029-042309-046*	*WG-6029-042209-030*	*WG-6029-042209-034*	*WG-6029-042309-061*	*WG-6029-042409-050*	*WG-6029-042409-052*	*WG-6029-042009-005*	*WG-6029-042309-054*	*WG-6029-042109-011*	*WG-6029-042409-067*
Sample Date	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/24/2009*
								Duplicate				
Semi-Volatile Organic Compounds (cont'd)												
Dibenz(a,h)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenzofuran	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Diethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Dimethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-octyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Fluorene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Hexachlorobutadiene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorocyclopentadiene	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Hexachloroethane	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Indeno(1,2,3-cd)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Isophorone	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Naphthalene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Nitrobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodi-n-propylamine	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodiphenylamine	ND(5.1)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Pentachlorophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Phenanthrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Phenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Volatile Organic Compounds												
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2,2-Tetrachloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.0
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloropropane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Hexanone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromoform	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Bromomethane (Methyl Bromide)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon disulfide	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon tetrachloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chlorobenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroform (Trichloromethane)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibromochloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-301*	*MW-302*	*MW-303*	*MW-304*	*MW-305*	*MW-306*	*MW-307*	*MW-307*	*MW-309*	*MW-319*	*MW-320*	*MW-321*
Sample Name	*WG-6029-042109-019*	*WG-6029-042209-033*	*WG-6029-042309-046*	*WG-6029-042209-030*	*WG-6029-042209-034*	*WG-6029-042309-061*	*WG-6029-042409-050*	*WG-6029-042409-052*	*WG-6029-042009-005*	*WG-6029-042309-054*	*WG-6029-042109-011*	*WG-6029-042409-067*
Sample Date	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/22/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*	*4/24/2009*	*4/20/2009*	*4/23/2009*	*4/21/2009*	*4/24/2009*
								Duplicate				
Volatile Organic Compounds (cont'd)												
Methylene chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Styrene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
General Chemistry												
Cyanide (total)	ND(0.010)	ND(0.010)	R	ND(0.010)	ND(0.010)	R	ND(0.010)	ND(0.010)	ND(0.010)	R	ND(0.010)	ND(0.010)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-322*	*MW-323*	*MW-324*	*MW-401*	*MW-401*	*MW-402*	*MW-414*	*MW-415*	*MW-421*	*MW-422*	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*WG-6029-042309-047*	*WG-6029-042309-058*	*WG-6029-042409-068*	*WG-6029-042309-059*	*WG-6029-042309-060*	*WG-6029-042009-001*	*WG-6029-042209-036*	*WG-6029-042109-015*	*WG-6029-042209-037*	*WG-6029-042109-021*	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*	*4/23/2009*	*4/20/2009*	*4/22/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/20/2009*	*4/24/2009*
					Duplicate							
Metals												
Aluminum	ND(200)	275	ND(200)	2000	1960	2970	268	ND(200)	527	ND(200)	716 J	-
Antimony	ND(6.0)	ND(6.0)	6.6	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)UJ	-
Arsenic	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)UJ	-
Barium	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	248	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)UJ	-
Beryllium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	-
Cadmium	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)UJ	-
Calcium	159000	ND(5000)	157000	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	6500	5090	85800 J	-
Chromium	ND(10)	10.3	ND(10)	ND(10)	ND(10)	24.1	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)UJ	-
Cobalt	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)UJ	-
Copper	ND(10)	76.3	ND(10)	78.3	55.6	27.8	ND(10)	20.4	ND(10)	ND(10)	ND(10)UJ	-
Iron	285	691	295	4740	5250	27700	3120	1720	3000	8580	1320 J	-
Lead	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	5.0	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)UJ	-
Magnesium	71100	ND(5000)	35400	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	24400 J	-
Manganese	120	15.6	38.4	52.8	54.0	142	28.9	15.1	66.1	90.9	204 J	-
Mercury	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)UJ	-
Nickel	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	44.7	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)UJ	-
Potassium	15400	ND(10000)	13900	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)UJ	-
Selenium	ND(10)UJ	ND(10)UJ	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)UJ	-
Silver	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)UJ	-
Sodium	547000	554000	458000	476000	485000	507000	539000	428000	514000	752000	58000 J	-
Thallium	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)UJ	-
Vanadium	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)UJ	-
Zinc	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	61.5	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)UJ	-
PCBs												
Aroclor-1016 (PCB-1016)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1221 (PCB-1221)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1232 (PCB-1232)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1242 (PCB-1242)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1248 (PCB-1248)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1254 (PCB-1254)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Aroclor-1260 (PCB-1260)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.54)	ND(0.50)	ND(46)
Pesticides												
4,4'-DDD	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
4,4'-DDE	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
4,4'-DDT	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Aldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
alpha-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
alpha-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
beta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
delta-BHC	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Dieldrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endosulfan I	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endosulfan II	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endosulfan sulfate	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endrin	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endrin aldehyde	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Endrin ketone	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-322*	*MW-323*	*MW-324*	*MW-401*	*MW-401*	*MW-402*	*MW-414*	*MW-415*	*MW-421*	*MW-422*	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*WG-6029-042309-047*	*WG-6029-042309-058*	*WG-6029-042409-068*	*WG-6029-042309-059*	*WG-6029-042309-060*	*WG-6029-042009-001*	*WG-6029-042209-036*	*WG-6029-042109-015*	*WG-6029-042209-037*	*WG-6029-042109-021*	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*	*4/23/2009*	*4/20/2009*	*4/22/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/20/2009*	*4/24/2009*
					Duplicate							
Pesticides (cont'd)												
gamma-BHC (Lindane)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
gamma-Chlordane	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Heptachlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Heptachlor epoxide	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Methoxychlor	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.022)	ND(0.020)	ND(1.8)
Toxaphene	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.27)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.27)	ND(0.25)	ND(23)
Semi-Volatile Organic Compounds												
1,2,4-Trichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
1,2-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
1,3-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
1,4-Dichlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
2,4,5-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2,4,6-Trichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2,4-Dichlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2,4-Dimethylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2,4-Dinitrophenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(930)
2,4-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
2,6-Dinitrotoluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
2-Chloronaphthalene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(93)
2-Chlorophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2-Methylnaphthalene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	112
2-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
2-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
2-Nitrophenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
3&4-Methylphenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
3,3'-Dichlorobenzidine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
3-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
4,6-Dinitro-2-methylphenol	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(930)
4-Bromophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
4-Chloro-3-methylphenol	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
4-Chloroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
4-Chlorophenyl phenyl ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
4-Nitroaniline	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
4-Nitrophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(460)
Acenaphthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Acenaphthylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Benzo(a)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Benzo(a)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Benzo(b)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	141
Benzo(g,h,i)perylene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	33.3 J
Benzo(k)fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
bis(2-Chloroethoxy)methane	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
bis(2-Chloroethyl)ether	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
bis(2-Ethylhexyl)phthalate	ND(2.0)	1.6 J	1.9 J	2.5	1.4 J	2.5	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Butyl benzylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Carbazole	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Chrysene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	26.0 J

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-322*	*MW-323*	*MW-324*	*MW-401*	*MW-401*	*MW-402*	*MW-414*	*MW-415*	*MW-421*	*MW-422*	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*WG-6029-042309-047*	*WG-6029-042309-058*	*WG-6029-042409-068*	*WG-6029-042309-059*	*WG-6029-042309-060*	*WG-6029-042009-001*	*WG-6029-042209-036*	*WG-6029-042109-015*	*WG-6029-042209-037*	*WG-6029-042109-021*	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*	*4/23/2009*	*4/20/2009*	*4/22/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/20/2009*	*4/24/2009*
					Duplicate							
Semi-Volatile Organic Compounds (cont'd)												
Dibenz(a,h)anthracene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Dibenzofuran	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	28.6 J
Diethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Dimethyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Di-n-butylphthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Di-n-octyl phthalate	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Fluoranthene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	30.6 J
Fluorene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Hexachlorobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Hexachlorobutadiene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Hexachlorocyclopentadiene	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(930)
Hexachloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
Indeno(1,2,3-cd)pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(46)
Isophorone	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Naphthalene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	71.8
Nitrobenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
N-Nitrosodi-n-propylamine	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
N-Nitrosodiphenylamine	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(230)
Pentachlorophenol	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(460)
Phenanthrene	ND(1.0)	ND(1.0)	0.56 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	99.8
Phenol	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(93)
Pyrene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	38.2 J
Volatile Organic Compounds												
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
1,1,2,2-Tetrachloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
1,1,2-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
1,1-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.2)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.51 J	ND(5.9)
1,2-Dichloropropane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
2-Butanone (Methyl Ethyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(12)
2-Hexanone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.9)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.9)
Acetone	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(12)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.36 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.2)
Bromodichloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Bromoform	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(5.9)
Bromomethane (Methyl Bromide)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.9)
Carbon disulfide	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	1.1 J	ND(2.0)	ND(2.0)	ND(5.9)
Carbon tetrachloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Chlorobenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Chloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Chloroform (Trichloromethane)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Chloromethane (Methyl Chloride)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.51 J	ND(5.9)
cis-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Dibromochloromethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.2)

TABLE B-1

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TCL/TAL RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name	*MW-322*	*MW-323*	*MW-324*	*MW-401*	*MW-401*	*MW-402*	*MW-414*	*MW-415*	*MW-421*	*MW-422*	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*WG-6029-042309-047*	*WG-6029-042309-058*	*WG-6029-042409-068*	*WG-6029-042309-059*	*WG-6029-042309-060*	*WG-6029-042009-001*	*WG-6029-042209-036*	*WG-6029-042109-015*	*WG-6029-042209-037*	*WG-6029-042109-021*	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/23/2009*	*4/23/2009*	*4/24/2009*	*4/23/2009*	*4/23/2009*	*4/20/2009*	*4/22/2009*	*4/21/2009*	*4/22/2009*	*4/21/2009*	*4/20/2009*	*4/24/2009*
					Duplicate							
Volatile Organic Compounds (cont'd)												
Methylene chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.9)
Styrene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.9)
Tetrachloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.2)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
trans-1,3-Dichloropropene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(5.9)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(2.4)
General Chemistry												
Cyanide (total)	R	R	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	-	-

TABLE B-2

SUUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
RINSATE BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*
Sample Name		*RB-6029-042109-012*	*RB-6029-042109-024*	*RB-6029-042209-035*	*RB-6029-042309-044*	*RB-6029-042309-055*	*RB-6029-042409-066*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*
	Units						
Metals							
Aluminum	µg/L	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Antimony	µg/L	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)	ND(6.0)
Arsenic	µg/L	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Barium	µg/L	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)
Beryllium	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Cadmium	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Calcium	µg/L	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)
Chromium	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Cobalt	µg/L	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Copper	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Iron	µg/L	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)
Lead	µg/L	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)	ND(3.0)
Magnesium	µg/L	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)	ND(5000)
Manganese	µg/L	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)	ND(15)
Mercury	µg/L	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
Nickel	µg/L	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Potassium	µg/L	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)
Selenium	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Silver	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Sodium	µg/L	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)
Thallium	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Vanadium	µg/L	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)
Zinc	µg/L	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
PCBs							
Aroclor-1016 (PCB-1016)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1221 (PCB-1221)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1232 (PCB-1232)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1242 (PCB-1242)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1248 (PCB-1248)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1254 (PCB-1254)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
Aroclor-1260 (PCB-1260)	µg/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

TABLE B-2

SUUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
RINSATE BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*
Sample Name		*RB-6029-042109-012*	*RB-6029-042109-024*	*RB-6029-042209-035*	*RB-6029-042309-044*	*RB-6029-042309-055*	*RB-6029-042409-066*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*
	Units						
Pesticides							
4,4'-DDD	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDE	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
4,4'-DDT	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Aldrin	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-BHC	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
alpha-Chlordane	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
beta-BHC	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
delta-BHC	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Dieldrin	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan I	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan II	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endosulfan sulfate	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin aldehyde	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Endrin ketone	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
gamma-BHC (Lindane)	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
gamma-Chlordane	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Heptachlor epoxide	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Methoxychlor	µg/L	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Toxaphene	µg/L	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
Semi-Volatile Organic Compounds							
1,2,4-Trichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,3-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,4-Dichlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,4,5-Trichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4,6-Trichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dichlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dimethylphenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2,4-Dinitrophenol	µg/L	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
2,4-Dinitrotoluene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2,6-Dinitrotoluene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Chloronaphthalene	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)

TABLE B-2

SUUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
RINSATE BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*
Sample Name		*RB-6029-042109-012*	*RB-6029-042109-024*	*RB-6029-042209-035*	*RB-6029-042309-044*	*RB-6029-042309-055*	*RB-6029-042409-066*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*
	Units						
Semi-Volatile Organic Compounds (cont'd)							
2-Chlorophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Methylnaphthalene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Methylphenol	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
2-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Nitrophenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3&4-Methylphenol	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
3,3'-Dichlorobenzidine	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
3-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4,6-Dinitro-2-methylphenol	µg/L	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
4-Bromophenyl phenyl ether	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Chloro-3-methylphenol	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chloroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Chlorophenyl phenyl ether	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
4-Nitroaniline	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Nitrophenol	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Acenaphthene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Acenaphthylene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(a)pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(b)fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(g,h,i)perylene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Benzo(k)fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Chloroethoxy)methane	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Chloroethyl)ether	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Butyl benzylphthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbazole	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chrysene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenz(a,h)anthracene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibenzofuran	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Diethyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Dimethyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-butylphthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Di-n-octyl phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Fluoranthene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Fluorene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-2

SUUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
RINSATE BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*
Sample Name		*RB-6029-042109-012*	*RB-6029-042109-024*	*RB-6029-042209-035*	*RB-6029-042309-044*	*RB-6029-042309-055*	*RB-6029-042409-066*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*
	Units						
Semi-Volatile Organic Compounds (cont'd)							
Hexachlorobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Hexachlorobutadiene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Hexachlorocyclopentadiene	µg/L	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)	ND(20)
Hexachloroethane	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Isophorone	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Naphthalene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Nitrobenzene	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodi-n-propylamine	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
N-Nitrosodiphenylamine	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Pentachlorophenol	µg/L	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)
Phenanthrene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Phenol	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Pyrene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2,2-Tetrachloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloropropane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Hexanone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromoform	µg/L	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)	ND(4.0)
Bromomethane (Methyl Bromide)	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon disulfide	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Carbon tetrachloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chlorobenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

TABLE B-2

SUUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
RINSATE BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*	*Rinse Blank*
Sample Name		*RB-6029-042109-012*	*RB-6029-042109-024*	*RB-6029-042209-035*	*RB-6029-042309-044*	*RB-6029-042309-055*	*RB-6029-042409-066*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/23/2009*	*4/24/2009*
	Units						
Volatile Organic Compounds (cont'd)							
Chloroform (Trichloromethane)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Dibromochloromethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Methylene chloride	µg/L	0.92 J	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Styrene	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
General Chemistry							
Cyanide (total)	mg/L	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)

Notes:
ND ( ) - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
ug/L - Micrograms per liter
mg/L - Milligrams per liter

TABLE B-3

SUMMARY OF MONITORING WELL GROUNDWATER ANALYTICAL DATA
TRIP BLANK RESULTS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
APRIL 2009

Location Name		*Trip Blank*	*Trip Blank*	*Trip Blank*	*Trip Blank*	*Trip Blank*	*Trip Blank*
Sample Name		*TB-6029-042009*	*TB-6029-042109*	*TB-6029-042109-01*	*TB-6029-042209*	*TB-6029-042309*	*TB-6029-042409*
Sample Date		*4/20/2009*	*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/23/2009*	*4/24/2009*
	Units						
Metals							
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2,2-Tetrachloroethane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
1,1,2-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloropropane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
2-Hexanone	µg/L	ND(5.0)	ND(5.0)	-	ND(5.0)	ND(5.0)	ND(5.0)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND(5.0)	ND(5.0)	-	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Bromodichloromethane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Bromoform	µg/L	ND(4.0)	ND(4.0)	-	ND(4.0)	ND(4.0)	ND(4.0)
Bromomethane (Methyl Bromide)	µg/L	ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)	ND(2.0)
Carbon disulfide	µg/L	ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)	ND(2.0)
Carbon tetrachloride	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Chlorobenzene	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Chloroethane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Chloroform (Trichloromethane)	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Dibromochloromethane	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Methylene chloride	µg/L	ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)	ND(2.0)
Styrene	µg/L	ND(5.0)	ND(5.0)	-	ND(5.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,3-Dichloropropene	µg/L	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

Notes:
ND ( ) - Not present at or above the associated value.
J - Estimated concentration.
UJ - Estimated reporting limit.
R - Rejected.
ug/L - Micrograms per liter

ATTACHMENT C

DATA VALIDATION MEMO

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
www.CRAworld.com

MEMORANDUM

TO: Steve Whillier

REF. NO.: 006029-50

FROM: Nancy Bergstrom/ko/35 NMB

DATE: June 11, 2009

C.C.: Steve Day
Eric Mannlein

RE: **Data Quality Assessment and Validation**
April 2009 Sampling Event
Summit National Superfund Site
Deerfield Township, Portage County, Ohio

The following summarizes the results of the data quality assessment and validation conducted for the samples collected during April 2009 at the Summit National Superfund Site in Deerfield Township, Portage County, Ohio (Site). The samples identified in Table 1 were selectively analyzed for Site-specific indicator parameter list (SSIPL) and target compound list (TCL) volatile organic compounds (VOCs), SSIPL and TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), target analyte list (TAL) metals, and total cyanide by Accutest Laboratories, Inc. of Dayton, New Jersey. The methods of analysis are presented in Table 2. The data quality evaluation criteria were established by the Site-specific quality assurance project plan (QAPP).[1]

Sample Receipt and Holding Time Period Compliance

The laboratory was requested to analyze surface water sample SW-6029-042009-008 for TAL metals after the sampling event was completed. The surface water sample is not required to be analyzed for TAL metals, and the required chemical preservative was not added to the sample immediately after collection, as required by the method. Consequently, the TAL metals results reported for sample SW-6029-042009-008 were qualified as estimated. All remaining samples were received by the laboratory intact, properly preserved, within the proper temperature range, and with the required chain-of-custody documentation.

Sample WG-6029-042209-028 was re-extracted for SVOC analysis after the holding time period had expired. The sample was re-extracted because the laboratory suspected the sample had been contaminated during the original extraction. Therefore, the SVOC results reported for this sample were qualified as estimated for holding time period compliance violation. All remaining samples were prepared and analyzed within the holding time periods specified in the QAPP.

[1]Application of data quality evaluation criteria was consistent with the relevant criteria in "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999 and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013, February 1994.

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Method Blank Sample Data

Method blank sample data were evaluated to verify that analytes detected in investigative samples were not attributable to laboratory conditions or procedures. One SVOC method blank sample contained bis(2-ethylhexyl)phthalate, but this compound was not detected in the associated investigative samples. Data qualification is not required in this instance. Target analytes were not detected in the remaining method blank samples.

Surrogate Compounds Data – Organics

Method performance on individual samples was evaluated by the percent recovery data from surrogate compounds spiked into each sample prior to preparation and analysis. The percent recoveries reported for the surrogate compounds associated with the analysis of certain samples for VOCs, pesticides, and PCBs were greater than their respective upper control limits. The affected samples did not contain target analytes associated with these parameters, and data qualification was not required. The surrogate compounds percent recovery data reported for the organic analyses of the remaining samples were acceptable.

Blank Spike Sample Analyses

Analytical accuracy was evaluated by the percent recovery data from blank spike sample analyses. The blank spike percent recovery data were acceptable for all analytes.

Matrix Spike/Laboratory Duplicate Sample Analyses – Total Cyanide

Accuracy and precision of the total cyanide data relative to the sample matrices were evaluated by percent recovery and relative percent difference (RPD) data from matrix spike/laboratory duplicate (MS/Dup) sample analyses. The total cyanide percent recovery data reported for two MS/Dup samples failed to achieve the acceptance the criteria. The qualified associated investigative sample data are presented in Table 3. The remaining percent recovery and RPD data were acceptable for all project-related MS/Dup samples.

Matrix Spike/Matrix Spike Duplicate Sample Analyses – Organics, TAL Metals

Accuracy and precision of the organics and TAL metals data relative to the sample matrices were evaluated by percent recovery and RPD data from matrix spike/matrix spike duplicate (MS/MSD) sample analyses. The hexachlorocyclopentadiene and selenium percent recovery data reported for two MS/MSD samples failed to achieve the acceptance the criteria. The qualified associated investigative sample data are presented in Table 4. The remaining percent recovery and RPD data were acceptable for all project-related MS/MSD samples or investigative samples associated with outlying MS/MSD data did not require qualification.

Serial Dilution Sample Data – Metals Analyses

Serial dilution sample data for metals analyzed by inductively coupled plasma (ICP) spectroscopy were evaluated to determine the presence of significant physical or chemical interferences attributable to the sample matrix. The percent difference between a sample result and the result from a serial dilution of the sample was required to be within 10 percent. Table 5 presents investigative sample data qualified for

violation of ICP serial dilution percent difference acceptance criteria. The remaining ICP serial dilution sample data were acceptable.

Sample Quantitation

VOC and SVOC results reported at concentrations less than their sample-specific reporting limits but greater than or equal to their respective method detection limits were flagged by the laboratory with the "J" qualifier. Results flagged as such are estimated concentrations, and the data validation "J" qualifier was applied to these results during the data validation process.

Field Quality Assurance/Quality Control

Field quality assurance measures included the analysis of equipment rinse blank, field duplicate, and trip blank samples.

The effectiveness of the field decontamination procedure was evaluated by the data from the analysis of equipment rinsate blank samples. Methylene chloride was detected in one equipment rinse blank, but not the associated investigative samples. Data qualification is not required in this instance. Target analytes were not detected in the remaining equipment rinse blank samples, indicating the decontamination procedure was effective.

Overall precision of the sampling and analysis event was evaluated by the data from the analyses of field duplicate samples that were submitted blindly to the laboratory. Table 6 summarizes the results of, and RPDs calculated for, analytes detected in the investigative and field duplicate samples. With the exception of the iron results for duplicate samples WG-6029-042209-029/WG-6029-042209-031, which exhibited excessive variability and were qualified as estimated, the RPD data indicate overall precision was acceptable.

A trip blank sample was included in each shipping cooler containing investigative aqueous samples being submitted for VOC analysis to monitor for sample cross-contamination by VOCs during sample shipping and storage. VOCs were not detected in the trip blank samples.

Completeness

The objective for completeness, which is defined in the QAPP as the total number of usable sample results versus the total possible number of sample results, was required to be at least 95%. With the exception of six total cyanide results and one hexachlorocyclopentadiene result, all investigative sample results were usable. Completeness was calculated to be 99.91%, which achieves the completeness objective.

Overall Assessment

Violation of MS/Dup percent recovery acceptance criteria resulted in the rejection of the total cyanide results reported for six investigative samples and violation of MS/MSD percent recovery acceptance criteria resulted in the rejection of the hexachlorocyclopentadiene result reported for one investigative sample. All remaining data were determined to be suitable for their intended purpose with the qualifications presented herein.

TABLE 1

SAMPLE IDENTIFICATION AND LOCATION SUMMARY
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Sample ID	*Location*
WG-6029-042009-001	MW-402
WG-6029-042009-002	MW-209
WG-6029-042009-003	MW-118
WG-6029-042009-004	MW-109
WG-6029-042009-005	MW-309
WG-6029-042009-006	MW-113
WG-6029-042009-007	MW-110
SW-6029-042009-008	Surface Water - South & East Ditches
TB-6029-042009	Trip Blank
WG-6029-042109-009	MW-103
WG-6029-042109-010	MW-116
WG-6029-042109-011	MW-320
RB-6029-042109-012	Equipment Rinse Blank
WG-6029-042109-013	MW-115
WG-6029-042109-014	MW-114
WG-6029-042109-015	MW-415
WG-6029-042109-016	MW-201
WG-6029-042109-017	MW-115 (Duplicate)
WG-6029-042109-018	MW-101
WG-6029-042109-019	MW-301
WG-6029-042109-020	MW-220
WG-6029-042109-021	MW-422
WG-6029-042109-022	MW-4
WG-6029-042109-023	MW-201 (Duplicate)
RB-6029-042109-024	Equipment Rinse Blank
WG-6029-042109-025	MW-117
RW-6029-042109-026	CARVER
RW-6029-042109-027	CARVER (Duplicate)
TB-6029-042109	Trip Blank
TB-6029-042109-01	Trip Blank
WG-6029-042209-028	MW-205
WG-6029-042209-029	MW-202
WG-6029-042209-030	MW-304
WG-6029-042209-031	MW-202 (Duplicate)
WG-6029-042209-032	MW-204
WG-6029-042209-033	MW-302
WG-6029-042209-034	MW-305
RB-6029-042209-035	Equipment Rinse Blank

TABLE 1

SAMPLE IDENTIFICATION AND LOCATION SUMMARY
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Sample ID	*Location*
WG-6029-042209-036	MW-414
WG-6029-042209-037	MW-421
WG-6029-042209-038	MW-102
RW-6029-042209-039	OYSTER
RW-6029-042209-040	DULEY
TB-6029-042209	Trip Blank
WG-6029-042309-041	MW-203
WG-6029-042309-042	MW-105
WG-6029-042309-043	MW-106 (Duplicate)
RB-6029-042309-044	Equipment Rinse Blank
WG-6029-042309-045	MW-104
WG-6029-042309-046	MW-303
WG-6029-042309-047	MW-322
WG-6029-042309-048	MW-223
WG-6029-042309-049	MW-106
WG-6029-042409-050	MW-307
WG-6029-042309-051	MW-11
WG-6029-042409-052	MW-307 (Duplicate)
WG-6029-042309-053	MW-111
WG-6029-042309-054	MW-319
RB-6029-042309-055	Equipment Rinse Blank
WG-6029-042309-056	MW-219
WG-6029-042309-057	MW-206
WG-6029-042309-058	MW-323
WG-6029-042309-059	MW-401
WG-6029-042309-060	MW-401 (Duplicate)
WG-6029-042309-061	MW-306
WG-6029-042309-062	MW-108
WG-6029-042409-063	MW-107
WG-6029-042409-064	MW-224
WG-6029-042409-065	MW-207
RB-6029-042409-066	Equipment Rinse Blank
WG-6029-042409-067	MW-321
WG-6029-042409-068	MW-324
SE-6029-042409-069	Sediment South & East Ditches
TB-6029-042309	Trip Blank
TB-6029-042409	Trip Blank

TABLE 2

SUMMARY OF ANALYTICAL METHODS
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Parameter	*Analytical Method* [1]
Volatile Organic Compounds (VOCs)	SW-846 8260B
Semivolatile Organic Compounds (SVOCs)	SW-846 8270C
Pesticides	SW-846 8081A
Polychlorinated biphenyls (PCBs)	SW-846 8082
TAL Metals	SW-846 6010B/7470A
Total Cyanide	EPA 335.4

[1] Method references:
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW-846, 3rd Edition with Updates I through IIIB.
EPA - "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, March 1983 and revisions.

TABLE 3

SUMMARY OF SAMPLE DATA QUALIFIED FOR VIOLATION OF MATRIX SPIKE/LABORATORY DUPLICATE ACCEPTANCE CRITERIA APRIL 2009 SAMPLING EVENT SUMMIT NATIONAL SUPERFUND SITE DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Associated Samples*	*Qualifier* [1]
Cyanide (total)	WG-6029-042309-046	R
	WG-6029-042309-047	R
	WG-6029-042309-054	R
	WG-6029-042309-058	R
	WG-6029-042309-061	R
	WG-6029-042409-063	R

[1] The sample results are qualified as:
R - The data are unusable.

TABLE 4

SUMMARY OF SAMPLE DATA QUALIFIED FOR VIOLATION OF MATRIX SPIKE/MATRIX SPIKE DUPLICATE ACCEPTANCE CRITERIA APRIL 2009 SAMPLING EVENT SUMMIT NATIONAL SUPERFUND SITE DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Associated Samples*	*Qualifier* [1]
Hexachlorocyclopentadiene	WG-6029-042409-063	R
Selenium	WG-6029-042309-046	UJ
Selenium	WG-6029-042309-047	UJ
Selenium	WG-6029-042309-054	UJ
Selenium	WG-6029-042309-058	UJ
Selenium	WG-6029-042309-061	UJ

[1] The sample results are qualified as:
R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

TABLE 5

SUMMARY OF SAMPLE DATA QUALIFIED FOR VIOLATION OF ICP SERIAL DILUTION ACCEPTANCE CRITERIA APRIL 2009 SAMPLING EVENT SUMMIT NATIONAL SUPERFUND SITE DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Associated Samples*	*Qualifier* [1]
Copper	WG-6029-042209-031	J
	WG-6029-042209-033	J
	WG-6029-042209-038	J
Manganese	WG-6029-042109-016	J
	WG-6029-042109-023	J
Nickel	WG-6029-042209-028	J
	WG-6029-042209-033	J
	WG-6029-042209-038	J

[1] The sample results are qualified as:
J - The associated value is an estimated quantity.

TABLE 6

SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLES
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Investigative Sample WG-6029-042109-013*	*Duplicate Sample WG-6029-042109-017*	*RPD* [1]
1,1-Dichloroethane	2.5	1.8	33
cis-1,2-Dichloroethene	8.7	5.6	43
1,2-Dichloroethene (total)	8.7	5.6	43
bis(2-Ethylhexyl)phthalate	2.5	2.0	22
Calcium	326,000	328,000	0.6
Iron	14,300	14,500	1.4
Magnesium	84,700	84,600	0.1
Manganese	3,850	3,840	0.3
Sodium	67,000	66,400	0.9

Analyte	*Investigative Sample WG-6029-042109-016*	*Duplicate Sample WG-6029-042109-023*	*RPD*
bis(2-Ethylhexyl)phthalate	ND (2.0)[2]	1.2 J[3]	NC[4]
Calcium	94,500	94,800	0.3
Iron	2,340	2,070	12
Magnesium	44,500	44,600	0.2
Manganese	101	102	1.0
Potassium	13,300	13,200	0.8
Sodium	851,000	839,000	1.4

Analyte	*Investigative Sample WG-6029-042209-029*	*Duplicate Sample WG-6029-042209-031*	*RPD*
Aluminum	ND (200)	267	NC
Calcium	13,100	12,400	5.5
Chromium	ND (10.0)	19.4	NC
Copper	ND (10.0)	60.3	NC
Iron	372	1,210	110
Magnesium	7,240	6,760	6.9
Manganese	16.9	24.2	36
Sodium	587,000	540,000	8.3

TABLE 6

SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLES
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Investigative Sample WG-6029-042309-049*	*Duplicate Sample WG-6029-042309-043*	
1,1,1-Trichloroethane	4.2	4.2	0
1,1-Dichloroethane	2.3	2.2	4.4
1,2-Dichloroethane	1.6	1.5	6.5
bis(2-Ethylhexyl)phthalate	ND (2.0)	2.1	NC
Arsenic	4.3	5.1	17
Cadmium	1.1	1.3	17
Calcium	338,000	347,000	2.6
Iron	153,000	159,000	3.8
Lead	ND (3.0)	5.1	NC
Magnesium	129,000	133,000	3.1
Manganese	6,160	6,350	3.0
Nickel	29.3	30.2	3.0
Potassium	ND (10,000)	10,100	NC
Sodium	46,500	47,300	1.7
Zinc	30.6	30.1	1.6

Analyte	*Investigative Sample WG-6029-042409-050*	*Duplicate Sample WG-6029-042409-052*	*RPD*
Aluminum	823	983	18
Calcium	7,210	7,170	0.6
Chromium	11.6	ND (10.0)	NC
Copper	63.0	61.1	3.1
Iron	1,340	1,050	24
Lead	3.3	ND (3.0)	NC
Manganese	28.9	23.3	21
Sodium	626,000	629,000	0.5
bis(2-Ethylhexyl)phthalate	1.8 J	2.9	47

TABLE 6

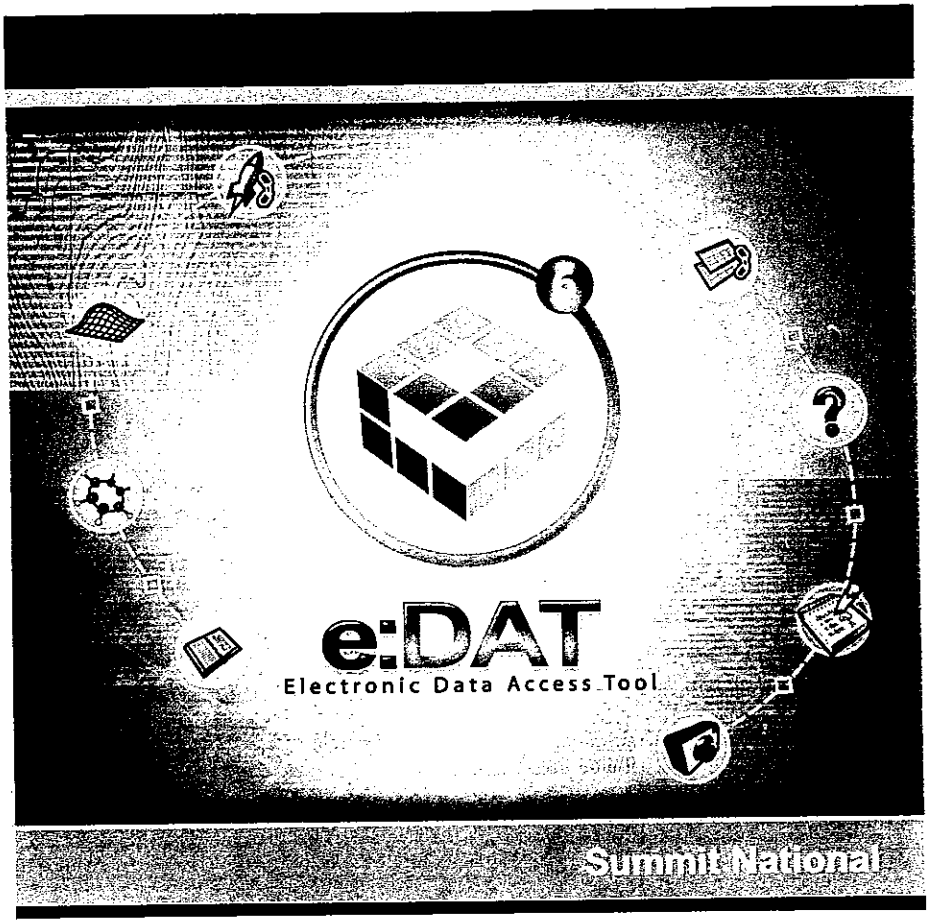
SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLES
APRIL 2009 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Investigative Sample WG-6029-042309-059*	*Duplicate Sample WG-6029-042309-060*	*RPD*
Aluminum	2,000	1,960	2.0
Copper	78.3	55.6	34
Iron	4,740	5,250	10
Manganese	52.8	54.0	2.2
Sodium	476,000	485,000	1.9
bis(2-Ethylhexyl)phthalate	2.5	1.4 J	56

[1] RPD - Relative Percent Difference
[2] ND ( ) - Not detected at associated value
[3] J - Estimated concentration
[4] NC - Not Calculable

ATTACHMENT D

eDATA AND TRENDS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Electronic Data Access Tool
Summit National

e:DAT 6.3
Electronic Data Access
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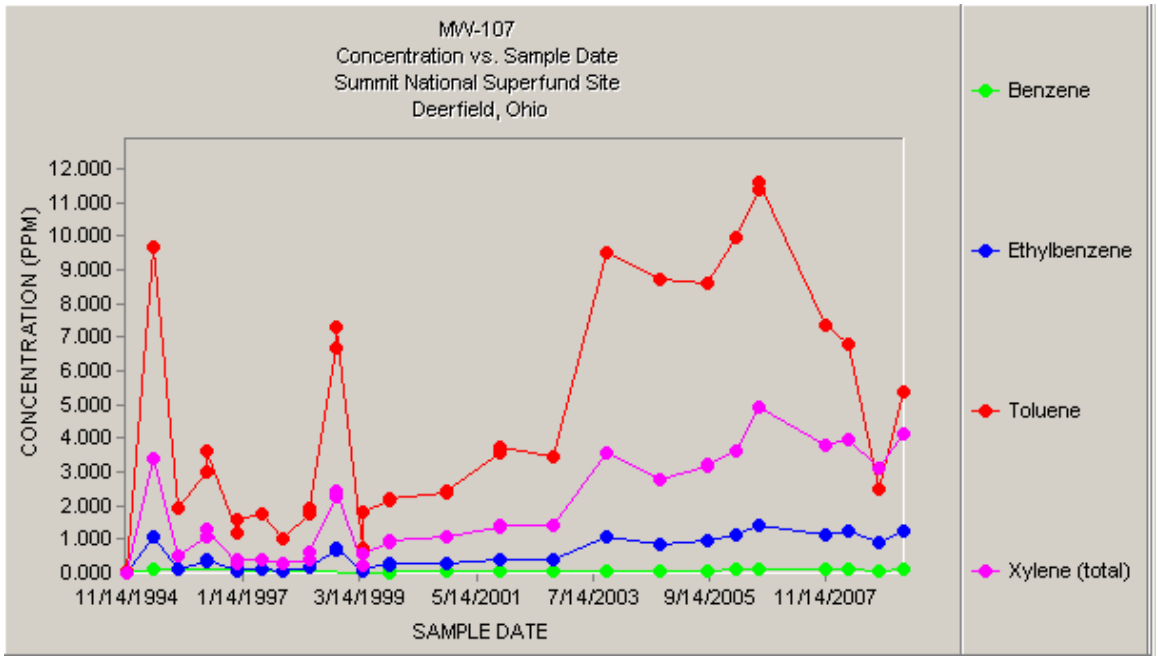
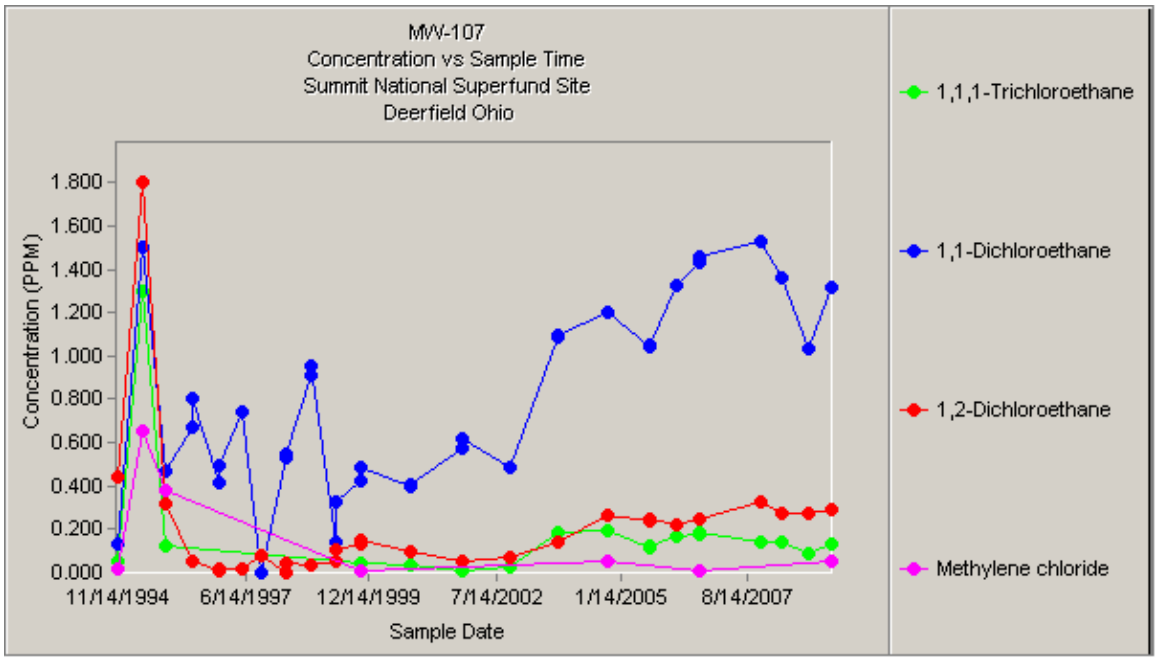
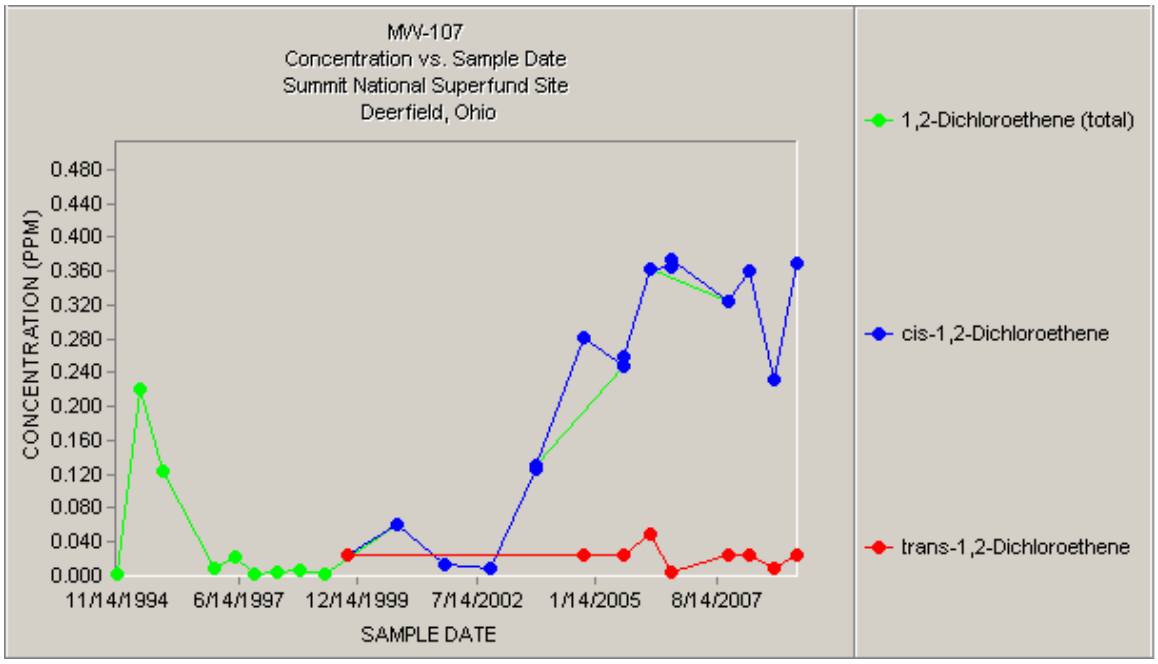
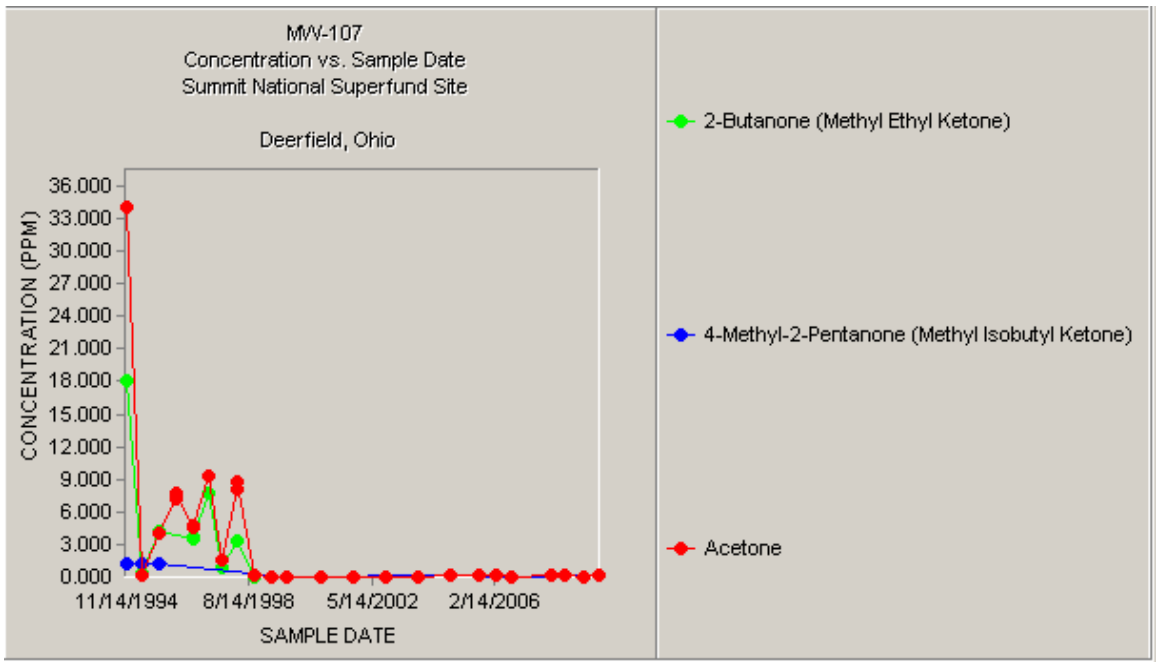
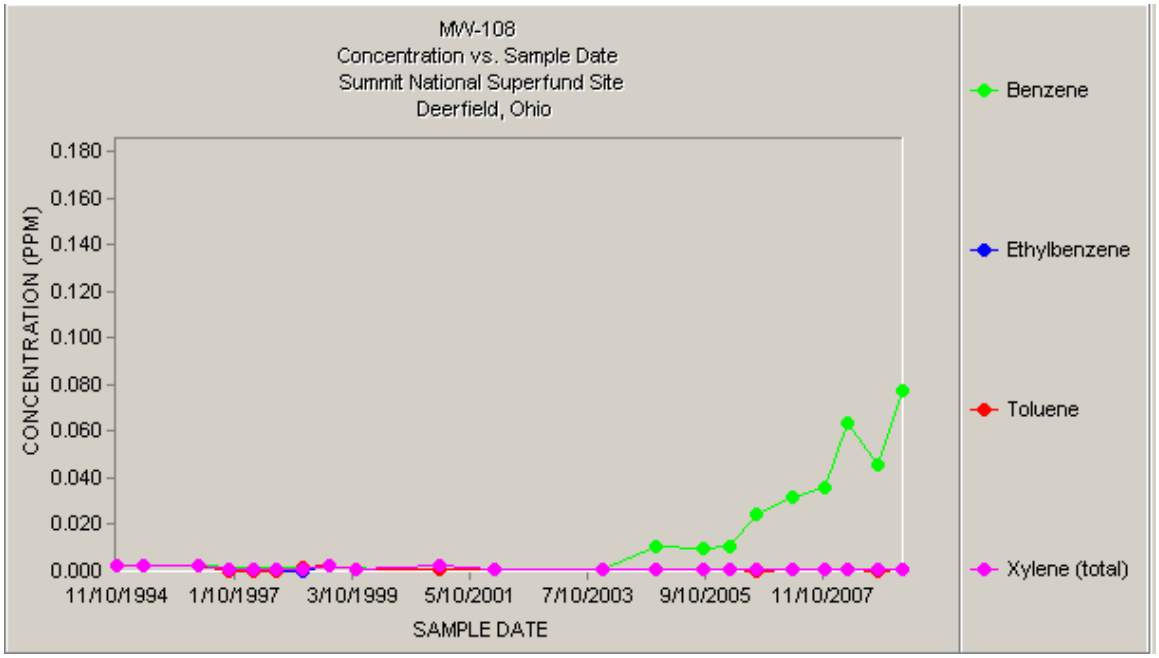
To Install: Insert CD into CD-ROM drive Double-click the "setup.exe" file in the Setup directory
2009081901-OT
Summit National
Client
Summit National
Project Manager
Steve Whillier
Project Number
06029
Date
August 19, 2009
IT Contact
Scott Bruce

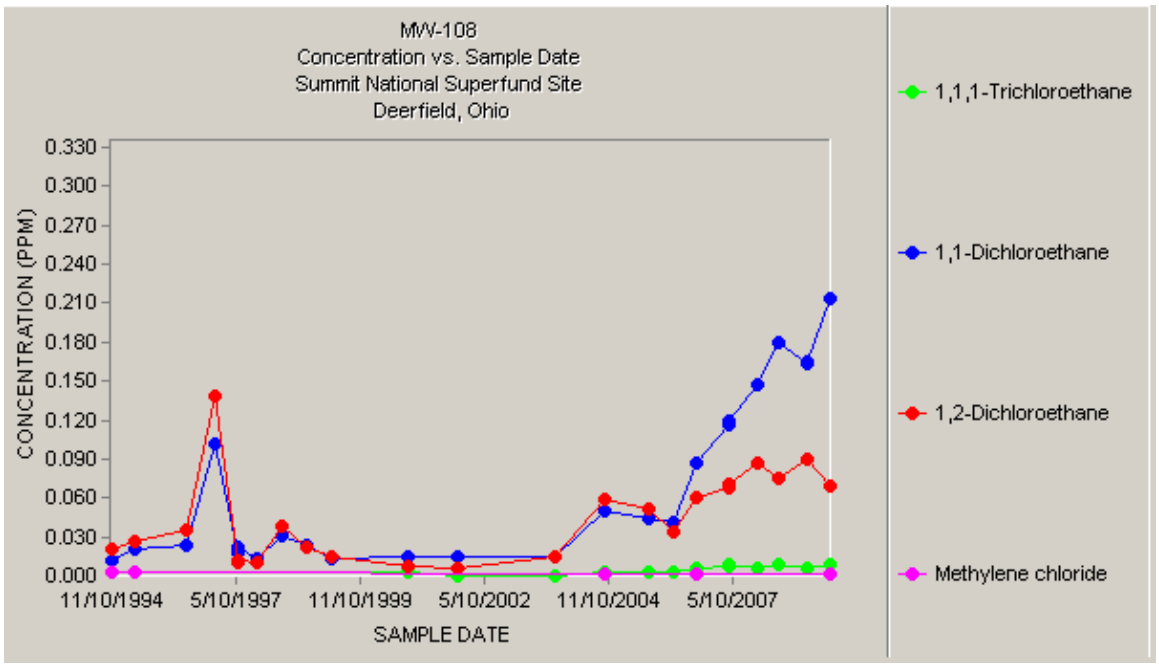

MW-107
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
12.000
11.000
10.000
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
11/14/1994
1/14/1997
3/14/1999
5/14/2001
7/14/2003
9/14/2005
11/14/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

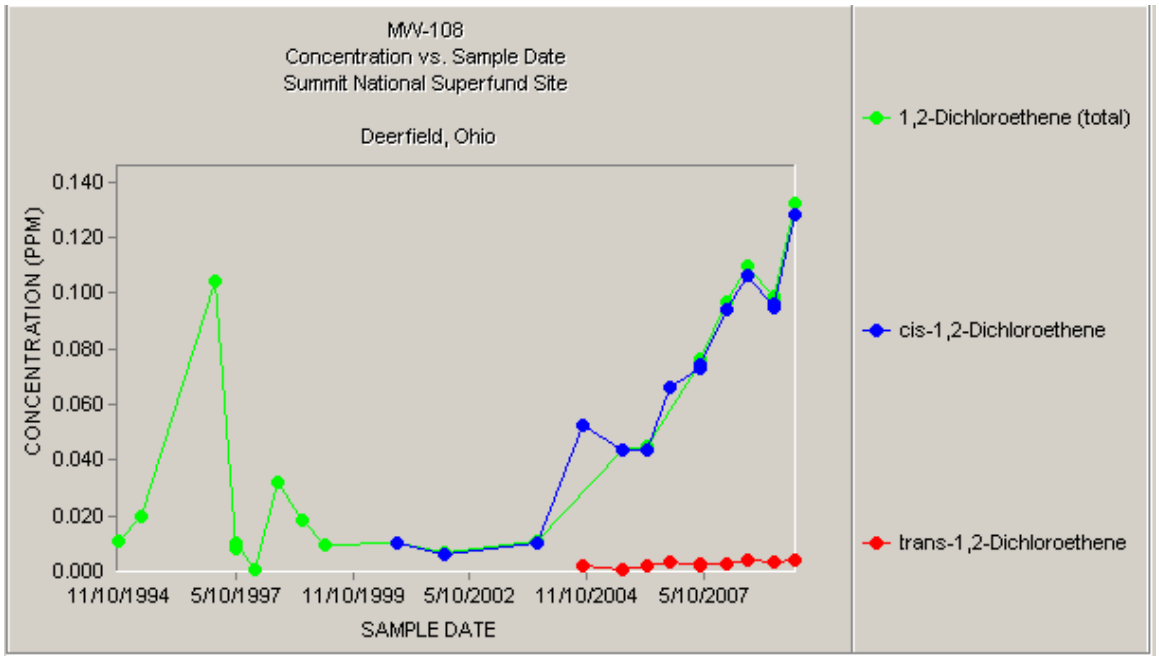

MW-107
Concentration vs Sample Time
Summit National Superfund Site
Deerfield Ohio
Concentration (PPM)
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
11/14/1994
6/14/1997
12/14/1999
7/14/2002
1/14/2005
8/14/2007
Sample Date
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

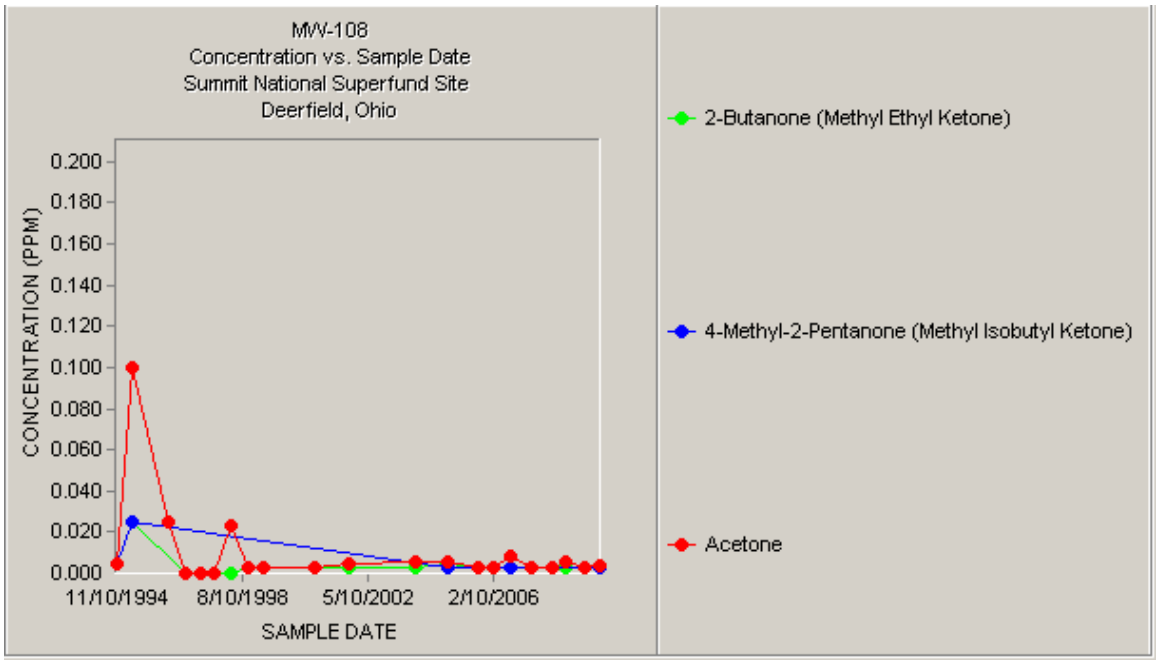

MW-107
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.480
0.440
0.400
0.360
0.320
0.280
0.240
0.200
0.160
0.120
0.080
0.040
0.000
11/14/1994
6/14/1997
12/14/1999
7/14/2002
1/14/2005
8/14/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene

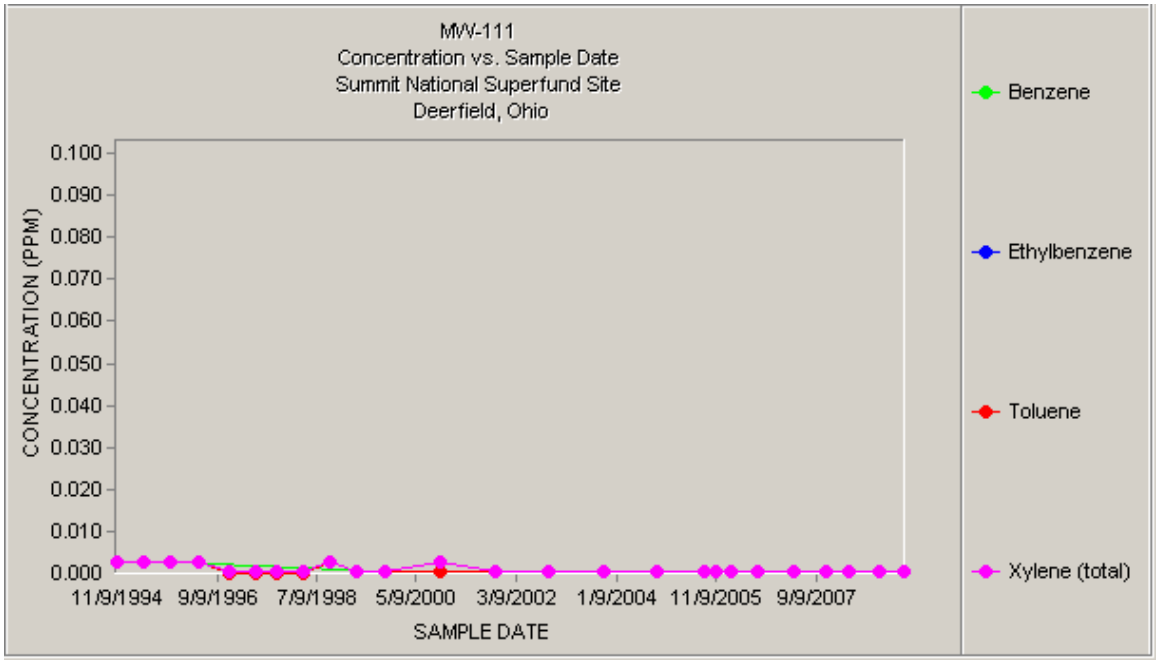

MW-107
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
36.000
33.000
30.000
27.000
24.000
21.000
18.000
15.000
12.000
9.000
6.000
3.000
0.000
11/14/1994
8/14/1998
5/14/2002
2/14/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone

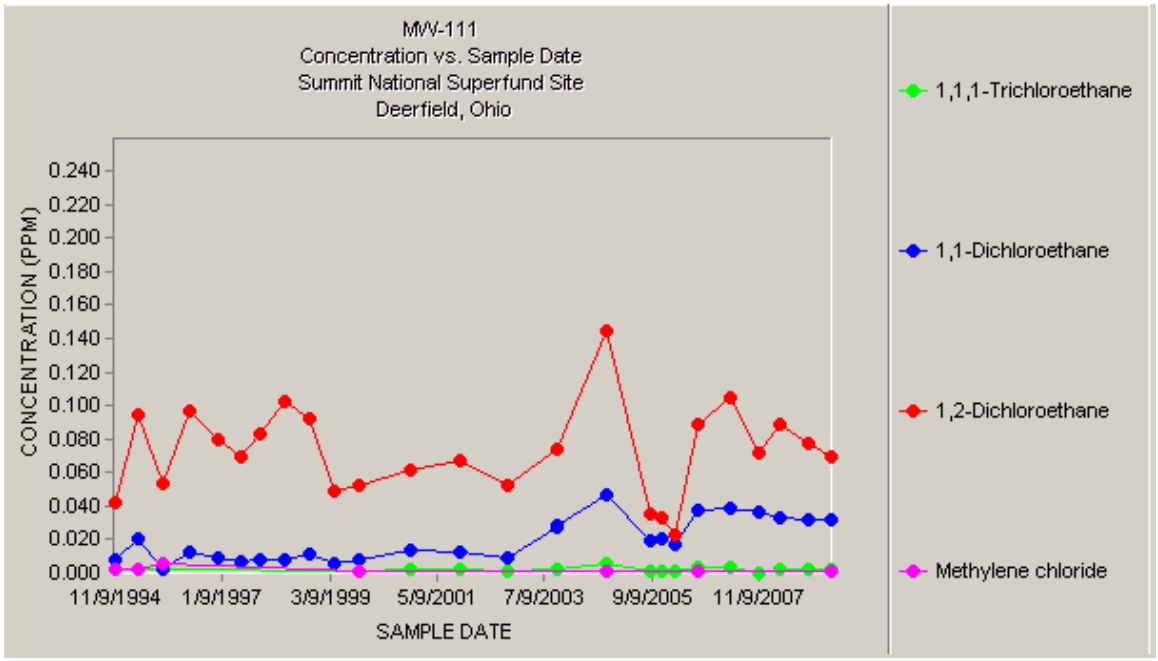

MW-108
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.180
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/10/1994
1/10/1997
3/10/1999
5/10/2001
7/10/2003
9/10/2005
11/10/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

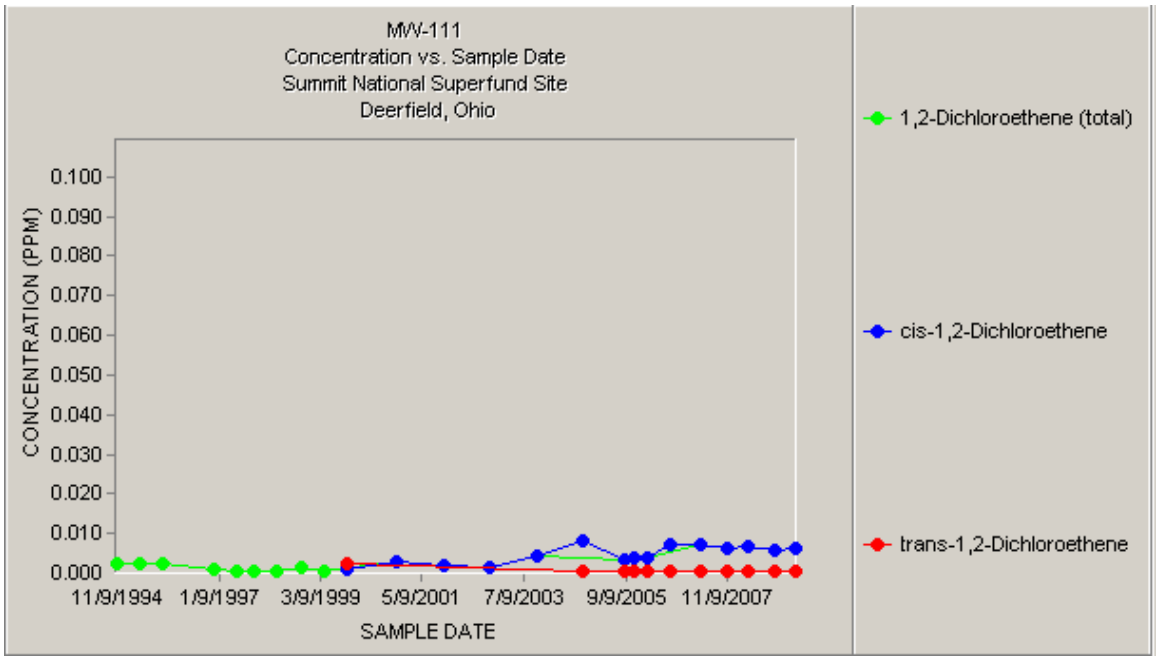

MW-108
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.330
0.300
0.270
0.240
0.210
0.180
0.150
0.120
0.090
0.060
0.030
0.000
11/10/1994
5/10/1997
11/10/1999
5/10/2002
11/10/2004
5/10/2007
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

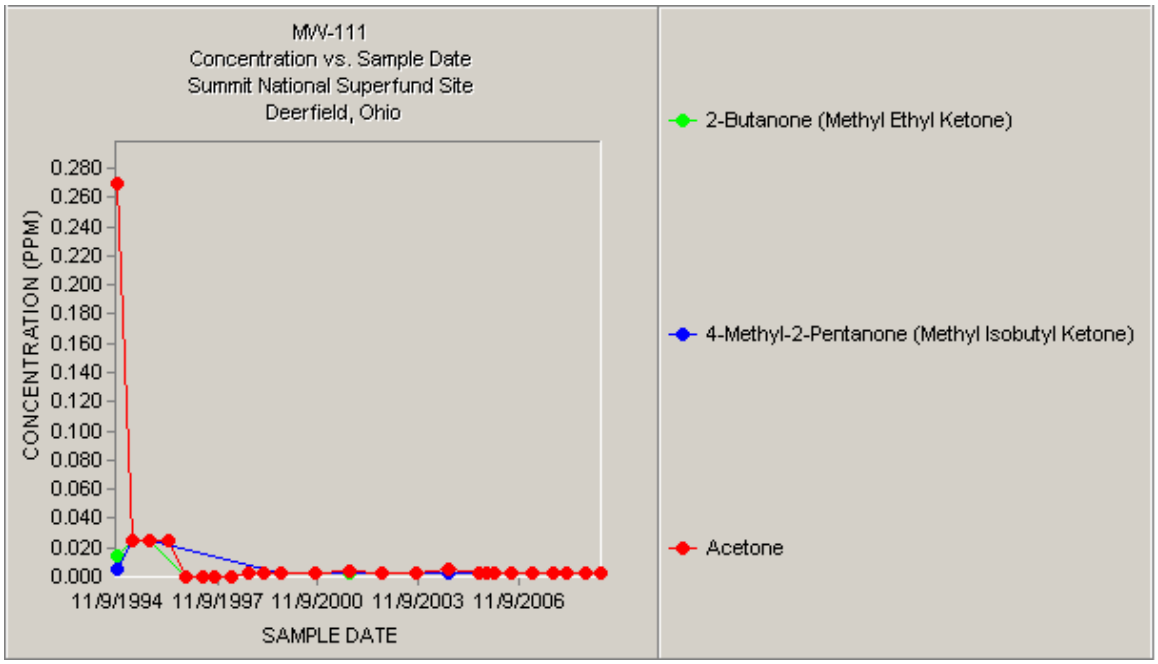

MW-108
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/10/1994
5/10/1997
11/10/1999
5/10/2002
11/10/2004
5/10/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene

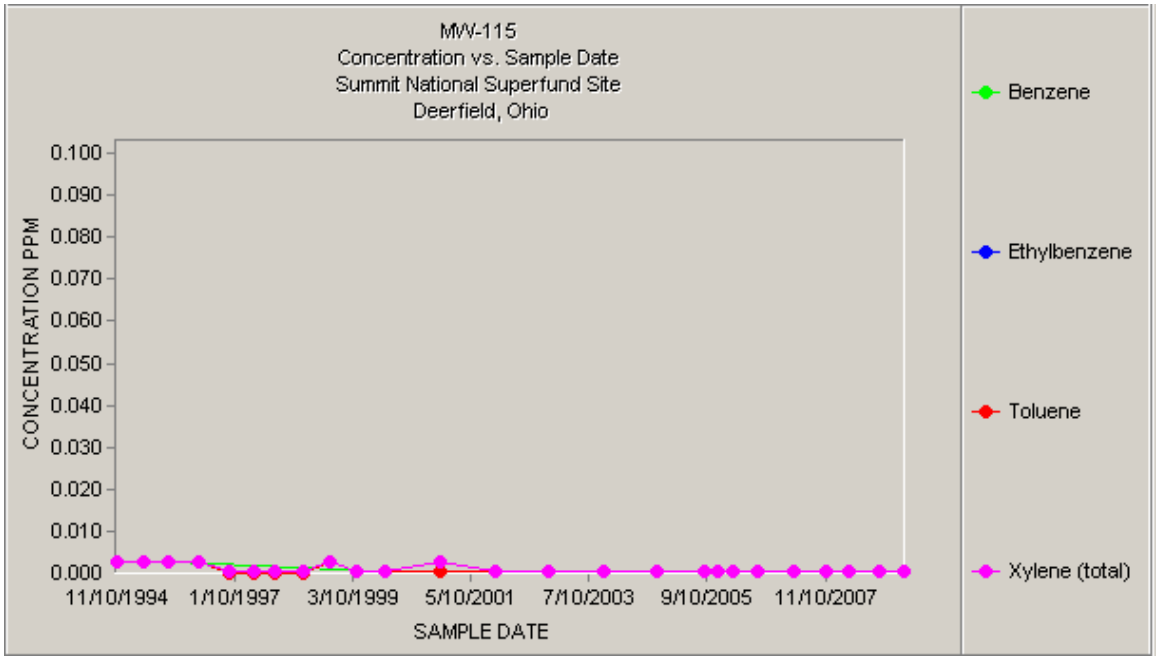

MW-108
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.200
0.180
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/10/1994
8/10/1998
5/10/2002
2/10/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone

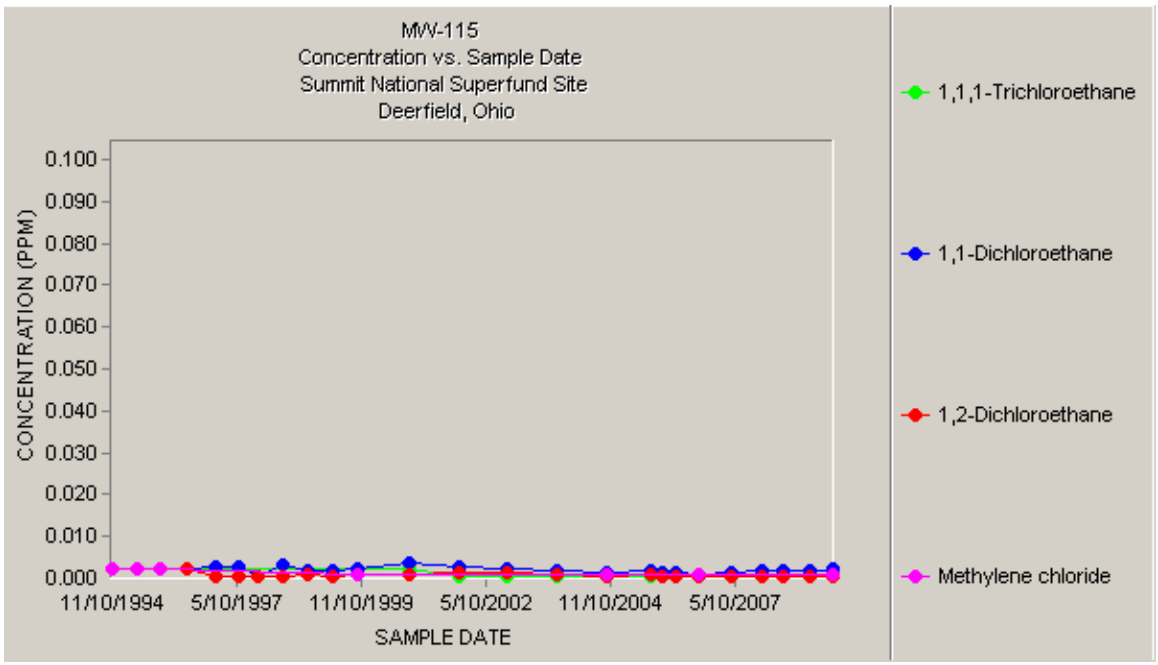

MW-111
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/9/1994
9/9/1996
7/9/1998
5/9/2000
3/9/2002
1/9/2004
11/9/2005
9/9/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

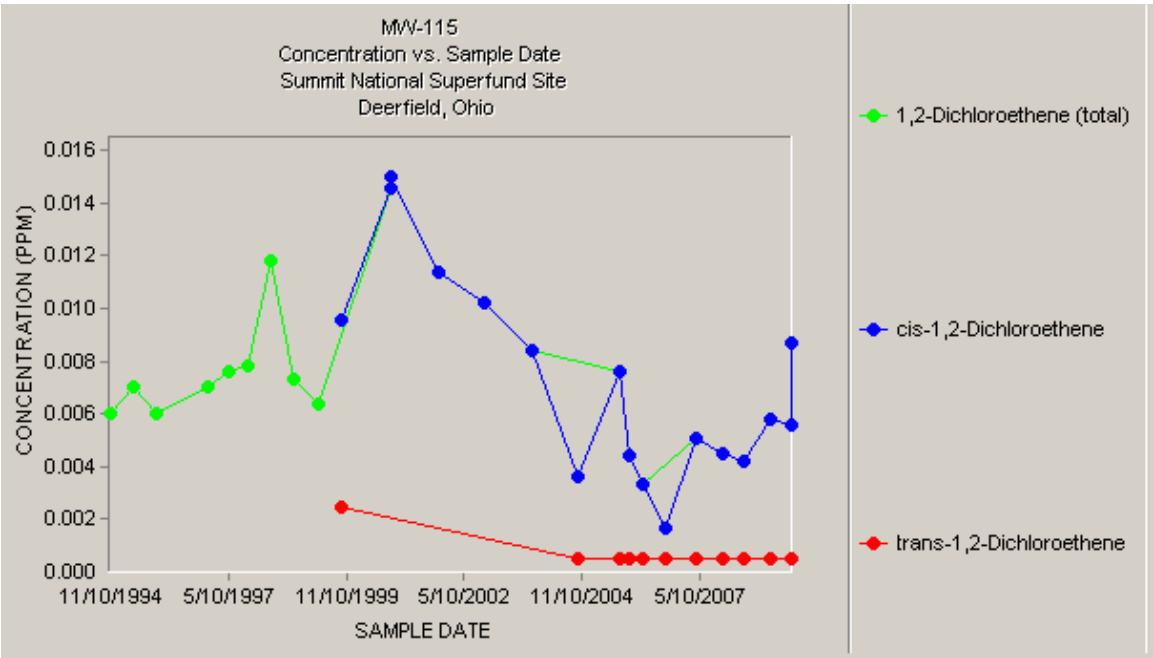

MW-111
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.240
0.220
0.200
0.180
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/9/1994
1/9/1997
3/9/1999
5/9/2001
7/9/2003
9/9/2005
11/9/2007
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

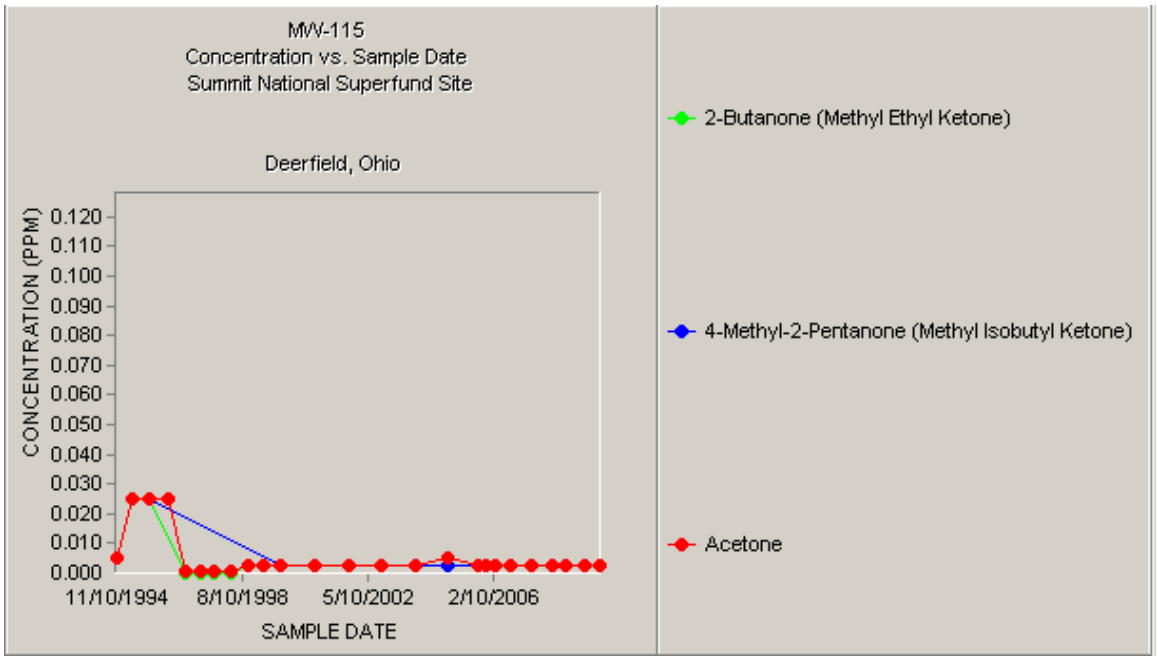

MW-111
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/9/1994
1/9/1997
3/9/1999
5/9/2001
7/9/2003
9/9/2005
11/9/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene

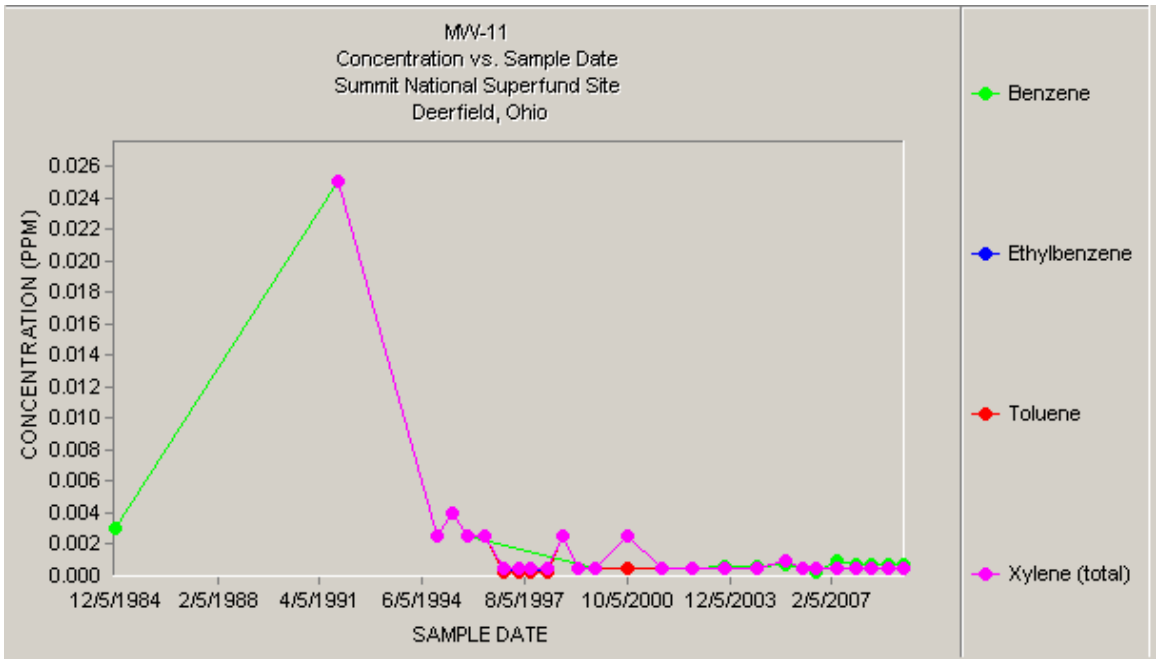

MW-111
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.280
0.260
0.240
0.220
0.200
0.180
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/9/1994
11/9/1997
11/9/2000
11/9/2003
11/9/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone

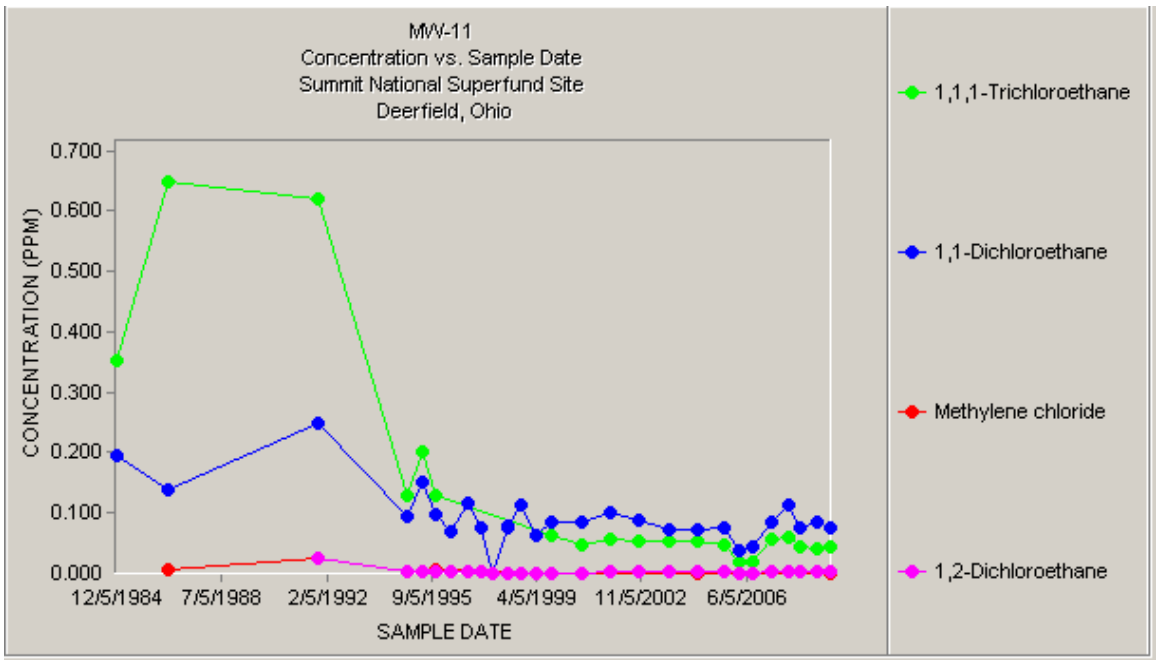

MW-115
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION PPM
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/10/1994
1/10/1997
3/10/1999
5/10/2001
7/10/2003
9/10/2005
11/10/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

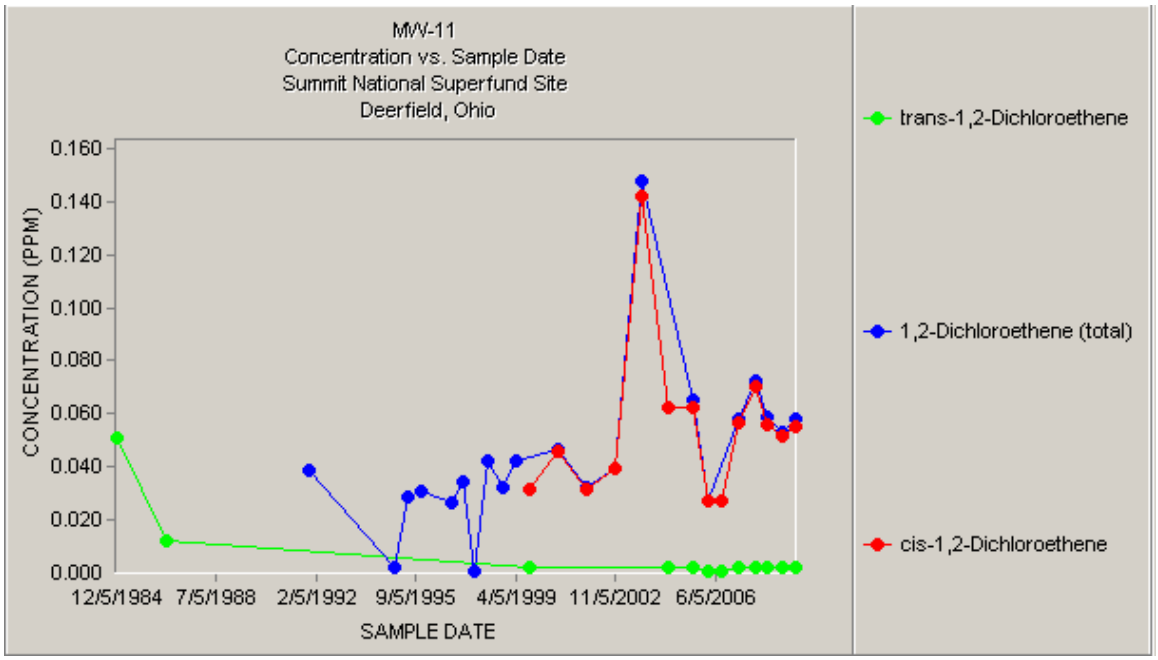

MW-115
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/10/1994
5/10/1997
11/10/1999
5/10/2002
11/10/2004
5/10/2007
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

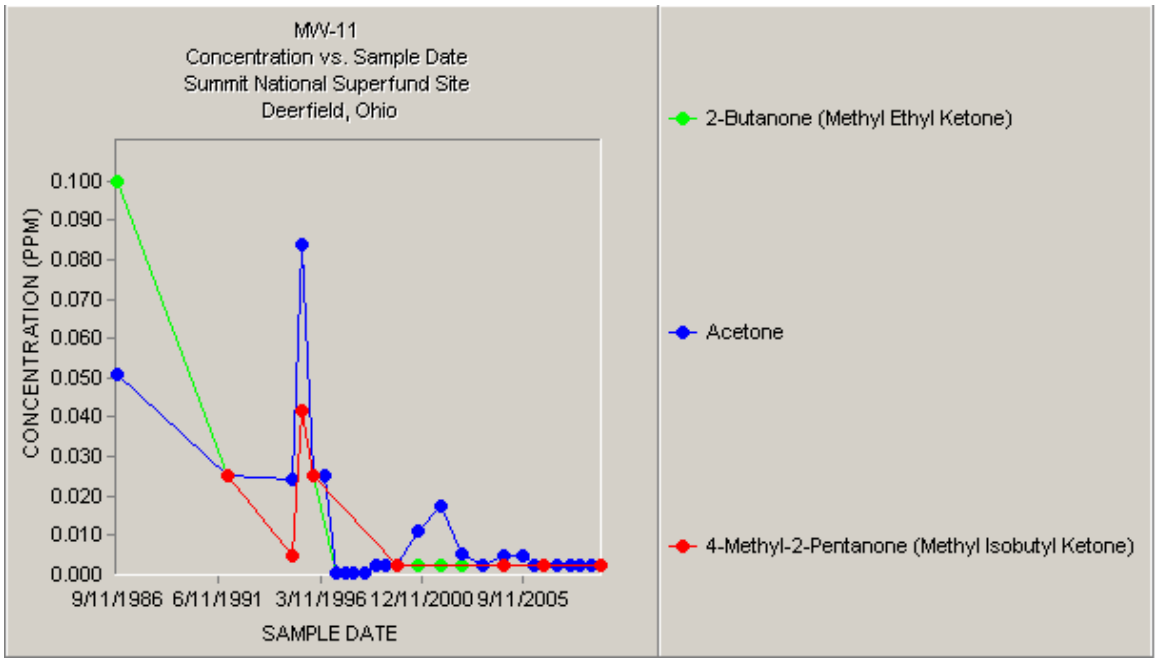

MW-115
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
11/10/1994
5/10/1997
11/10/1999
5/10/2002
11/10/2004
5/10/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene

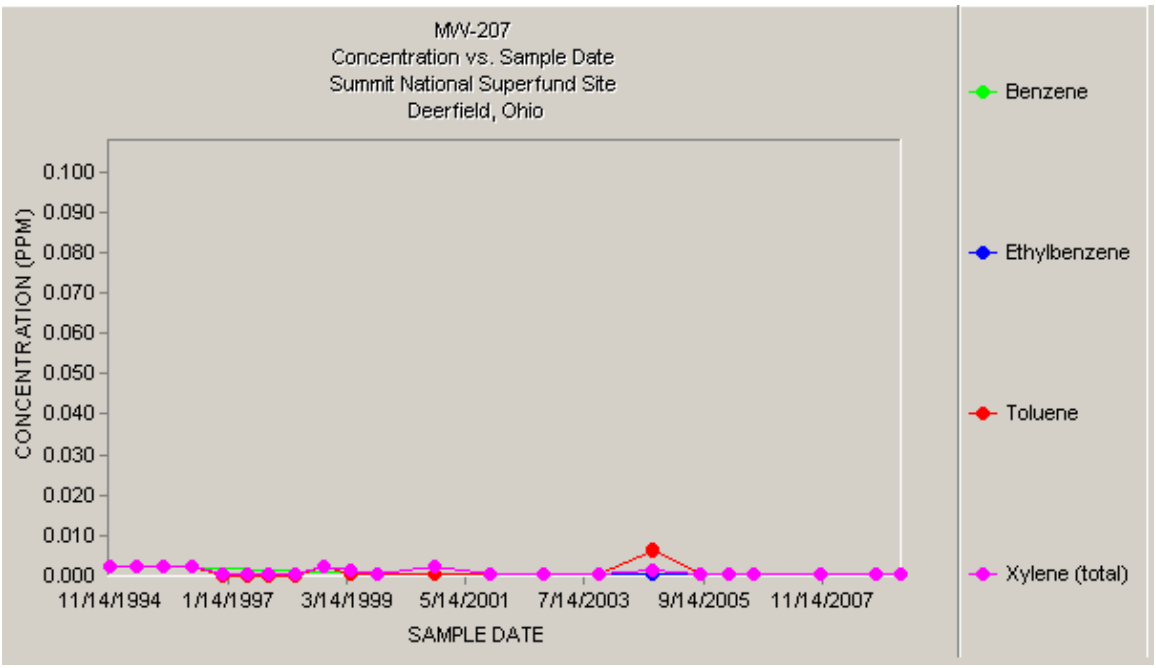

MW-115
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.120
0.110
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/10/1994
8/10/1998
5/10/2002
2/10/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone

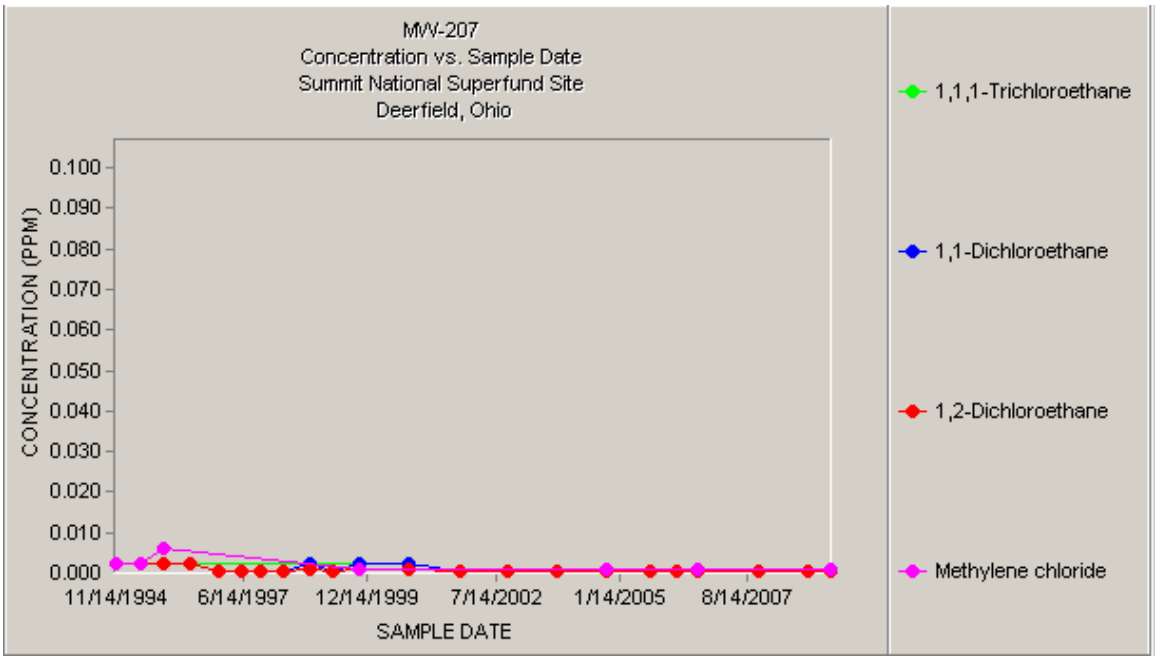

MW-11
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.026
0.024
0.022
0.020
0.018
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
12/5/1984
2/5/1988
4/5/1991
6/5/1994
8/5/1997
10/5/2000
12/5/2003
2/5/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

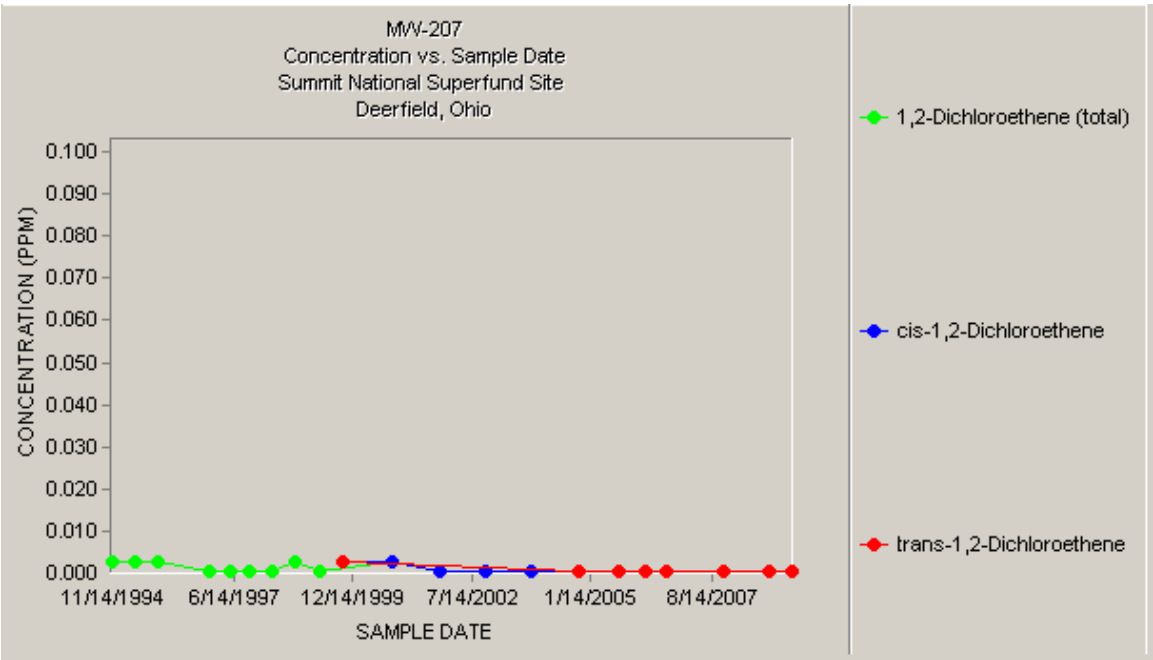

MW-11
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
12/5/1984
7/5/1988
2/5/1992
9/5/1995
4/5/1999
11/5/2002
6/5/2006
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
Methylene chloride
1,2-Dichloroethane

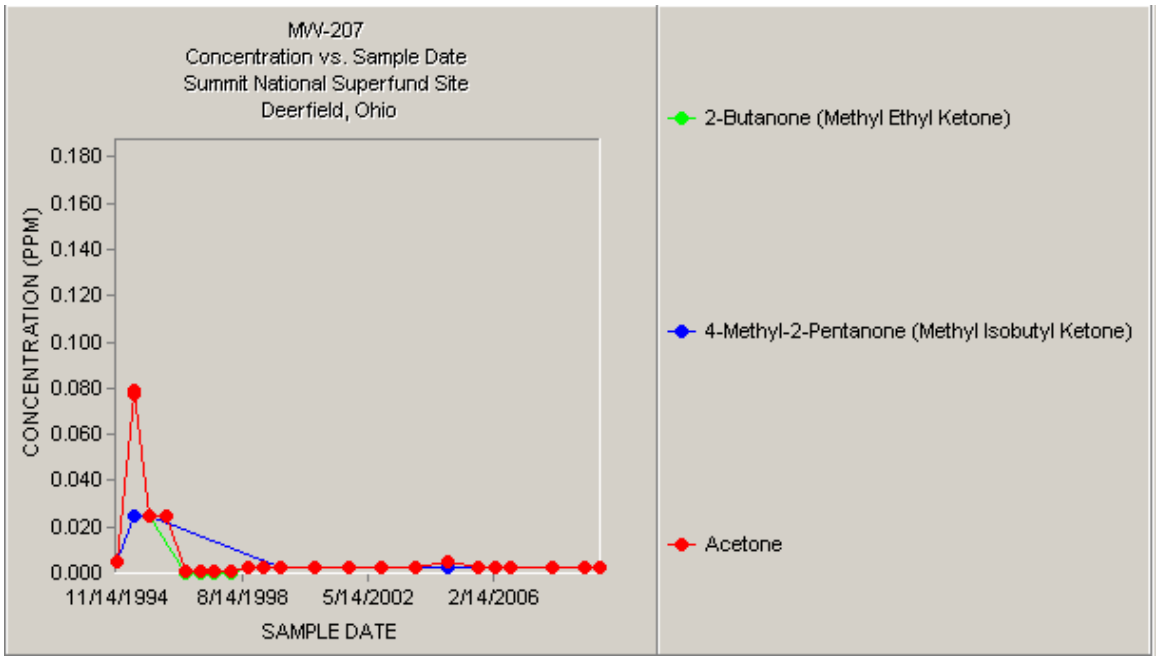

MW-11
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
12/5/1984
7/5/1988
2/5/1992
9/5/1995
4/5/1999
11/5/2002
6/5/2006
SAMPLE DATE
trans-1,2-Dichloroethene
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene

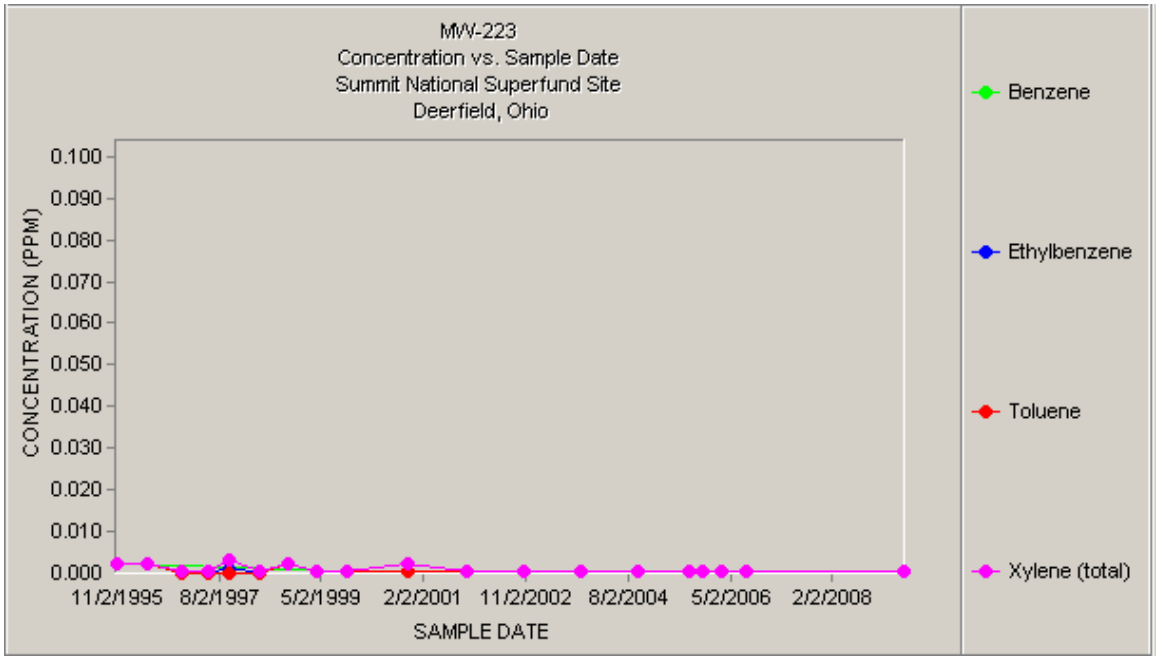

MW-11
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
9/11/1986
6/11/1991
3/11/1996
12/11/2000
9/11/2005
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
Acetone
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)

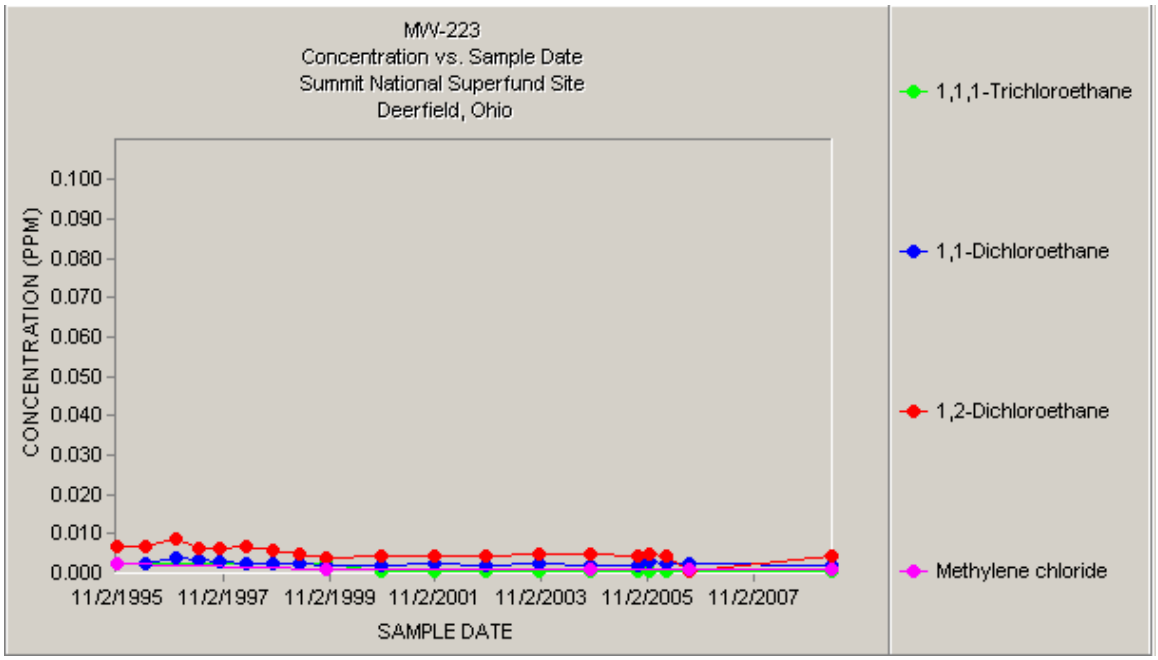

MW-207
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/14/1994
1/14/1997
3/14/1999
5/14/2001
7/14/2003
9/14/2005
11/14/2007
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

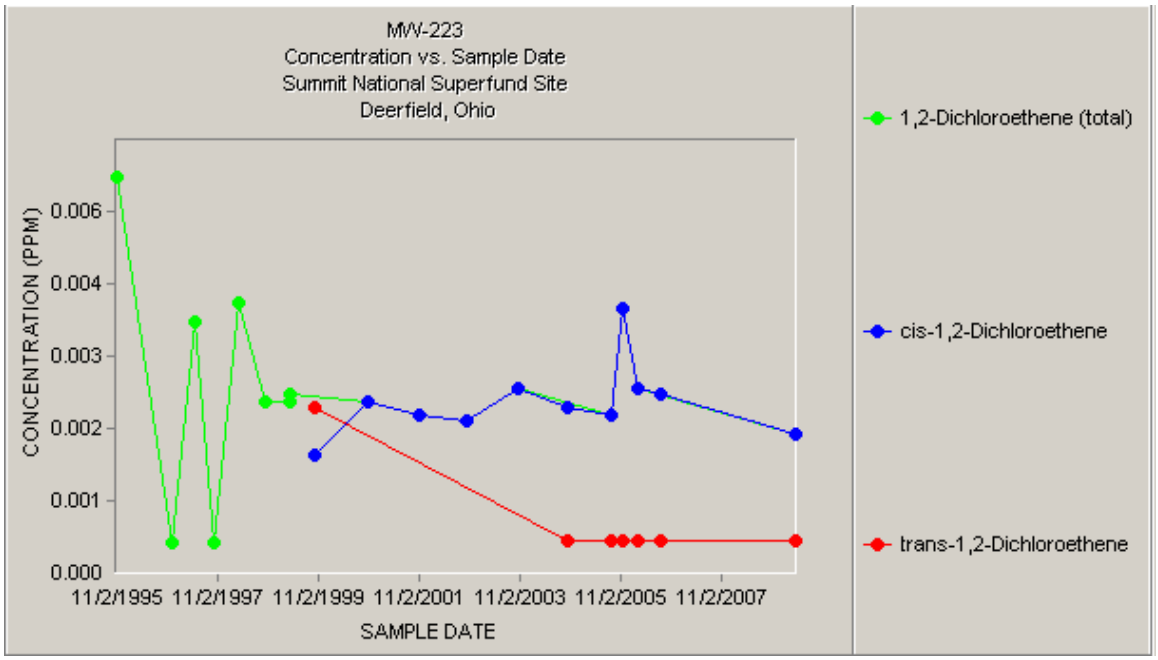

MW-207
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/14/1994
6/14/1997
12/14/1999
7/14/2002
1/14/2005
8/14/2007
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

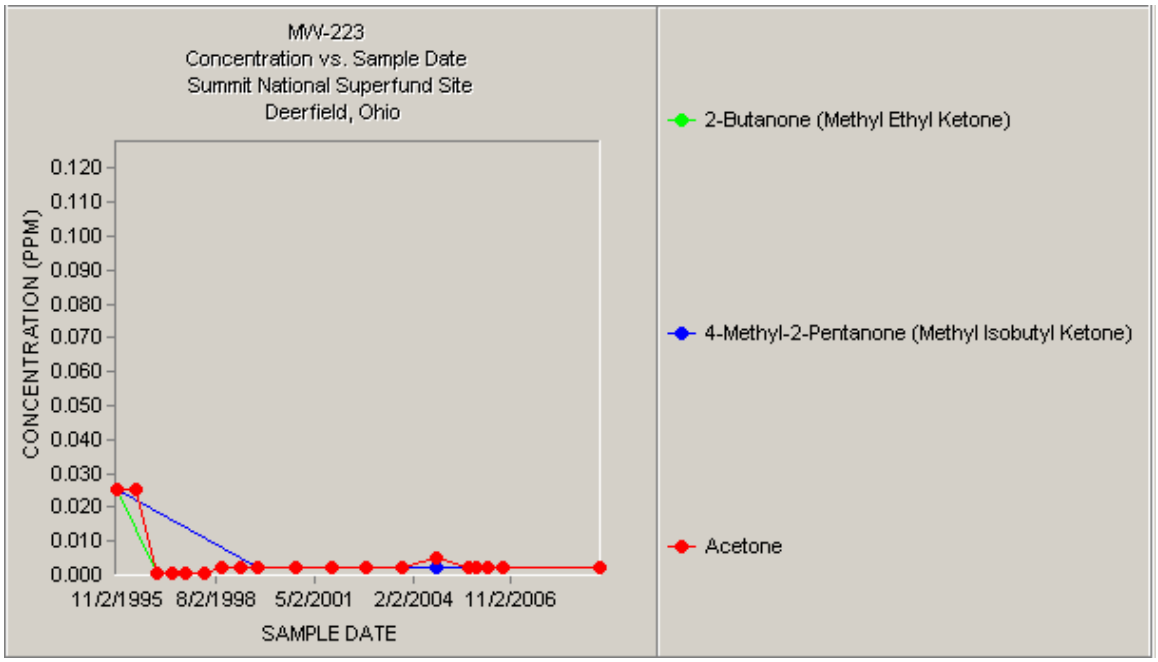

MW-207
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/14/1994
6/14/1997
12/14/1999
7/14/2002
1/14/2005
8/14/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene

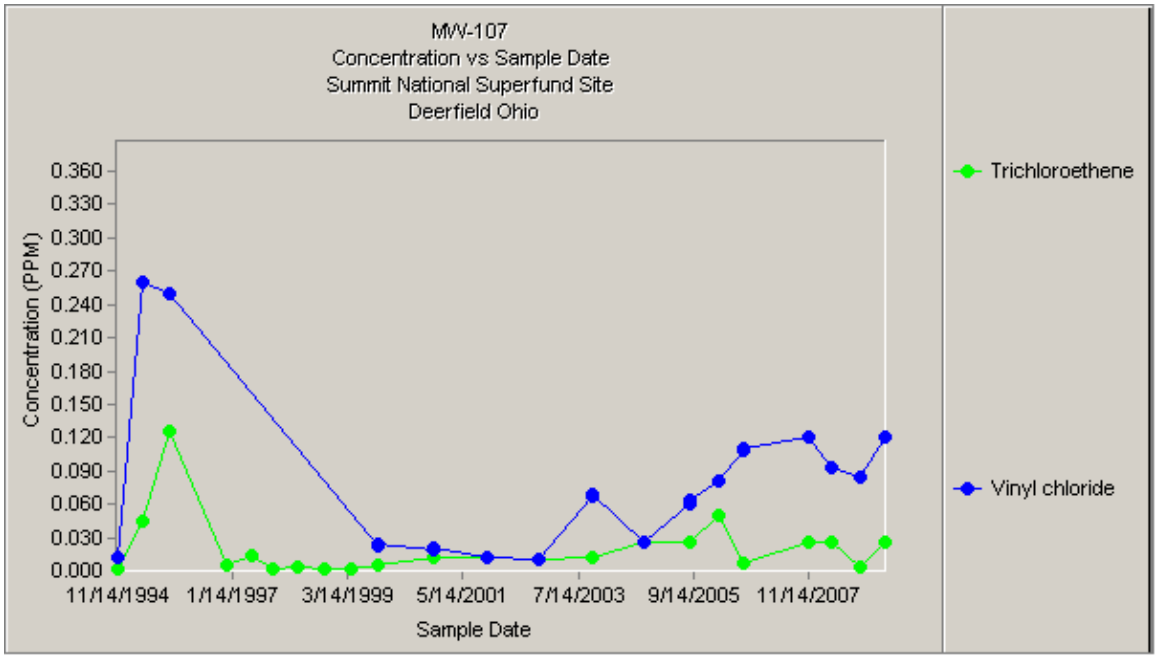

MW-207
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.180
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/14/1994
8/14/1998
5/14/2002
2/14/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone

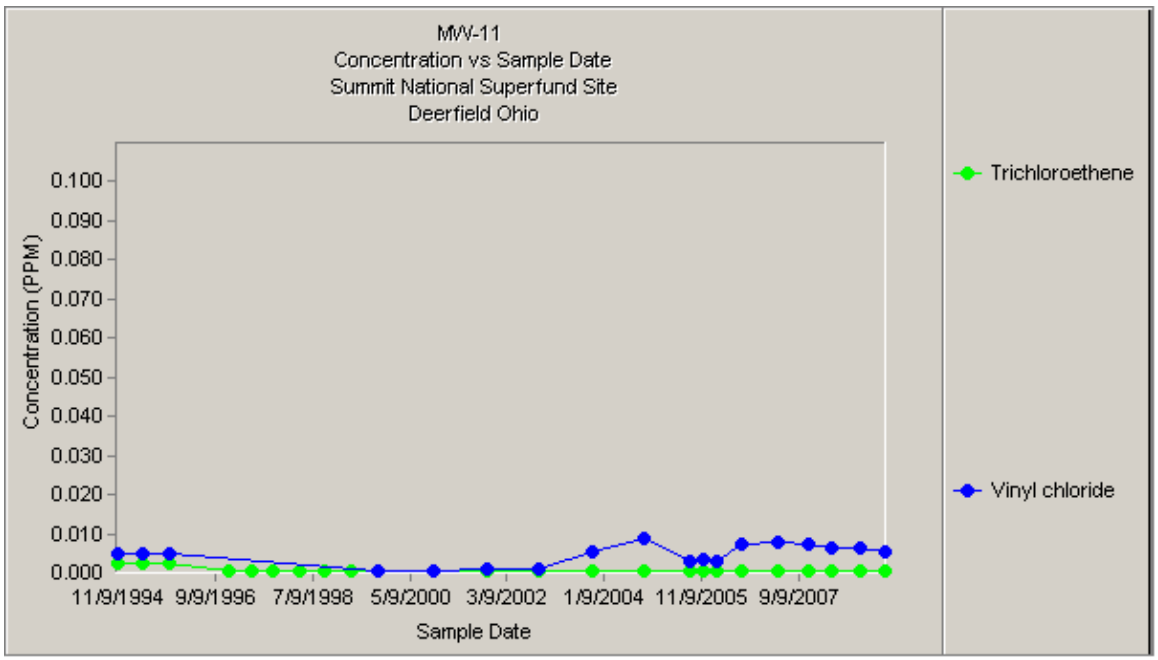

MW-223
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/2/1995
8/2/1997
5/2/1999
2/2/2001
11/2/2002
8/2/2004
5/2/2006
2/2/2008
SAMPLE DATE
Benzene
Ethylbenzene
Toluene
Xylene (total)

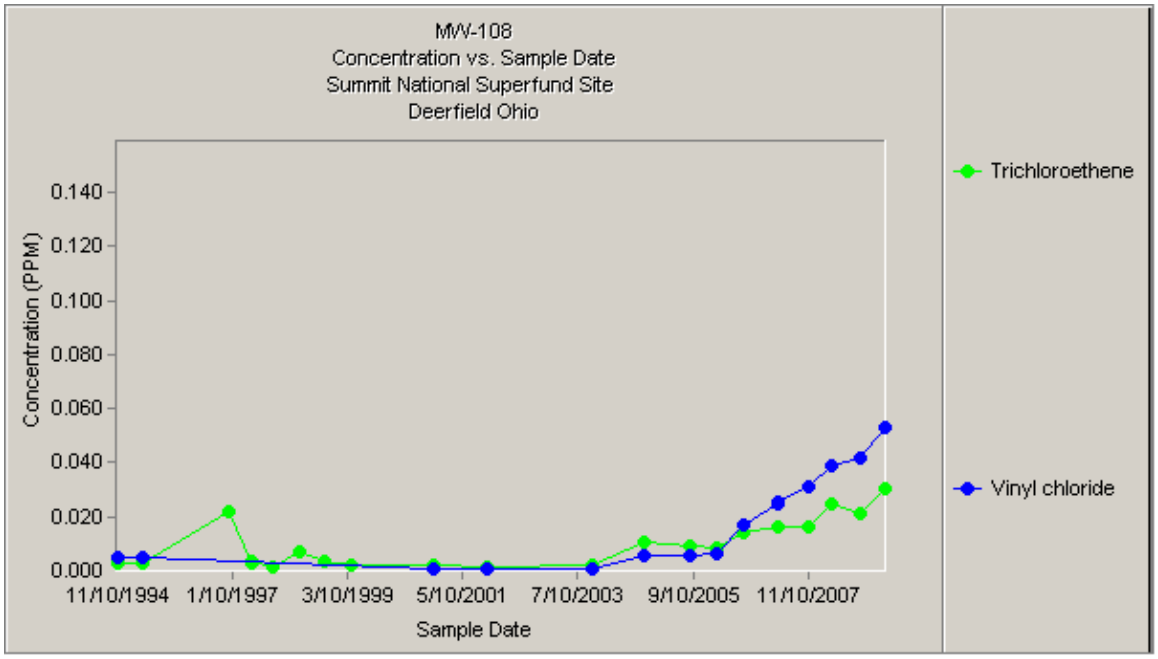

MW-223
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/2/1995
11/2/1997
11/2/1999
11/2/2001
11/2/2003
11/2/2005
11/2/2007
SAMPLE DATE
1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
Methylene chloride

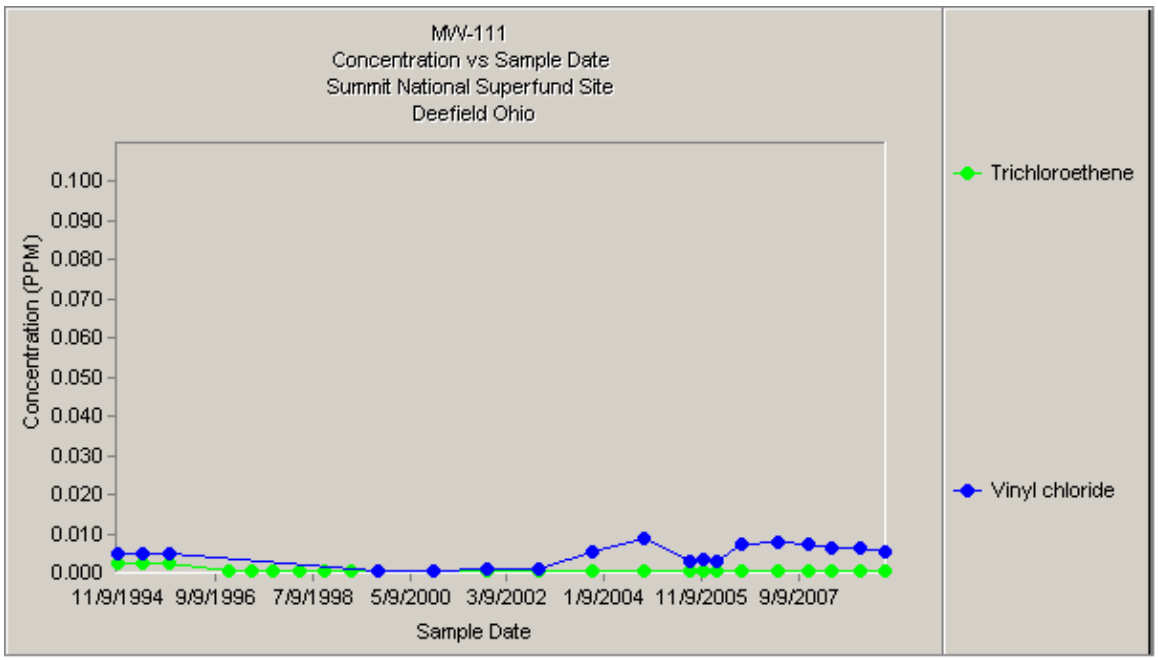

MW-223
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.006
0.004
0.003
0.002
0.001
0.000
11/2/1995
11/2/1997
11/2/1999
11/2/2001
11/2/2003
11/2/2005
11/2/2007
SAMPLE DATE
1,2-Dichloroethene (total)
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene


MW-223
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield, Ohio
CONCENTRATION (PPM)
0.120
0.110
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/2/1995
8/2/1998
5/2/2001
2/2/2004
11/2/2006
SAMPLE DATE
2-Butanone (Methyl Ethyl Ketone)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)
Acetone


MW-107
Concentration vs Sample Date
Summit National Superfund Site
Deerfield Ohio
Concentration (PPM)
0.360
0.330
0.300
0.270
0.240
0.210
0.180
0.150
0.120
0.090
0.060
0.030
0.000
11/14/1994
1/14/1997
3/14/1999
5/14/2001
7/14/2003
9/14/2005
11/14/2007
Sample Date
Trichloroethene
Vinyl chloride


MW-11
Concentration vs Sample Date
Summit National Superfund Site
Deerfield Ohio
Concentration (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/9/1994
9/9/1996
7/9/1998
5/9/2000
3/9/2002
1/9/2004
11/9/2005
9/9/2007
Sample Date
Trichloroethene
Vinyl chloride


MW-108
Concentration vs. Sample Date
Summit National Superfund Site
Deerfield Ohio
Concentration (PPM)
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
11/10/1994
1/10/1997
3/10/1999
5/10/2001
7/10/2003
9/10/2005
11/10/2007
Sample Date
Trichloroethene
Vinyl chloride


MW-111
Concentration vs Sample Date
Summit National Superfund Site
Deefield Ohio
Concentration (PPM)
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
11/9/1994
9/9/1996
7/9/1998
5/9/2000
3/9/2002
1/9/2004
11/9/2005
9/9/2007
Sample Date
Trichloroethene
Vinyl chloride

ATTACHMENT E

GROUNDWATER CONTOURS

GROUNDWATER ELEVATIONS
WATER TABLE UNIT MONITORING WELLS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 2009

Well Designation	Reference Elevation (ft AMSL)	Water Level Depth (ft)	Water Level Elevation (ft AMSL)
MH-1	1102.78	15.43	1087.35
MH-2	1101.04	13.72	1087.32
MH-3	1100.95	13.64	1087.31
MH-4	1100.05	12.74	1087.31
MH-5	1095.68	8.75	1086.93
MH-6	1088.64	1.78	1086.86
MH-7	1089.29	2.31	1086.98
MH-8	1089.23	2.24	1086.99
MW-101	1107.57	7.48	1100.09
MW-102	1100.17	3.47	1096.7
MW-103	1096.22	1.78	1094.44
MW-104	1099.81	12.4	1087.41
MW-105	1101.32	14.03	1087.29
MW-106	1102.88	14.91	1087.97
MW-107	1098.27	9.77	1088.5
MW-108	1091.96	5.39	1086.57
MW-109	1087.42	2.93	1084.49
MW-11	1095.93	9.12	1086.81
MW-110	1086.87	5.83	1081.04
MW-111	1099.67	12.76	1086.91
MW-113	1088.46	4.96	1083.5
MW-114	1097.27	8.09	1089.18
MW-115	1101.83	16.63	1085.2
MW-116	1105.54	22.14	1083.4
MW-117	1123.97	40.83	1083.14
MW-118	1098.38	23.43	1074.95
MW-4	1091.09	6.22	1084.87
PZ-1	1104.43	6.61	1097.82
PZ-101	1108.53	12.22	1096.31
PZ-102	1100.21	7.92	1092.29
PZ-103	1093.98	6.12	1087.86
PZ-104	1097.54	10.06	1087.48
PZ-105	1101.6	17.56	1084.04
PZ-106	1102.23	22.14	1080.09
WETWELL	1098.86	11.89	1086.97

GROUNDWATER ELEVATIONS
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 2009

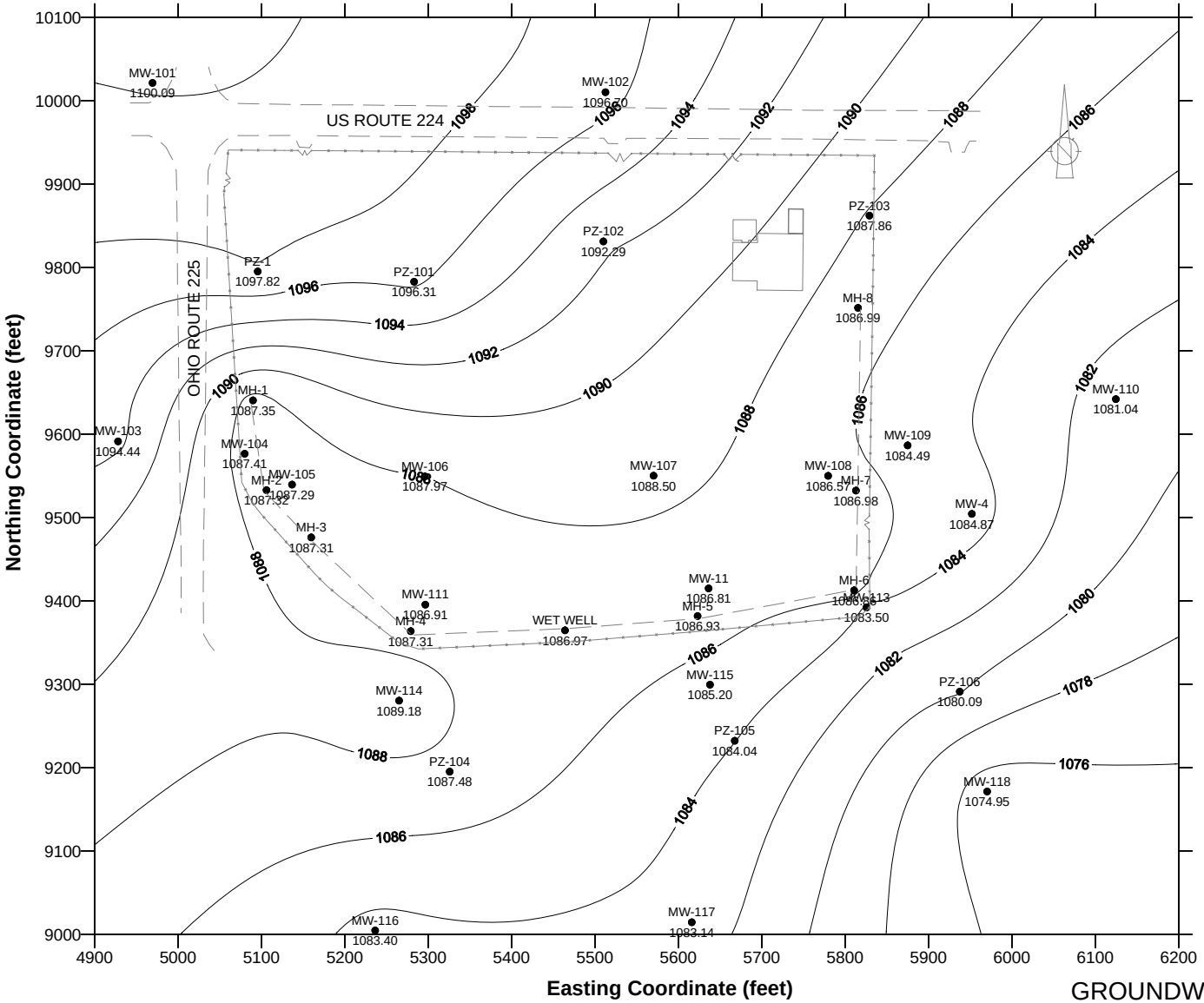
Well Designation	Reference Elevation (ft AMSL)	Water Level Depth (ft)	Water Level Elevation (ft AMSL)
MW-201	1107.52	11.21	1096.31
MW-202	1099.5	23.27	1076.23
MW-203	1103.35	9.32	1094.03
MW-204	1098.01	10.24	1087.77
MW-205	1100.9	17.08	1083.82
MW-206	1103.22	25.82	1077.4
MW-207	1098.51	10.02	1088.49
MW-209	1087.66	4.46	1083.2
MW-219	1108.24	19.13	1089.11
MW-220	1090.92	7.7	1083.22
MW-223	1098.37	10.84	1087.53
MW-224	1089.41	10.77	1078.64
PZ-201	1099.74	11.79	1087.95
PZ-202	1101.56	13.46	1088.1
PZ-203	1098.31	11.32	1086.99
PZ-204	1095.41	9.64	1085.77
PZ-205	1096.63	9.62	1087.01
PZ-206	1088.05	10.72	1077.33
PZ-207	1091.36	7.41	1083.95

GROUNDWATER ELEVATIONS
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 2009

Well Designation	Reference Elevation (ft AMSL)	Water Level Depth (ft)	Water Level Elevation (ft AMSL)
MW-301	1107.91	27.61	1080.3
MW-302	1100.39	24.49	1075.9
MW-303	1103.15	25.33	1077.82
MW-304	1097.73	14.22	1083.51
MW-305	1101.22	27.58	1073.64
MW-306	1103.14	26.54	1076.6
MW-307	1098.83	21.85	1076.98
MW-309	1087.81	11.37	1076.44
MW-319	1108.07	19.12	1088.95
MW-320	1091.14	18.53	1072.61
MW-321	1095.32	18.21	1077.11
MW-322	1098.88	13.93	1084.95
MW-323	1097.51	21.53	1075.98
MW-324	1089.39	15.07	1074.32
PZ-301	1100.07	17.45	1082.62
PZ-302	1101.25	24.18	1077.07
PZ-303	1098.39	21.42	1076.97
PZ-305	1096.49	19.54	1076.95
PZ-306	1088.35	12.98	1075.37
PZ-307	1091.4	12.64	1078.76

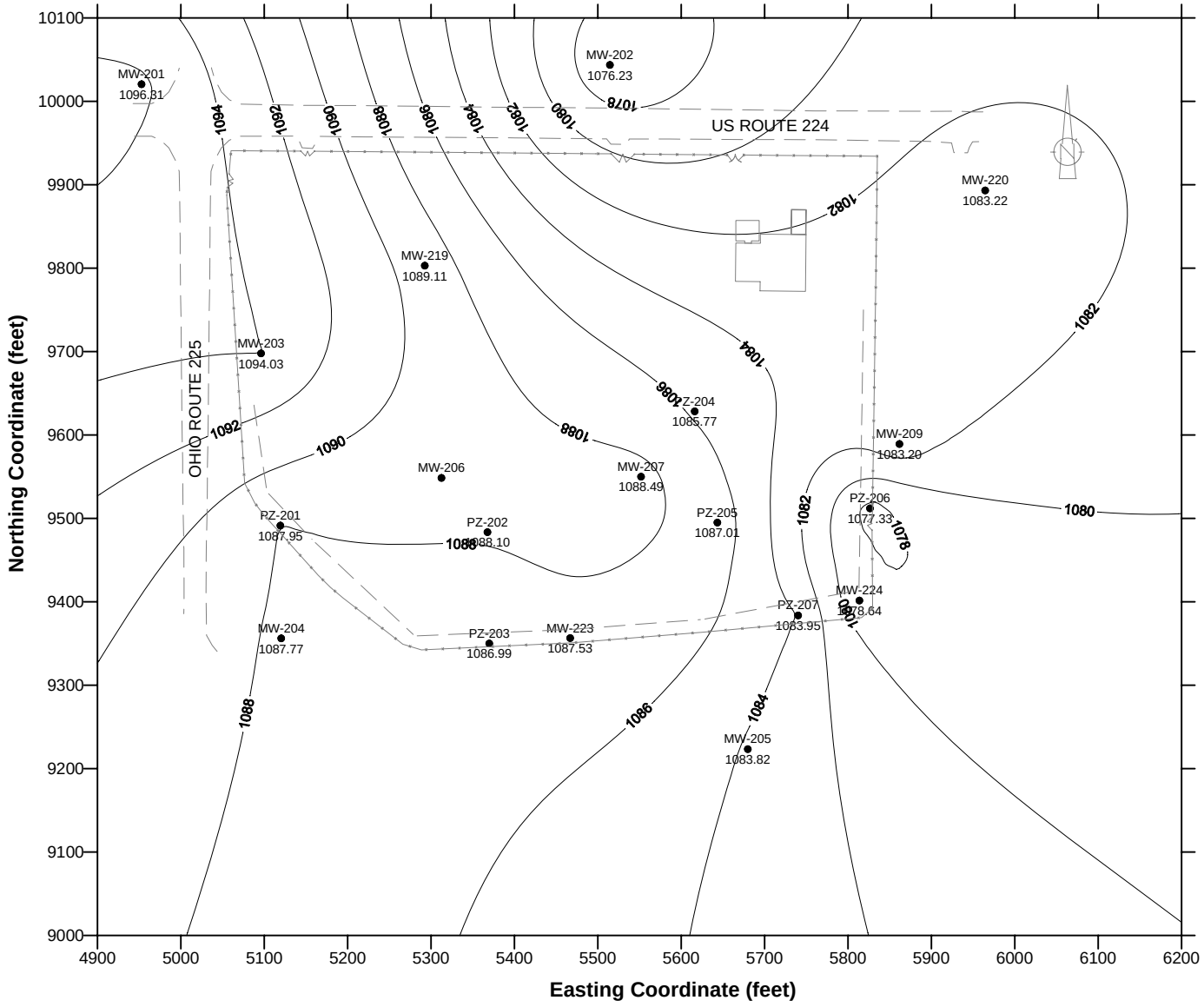
GROUNDWATER ELEVATIONS
UPPER SHARON UNIT MONITORING WELLS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO
APRIL 2009

Well Designation	Reference Elevation (ft AMSL)	Water Level Depth (ft)	Water Level Elevation (ft AMSL)
MW-401	1099.75	29.65	1070.1
MW-402	1089.9	27.83	1062.07
MW-414	1096.99	22.67	1074.32
MW-415	1102.25	27.21	1075.04
MW-420	1091.66	24.76	1066.9
MW-421	1099.93	27.04	1072.89
MW-422	1107.38	25.86	1081.52
Potable Water Well	1099.34	53.08	1046.26



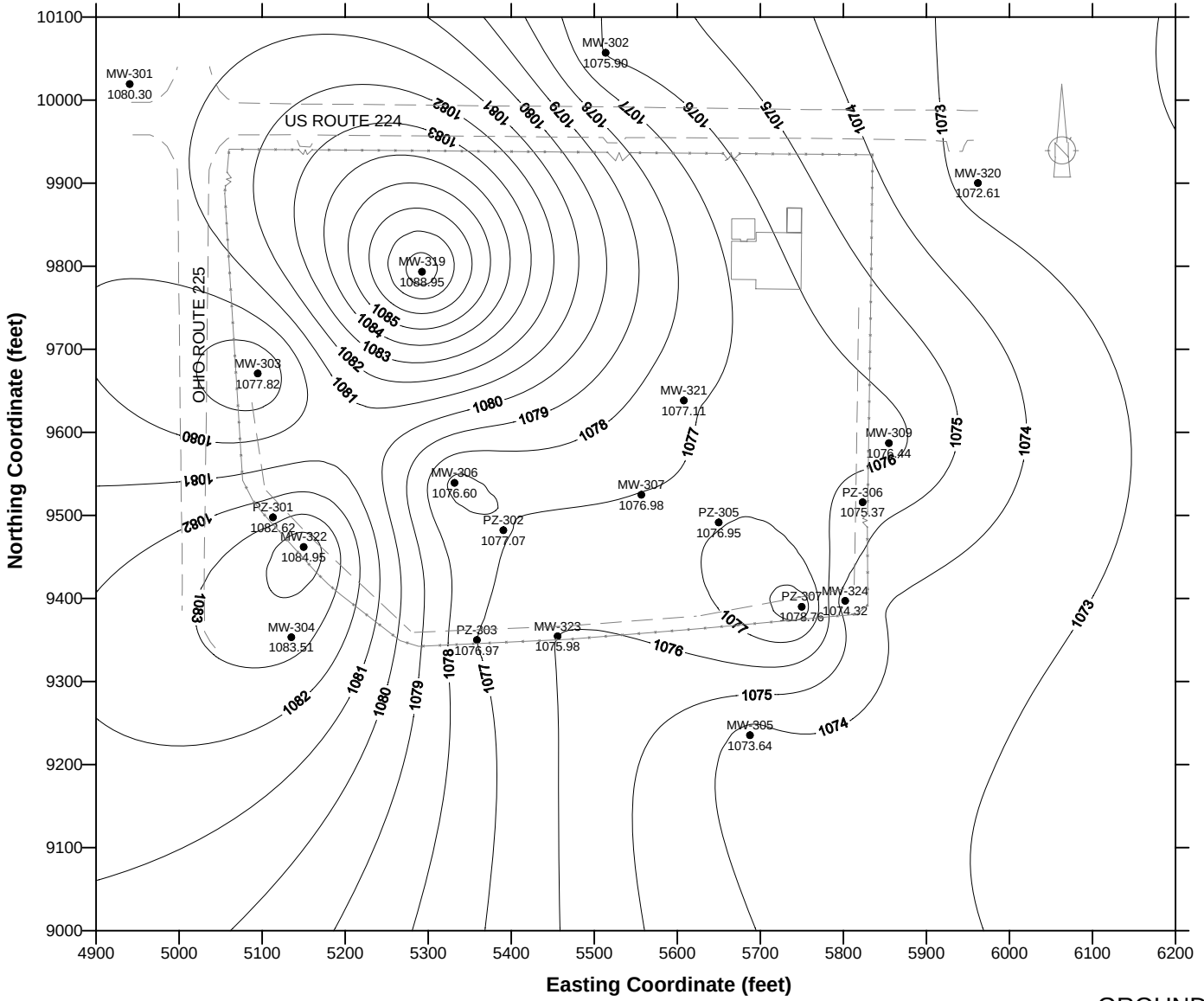
GROUNDWATER CONTOURS
WATER TABLE UNIT -- APRIL 20, 2009
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) APRIL 20, 2009 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\wtu\WATER TABLE UNIT 2009-04-20.srf)



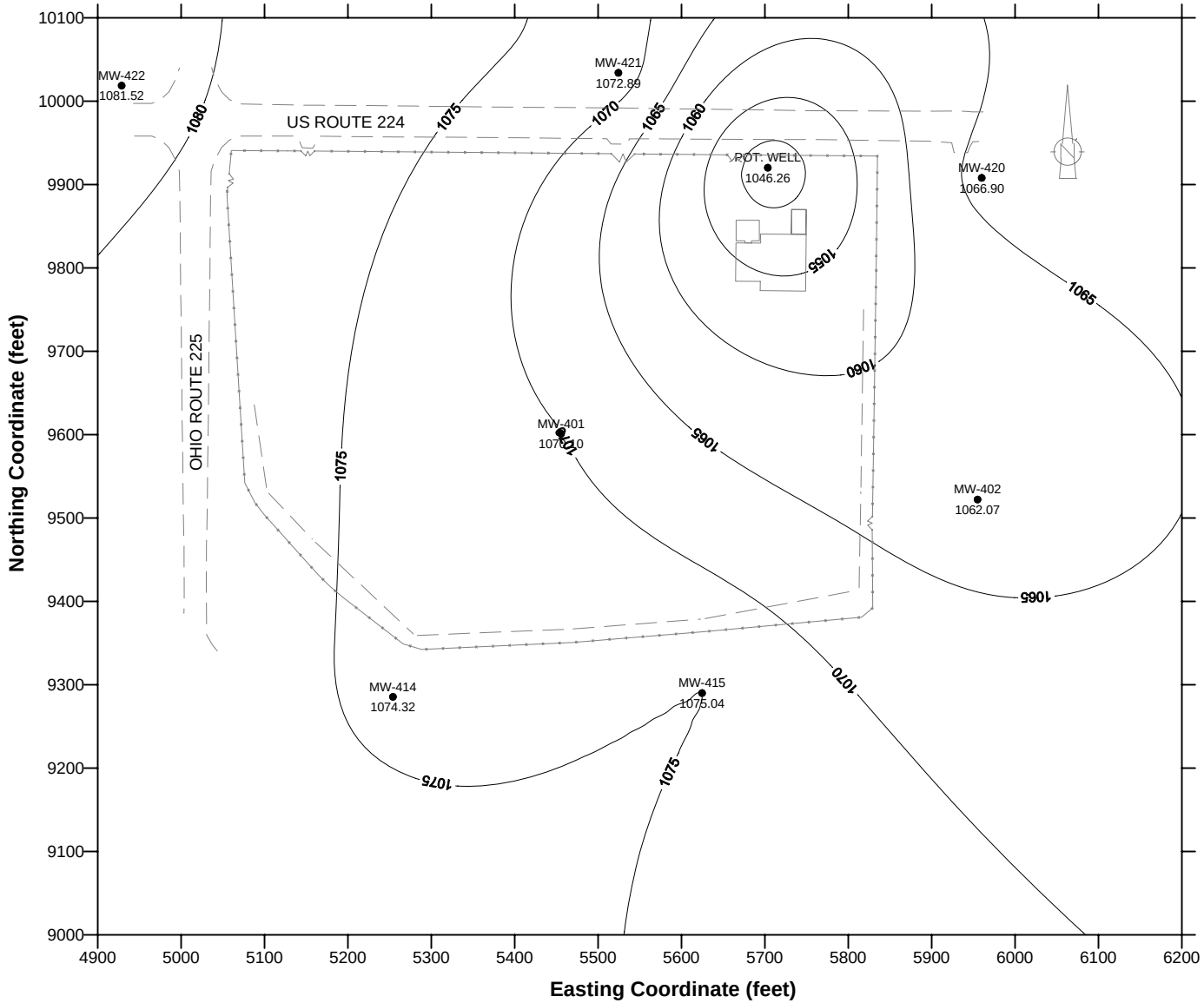
GROUNDWATER CONTOURS
UPPER INTERMEDIATE UNIT -- APRIL 20, 2009
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) APRIL 20, 2009 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\uiu\UPPER INTERMEDIATE UNIT - 2009-04-20.srf)



GROUNDWATER CONTOURS
LOWER INTERMEDIATE UNIT -- APRIL 20, 2009
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) APRIL 20, 2009 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\liu\LOWER INTERMEDIATE UNIT - 2009-04-20.srf)



GROUNDWATER CONTOURS
UPPER SHARON UNIT -- APRIL 20, 2009
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) APRIL 20, 2009 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\usu\UPPER SHARRON UNIT - 2009-04-20.srf)

ATTACHMENT F

SURFACE WATER AND SEDIMENT DATA

TABLE F-1

SUMMARY OF SURFACE WATER AND SEDIMENT ANALYTICAL DATE
CONFLUENCE OF SOUTH AND EAST DRAINAGE DITCHES
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Location Name	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/20/2009*	*4/24/2009*
Units	*µg/L*	*µg/kg*
Metals		
Aluminum	716 J	-
Antimony	ND(6.0)UJ	-
Arsenic	ND(3.0)UJ	-
Barium	ND(200)UJ	-
Beryllium	ND(1.0)UJ	-
Cadmium	ND(1.0)UJ	-
Calcium	85800 J	-
Chromium	ND(10)UJ	-
Cobalt	ND(50)UJ	-
Copper	ND(10)UJ	-
Iron	1320 J	-
Lead	ND(3.0)UJ	-
Magnesium	24400 J	-
Manganese	204 J	-
Mercury	ND(0.20)UJ	-
Nickel	ND(20)UJ	-
Potassium	ND(10000)UJ	-
Selenium	ND(10)UJ	-
Silver	ND(10)UJ	-
Sodium	58000 J	-
Thallium	ND(2.0)UJ	-
Vanadium	ND(50)UJ	-
Zinc	ND(20)UJ	-
PCBs		
Aroclor-1016 (PCB-1016)	ND(0.50)	ND(46)
Aroclor-1221 (PCB-1221)	ND(0.50)	ND(46)
Aroclor-1232 (PCB-1232)	ND(0.50)	ND(46)
Aroclor-1242 (PCB-1242)	ND(0.50)	ND(46)
Aroclor-1248 (PCB-1248)	ND(0.50)	ND(46)
Aroclor-1254 (PCB-1254)	ND(0.50)	ND(46)
Aroclor-1260 (PCB-1260)	ND(0.50)	ND(46)
Pesticides		
4,4'-DDD	ND(0.020)	ND(1.8)
4,4'-DDE	ND(0.020)	ND(1.8)
4,4'-DDT	ND(0.020)	ND(1.8)
Aldrin	ND(0.020)	ND(1.8)
alpha-BHC	ND(0.020)	ND(1.8)
alpha-Chlordane	ND(0.020)	ND(1.8)
beta-BHC	ND(0.020)	ND(1.8)
delta-BHC	ND(0.020)	ND(1.8)
Dieldrin	ND(0.020)	ND(1.8)
Endosulfan I	ND(0.020)	ND(1.8)

TABLE F-1

SUMMARY OF SURFACE WATER AND SEDIMENT ANALYTICAL DATE
CONFLUENCE OF SOUTH AND EAST DRAINAGE DITCHES
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Location Name	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/20/2009*	*4/24/2009*
Units	*µg/L*	*µg/kg*
Pesticides (cont'd)		
Endosulfan II	ND(0.020)	ND(1.8)
Endosulfan sulfate	ND(0.020)	ND(1.8)
Endrin	ND(0.020)	ND(1.8)
Endrin aldehyde	ND(0.020)	ND(1.8)
Endrin ketone	ND(0.020)	ND(1.8)
gamma-BHC (Lindane)	ND(0.020)	ND(1.8)
gamma-Chlordane	ND(0.020)	ND(1.8)
Heptachlor	ND(0.020)	ND(1.8)
Heptachlor epoxide	ND(0.020)	ND(1.8)
Methoxychlor	ND(0.020)	ND(1.8)
Toxaphene	ND(0.25)	ND(23)
Semi-Volatile Organic Compounds		
1,2,4-Trichlorobenzene	ND(2.0)	ND(93)
1,2-Dichlorobenzene	ND(2.0)	ND(93)
1,3-Dichlorobenzene	ND(2.0)	ND(93)
1,4-Dichlorobenzene	ND(2.0)	ND(93)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ND(2.0)	ND(93)
2,4,5-Trichlorophenol	ND(5.0)	ND(230)
2,4,6-Trichlorophenol	ND(5.0)	ND(230)
2,4-Dichlorophenol	ND(5.0)	ND(230)
2,4-Dimethylphenol	ND(5.0)	ND(230)
2,4-Dinitrophenol	ND(20)	ND(930)
2,4-Dinitrotoluene	ND(2.0)	ND(93)
2,6-Dinitrotoluene	ND(2.0)	ND(93)
2-Chloronaphthalene	ND(5.0)	ND(93)
2-Chlorophenol	ND(5.0)	ND(230)
2-Methylnaphthalene	ND(2.0)	112
2-Methylphenol	ND(2.0)	ND(93)
2-Nitroaniline	ND(5.0)	ND(230)
2-Nitrophenol	ND(5.0)	ND(230)
3&4-Methylphenol	ND(2.0)	ND(93)
3,3'-Dichlorobenzidine	ND(5.0)	ND(230)
3-Nitroaniline	ND(5.0)	ND(230)
4,6-Dinitro-2-methylphenol	ND(20)	ND(930)
4-Bromophenyl phenyl ether	ND(2.0)	ND(93)
4-Chloro-3-methylphenol	ND(5.0)	ND(230)
4-Chloroaniline	ND(5.0)	ND(230)
4-Chlorophenyl phenyl ether	ND(2.0)	ND(93)
4-Nitroaniline	ND(5.0)	ND(230)
4-Nitrophenol	ND(10)	ND(460)
Acenaphthene	ND(1.0)	ND(46)
Acenaphthylene	ND(1.0)	ND(46)
Anthracene	ND(1.0)	ND(46)

TABLE F-1

SUMMARY OF SURFACE WATER AND SEDIMENT ANALYTICAL DATE
CONFLUENCE OF SOUTH AND EAST DRAINAGE DITCHES
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Location Name	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/20/2009*	*4/24/2009*
Units	*µg/L*	*µg/kg*
Semi-Volatile Organic Compounds (cont'd)		
Benzo(a)anthracene	ND(1.0)	ND(46)
Benzo(a)pyrene	ND(1.0)	ND(46)
Benzo(b)fluoranthene	ND(1.0)	141
Benzo(g,h,i)perylene	ND(1.0)	33.3 J
Benzo(k)fluoranthene	ND(1.0)	ND(46)
bis(2-Chloroethoxy)methane	ND(2.0)	ND(93)
bis(2-Chloroethyl)ether	ND(2.0)	ND(93)
bis(2-Ethylhexyl)phthalate	ND(2.0)	ND(93)
Butyl benzylphthalate	ND(2.0)	ND(93)
Carbazole	ND(2.0)	ND(93)
Chrysene	ND(1.0)	26.0 J
Dibenz(a,h)anthracene	ND(1.0)	ND(46)
Dibenzofuran	ND(5.0)	28.6 J
Diethyl phthalate	ND(2.0)	ND(93)
Dimethyl phthalate	ND(2.0)	ND(93)
Di-n-butylphthalate	ND(2.0)	ND(93)
Di-n-octyl phthalate	ND(2.0)	ND(93)
Fluoranthene	ND(1.0)	30.6 J
Fluorene	ND(1.0)	ND(46)
Hexachlorobenzene	ND(2.0)	ND(93)
Hexachlorobutadiene	ND(1.0)	ND(46)
Hexachlorocyclopentadiene	ND(20)	ND(930)
Hexachloroethane	ND(5.0)	ND(230)
Indeno(1,2,3-cd)pyrene	ND(1.0)	ND(46)
Isophorone	ND(2.0)	ND(93)
Naphthalene	ND(1.0)	71.8
Nitrobenzene	ND(2.0)	ND(93)
N-Nitrosodi-n-propylamine	ND(2.0)	ND(93)
N-Nitrosodiphenylamine	ND(5.0)	ND(230)
Pentachlorophenol	ND(10)	ND(460)
Phenanthrene	ND(1.0)	99.8
Phenol	ND(2.0)	ND(93)
Pyrene	ND(1.0)	38.2 J
Volatile Organic Compounds		
1,1,1-Trichloroethane	ND(1.0)	ND(5.9)
1,1,2,2-Tetrachloroethane	ND(1.0)	ND(5.9)
1,1,2-Trichloroethane	ND(1.0)	ND(5.9)
1,1-Dichloroethane	ND(1.0)	ND(5.9)
1,1-Dichloroethene	ND(1.0)	ND(5.9)
1,2-Dichloroethane	ND(1.0)	ND(1.2)
1,2-Dichloroethene (total)	0.51 J	ND(5.9)
1,2-Dichloropropane	ND(1.0)	ND(5.9)
2-Butanone (Methyl Ethyl Ketone)	ND(5.0)	ND(12)

TABLE F-1

SUMMARY OF SURFACE WATER AND SEDIMENT ANALYTICAL DATE
CONFLUENCE OF SOUTH AND EAST DRAINAGE DITCHES
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Location Name	*S&E Ditches Surface Water*	*S&E Ditches Sediment*
Sample Name	*SW-6029-042009-008*	*SE-6029-042409-069*
Sample Date	*4/20/2009*	*4/24/2009*
Units	*µg/L*	*µg/kg*
Volatile Organic Compounds (cont'd)		
2-Hexanone	ND(5.0)	ND(5.9)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ND(5.0)	ND(5.9)
Acetone	ND(5.0)	ND(12)
Benzene	ND(1.0)	ND(1.2)
Bromodichloromethane	ND(1.0)	ND(5.9)
Bromoform	ND(4.0)	ND(5.9)
Bromomethane (Methyl Bromide)	ND(2.0)	ND(5.9)
Carbon disulfide	ND(2.0)	ND(5.9)
Carbon tetrachloride	ND(1.0)	ND(5.9)
Chlorobenzene	ND(1.0)	ND(5.9)
Chloroethane	ND(1.0)	ND(5.9)
Chloroform (Trichloromethane)	ND(1.0)	ND(5.9)
Chloromethane (Methyl Chloride)	ND(1.0)	ND(5.9)
cis-1,2-Dichloroethene	0.51 J	ND(5.9)
cis-1,3-Dichloropropene	ND(1.0)	ND(5.9)
Dibromochloromethane	ND(1.0)	ND(5.9)
Ethylbenzene	ND(1.0)	ND(1.2)
Methylene chloride	ND(2.0)	ND(5.9)
Styrene	ND(5.0)	ND(5.9)
Tetrachloroethene	ND(1.0)	ND(5.9)
Toluene	ND(1.0)	ND(1.2)
trans-1,2-Dichloroethene	ND(1.0)	ND(5.9)
trans-1,3-Dichloropropene	ND(1.0)	ND(5.9)
Trichloroethene	ND(1.0)	ND(5.9)
Vinyl chloride	ND(1.0)	ND(5.9)
Xylene (total)	ND(1.0)	ND(2.4)

ATTACHMENT G

RESIDENTIAL WELLS

TABLE G-1

RESIDENTIAL WELL ANALYTICAL DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Location Name		*Carver*	*Carver*	*Duley*	*Oyster*
Sample Name		*RW-6029-042109-026*	*RW-6029-042109-027*	*RW-6029-042209-040*	*RW-6029-042209-039*
Sample Date		*4/21/2009*	*4/21/2009*	*4/22/2009*	*4/22/2009*
			Duplicate		
	Units				
Metals					
Lead	µg/L	ND(3.0)	ND(3.0)	3.1	ND(3.0)
Nickel	µg/L	ND(20)	ND(20)	ND(20)	ND(20)
Semi-Volatile Organic Compounds					
bis(2-Ethylhexyl)phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Tetrachloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

Notes:
ND ( ) - Not present at or above the associated value.
ug/L - Micrograms per liter

ATTACHMENT H

PERFORMANCE STANDARDS CARCINOGENIC

TABLE H-1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*		*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10 $^{-6}$ RISK (3) (µg/L)*
VOLATILE ORGANIC COMPOUNDS				
1,1,1-TRICHLOROETHANE	D	NA		NV
1,1,2,2-TETRACHLOROETHANE	C	2.0E-01		0.43
1,1,2-TRICHLOROETHANE	C	5.7E-02		1.49
1,1-DICHLOROETHANE	C	5.7E-03		14.94
1,1-DICHLOROETHENE	C	NA		NV
1,2-DICHLOROETHANE	B2	9.1E-02		0.94
1,2-DICHLOROETHENE, TOTAL		NA		NV
1,2-DICHLOROPROPANE	B2	3.6E-02		2.37
cis-1,3-DICHLOROPROPENE		1.0E-01	(4)	0.85
trans-1,3-DICHLOROPROPENE		1.0E-01	(4)	0.85
2-HEXANONE		NA		NV
ACETONE	D	NA		NV
BENZENE	A	5.5E-02		1.55
BROMODICHLOROMETHANE	B2	6.2E-02		1.37
BROMOFORM	B2	7.9E-03		10.78
BROMOMETHANE	D	NA		NV
CARBON DISULFIDE		NA		NV
CARBON TETRACHLORIDE	B2	1.3E-01		0.66
CHLOROBENZENE	D	NA		NV
CHLOROETHANE		NA		NV
CHLOROFORM	B2	3.1E-02		2.75
CHLOROMETHANE	D	NA		NV
DIBROMOCHLOROMETHANE	C	8.4E-02		1.01
ETHYLBENZENE	D	1.1E-02		7.74
METHYL ETHYL KETONE	D	NA		NV
METHYL ISOBUTYL KETONE		NA		NV
METHYLENE CHLORIDE	B2	7.5E-03		11.36
STYRENE		NA		NV
TETRACHLOROETHENE (dated)	B2	5.1E-02		1.67
TETRACHLOROETHENE (current)	B2	5.4E-01		0.16
TOLUENE	D	NA		NV
TRICHLOROETHENE (dated)	B2	1.1E-02		7.74
TRICHLOROETHENE (current)	B2	1.3E-02		6.55
VINYL ACETATE		NA		NV
VINYL CHLORIDE	A	7.2E-01		0.12
XYLENES, TOTAL	D	NA		NV
SEMI-VOLATILE ORGANIC COMPOUNDS				
1,2,4-TRICHLOROBENZENE	D	3.6E-03		23.66
1,2-DICHLOROBENZENE	D	NA		NV
1,3-DICHLOROBENZENE	D	NA		NV
1,4-DICHLOROBENZENE		5.4E-03		15.77
2,4,5-TRICHLOROPHENOL		NA		NV
2,4,6-TRICHLOROPHENOL	B2	1.1E-02		7.74
2,4-DICHLOROPHENOL		NA		NV
2,4-DIMETHYLPHENOL		NA		NV
2,4-DINITROPHENOL		NA		NV
2,4-DINITROTOLUENE	B2	6.8E-01		0.13
2,6-DINITROTOLUENE	B2	6.8E-01		0.13
2-CHLORONAPHTHALENE		NA		NV
2-CHLOROPHENOL		NA		NV
2-METHYLNAPHTHALENE		NA		NV
2-METHYLPHENOL	C	NA		NV
2-NITROANILINE		NA		NV

TABLE H-1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*	*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10 $^{-6}$ RISK (3) (µg/L)*
SEMI-VOLATILE ORGANIC COMPOUNDS (cont'd)			
2-NITROPHENOL		NA	NV
3,3'-DICHLOROBENZIDINE	B2	4.5E-01	0.19
3-NITROANILINE		NA	NV
4,6-DINITRO-o-CRESOL		NA	NV
4-BROMOPHENYL PHENYL ETHER	D	NA	NV
4-CHLOROANILINE		2.0E-01	0.43
4-CHLOROPHENYL PHENYL ETHER		NA	NV
4-METHYLPHENOL	C	NA	NV
4-NITROANILINE		2.0E-02	4.26
4-NITROPHENOL		NA	NV
ACENAPHTHENE		NA	NV
ACENAPHTHYLENE	D	NA	NV
ANTHRACENE	D	NA	NV
BENZO(a)ANTHRACENE	B2	7.3E-01	0.12
BENZO(a)PYRENE	B2	7.3E+00	0.01
BENZO(b)FLUORANTHENE	B2	7.3E-01	0.12
BENZO(g,h,i)PERYLENE	D	NA	NV
BENZO(k)FLUORANTHENE	B2	7.3E-02	1.17
BENZOIC ACID	D	NA	NV
BENZYL ALCOHOL		NA	NV
BIS(2-CHLOROETHOXY)METHANE	D	NA	NV
BIS(2-CHLOROETHYL)ETHER	B2	1.1E+00	0.08
BIS(2-CHLOROISOPROPYL)ETHER	C	7.0E-02	1.22
BIS(2-ETHYLHEXYL)PHTHALATE	B2	1.4E-02	6.08
BUTYLBENZYL PHTHALATE	C	1.9E-03	44.82
CHRYSENE	B2	7.3E-03	11.67
DI-n-BUTYL PHTHALATE	D	NA	NV
DI-n-OCTYLPHTHALATE		NA	NV
DI-n-PROPYLNITROSAMINE		NA	NV
DIBENZ(a,h)ANTHRACENE	B2	7.3E+00	0.01
DIBENZOFURAN	D	NA	NV
DIETHYLPHTHALATE	D	NA	NV
DIMETHYLPHTHALATE	D	NA	NV
FLUORANTHENE	D	NA	NV
FLUORENE	D	NA	NV
HEXACHLOROBENZENE	B2	1.6E+00	0.05
HEXACHLOROBUTADIENE	C	7.8E-02	1.09
HEXACHLOROCYCLOPENTADIENE	D	NA	NV
HEXACHLOROETHANE	C	1.4E-02	6.08
INDENO(1,2,3-cd)PYRENE	B2	7.3E-01	0.12
ISOPHORONE	C	9.5E-04	89.65
N-NITROSODIMETHYLAMINE	B2	5.1E+01	0.00
N-NITROSO-DI-N-PROPYLAMINE	B2	7.0E+00	0.01
NAPHTHALENE	D	NA	NV
NITROBENZENE	D	NA	NV
PENTACHLOROPHENOL	B2	1.2E-01	0.71
PHENANTHRENE	D	NA	NV
PHENOL	D	NA	NV
PYRENE	D	NA	NV

TABLE H-1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*		*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10 $^{-6}$ RISK (3) (µg/L)*
PESTICIDES/PCBS				
4,4'-DDD	B2	2.4E-01		0.35
4,4'-DDE	B2	3.4E-01		0.25
4,4'-DDT	B2	3.4E-01		0.25
ALDRIN	B2	1.7E+01		0.01
alpha-BHC	B2	6.3E+00		0.01
beta-BHC	C	1.8E+00		0.05
CHLORDANE	B2	3.5E-01		0.24
delta-BHC	D	NA		NV
DIELDRIN	B2	1.6E+01		0.01
ENDOSULFAN I		NA		NV
ENDOSULFAN II		NA		NV
ENDOSULFAN SULFATE		NA		NV
ENDRIN	D	NA		NV
ENDRIN ALDEHYDE		NA		NV
gamma-BHC (LINDANE)	C	1.1E+00		0.08
HEPTACHLOR	B2	4.5E+00		0.02
HEPTACHLOR EPOXIDE	B2	9.1E+00		0.01
METHOXYCHLOR	D	NA		NV
TOXAPHENE	B2	1.1E+00		0.08
PCB-1242	B2	2.0E+00	(5)	0.04
PCB-1254	B2	2.0E+00	(5)	0.04
PCB-1221	B2	2.0E+00	(5)	0.04
PCB-1232	B2	2.0E+00	(5)	0.04
PCB-1248	B2	2.0E+00	(5)	0.04
PCB-1260	B2	2.0E+00	(5)	0.04
PCB-1016	B2	2.0E+00	(5)	0.04
METALS (TOTAL)				
ALUMINUM		NA		NV
ANTIMONY		NA		NV
ARSENIC	A	1.5E+00		0.06
BARIUM		NA		NV
BERYLLIUM	B1 (via inhalation)	NA		NV
CADMIUM	B1 (via inhalation)	NA		NV
CALCIUM		NA		NV
CHROMIUM		NA		NV
COBALT		NA		NV
COPPER	D	NA		NV
IRON	C	NA		NV
LEAD	B2	NA		NV
MAGNESIUM		NA		NV
MANGANESE	D	NA		NV
MERCURY	D	NA		NV
NICKEL		NA		NV
POTASSIUM		NA		NV
SELENIUM	D	NA		NV
SILVER	D	NA		NV
SODIUM		NA		NV
THALLIUM		NA		NV
VANADIUM		NA		NV
ZINC	D	NA		NV

TABLE H-1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*	*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*

Notes:

NA= NOT AVAILABLE
(1) USEPA Weight-of-Evidence Toxicological Classification
Group A - Human Carcinogen (sufficient evidence of carcinogenicity in humans)
Group B1 - Probable Human Carcinogen (limited evidence of carcinogenicity in humans)
Group B2 - Probable Human Carcinogen (sufficient evidence of carcinogenicity in animals)
Group C - Possible Human Carcinogen (limited evidence of carcinogenicity in animals)
Group D - Not Classified as to Human Carcinogenicity (inadequate or no evidence)
(2) Cancer Slope Factor - A measure of the carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: CalEPA Office of Environmental Health Hazard Assessment (OEHHA), Cancer Potency Values, December 2008.
(3) Based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(4) 1,3-Dichloropropene CSF substituted.
(5) Total PCBs CSF substituted.

ATTACHMENT I

PERFORMANCE STANDARDS NON-CARCINOGENIC

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MEMORANDUM

TO:	Steve Whillier	REF. NO.:	006029-50
FROM:	April Gowing/Tina LePage/kf/23 AG.	DATE:	June 4, 2009
RE:	**Determination of Groundwater Performance Standards for Non-Carcinogenic Parameters, Summit National Superfund Site, Portage County, Ohio**		

This memorandum present the work performed in response to the requirements for determining groundwater performance standards as stated in pages 40 and 41 of the Consent Decree.

The following task presents the determination of groundwater performance standards for substances not believed to have carcinogenic effects.

TASK: DETERMINATION OF PERFORMANCE STANDARDS FOR SUBSTANCES NOT BELIEVED TO HAVE CARCINOGENIC EFFECTS

Page 41 of the Consent Decree states that for each *"hazardous substance, pollutant or contaminant detected in groundwater at any compliance point referred to above that has not been identified by USEPA's Cancer Assessment Group as a possible, probable or known human carcinogen, Settling Defendants shall calculate a groundwater concentration limitation adequate to assure that such substances will not present a maximum cumulative chronic health index (HI) greater than 1."*. Therefore to satisfy this requirement, the hazard indices were calculated for each sampling round for each monitoring well and assuming the ingestion of groundwater by residents (i.e., considered to be the most sensitive population). Analytical data from the April 2009 sampling round was utilized in the evaluation presented herein.

As part of this effort, background wells were identified for the Water Table Unit (WTU), the Upper Intermediate Unit (UIU), the Lower Intermediate Unit (LIU) and the Upper Sharon Unit (USU). Groundwater parameters for all the units were identified based on a detected value of the parameter in any of the units. The mean and reasonable maximum exposure (RME) [95 percent upper confidence level (UCL)] background concentrations were then calculated for each groundwater unit. The mean background concentrations were calculated including both detected and non-detected results with non-detects equal to one-half the detection limit. The RME values were determined based on the observed data distribution and the percent age of censored data points (non-detected results), consistent with USEPA ProUCL 4.0 (2007). The RME concentrations are conservatively based on the 95 percent UCL of the mean. Duplicate samples were averaged and considered as one sample. The calculated mean and RME background concentrations for the four groundwater units identified are summarized in Table 1.0.

The reported inorganic parameters for each sampling round for each monitoring well were compared to twice the appropriate mean background concentrations (i.e., WTU, UIU, LIU or USU). This is consistent with USEPA guidance (RAGS, 1989) which states reported concentrations of chemicals of potential concern

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(COPCs) should be "significantly elevated above naturally occurring levels of the same chemicals." Inorganic parameters at levels in exceedance of twice the appropriate mean background concentrations were then identified as COPCs and evaluated in the hazard assessment. For organic parameters above the appropriate mean background concentrations, were considered as COPCs for that monitoring well location and evaluated in the hazard assessment.

The chemical-specific Hazard Quotient (HQ) was calculated as follows:

$$HQ = \frac{(C * IR * EF * ED) / (BW * AT)}{RfD}$$

Where:

HQ	Hazard Quotient	--	(unitless)
C	reported groundwater Concentration	--	(mg/L)
IR	Ingestion Rate	2	(L/day)
EF	Exposure Frequency	350	(days/year)
ED	Exposure Duration	30	(years)
BW	Body Weight	70	(kg)
AT	Averaging Time	10,950	(days)
RfD	oral Reference Dose	chemical-specific	(mg/kg-day)

The most current oral reference doses (RfDs) were used in the calculations. These RfD values were taken from the USEPA Integrated Risk Information System (USEPA, 2009a), USEPA Health Effects Assessment Summary Tables (HEAST, July 1997), Office of National Center of Environmental Assessment as presented in the Regional Screening Levels (RSLs) Master Table (USEPA, 2009b), and from the Agency for Toxic Substances and Disease Registry (ATSDR, 2008) as presented in their Minimum Risk Levels (MRLs) Table.

Therefore, the hazard index associated with the potential residential exposure to groundwater from monitoring well '***y***' is calculated as follows:

$$HI_y = \sum_{n}^{1} HQ_1 + HQ_2 + \ldots + HQ_n$$

Table 2.0 summarizes the hazard indices associated with the potential residential exposure to groundwater from all monitoring wells. Attachment A presents the hazard calculation for each monitoring well within each unit. In cases whereby the calculated hazard index is above 1.0, the level of potential concern, the COPCs that drive the hazard are also identified. In lieu of USEPA established RfDs, note that peered-reviewed provisional RfDs for aluminum, cobalt, iron, 1,1-dichloroethane, 1,2-dichloroethane, and cis-1,2-dichloroethylene were used in the evaluation. This is due to inadequate animal and/or human data involving oral toxicity studies, which prevent determination of oral reference doses for the above mentioned analytes. Therefore, USEPA applied alternative approaches to derive provisional oral RfDs for the mentioned analytes. Additionally, the toxicity data for trichloroethylene (TCE) is currently under review by the USEPA, therefore the hazard quotient for TCE in each monitoring well was not calculated, as currently there is no accepted RfD as indicated in the RSL Master Table (USEPA, 2009b). The RSL Master Table is the current approach used by Regional USEPA Offices.

REFERENCES:

ATSDR, 2008. Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels, December (http://www.atsdr.cdc.gov/toxpro2.html#-A-).

HEAST, 1997. U.S. EPA Health Effects Assessment Summary Tables (HEAST), July 1, 1997.

USEPA, 1989. Risk Assessment Guidance for Superfund (RAGS) Interim Final, EPA/540/1-89/002, December 1989.

USEPA, 2007. ProUCL Users Guide Version 4.0. United States Environmental Protection Agency, Washington D.C., April 2007. EPA/600/R07/041.

USEPA, 2009a. USEPA Integrated Risk Information System (IRIS), May (http://cfpub.epa.gov/ncea/iris/index.cfm).

USEPA, 2009b. Regional Screening Levels (RSLs) Master Table, April (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm).

TABLE 1.0

SUMMARY OF MEAN AND RME BACKGROUND CONCENTRATIONS
GROUNDWATER
SUMMIT NATIONAL SITE
DEERFIELD, OHIO

		Water Table Unit (1)		*Upper Intermediate Unit (2)*		*Lower Intermediate Unit (3)*		*Upper Sharon Unit (4)*	
Parameters	***Units***	***Mean***	***RME***	***Mean***	***RME***	***Mean***	***RME***	***Mean***	***RME***
Total Metals									
Aluminum	µg/L	1.17E+03	1.73E+03	ND	ND	2.56E+03	7.49E+03	1.56E+02	2.68E+02
Antimony	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	µg/L	1.11E+01	2.37E+01	3.60E+00	7.80E+00	ND	ND	ND	ND
Barium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	µg/L	2.43E+05	3.45E+05	2.30E+05	4.48E+05	2.46E+04	4.14E+04	3.36E+03	5.09E+03
Chromium	µg/L	ND	ND	ND	ND	8.37E+00	1.51E+01	ND	ND
Cobalt	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Copper	µg/L	3.70E+01	3.10E+01	ND	ND	3.14E+01	8.41E+01	1.01E+01	2.04E+01
Iron	µg/L	4.93E+04	8.71E+04	3.05E+04	2.20E+05	5.54E+03	2.04E+04	4.47E+03	1.06E+04
Lead	µg/L	2.03E+00	3.10E+00	ND	ND	2.93E+00	5.80E+00	ND	ND
Magnesium	µg/L	1.03E+05	1.76E+05	8.45E+04	1.43E+05	1.34E+04	2.24E+04	ND	ND
Manganese	µg/L	3.29E+03	5.96E+03	1.94E+03	6.87E+03	1.59E+02	5.33E+02	4.50E+01	1.13E+02
Mercury	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	µg/L	4.98E+01	6.89E+01	1.38E+01	2.13E+01	1.36E+01	2.08E+01	ND	ND
Potassium	µg/L	ND	ND	1.33E+04	1.83E+04	6.90E+03	1.07E+04	ND	ND
Selenium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Silver	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	µg/L	3.33E+04	3.89E+04	4.47E+05	1.08E+06	5.82E+05	9.76E+05	5.73E+05	8.51E+05
Thallium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	µg/L	1.24E+02	2.48E+02	3.17E+01	7.51E+01	1.97E+01	3.91E+01	ND	ND
SVOCs									
1,2-Dichlorobenzene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol [o-cresol]	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	µg/L	2.10E+00	4.30E+00	2.13E+00	2.70E+00	1.13E+00	1.40E+00	ND	ND
Diethyl phthalate	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
VOCs									
1,1,1-Trichloroethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethylene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, total	µg/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes :

ND = Not Detected
RME = Reasonable Maximum Exposure
(1) Based on data collected from sampling locations : MW-101, MW-102, MW-103.
(2) Based on data collected from sampling locations : MW-201, MW-204, MW-205.
(3) Based on data collected from sampling locations : MW-301, MW-302, MW-304.
(4) Based on data collected from sampling locations : MW-414, MW-415, MW-422.

TABLE 2.0

SUMMARY OF HAZARD INDICES
GROUNDWATER
SUMMIT NATIONAL SITE
DEERFIELD, OHIO

Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*
WATER TABLE UNIT				
MW-4	4/21/2009	2.88E-03	--	--
MW-11	4/23/2009	7.80E-01	--	--
MW-104	4/23/2009	1.90E-04	--	--
MW-105	4/23/2009	**1.56E+01**	**Arsenic**	**18**
			Cadmium	1
			Iron	**55**
			Manganese	**27**
MW-106	4/23/2009	**6.17E+00**	**Iron**	**99**
MW-107	4/24/2009	**9.70E+00**	**Arsenic**	**35**
			1,1-Dichloroethane	2
			1,2-Dichloroethane	4
			Benzene	7
			cis-1,2-Dichloroethylene	10
			Ethylbenzene	3
			Toluene	**19**
			Vinyl Chloride	**11**
			Xylenes, total	6
MW-108	4/23/2009	**4.61E+00**	**Arsenic**	**65**
			1,2-Dichloroethane	2
			Benzene	11
			cis-1,2-Dichloroethylene	8
			Trichloroethene (dated)	3
			Vinyl Chloride	11
MW-109	4/20/2009	1.87E-01	--	--
MW-110	4/20/2009	NC	--	--
MW-111	4/23/2009	**8.18E+00**	**Iron**	**97**
MW-113	4/20/2009	4.73E-04	--	--
MW-114	4/21/2009	**1.04E+01**	**Arsenic**	**55**
			Iron	**44**
MW-115	4/21/2009	2.30E-02	--	--
MW-116	4/21/2009	3.70E-03	--	--
MW-117	4/21/2009	NC	--	--
MW-118	4/20/2009	2.88E-03	--	--

TABLE 2.0

SUMMARY OF HAZARD INDICES
GROUNDWATER
SUMMIT NATIONAL SITE
DEERFIELD, OHIO

Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*
UPPER INTERMEDIATE UNIT				
MW-202	4/22/2009	4.90E-02	--	--
MW-203	4/23/2009	NC	--	--
MW-206	4/23/2009	**1.73E+00**	Aluminum	23
			Arsenic	57
			Barium	2
			Cadmium	8
			Copper	5
			Nickel	5
MW-207	4/24/2009	NC	--	--
MW-209	4/20/2009	4.38E-04	--	--
MW-219	4/23/2009	NC	--	--
MW-220	4/21/2009	NC	--	--
MW-223	4/23/2009	**8.61E+00**	**Iron**	**56**
			Manganese	**44**
MW-224	4/24/2009	4.83E-02	--	--
LOWER INTERMEDIATE UNIT				
MW-303	4/23/2009	NC	--	--
MW-305	4/22/2009	**1.57E+00**	Iron	30
			Manganese	**70**
MW-306	4/23/2009	2.19E-03	--	--
MW-307	4/24/2009	3.22E-03	--	--
MW-309	4/20/2009	2.19E-03	--	--
MW-319	4/23/2009	NC	--	--
MW-320	4/21/2009	5.86E-02	--	--
MW-321	4/24/2009	6.30E-03	--	--
MW-322	4/23/2009	NC	--	--
MW-323	4/23/2009	5.45E-02	--	--
MW-324	4/24/2009	4.55E-01	--	--

TABLE 2.0

SUMMARY OF HAZARD INDICES
GROUNDWATER
SUMMIT NATIONAL SITE
DEERFIELD, OHIO

Monitoring Well	*Sampling Date*	*Hazard Index*	*Chemical of Potential Concern (COPC)*	*Percent Contribution of COPC*
UPPER SHARON UNIT				
MW-401	4/23/2009	1.03E-01	--	--
MW-402	4/20/2009	**1.38E+00**	Aluminum	6
			Barium	2
			Copper	1
			Iron	**79**
			Manganese	6
			Nickel	4
MW-421	4/22/2009	1.47E-02	--	--

Notes:

NC = Not Calculated
Bolded chemical name indicates respective HQ >1.0.

eg. Aluminum	HQ >1
Aluminum	HQ<1

TABLE F.1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*		*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*
VOLATILE ORGANIC COMPOUNDS				
1,1,1-TRICHLOROETHANE	D	NA		NV
1,1,2,2-TETRACHLOROETHANE	C	2.0E-01		0.43
1,1,2-TRICHLOROETHANE	C	5.7E-02		1.49
1,1-DICHLOROETHANE	C	5.7E-03		14.94
1,1-DICHLOROETHENE	C	NA		NV
1,2-DICHLOROETHANE	B2	9.1E-02		0.94
1,2-DICHLOROETHENE, TOTAL		NA		NV
1,2-DICHLOROPROPANE	B2	3.6E-02		2.37
cis-1,3-DICHLOROPROPENE		1.0E-01	(4)	0.85
trans-1,3-DICHLOROPROPENE		1.0E-01	(4)	0.85
2-HEXANONE		NA		NV
ACETONE	D	NA		NV
BENZENE	A	5.5E-02		1.55
BROMODICHLOROMETHANE	B2	6.2E-02		1.37
BROMOFORM	B2	7.9E-03		10.78
BROMOMETHANE	D	NA		NV
CARBON DISULFIDE		NA		NV
CARBON TETRACHLORIDE	B2	1.3E-01		0.66
CHLOROBENZENE	D	NA		NV
CHLOROETHANE		NA		NV
CHLOROFORM	B2	3.1E-02		2.75
CHLOROMETHANE	D	NA		NV
DIBROMOCHLOROMETHANE	C	8.4E-02		1.01
ETHYLBENZENE	D	1.1E-02		7.74
METHYL ETHYL KETONE	D	NA		NV
METHYL ISOBUTYL KETONE		NA		NV
METHYLENE CHLORIDE	B2	7.5E-03		11.36
STYRENE		NA		NV
TETRACHLOROETHENE (dated)	B2	5.1E-02		1.67
TETRACHLOROETHENE (current)	B2	5.4E-01		0.16
TOLUENE	D	NA		NV
TRICHLOROETHENE (dated)	B2	1.1E-02		7.74
TRICHLOROETHENE (current)	B2	1.3E-02		6.55
VINYL ACETATE		NA		NV
VINYL CHLORIDE	A	7.2E-01		0.12
XYLENES, TOTAL	D	NA		NV

TABLE F.1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*	*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*
SEMI-VOLATILE ORGANIC COMPOUNDS			
1,2,4-TRICHLOROBENZENE	D	3.6E-03	23.66
1,2-DICHLOROBENZENE	D	NA	NV
1,3-DICHLOROBENZENE	D	NA	NV
1,4-DICHLOROBENZENE		5.4E-03	15.77
2,4,5-TRICHLOROPHENOL		NA	NV
2,4,6-TRICHLOROPHENOL	B2	1.1E-02	7.74
2,4-DICHLOROPHENOL		NA	NV
2,4-DIMETHYLPHENOL		NA	NV
2,4-DINITROPHENOL		NA	NV
2,4-DINITROTOLUENE	B2	6.8E-01	0.13
2,6-DINITROTOLUENE	B2	6.8E-01	0.13
2-CHLORONAPHTHALENE		NA	NV
2-CHLOROPHENOL		NA	NV
2-METHYLNAPHTHALENE		NA	NV
2-METHYLPHENOL	C	NA	NV
2-NITROANILINE		NA	NV
2-NITROPHENOL		NA	NV
3,3'-DICHLOROBENZIDINE	B2	4.5E-01	0.19
3-NITROANILINE		NA	NV
4,6-DINITRO-o-CRESOL		NA	NV
4-BROMOPHENYL PHENYL ETHER	D	NA	NV
4-CHLOROANILINE		2.0E-01	0.43
4-CHLOROPHENYL PHENYL ETHER		NA	NV
4-METHYLPHENOL	C	NA	NV
4-NITROANILINE		2.0E-02	4.26
4-NITROPHENOL		NA	NV
ACENAPHTHENE		NA	NV
ACENAPHTHYLENE	D	NA	NV
ANTHRACENE	D	NA	NV
BENZO(a)ANTHRACENE	B2	7.3E-01	0.12
BENZO(a)PYRENE	B2	7.3E+00	0.01
BENZO(b)FLUORANTHENE	B2	7.3E-01	0.12
BENZO(g,h,i)PERYLENE	D	NA	NV
BENZO(k)FLUORANTHENE	B2	7.3E-02	1.17
BENZOIC ACID	D	NA	NV
BENZYL ALCOHOL		NA	NV
BIS(2-CHLOROETHOXY)METHANE	D	NA	NV
BIS(2-CHLOROETHYL)ETHER	B2	1.1E+00	0.08
BIS(2-CHLOROISOPROPYL)ETHER	C	7.0E-02	1.22
BIS(2-ETHYLHEXYL)PHTHALATE	B2	1.4E-02	6.08
BUTYLBENZYL PHTHALATE	C	1.9E-03	44.82
CHRYSENE	B2	7.3E-03	11.67

TABLE F.1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*	*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*
SEMI-VOLATILE ORGANIC COMPOUNDS (cont'd)			
DI-n-BUTYL PHTHALATE	D	NA	NV
DI-n-OCTYLPHTHALATE		NA	NV
DI-n-PROPYLNITROSAMINE		NA	NV
DIBENZ(a,h)ANTHRACENE	B2	7.3E+00	0.01
DIBENZOFURAN	D	NA	NV
DIETHYLPHTHALATE	D	NA	NV
DIMETHYLPHTHALATE	D	NA	NV
FLUORANTHENE	D	NA	NV
FLUORENE	D	NA	NV
HEXACHLOROBENZENE	B2	1.6E+00	0.05
HEXACHLOROBUTADIENE	C	7.8E-02	1.09
HEXACHLOROCYCLOPENTADIENE	D	NA	NV
HEXACHLOROETHANE	C	1.4E-02	6.08
INDENO(1,2,3-cd)PYRENE	B2	7.3E-01	0.12
ISOPHORONE	C	9.5E-04	89.65
N-NITROSODIMETHYLAMINE	B2	5.1E+01	0.00
N-NITROSO-DI-N-PROPYLAMINE	B2	7.0E+00	0.01
NAPHTHALENE	D	NA	NV
NITROBENZENE	D	NA	NV
PENTACHLOROPHENOL	B2	1.2E-01	0.71
PHENANTHRENE	D	NA	NV
PHENOL	D	NA	NV
PYRENE	D	NA	NV

TABLE F.1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*		*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*
PESTICIDES/PCBS				
4,4'-DDD	B2	2.4E-01		0.35
4,4'-DDE	B2	3.4E-01		0.25
4,4'-DDT	B2	3.4E-01		0.25
ALDRIN	B2	1.7E+01		0.01
alpha-BHC	B2	6.3E+00		0.01
beta-BHC	C	1.8E+00		0.05
CHLORDANE	B2	3.5E-01		0.24
delta-BHC	D	NA		NV
DIELDRIN	B2	1.6E+01		0.01
ENDOSULFAN I		NA		NV
ENDOSULFAN II		NA		NV
ENDOSULFAN SULFATE		NA		NV
ENDRIN	D	NA		NV
ENDRIN ALDEHYDE		NA		NV
gamma-BHC (LINDANE)	C	1.1E+00		0.08
HEPTACHLOR	B2	4.5E+00		0.02
HEPTACHLOR EPOXIDE	B2	9.1E+00		0.01
METHOXYCHLOR	D	NA		NV
TOXAPHENE	B2	1.1E+00		0.08
PCB-1242	B2	2.0E+00	(5)	0.04
PCB-1254	B2	2.0E+00	(5)	0.04
PCB-1221	B2	2.0E+00	(5)	0.04
PCB-1232	B2	2.0E+00	(5)	0.04
PCB-1248	B2	2.0E+00	(5)	0.04
PCB-1260	B2	2.0E+00	(5)	0.04
PCB-1016	B2	2.0E+00	(5)	0.04

TABLE F.1

SUMMARY OF PERFORMANCE STANDARDS FOR SUBSTANCES WITH POSSIBLE CARCINOGENIC EFFECTS GROUNDWATER SUMMIT NATIONAL SUPERFUND SITE PORTAGE COUNTY, OHIO

COMPOUND	*TOXICOLOGICAL CLASS (1)*	*ORAL CANCER SLOPE FACTOR (2) 1/(mg/kg/day)*	*PERFORMANCE STANDARDS FOR INDIVIDUAL COMPOUNDS BASED ON 1.0 X 10^{-6} RISK (3) (µg/L)*
METALS (TOTAL)			
ALUMINUM		NA	NV
ANTIMONY		NA	NV
ARSENIC	A	1.5E+00	0.06
BARIUM		NA	NV
BERYLLIUM	B1 (via inhalation)	NA	NV
CADMIUM	B1 (via inhalation)	NA	NV
CALCIUM		NA	NV
CHROMIUM		NA	NV
COBALT		NA	NV
COPPER	D	NA	NV
IRON	C	NA	NV
LEAD	B2	NA	NV
MAGNESIUM		NA	NV
MANGANESE	D	NA	NV
MERCURY	D	NA	NV
NICKEL		NA	NV
POTASSIUM		NA	NV
SELENIUM	D	NA	NV
SILVER	D	NA	NV
SODIUM		NA	NV
THALLIUM		NA	NV
VANADIUM		NA	NV
ZINC	D	NA	NV

Notes:

NA= NOT AVAILABLE
(1) USEPA Weight-of-Evidence Toxicological Classification
Group A - Human Carcinogen (sufficient evidence of carcinogenicity in humans)
Group B1 - Probable Human Carcinogen (limited evidence of carcinogenicity in humans)
Group B2 - Probable Human Carcinogen (sufficient evidence of carcinogenicity in animals)
Group C - Possible Human Carcinogen (limited evidence of carcinogenicity in animals)
Group D - Not Classified as to Human Carcinogenicity (inadequate or no evidence)
(2) Cancer Slope Factor - A measure of the carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: CalEPA Office of Environmental Health Hazard Assessment (OEHHA), Cancer Potency Values, December 2008.
(3) Based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(4) 1,3-Dichloropropene CSF substituted.
(5) Total PCBs CSF substituted.

TABLE 1

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-4
SAMPLE ID : WG-6029-042109-022
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	375000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	1440	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	231000	1.03E+05	1.76E+05	X	NA		6.33E+00	--	--
MANGANESE	617	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	13500	3.33E+04	3.89E+04		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 1

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-4
SAMPLE ID : WG-6029-042109-022
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 2

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-11
SAMPLE ID : WG-6029-042309-051
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	295000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	16100	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	68400	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	4460	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	47700	3.33E+04	3.89E+04		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 2

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-11
SAMPLE ID : WG-6029-042309-051
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	45.5	ND	ND	X	2.00E+00	1.25E-03	6.23E-04	0.28
1,1,2-TRICHLOROETHANE	0.24 J	ND	ND	X	4.00E-03	6.58E-06	1.64E-03	0.74
1,1-DICHLOROETHANE	76.2	ND	ND	X	2.00E-01	2.09E-03	1.04E-02	4.69
1,1-DICHLOROETHENE	2	ND	ND	X	5.00E-02	5.48E-05	1.10E-03	0.49
1,2-DICHLOROETHANE	1.6	ND	ND	X	2.00E-02	4.38E-05	2.19E-03	0.98
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	0.7 J	ND	ND	X	4.00E-03	1.92E-05	4.79E-03	2.15
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	0.35 J	ND	ND	X	1.00E-02	9.59E-06	9.59E-04	0.43
CHLOROMETHANE	0.75 J	ND	ND	X	NA	2.05E-05	--	--
CIS-1,2-DICHLOROETHYLENE	55.5	ND	ND	X	1.00E-02	1.52E-03	1.52E-01	68.26
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	2.4	ND	ND	X	2.00E-02	6.58E-05	3.29E-03	1.48
TRICHLOROETHENE	122	ND	ND	X	NA	3.34E-03	--	--
VINYL CHLORIDE	5	ND	ND	X	3.00E-03	1.37E-04	4.57E-02	20.50
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	2.23E-01	
							TOTAL PERCENT :	100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 3

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-104
SAMPLE ID : WG-6029-042309-045
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	301	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	3.1	1.11E+01	2.37E+01		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	209000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	10.4	ND	ND	X	1.50E+00	2.85E-04	1.90E-04	100.00
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	21700	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	4	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	54600	1.03E+05	1.76E+05		NA	--	--	--
MANGANESE	2500	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	480000	3.33E+04	3.89E+04	X	NA	1.32E+01	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	39.8	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 3

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-104
SAMPLE ID : WG-6029-042309-045
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.90E-04

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 4

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-105
SAMPLE ID : WG-6029-042309-042
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	30.5	1.11E+01	2.37E+01	X	3.00E-04	8.36E-04	2.79E+00	17.89
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	1.5	ND	ND	X	5.00E-04	4.11E-05	8.22E-02	0.53
CALCIUM	414000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	217000	4.93E+04	8.71E+04	X	7.00E-01	5.95E+00	8.49E+00	54.54
LEAD	4.6	2.03E+00	3.10E+00	X	NA	1.26E-04	--	--
MAGNESIUM	174000	1.03E+05	1.76E+05		NA	--	--	--
MANGANESE	7180	3.29E+03	5.96E+03	X	4.67E-02	1.97E-01	4.21E+00	27.05
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	41.3	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	62500	3.33E+04	3.89E+04		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	93.2	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 4

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-105
SAMPLE ID : WG-6029-042309-042
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.56E+01

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 5

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-106
SAMPLE ID : WG-6029-042309-049
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	4.7	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	1.2	ND	ND	X	5.00E-04		3.29E-05	6.58E-02	1.07
CALCIUM	342500	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	156000	4.93E+04	8.71E+04	X	7.00E-01		4.27E+00	6.11E+00	98.89
LEAD	5.1	2.03E+00	3.10E+00	X	NA		1.40E-04	--	--
MAGNESIUM	131000	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	6255	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	29.75	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	10100	ND	ND	X	NA		2.77E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	46900	3.33E+04	3.89E+04		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	30.35	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.1	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 5

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-106
SAMPLE ID : WG-6029-042309-049
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	4.2	ND	ND	X	2.00E+00	1.15E-04	5.75E-05	0.00
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	2.25	ND	ND	X	2.00E-01	6.16E-05	3.08E-04	0.00
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	1.55	ND	ND	X	2.00E-02	4.25E-05	2.12E-03	0.03
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 6.17E+00

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 6

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-107
SAMPLE ID : WG-6029-042409-063
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	36.7	1.11E+01	2.37E+01	X	3.00E-04		1.01E-03	3.35E+00	34.54
BARIUM	298	ND	ND	X	2.00E-01		8.16E-03	4.08E-02	0.42
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	228000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	12.4	ND	ND	X	1.50E+00		3.40E-04	2.26E-04	0.00
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	45.4	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	391	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	109000	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	693	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	170000	3.33E+04	3.89E+04	X	NA		4.66E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	1.6 J	ND	ND	X	9.00E-02		4.38E-05	4.87E-04	0.01
2,4-DIMETHYLPHENOL	12.2	ND	ND	X	2.00E-02		3.34E-04	1.67E-02	0.17
2-METHYLNAPHTHALENE	1.7 J	ND	ND	X	4.00E-03		4.66E-05	1.16E-02	0.12
2-METHYLPHENOL	16.1	ND	ND	X	5.00E-02		4.41E-04	8.82E-03	0.09
3&4-METHYLPHENOL	11.8	ND	ND	X	5.00E-03	(5)	3.23E-04	6.47E-02	0.67
4-CHLOR-3-METHYLPHENOL	8.7	ND	ND	X	NA		2.38E-04	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.5 J	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	2.9	ND	ND	X	8.00E-01		7.95E-05	9.93E-05	0.00
NAPHTHALENE	9.2	ND	ND	X	2.00E-02		2.52E-04	1.26E-02	0.13
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 6

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-107
SAMPLE ID : WG-6029-042409-063
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	134	ND	ND	X	2.00E+00	3.67E-03	1.84E-03	0.02
1,1,2-TRICHLOROETHANE	ND(50)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	1320	ND	ND	X	2.00E-01	3.62E-02	1.81E-01	1.86
1,1-DICHLOROETHENE	ND(50)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	291	ND	ND	X	2.00E-02	7.97E-03	3.99E-01	4.11
ACETONE	ND(250)	ND	ND		9.00E-01	--	--	--
BENZENE	97.8	ND	ND	X	4.00E-03	2.68E-03	6.70E-01	6.90
CARBON DISULFIDE	ND(100)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	63.5	ND	ND	X	2.00E-02	1.74E-03	8.70E-02	0.90
CHLOROETHANE	ND(50)	ND	ND		NA	--	--	--
CHLOROFORM	ND(50)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(50)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	369	ND	ND	X	1.00E-02	1.01E-02	1.01E+00	10.42
ETHYLBENZENE	1230	ND	ND	X	1.00E-01	3.37E-02	3.37E-01	3.47
TOLUENE	5370	ND	ND	X	8.00E-02	1.47E-01	1.84E+00	18.95
TRANS-1,2-DICHLOROETHYLENE	ND(50)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(50)	ND	ND		NA	--	--	--
VINYL CHLORIDE	121	ND	ND	X	3.00E-03	3.32E-03	1.11E+00	11.39
XYLENES, TOTAL	4120	ND	ND	X	2.00E-01	1.13E-01	5.64E-01	5.82
						HAZARD INDEX :	9.70E+00	
							TOTAL PERCENT :	100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 7

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-108
SAMPLE ID : WG-6029-042309-062
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	32.6	1.11E+01	2.37E+01	X	3.00E-04	8.93E-04	2.98E+00	66.50
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	187000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	61.3	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	45400	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	57400	1.03E+05	1.76E+05		NA	--	--	--
MANGANESE	1810	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	116000	3.33E+04	3.89E+04	X	NA	3.18E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 7

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-108
SAMPLE ID : WG-6029-042309-062
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	8.8	ND	ND	X	2.00E+00	2.41E-04	1.21E-04	0.00
1,1,2-TRICHLOROETHANE	0.21 J	ND	ND	X	4.00E-03	5.75E-06	1.44E-03	0.03
1,1-DICHLOROETHANE	213	ND	ND	X	2.00E-01	5.84E-03	2.92E-02	0.65
1,1-DICHLOROETHENE	2.8	ND	ND	X	5.00E-02	7.67E-05	1.53E-03	0.03
1,2-DICHLOROETHANE	68.9	ND	ND	X	2.00E-02	1.89E-03	9.44E-02	2.11
ACETONE	3.8 J	ND	ND	X	9.00E-01	1.04E-04	1.16E-04	0.00
BENZENE	77.2	ND	ND	X	4.00E-03	2.12E-03	5.29E-01	11.81
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	0.55 J	ND	ND	X	1.00E-02	1.51E-05	1.51E-03	0.03
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	128	ND	ND	X	1.00E-02	3.51E-03	3.51E-01	7.83
ETHYLBENZENE	0.54 J	ND	ND	X	1.00E-01	1.48E-05	1.48E-04	0.00
TOLUENE	0.59 J	ND	ND	X	8.00E-02	1.62E-05	2.02E-04	0.00
TRANS-1,2-DICHLOROETHYLENE	4.2	ND	ND	X	2.00E-02	1.15E-04	5.75E-03	0.13
TRICHLOROETHENE	30.1	ND	ND	X	NA	8.25E-04	--	--
VINYL CHLORIDE	53.2	ND	ND	X	3.00E-03	1.46E-03	4.86E-01	10.85
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	4.48E+00	
						TOTAL PERCENT :		100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 8

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-109
SAMPLE ID : WG-6029-042009-004
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	2440	1.17E+03	1.73E+03	X	1.00E+00	6.68E-02	6.68E-02	35.67
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	3.3	1.11E+01	2.37E+01		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	2.2	ND	ND	X	5.00E-04	6.03E-05	1.21E-01	64.33
CALCIUM	420000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	8400	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	208000	1.03E+05	1.76E+05	X	NA	5.70E+00	--	--
MANGANESE	5690	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	73.9	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	ND(10000)	3.33E+04	3.89E+04		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	232	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.5 J	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 8

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-109
SAMPLE ID : WG-6029-042009-004
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.87E-01

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 9

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-110
SAMPLE ID : WG-6029-042009-007
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	691	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	92600	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	1350	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	25700	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	180	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	ND(10000)	3.33E+04	3.89E+04		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 9

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-110
SAMPLE ID : WG-6029-042009-007
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 10

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-111
SAMPLE ID : WG-6029-042309-053
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	9.1	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	1.2	ND	ND	X	5.00E-04		3.29E-05	6.58E-02	0.80
CALCIUM	447000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	203000	4.93E+04	8.71E+04	X	7.00E-01		5.56E+00	7.95E+00	97.19
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	155000	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	4780	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	28.7	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	96300	3.33E+04	3.89E+04	X	NA		2.64E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	25.6	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 10

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-111
SAMPLE ID : WG-6029-042309-053
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	2.3	ND	ND	X	2.00E+00	6.30E-05	3.15E-05	0.00
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	31.4	ND	ND	X	2.00E-01	8.60E-04	4.30E-03	0.05
1,1-DICHLOROETHENE	0.71 J	ND	ND	X	5.00E-02	1.95E-05	3.89E-04	0.00
1,2-DICHLOROETHANE	69.1	ND	ND	X	2.00E-02	1.89E-03	9.47E-02	1.16
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	1.4	ND	ND	X	NA	3.84E-05	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	6.3	ND	ND	X	1.00E-02	1.73E-04	1.73E-02	0.21
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	5.2	ND	ND	X	3.00E-03	1.42E-04	4.75E-02	0.58
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	8.18E+00	
						TOTAL PERCENT :		100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 11

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-113
SAMPLE ID : WG-6029-042009-006
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	1990	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	8.9	1.11E+01	2.37E+01		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	534000	2.43E+05	3.45E+05	X	NA	1.46E+01	--	--
CHROMIUM	25.9	ND	ND	X	1.50E+00	7.10E-04	4.73E-04	100.00
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	10300	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	5.5	2.03E+00	3.10E+00	X	NA	1.51E-04	--	--
MAGNESIUM	216000	1.03E+05	1.76E+05	X	NA	5.92E+00	--	--
MANGANESE	5970	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	39.3	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	166000	3.33E+04	3.89E+04	X	NA	4.55E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	20.1	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.6 J	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 11

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-113
SAMPLE ID : WG-6029-042009-006
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 4.73E-04

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 12

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-114
SAMPLE ID : WG-6029-042109-014
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	706	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	62.9	1.11E+01	2.37E+01	X	3.00E-04	1.72E-03	5.74E+00	55.00
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	1.5	ND	ND	X	5.00E-04	4.11E-05	8.22E-02	0.79
CALCIUM	425000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	118000	4.93E+04	8.71E+04	X	7.00E-01	3.23E+00	4.62E+00	44.22
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	27100	1.03E+05	1.76E+05		NA	--	--	--
MANGANESE	1850	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	39.2	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	27500	ND	ND	X	NA	7.53E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	130000	3.33E+04	3.89E+04	X	NA	3.56E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	155	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 12

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-114
SAMPLE ID : WG-6029-042109-014
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.04E+01

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 13

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-115
SAMPLE ID : WG-6029-042109-013
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	327000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	14400	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	84650	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	3845	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	66700	3.33E+04	3.89E+04	X	NA		1.83E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.05)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.1)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.05)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.05)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.05)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.1)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.25 J	2.10E+00	4.30E+00	X	2.00E-02		6.16E-05	3.08E-03	13.42
DIETHYLPHTHALATE	ND(2.05)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 13

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-115
SAMPLE ID : WG-6029-042109-013
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	2.15	ND	ND	X	2.00E-01	5.89E-05	2.95E-04	1.28
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	7.15	ND	ND	X	1.00E-02	1.96E-04	1.96E-02	85.30
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	2.30E-02	
							TOTAL PERCENT :	100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 14

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-116
SAMPLE ID : WG-6029-042109-010
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	630	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	3.1	1.11E+01	2.37E+01		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	434000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	28.2	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	2170	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	475000	1.03E+05	1.76E+05	X	NA	1.30E+01	--	--
MANGANESE	1420	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	13200	ND	ND	X	NA	3.62E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	171000	3.33E+04	3.89E+04	X	NA	4.68E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.7	2.10E+00	4.30E+00	X	2.00E-02	7.40E-05	3.70E-03	100.00
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 14

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-116
SAMPLE ID : WG-6029-042109-010
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 3.70E-03

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 15

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-117
SAMPLE ID : WG-6029-042109-025
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	1.17E+03	1.73E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	4.7	1.11E+01	2.37E+01		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	413000	2.43E+05	3.45E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02		--	--	--
IRON	24200	4.93E+04	8.71E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA		--	--	--
MAGNESIUM	130000	1.03E+05	1.76E+05		NA		--	--	--
MANGANESE	5720	3.29E+03	5.96E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	34	4.98E+01	6.89E+01		2.00E-02		--	--	--
POTASSIUM	13800	ND	ND	X	NA		3.78E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	57000	3.33E+04	3.89E+04		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	79	1.24E+02	2.48E+02		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.10E+00	4.30E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 15

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-117
SAMPLE ID : WG-6029-042109-025
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 16

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-118
SAMPLE ID : WG-6029-042009-003
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	692	1.17E+03	1.73E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	1.11E+01	2.37E+01		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	347000	2.43E+05	3.45E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.70E+01	3.10E+01		4.00E-02	--	--	--
IRON	11800	4.93E+04	8.71E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.03E+00	3.10E+00		NA	--	--	--
MAGNESIUM	129000	1.03E+05	1.76E+05		NA	--	--	--
MANGANESE	4920	3.29E+03	5.96E+03		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	4.98E+01	6.89E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	ND	ND		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	83200	3.33E+04	3.89E+04	X	NA	2.28E+00	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	48.3	1.24E+02	2.48E+02		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.3 J	2.10E+00	4.30E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 16

SITE : SUMMIT NATIONAL
SECTOR : WATER TABLE UNIT
LOCATION : MW-118
SAMPLE ID : WG-6029-042009-003
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	2.1	ND	ND	X	2.00E-02	5.75E-05	2.88E-03	100.00
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 2.88E-03

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW101, MW102, MW103
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 17

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-202
SAMPLE ID : WG-6029-042209-029
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	267	ND	ND	X	1.00E+00		7.32E-03	7.32E-03	14.94
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	12750	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	19.4	ND	ND	X	1.50E+00		5.32E-04	3.54E-04	0.72
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	60.3 J	ND	ND	X	4.00E-02		1.65E-03	4.13E-02	84.34
IRON	791 J	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	7000	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	20.55	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	563500	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 17

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-202
SAMPLE ID : WG-6029-042209-029
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 4.90E-02

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 18

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-203
SAMPLE ID : WG-6029-042309-041
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	ND	ND		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	7460	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	ND	ND		4.00E-02		--	--	--
IRON	ND(100)	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	ND(5000)	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	ND(15)	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	739000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 18

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-203
SAMPLE ID : WG-6029-042309-041
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 19

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-206
SAMPLE ID : WG-6029-042309-057
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	14400	ND	ND	X	1.00E+00		3.95E-01	3.95E-01	22.75
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	10.8	3.60E+00	7.80E+00	X	3.00E-04		2.96E-04	9.86E-01	56.87
BARIUM	301	ND	ND	X	2.00E-01		8.25E-03	4.12E-02	2.38
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	2.6	ND	ND	X	5.00E-04		7.12E-05	1.42E-01	8.21
CALCIUM	22700	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	55.1	ND	ND	X	1.50E+00		1.51E-03	1.01E-03	0.06
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	116	ND	ND	X	4.00E-02		3.18E-03	7.95E-02	4.58
IRON	43700	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	13.8	ND	ND	X	NA		3.78E-04	--	--
MAGNESIUM	10600	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	953	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	57.1	1.38E+01	2.13E+01	X	2.00E-02		1.56E-03	7.82E-02	4.51
POTASSIUM	11900	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	532000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	122	3.17E+01	7.51E+01	X	3.00E-01		3.34E-03	1.11E-02	0.64
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 19

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-206
SAMPLE ID : WG-6029-042309-057
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.73E+00

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 20

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-207
SAMPLE ID : WG-6029-042409-065
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	ND	ND		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	383000	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	ND	ND		4.00E-02		--	--	--
IRON	41300	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	154000	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	2200	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	17400	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	174000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.5 J	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 20

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-207
SAMPLE ID : WG-6029-042409-065
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	NC	
						TOTAL PERCENT :		NC

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 21

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-209
SAMPLE ID : WG-6029-042009-002
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	ND	ND		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	3.3	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	274000	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	ND	ND		4.00E-02		--	--	--
IRON	8210	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	134000	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	3660	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	15000	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	204000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.9 J	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 21

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-209
SAMPLE ID : WG-6029-042009-002
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	14.4	ND	ND	X	9.00E-01	3.95E-04	4.38E-04	100.00
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 4.38E-04

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 22

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-219
SAMPLE ID : WG-6029-042309-056
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	ND	ND		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	7920	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	ND	ND		4.00E-02		--	--	--
IRON	312	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	ND(5000)	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	ND(15)	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	587000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.6 J	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 22

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-219
SAMPLE ID : WG-6029-042309-056
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	NC	
						TOTAL PERCENT :		NC

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 23

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-220
SAMPLE ID : WG-6029-042109-020
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	ND	ND		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	406000	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	ND	ND		4.00E-02		--	--	--
IRON	105	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	26800	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	ND(15)	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	17000	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	303000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.1)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.1)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 23

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-220
SAMPLE ID : WG-6029-042109-020
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	NC	
						TOTAL PERCENT :		NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 24

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-223
SAMPLE ID : WG-6029-042309-048
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	ND	ND		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	369000	2.30E+05	4.48E+05		NA	--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	ND	ND		4.00E-02	--	--	--
IRON	123000	3.05E+04	2.20E+05	X	7.00E-01	3.37E+00	4.81E+00	55.95
LEAD	ND(3.0)	ND	ND		NA	--	--	--
MAGNESIUM	133000	8.45E+04	1.43E+05		NA	--	--	--
MANGANESE	6440	1.94E+03	6.87E+03	X	4.67E-02	1.76E-01	3.78E+00	43.91
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02	--	--	--
POTASSIUM	16500	1.33E+04	1.83E+04		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	182000	4.47E+05	1.08E+06		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	3.17E+01	7.51E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 24

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-223
SAMPLE ID : WG-6029-042309-048
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	1.9	ND	ND	X	2.00E-01	5.21E-05	2.60E-04	0.00
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	4.2	ND	ND	X	2.00E-02	1.15E-04	5.75E-03	0.07
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	2.1	ND	ND	X	1.00E-02	5.75E-05	5.75E-03	0.07
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	0.35 J	ND	ND	X	NA	9.59E-06	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	8.60E+00	
						TOTAL PERCENT :	100	

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 25

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-224
SAMPLE ID : WG-6029-042409-064
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	288	ND	ND	X	1.00E+00		7.89E-03	7.89E-03	16.34
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	3.60E+00	7.80E+00		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	115000	2.30E+05	4.48E+05		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	59	ND	ND	X	4.00E-02		1.62E-03	4.04E-02	83.66
IRON	1900	3.05E+04	2.20E+05		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	42800	8.45E+04	1.43E+05		NA		--	--	--
MANGANESE	219	1.94E+03	6.87E+03		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.38E+01	2.13E+01		2.00E-02		--	--	--
POTASSIUM	13300	1.33E+04	1.83E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	448000	4.47E+05	1.08E+06		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	48.7	3.17E+01	7.51E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	2.13E+00	2.70E+00		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 25

SITE : SUMMIT NATIONAL
SECTOR : UPPER INTERMEDIATE UNIT
LOCATION : MW-224
SAMPLE ID : WG-6029-042409-064
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 4.83E-02

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW201, MW204, MW205.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 26

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-303
SAMPLE ID : WG-6029-042309-046
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	28900	2.46E+04	4.14E+04		NA	--	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02	--	--	--
IRON	177	5.54E+03	2.04E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA	--	--	--
MAGNESIUM	12500	1.34E+04	2.24E+04		NA	--	--	--
MANGANESE	29.5	1.59E+02	5.33E+02		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	10100	6.90E+03	1.07E+04		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	769000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5) --	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	1.13E+00	1.40E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 26

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-303
SAMPLE ID : WG-6029-042309-046
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--
						HAZARD INDEX :	NC	
						TOTAL PERCENT :		NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 27

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-305
SAMPLE ID : WG-6029-042209-034
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	330000	2.46E+04	4.14E+04	X	NA	9.04E+00	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02	--	--	--
IRON	11900	5.54E+03	2.04E+04	X	7.00E-01	3.26E-01	4.66E-01	29.58
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA	--	--	--
MAGNESIUM	108000	1.34E+04	2.24E+04	X	NA	2.96E+00	--	--
MANGANESE	1890	1.59E+02	5.33E+02	X	4.67E-02	5.18E-02	1.11E+00	70.42
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	12600	6.90E+03	1.07E+04		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	296000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	1.13E+00	1.40E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 27

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-305
SAMPLE ID : WG-6029-042209-034
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.57E+00

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 28

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-306
SAMPLE ID : WG-6029-042309-061
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	6700	2.46E+04	4.14E+04		NA		--	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02		--	--	--
IRON	111	5.54E+03	2.04E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA		--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA		--	--	--
MANGANESE	ND(15)	1.59E+02	5.33E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	565000	5.82E+05	9.76E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.6 J	1.13E+00	1.40E+00	X	2.00E-02		4.38E-05	2.19E-03	100.00
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 28

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-306
SAMPLE ID : WG-6029-042309-061
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 2.19E-03

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 29

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-307
SAMPLE ID : WG-6029-042409-050
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	903	2.56E+03	7.49E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	7190	2.46E+04	4.14E+04		NA		--	--	--
CHROMIUM	11.6	8.37E+00	1.51E+01		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	62.05	3.14E+01	8.41E+01		4.00E-02		--	--	--
IRON	1195	5.54E+03	2.04E+04		7.00E-01		--	--	--
LEAD	3.3	2.93E+00	5.80E+00		NA		--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA		--	--	--
MANGANESE	26.1	1.59E+02	5.33E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	627500	5.82E+05	9.76E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.35	1.13E+00	1.40E+00	X	2.00E-02		6.44E-05	3.22E-03	100.00
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 29

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-307
SAMPLE ID : WG-6029-042409-050
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 3.22E-03

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 30

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-309
SAMPLE ID : WG-6029-042009-005
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	12600	2.46E+04	4.14E+04		NA		--	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02		--	--	--
IRON	ND(100)	5.54E+03	2.04E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA		--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA		--	--	--
MANGANESE	ND(15)	1.59E+02	5.33E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	900000	5.82E+05	9.76E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.6 J	1.13E+00	1.40E+00	X	2.00E-02		4.38E-05	2.19E-03	100.00
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 30

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-309
SAMPLE ID : WG-6029-042009-005
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 2.19E-03

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 31

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-319
SAMPLE ID : WG-6029-042309-054
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	309	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	10100	2.46E+04	4.14E+04		NA	--	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02	--	--	--
IRON	337	5.54E+03	2.04E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA	--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA	--	--	--
MANGANESE	ND(15)	1.59E+02	5.33E+02		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA	--	--	--
SELENIUM	ND(10)UJ	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	562000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5) --	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	1.13E+00	1.40E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 31

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-319
SAMPLE ID : WG-6029-042309-054
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 32

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-320
SAMPLE ID : WG-6029-042109-011
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	259	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	ND(5000)	2.46E+04	4.14E+04		NA	--	--	--
CHROMIUM	11.2	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	85.5	3.14E+01	8.41E+01	X	4.00E-02	2.34E-03	5.86E-02	100.00
IRON	2270	5.54E+03	2.04E+04		7.00E-01	--	--	--
LEAD	6	2.93E+00	5.80E+00	X	NA	1.64E-04	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA	--	--	--
MANGANESE	22.3	1.59E+02	5.33E+02		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA	--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	365000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	1.13E+00	1.40E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 32

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-320
SAMPLE ID : WG-6029-042109-011
SAMPLING DATE : 4/21/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 5.86E-02

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 33

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-321
SAMPLE ID : WG-6029-042409-067
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	9500	2.46E+04	4.14E+04		NA		--	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02		--	--	--
IRON	145	5.54E+03	2.04E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA		--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA		--	--	--
MANGANESE	ND(15)	1.59E+02	5.33E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	647000	5.82E+05	9.76E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.6	1.13E+00	1.40E+00	X	2.00E-02		7.12E-05	3.56E-03	56.52
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 33

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-321
SAMPLE ID : WG-6029-042409-067
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	2	ND	ND	X	2.00E-02	5.48E-05	2.74E-03	43.48
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 6.30E-03

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 34

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-322
SAMPLE ID : WG-6029-042309-047
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04	--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	159000	2.46E+04	4.14E+04	X	NA	4.36E+00	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02	--	--	--
IRON	285	5.54E+03	2.04E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA	--	--	--
MAGNESIUM	71100	1.34E+04	2.24E+04	X	NA	1.95E+00	--	--
MANGANESE	120	1.59E+02	5.33E+02		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	15400	6.90E+03	1.07E+04	X	NA	4.22E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	547000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	1.13E+00	1.40E+00		2.00E-02	--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA	--	--	--

TABLE 34

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-322
SAMPLE ID : WG-6029-042309-047
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : NC

TOTAL PERCENT : NC

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 35

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-323
SAMPLE ID : WG-6029-042309-058
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	275	2.56E+03	7.49E+03		1.00E+00		--	--	--
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	ND(5000)	2.46E+04	4.14E+04		NA		--	--	--
CHROMIUM	10.3	8.37E+00	1.51E+01		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	76.3	3.14E+01	8.41E+01	X	4.00E-02		2.09E-03	5.23E-02	95.97
IRON	691	5.54E+03	2.04E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA		--	--	--
MAGNESIUM	ND(5000)	1.34E+04	2.24E+04		NA		--	--	--
MANGANESE	15.6	1.59E+02	5.33E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02		--	--	--
POTASSIUM	ND(10000)	6.90E+03	1.07E+04		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	554000	5.82E+05	9.76E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.6 J	1.13E+00	1.40E+00	X	2.00E-02		4.38E-05	2.19E-03	4.03
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 35

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-323
SAMPLE ID : WG-6029-042309-058
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 5.45E-02

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 36

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-324
SAMPLE ID : WG-6029-042409-068
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)								
ALUMINUM	ND(200)	2.56E+03	7.49E+03		1.00E+00	--	--	--
ANTIMONY	6.6	ND	ND	X	4.00E-04	1.81E-04	4.52E-01	99.43
ARSENIC	ND(3.0)	ND	ND		3.00E-04	--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01	--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03	--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04	--	--	--
CALCIUM	157000	2.46E+04	4.14E+04	X	NA	4.30E+00	--	--
CHROMIUM	ND(10)	8.37E+00	1.51E+01		1.50E+00	--	--	--
COBALT	ND(50)	ND	ND		3.00E-04	--	--	--
COPPER	ND(10)	3.14E+01	8.41E+01		4.00E-02	--	--	--
IRON	295	5.54E+03	2.04E+04		7.00E-01	--	--	--
LEAD	ND(3.0)	2.93E+00	5.80E+00		NA	--	--	--
MAGNESIUM	35400	1.34E+04	2.24E+04	X	NA	9.70E-01	--	--
MANGANESE	38.4	1.59E+02	5.33E+02		4.67E-02	--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04	--	--	--
NICKEL	ND(20)	1.36E+01	2.08E+01		2.00E-02	--	--	--
POTASSIUM	13900	6.90E+03	1.07E+04	X	NA	3.81E-01	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03	--	--	--
SILVER	ND(10)	ND	ND		5.00E-03	--	--	--
SODIUM	458000	5.82E+05	9.76E+05		NA	--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05	--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03	--	--	--
ZINC	ND(20)	1.97E+01	3.91E+01		3.00E-01	--	--	--
SVOCs								
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02	--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02	--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03	--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02	--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03 (5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.9 J	1.13E+00	1.40E+00	X	2.00E-02	5.21E-05	2.60E-03	0.57
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01	--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
PHENANTHRENE	0.56 J	ND	ND	X	NA	1.53E-05	--	--

TABLE 36

SITE : SUMMIT NATIONAL
SECTOR : LOWER INTERMEDIATE UNIT
LOCATION : MW-324
SAMPLE ID : WG-6029-042409-068
SAMPLING DATE : 4/24/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 4.55E-01

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW301, MW302, MW304.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 37

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-401
SAMPLE ID : WG-6029-042309-059
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	1980	1.56E+02	2.68E+02	X	1.00E+00		5.42E-02	5.42E-02	52.78
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	ND(5000)	3.36E+03	5.09E+03		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	66.95	1.01E+01	2.04E+01	X	4.00E-02		1.83E-03	4.59E-02	44.62
IRON	4995	4.47E+03	1.06E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	ND(5000)	ND	ND		NA		--	--	--
MANGANESE	53.4	4.50E+01	1.13E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	ND	ND		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	480500	5.73E+05	8.51E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	ND	ND		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	1.95	ND	ND	X	2.00E-02		5.34E-05	2.67E-03	2.60
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 37

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-401
SAMPLE ID : WG-6029-042309-059
SAMPLING DATE : 4/23/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.03E-01

TOTAL PERCENT : 100

Notes:

NA= Not available.

NC = Not calculated.

ND( ) = Not detected at quantitation limit in parenthesis.

RME = Reasonable Maximum Exposure (95% Upper Confidence Level)

(1) Background concentrations for this unit based on sampling locations: MW414, MW415, MW422.

(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.

(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.

(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.

(5) 4-Methylphenol RfD substituted.

TABLE 38

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-402
SAMPLE ID : WG-6029-042009-001
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	2970	1.56E+02	2.68E+02	X	1.00E+00		8.14E-02	8.14E-02	5.92
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	248	ND	ND	X	2.00E-01		6.79E-03	3.40E-02	2.47
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	ND(5000)	3.36E+03	5.09E+03		NA		--	--	--
CHROMIUM	24.1	ND	ND	X	1.50E+00		6.60E-04	4.40E-04	0.03
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	27.8	1.01E+01	2.04E+01	X	4.00E-02		7.62E-04	1.90E-02	1.38
IRON	27700	4.47E+03	1.06E+04	X	7.00E-01		7.59E-01	1.08E+00	78.85
LEAD	5	ND	ND	X	NA		1.37E-04	--	--
MAGNESIUM	ND(5000)	ND	ND		NA		--	--	--
MANGANESE	142	4.50E+01	1.13E+02	X	4.67E-02		3.89E-03	8.33E-02	6.06
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	44.7	ND	ND	X	2.00E-02		1.22E-03	6.12E-02	4.45
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	507000	5.73E+05	8.51E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	61.5	ND	ND	X	3.00E-01		1.68E-03	5.62E-03	0.41
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	2.5	ND	ND	X	2.00E-02		6.85E-05	3.42E-03	0.25
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 38

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-402
SAMPLE ID : WG-6029-042009-001
SAMPLING DATE : 4/20/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	0.36 J	ND	ND	X	4.00E-03	9.86E-06	2.47E-03	0.18
CARBON DISULFIDE	ND(2.0)	ND	ND		1.00E-01	--	--	--
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.38E+00

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW414, MW415, MW422.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

TABLE 39

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-421
SAMPLE ID : WG-6029-042209-037
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*		*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
METALS (TOTAL)									
ALUMINUM	527	1.56E+02	2.68E+02	X	1.00E+00		1.44E-02	1.44E-02	97.96
ANTIMONY	ND(6.0)	ND	ND		4.00E-04		--	--	--
ARSENIC	ND(3.0)	ND	ND		3.00E-04		--	--	--
BARIUM	ND(200)	ND	ND		2.00E-01		--	--	--
BERYLLIUM	ND(1.0)	ND	ND		2.00E-03		--	--	--
CADMIUM	ND(1.0)	ND	ND		5.00E-04		--	--	--
CALCIUM	6500	3.36E+03	5.09E+03		NA		--	--	--
CHROMIUM	ND(10)	ND	ND		1.50E+00		--	--	--
COBALT	ND(50)	ND	ND		3.00E-04		--	--	--
COPPER	ND(10)	1.01E+01	2.04E+01		4.00E-02		--	--	--
IRON	3000	4.47E+03	1.06E+04		7.00E-01		--	--	--
LEAD	ND(3.0)	ND	ND		NA		--	--	--
MAGNESIUM	ND(5000)	ND	ND		NA		--	--	--
MANGANESE	66.1	4.50E+01	1.13E+02		4.67E-02		--	--	--
MERCURY	ND(0.20)	ND	ND		3.00E-04		--	--	--
NICKEL	ND(20)	ND	ND		2.00E-02		--	--	--
POTASSIUM	ND(10000)	ND	ND		NA		--	--	--
SELENIUM	ND(10)	ND	ND		5.00E-03		--	--	--
SILVER	ND(10)	ND	ND		5.00E-03		--	--	--
SODIUM	514000	5.73E+05	8.51E+05		NA		--	--	--
THALLIUM	ND(2.0)	ND	ND		6.50E-05		--	--	--
VANADIUM	ND(50)	ND	ND		7.00E-03		--	--	--
ZINC	ND(20)	ND	ND		3.00E-01		--	--	--
SVOCs									
1,2-DICHLOROBENZENE	ND(2.0)	ND	ND		9.00E-02		--	--	--
2,4-DIMETHYLPHENOL	ND(5.0)	ND	ND		2.00E-02		--	--	--
2-METHYLNAPHTHALENE	ND(2.0)	ND	ND		4.00E-03		--	--	--
2-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-02		--	--	--
3&4-METHYLPHENOL	ND(2.0)	ND	ND		5.00E-03	(5)	--	--	--
4-CHLOR-3-METHYLPHENOL	ND(5.0)	ND	ND		NA		--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE	ND(2.0)	ND	ND		2.00E-02		--	--	--
DIETHYLPHTHALATE	ND(2.0)	ND	ND		8.00E-01		--	--	--
NAPHTHALENE	ND(1.0)	ND	ND		2.00E-02		--	--	--
PHENANTHRENE	ND(1.0)	ND	ND		NA		--	--	--

TABLE 39

SITE : SUMMIT NATIONAL
SECTOR : UPPER SHARON UNIT
LOCATION : MW-421
SAMPLE ID : WG-6029-042209-037
SAMPLING DATE : 4/22/2009
MEDIA : GROUNDWATER
EXPOSURE SCENARIO : ADULT - RESIDENTIAL/ INGESTION

COMPOUND	*MONITORING WELL CONCENTRATION (µg/L)*	*BACKGROUND CONCENTRATION (1) MEAN (µg/L)*	*BACKGROUND CONCENTRATION (1) RME (µg/L)*	*COPC (2)*	*REFERENCE DOSE (3) (mg/kg/day)*	*CHRONIC DAILY INTAKE (4) (mg/kg/day)*	*HAZARD QUOTIENT*	*PERCENT CONTRIBUTION*
VOLATILE ORGANIC COMPOUNDS								
1,1,1-TRICHLOROETHANE	ND(1.0)	ND	ND		2.00E+00	--	--	--
1,1,2-TRICHLOROETHANE	ND(1.0)	ND	ND		4.00E-03	--	--	--
1,1-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-01	--	--	--
1,1-DICHLOROETHENE	ND(1.0)	ND	ND		5.00E-02	--	--	--
1,2-DICHLOROETHANE	ND(1.0)	ND	ND		2.00E-02	--	--	--
ACETONE	ND(5.0)	ND	ND		9.00E-01	--	--	--
BENZENE	ND(1.0)	ND	ND		4.00E-03	--	--	--
CARBON DISULFIDE	1.1 J	ND	ND	X	1.00E-01	3.01E-05	3.01E-04	2.04
CHLOROBENZENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
CHLOROETHANE	ND(1.0)	ND	ND		NA	--	--	--
CHLOROFORM	ND(1.0)	ND	ND		1.00E-02	--	--	--
CHLOROMETHANE	ND(1.0)	ND	ND		NA	--	--	--
CIS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		1.00E-02	--	--	--
ETHYLBENZENE	ND(1.0)	ND	ND		1.00E-01	--	--	--
TOLUENE	ND(1.0)	ND	ND		8.00E-02	--	--	--
TRANS-1,2-DICHLOROETHYLENE	ND(1.0)	ND	ND		2.00E-02	--	--	--
TRICHLOROETHENE	ND(1.0)	ND	ND		NA	--	--	--
VINYL CHLORIDE	ND(1.0)	ND	ND		3.00E-03	--	--	--
XYLENES, TOTAL	ND(1.0)	ND	ND		2.00E-01	--	--	--

HAZARD INDEX : 1.47E-02

TOTAL PERCENT : 100

Notes:

J = Associated value is estimated.
NA= Not available.
NC = Not calculated.
ND( ) = Not detected at quantitation limit in parenthesis.
RME = Reasonable Maximum Exposure (95% Upper Confidence Level)
(1) Background concentrations for this unit based on sampling locations: MW414, MW415, MW422.
(2) COPC selection process: Inorganic detected concentration above two times the mean background concentration.
Organic detected concentration above the mean background concentration.
(3) Reference Dose - A measure of the non-carcinogenic potential of a compound.
SOURCE : USEPA Integrated Risk Information System (IRIS); May 2009.
: Health Effects Assessment Table (HEAST); July 1997.
: Regional Screening Levels (RSLs) Master Table, April 2009. Provisional values supplied by NCEA.
: Agency for Toxic Substances and Disease Registry (ATSDR), Minimum Risk Levels (MRLs), December 2008.
(4) Chronic daily intake (CDI) calculated only for COPCs. CDI based on the assumption of 2 liters of groundwater consumed per day, for 350 days per year, by a 70-kg adult for a 30-year residency period.
(5) 4-Methylphenol RfD substituted.

ATTACHMENT J

STATISTICAL EVALUATION

CONESTOGA-ROVERS & ASSOCIATES

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MEMORANDUM

TO:	Steve Whillier	REF. NO.:	006029-50
FROM:	Daniela Araujo, Wesley Dyck/kf/24	DATE:	August 12, 2009
RE:	**Statistical Trend Evaluation of Groundwater Data Summit National Superfund Site Deerfield, Ohio**		

1.0 INTRODUCTION

Groundwater samples have been collected from monitoring wells at the Summit National Superfund Site in Deerfield, Ohio, (Site) since the start of the Groundwater Treatment System (GWTS) and Groundwater Extraction System (GWES) in 1994, and analyzed for specific parameters based on the groundwater monitoring requirements for the Site. In the 2004 10-year groundwater evaluation (CRA, March 16, 2005), the SNFT requested permission to shut down the groundwater extraction system, based on the continued stable on-Site groundwater plume and no indication of adverse impact to the off-Site groundwater in any of the groundwater units either before any remedial action at the Site, or since the 10 years of active groundwater pump and treatment operations. Both GWES and GWTS were shut-down on August 31, 2005.

This memorandum reports on a statistical evaluation of trends over time in the groundwater data as part of the evaluation of the system shutdown.

2.0 SCOPE OF DATA

Groundwater samples were collected twice a year during 1994-1999 and 2006-2009 (and also during 2005 at wells MW-111, MW-115 and MW-223). Groundwater samples were collected on an annual basis (once per year) between 2000-2005.

At the outset of groundwater quality monitoring (the first three events in 1999), the samples collected were analyzed for the full target compound list/target parameter list (TCL/TAL) of parameters. A Site-Specific Indicator Parameter List (SSIPL) was then developed and approved by USEPA and OEPA. All further groundwater samples are to be analyzed for the SSIPL, except during every fifth year of sampling when the full TCL/TAL parameters are to be analyzed. The present statistical evaluation considered to the SSIPL parameters, which are:

- bis(2-Ethylhexyl)phthalate
- 1,1,1-Trichloroethane
- 1,1-Dichloroethane
- Chloromethane (Methyl Chloride)
- cis-1,2-Dichloroethene
- Ethylbenzene

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- 1,2-Dichloroethane
- 1,2-Dichloroethene (total)
- 2-Butanone (Methyl Ethyl Ketone)
- Acetone
- Benzene
- Toluene
- trans-1,2-Dichloroethene
- Trichloroethene
- Vinyl chloride
- Xylene (total)

The wells considered in the statistical analyses were those having detectable concentrations of SSIPL parameters on a somewhat regular basis. These included:

- On-Site, Water Table Unit (WTU) wells MW-11, MW-106, MW-107, MW-108 and MW-111
- On-Site, Upper Intermediate Unit (UIU) well MW-223
- Off Site, WTU wells MW-4, MW-109, MW-115 and MW-118
- Off-Site, UIU well MW-209

The locations of the monitoring wells are shown in Figure 1.

In evaluating the MNA Remedy performance, monitoring data from different time periods were considered (as discussed in the following sections). The time periods included: (i) overall (1994-2009); (ii) pre-shutdown (1994-2005); and (iii) post-shutdown (2005-2009).

3.0 STATISTICAL PROCEDURES

3.1 TREND TESTING

Methods for statistical trend testing are discussed in Section 4.3 of USEPA (2006), Chapter 12 of Helsel & Hirsch (1992) and other relevant guidance and reference texts. The evaluation of trends in environmental data is often complicated by factors such as seasonality in data, outlying (grossly atypical) data points, the presence of censored (non detect) data, small data sets (due to the relatively high costs associated with sample collection and analysis, particularly for trace concentration analyses) and non-linearity in any patterns present through time. Different tests exist, which balance the statistical power of detecting trends against susceptibility to outliers, deviations from model assumptions (e.g., linearity) and the ability to incorporate non-detect data into the analyses.

One trend test suitable for general application across a variety of environmental data applications is the Mann-Kendall test. This test is non parametric (rank-based), and therefore robust with respect to outlying observations. The Mann-Kendall test neither assumes a particular data distribution (e.g., normal) nor data pattern tested (e.g., linear trend), but rather tests for a monotonic (single direction) trend in the data over time. Although the test is not as powerful as parametric tests are under optimal conditions, its wide range of applicability makes it a good candidate for use when testing numerous data sets where the effort required for detailed characterization and selection of specific trend tests on a case by case basis is not appropriate. The test is a robust procedure suitable for general trend analysis. However, the Mann Kendall procedure loses sensitivity if a large proportion of censored data (non-detect results) is present, and in particular should be avoided when more than half the points in a data set are censored.

The Mann-Kendall trend test was therefore selected for use in the evaluation of Site groundwater data for the presence of temporal trends. Computational details for the test may be found in Section 4.3.4.1 of USEPA (2006).

The Mann-Kendall test does assume that the sampling interval is equal, or at least approximately so. Groundwater samples were collected twice a year since start-up of treatment systems in 1994 (GWTS and GWES) and annually thereafter (2000-2005). After the shutdown of both treatment systems (in 2005), groundwater samples were collected twice a year, which makes for approximately regular intervals of groundwater sampling during the overall time period. Nonetheless, the 2000-2005 period is slightly under-represented due to the annual (as opposed to semi-annual) sampling during that time.

3.2 POST-SHUTDOWN VS. PRE-SHUTDOWN COMPARISONS

A second type of evaluation used compared post-shutdown monitoring data against pre-shutdown conditions. This evaluation was performed using statistical control analyses. Shewhart-CUSUM control charts utilize statistical calculations to evaluate individual points for gross deviations from reference conditions represented by a Shewhart Control Limit (SCL). Additionally, the charts evaluate ongoing data for a gradual shift from reference conditions using a cumulative sum (CUSUM), which is compared to a cumulative threshold value (h). In the case of the Site's SSIPL groundwater monitoring data, 6 years of monitoring data (1999-2005) previous to the GWES and GWTS shutdown were used as a reference set, against which the post-shutdown sampling results have been compared. Trigger values of SCL=5 and h=4.5 above and below the pre-shutdown average were selected for the Shewhart-CUSUM control chart (as per USEPA, 1989). The calculated SCL represents a range of the standard deviation from the baseline mean, for individual-point comparisons. The CUSUM limit (h) represents a cumulative sum of consecutive observations more than 4.5 standard deviations outside a range of one standard deviation around the baseline reference mean (for example, if one concentration was 3.5 standard deviations above the reference period mean and the next concentration was 3.1 standard deviations above the mean, then the cumulative sum would be (3.5-1.0)+(3.1-1.0) = 4.6, and this would indicate a CUSUM increase over reference conditions, since the selected trigger level (h) is 4.5).

The baseline period for the control charts included data collected in the five years prior to the GWES and GWTS shutdown, from 1999 to August 2005 (inclusive). Post- shutdown data consisted of data collected during the MNA trial implementation phase, from November 2005 to April 2009. Shewhart-CUSUM control calculations were performed for the wells/parameters detected at reasonable frequencies in the post-shutdown period (i.e., in more than two post-shutdown sampling events). Control charts were produced for any data sets found to be above pre-shutdown conditions.

3.3 OFF-SITE VS. ON-SITE COMPARISONS ALONG GROUNDWATER FLOWPATH

For the purposes of comparing parameter concentrations between on-Site wells (upgradient) and their corresponding off-Site wells (downgradient) along the observed groundwater flowpath, correlation analyses were performed where sufficient data were available (i.e., when monitored parameters were detected in more than half the samples in each well). In correlation analysis, a correlation coefficient (Pearson's R) is calculated, which ranges between -1 (a perfect inverse correlation) through 0, (no correlation), and to +1 (perfect positive correlation). Values closer to 1 (either positive or negative) indicate a stronger correlation between the data sets, while values of R close to zero indicate a poor correlation.

The pairs of wells considered along the groundwater flowpath were:

On-Site, Upgradient Well(s)		*Off-Site, Downgradient Well(s)*
MW-11	→	MW-115
MW-108	→	MW-4, MW-109
MW-11, MW-107, MW-108	→	MW-118*

* Well MW-118 is the farthest, off-Site downgradient well of the Site.

4.0 RESULTS

4.1 TREND TESTING

Three data sets were considered when testing for temporal trends: (i) overall, which included all data collected since 1994; (ii) pre-shutdown, which included 1994 to August 2005 (inclusive) data; and (iii) post-shutdown, which included August 2005 to April 2009 data. Results for the Mann-Kendall trend test are presented in Tables 1 (overall), 2 (pre-shutdown) and 3 (post-shutdown). Table 4 presents a summary of the conclusions found in Tables 1, 2 and 3 for comparison.

Of 528 data sets considered (16 parameters x 11 wells x 3 time periods - overall, pre-shutdown and post-shutdown periods), 401 data sets were not suitable for trend testing due to insufficient data (fewer than 4 data points) or low detection frequencies (50-100 percent non-detects). In particular, no trend tests were performed for any SSIPL parameters at wells MW-4 and MW-109. Of the remaining 127 data sets subjected to trend testing, 75 had no statistically significant trends while 52 did have significant (decreasing or increasing) trends. Parameters that had significant trends are listed below:

A total of 7 decreasing trends were observed:

i) On-Site wells:

- Overall (1994-2009)
  - 1,1,1-trichloroethane at MW-11 (WTU)
  - 1,2-dichloroethane at MW-223 (UIU)
- Pre-shutdown (1999-2005)
  - 1,1,1-trichloroethane at well MW-11 (WTU)
  - 2-butanone and acetone at MW-107 (WTU)
  - 1,2-dichloroethane at well MW-223 (UIU)
- Post-shutdown (2005-2009)
  - < no significant trends identified >

(ii) Off-Site wells:

- Overall (1994-2009)
  - cis-1,2-dichloroethene at MW-115 (WTU)

- Pre-shutdown (1999-2005)
  - < no significant trends identified >
- Post-shutdown (2005-2009)
  - < no significant trends identified >

A total of 45 increasing trends were observed:

i) On-Site wells:

- Overall (1994-2009)
  - 1,1,1-trichloroethane at MW-106 and MW-108 (WTU)
  - 1,1-dichloroethane at MW-107, MW-108 and MW-111 (WTU)
  - 1,2-dichloroethane at MW-108 (WTU)
  - 1,2-dichloroethene (total) at MW-11, MW-108 and MW-111 (WTU)
  - Benzene at MW-11, MW-107 and MW-108 (WTU)
  - Cis-1,2-dichloroethene at MW-107, MW-108 and MW-111 (WTU)
  - Ethylbenzene, toluene and xylenes at MW-107 (WTU)
  - Trans-1,2-dichloroethene at MW-108 (WTU)
  - Trichloroethene at MW-11 and MW-108 (WTU)
  - Vinyl chloride at MW-11, MW-107, MW-108 and MW-111 (WTU)
- Pre-shutdown (1999-2005)
  - 1,1,1-trichloroethane, 1,1-dichloroethane at MW-111 (WTU)
  - 1,2-dichloroethene (total) at MW-11 and MW-111 (WTU)
  - Benzene, ethylbenzene, toluene, and xylenes at MW-107 (WTU)
  - Trichloroethene at MW-11 (WTU)
  - Vinyl chloride at MW-11 and MW-111 (WTU)
- Post-shutdown (2005-2009)
  - 1,1-dichloroethane, 1,2-dichloroethene (total), benzene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and trichloroethene at MW-108 (WTU)
  - Vinyl chloride at MW-11 and MW-108 (WTU)

i) Off-Site wells:

- Overall (1994-2009)
  - < no significant trends identified >
- Pre-shutdown (1999-2005)
  - 1,2-dichloroethene (total) at MW-115 (WTU)
- Post-shutdown (2005-2009)
  - < no significant trends identified >

4.2 POST-SHUTDOWN VS. PRE-SHUTDOWN COMPARISONS

Results of the statistical control analysis comparing GWES and GWTS pre-shutdown to post-shutdown conditions are provided in Table 5 and control charts for parameters exceeding control limits are provided in Attachment A, Figures 2 to 4. Statistical control analyses were performed for data sets with more than 4 data points and with moderate to high detection frequencies (0-50 percent non-detects). Forty-nine data sets fit these criteria (Table 5).

Of the 49 data sets tested in the control analysis, 12 data sets were found to be above one or both of the controls limits (SCL and/or h). Of the 12 data sets above control limits, 5 did not have any individual data points above the SCL limit, but the post-shutdown data were observed to be consistently higher than the pre-shutdown data, causing the CUSUM to be elevated above its limit (h). These data sets were:

- 1,2-dichloroethane at MW-108
- 1,2-dichloroethene (total) at MW-111
- Benzene at MW-107
- Vinyl chloride at MW-11 and MW-107

The remaining seven data sets had both individual points above the SCL and CUSUM values above the control limit (h). In these cases, the increased concentrations above pre-baseline conditions are more obvious than for those only having their CUSUMs above the limit (see above). The seven data sets were:

- 1,1,1-trichloroethane at MW-108
- 1,1-dichloroethane at MW-108
- 1,2-dichloroethene (total) at MW-108
- Benzene at MW-108
- Cis-1,2-dichloroethene at MW-108
- Trichloroethene at MW-108
- Vinyl chloride at MW-108

4.3 OFF-SITE VS. ON-SITE COMPARISONS ALONG GROUNDWATER FLOWPATH

Of the pairs of wells along the groundwater flowpath considered for off-Site *vs.* on-Site comparisons (see Section 3.3), only one pair of wells had parameters with sufficient frequencies of detected data to permit correlation analysis: on-Site well MW-11 and off-Site well MW-115. The results of the correlation analyses performed are provided in Table 6.

Three parameters were tested (based on high detection frequencies): 1,1-dichloroethane, 1,2-dichloroethene (total); and cis-1,2-dichloroethene. Data from two time periods were tested (overall and post-shutdown data). Concentrations of 1,1-dichloroethane at the two wells were found to be statistically significantly correlated with greater than 95 percent confidence (i.e., probability < 0.05) considering both overall and post-shutdown time periods. However, the correlation coefficient for the overall data set was low (R^2=0.274) and for the post-shutdown data set was moderate (R^2=0.546). The correlation analyses for the other two parameters were not found to be statistically significant.

5.0 DISCUSSION AND CONCLUSIONS

The overall findings at the trend tests (Tables 1, 2 and 3) and statistical control evaluation (Table 4) show that many of the monitored parameters at most of the wells considered are either not present at detectable levels or are present at stable (no trends) or decreasing concentrations. However, certain parameters/wells have been identified exhibiting increasing patterns over time comparing post-shutdown to pre-shutdown conditions.

Of the five on-Site wells considered, four had parameters with increasing trends and/or post-shutdown concentrations above pre-shutdown conditions during the post-shutdown period. The locations with the most evidence of increasing contaminant concentrations was well monitoring MW-108, with nine parameters found to be increasing or above control limits. The fact that these parameter concentrations had increasing trends and were above their control limits shows a clear evidence of increasing parameter concentration during the post-shutdown period relative to earlier levels. A similar pattern was observed at on-Site wells MW-107 and MW-11 with seven and four (respectively) parameters found to be increasing or above pre-shutdown conditions. However, in these cases one or two parameters were found to have decreased, providing a mixed picture overall. Off-Site downgradient wells have generally not found these parameters above their reporting limit, indicating that although some increasing parameter concentrations have been occurring on Site, these are contained within the Site's boundaries and are not migrating off-Site.

There was one increasing trend found in a well located outside the Site's boundaries: 1,2-dichloroethene (total) concentrations during the pre-shutdown period at off-Site well monitoring MW-115. However, no significant trends were found considering the overall or post-shutdown periods for this parameter, and the statistical control analysis found that post-shutdown concentrations were within the pre-shutdown control limits. Correlation analysis performed between off-Site well monitoring MW-115 and on-Site well monitoring MW-11 found no statistically significant relationship in 1,2-dichloroethene concentrations between the two wells. Based on this evidence, it does not appear that the shutdown of the treatment system has resulted in additional migration of 1,2-dichloroethene to off-Site well monitoring MW-115.

Vinyl chloride and 1,2-dichloroethene (total) appear to be consistently increasing, considering both trends and statistical control analyses, across a number of on-Site wells (MW-11, MW-107, MW-108 and MW-111). These two parameters are daughter products of trichloroethene degradation and the fact that their concentrations are increasing during the post-shutdown period appears to indicate that degradation is taking place on Site.

In summary, although the vast majority of data sets considered show the absence of SSIPL parameters, or their presence at apparently stable conditions or decreasing conditions, certain parameters in certain on-Site wells have been found to be increasing during the system's post-shutdown period and/or are elevated compared to pre-shutdown conditions. However, the contaminants do not show signs of migration beyond the Site boundaries, based on the groundwater monitoring data obtained, and any concentration increases appear therefore to be contained inside the Site.

Considering the results of the statistical analyses performed, there appears to be evidence that natural attenuation of SSIPL parameters has been occurring at the Site after the shutdown of the treatment system. The majority of the parameters at on-Site monitoring wells have concentrations below their reporting limit, had no trends identified or were decreasing and are below control limits. Some of the parameters found to

be increasing more consistently across a number of on-Site wells are breakdown products of other SSIPL parameters. The well with clearest patterns of elevated concentrations following the system's shutdown is well MW-108, although wells MW-11, MW-107 and MW-111 also had several parameters still increasing. However, these parameters all appear to be well-contained inside Site boundaries and therefore are not posing a contamination risk to the surrounding area. Further evaluation of well MW-108 is recommended in order to determine the significance of the identified parameters elevated concentrations.

6.0 REFERENCES

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USGS, 2002. Statistical Methods in Water Resources. By D.R. Helsel and R.M. Hirsch. Chapter A3 of Book 4, Hydrologic Analysis and Interpretation *in* Techniques of Water-Resources Investigations of the United States Geological Survey. [Available at http://pubs.usgs.gov/twri/twri4a3/].

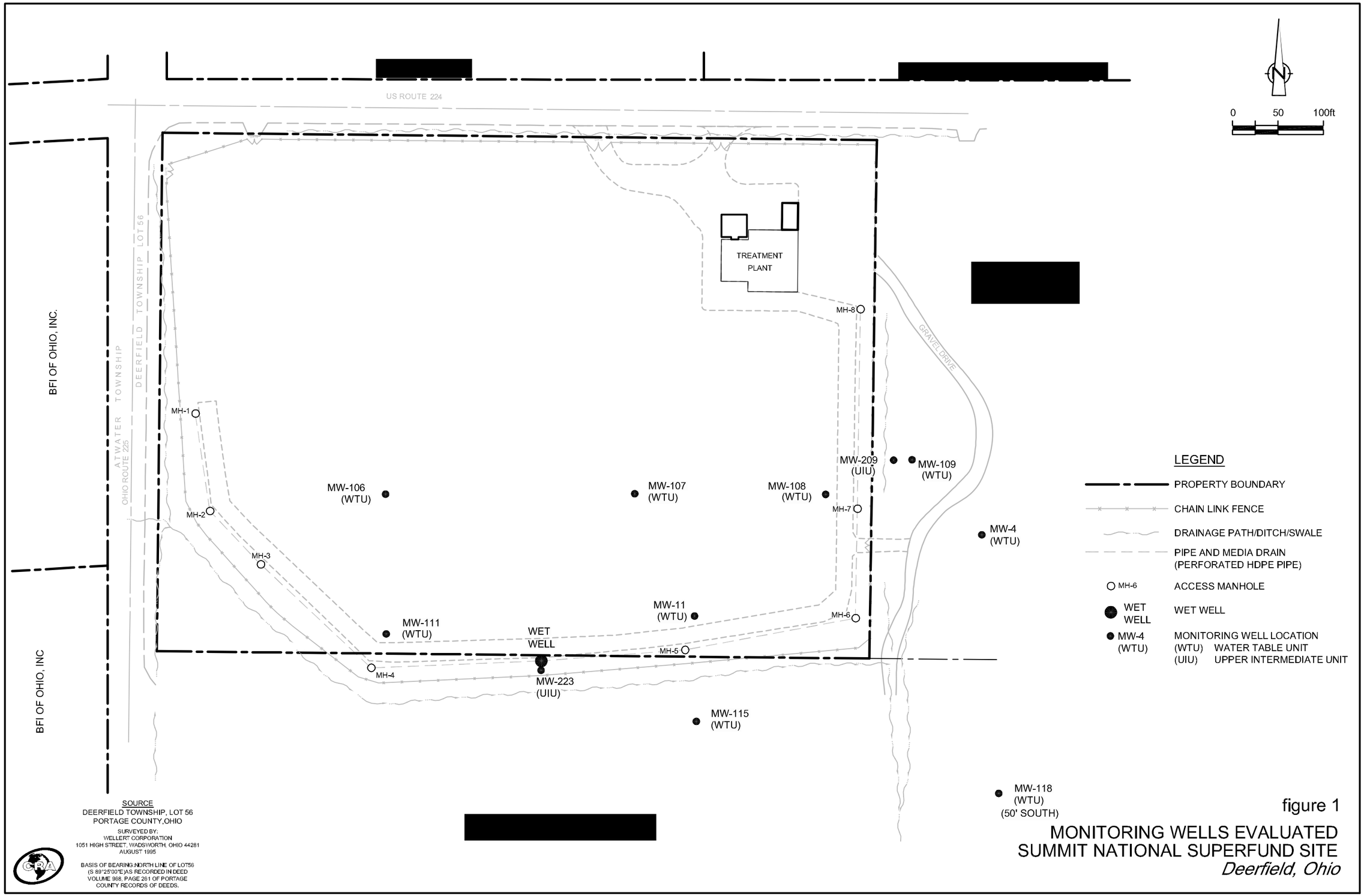
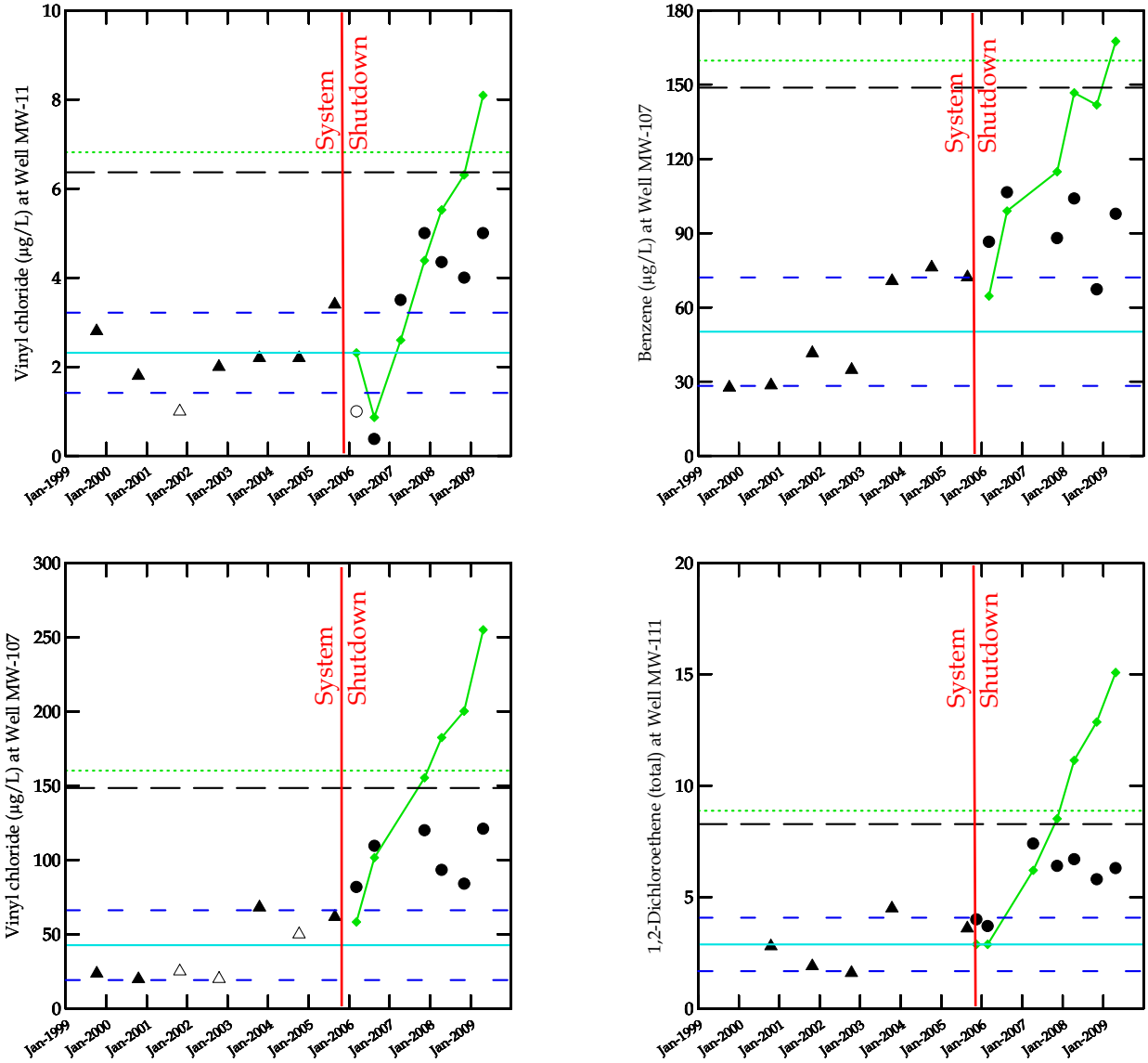


figure 1

MONITORING WELLS EVALUATED
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

06029-50(MEMO024)GN-WA001 AUG 12/2009



Legend:

▲ Pre-shutdown result (detect)

△ Pre-shutdown result (non-detect)

● Post-shutdown result (detect)

○ Post-shutdown result (non-detect)

◆ CUSUM value

Upper and Lower Shewhart Control Limits
(SCL= -4.5, +4.5 standardized units)

Upper and Lower CUSUM Limits
(h= -5, +5 standardized units)

Upper and Lower Reference Displacement Values
(k= -1, +1 standardized units)

Pre-Shutdown Mean

figure 2

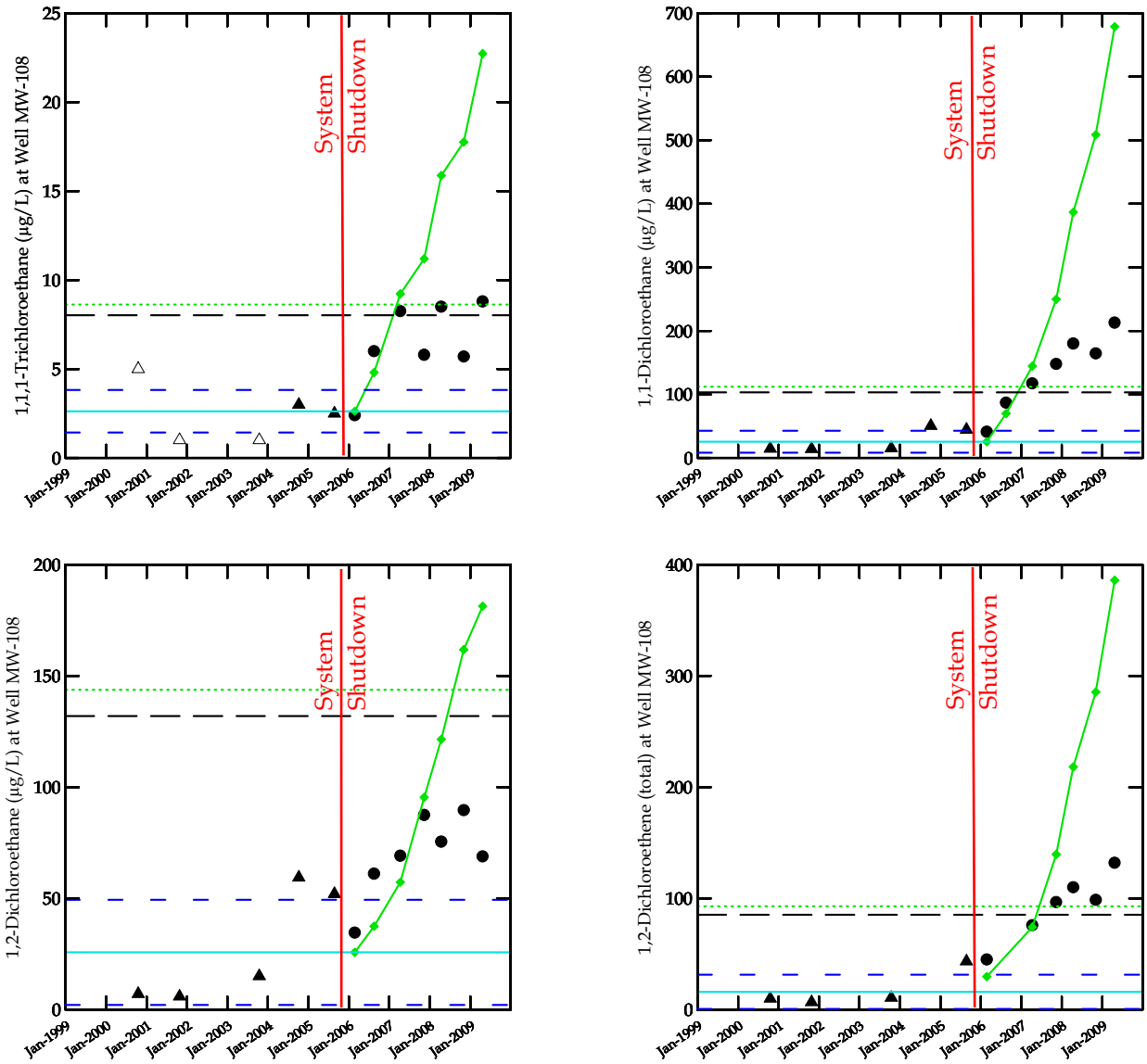
Post-Shutdown vs. Pre-Shutdown Shewhart-CUSUM Control Charts

for Evaluation of Groundwater Monitoring Data

Summit National Supefund Site

Deerfield, Ohio

06059(50)



Legend:

- ▲ Pre-shutdown result (detect)
- △ Pre-shutdown result (non-detect)
- ● Post-shutdown result (detect)
- ○ Post-shutdown result (non-detect)
- ◆ CUSUM value
- — — Upper and Lower Shewhart Control Limits (SCL= -4.5, +4.5 standardized units)
- ····· Upper and Lower CUSUM Limits (h= -5, +5 standardized units)
- – – Upper and Lower Reference Displacement Values (k= -1, +1 standardized units)
- —— Pre-Shutdown Mean

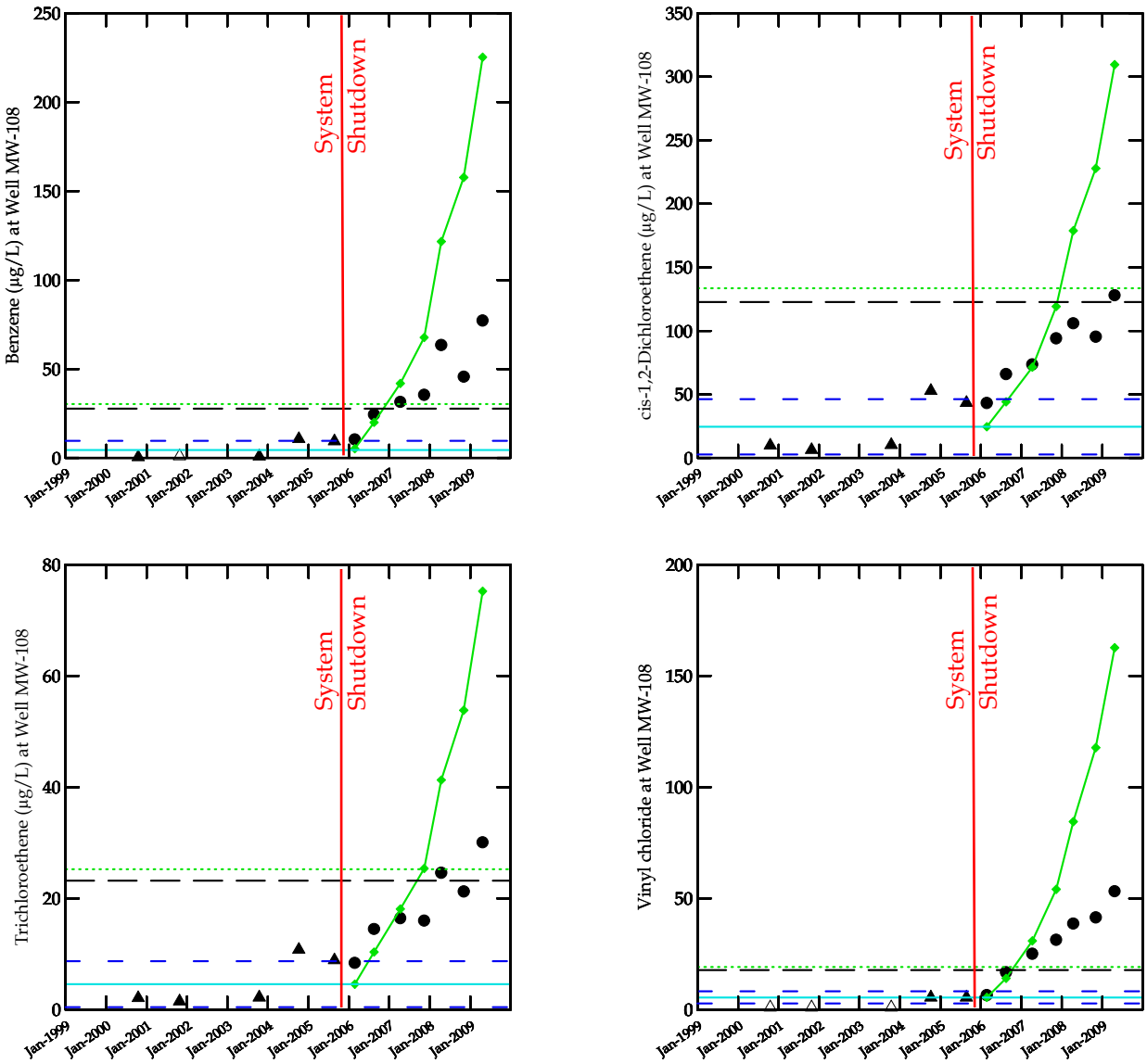
figure 3

Post-Shutdown vs. Pre-Shutdown Shewhart-CUSUM Control Charts

for Evaluation of Groundwater Monitoring Data

Summit National Supefund Site

Deerfield, Ohio



Legend:

- ▲ Pre-shutdown result (detect)
- △ Pre-shutdown result (non-detect)
- ● Post-shutdown result (detect)
- ○ Post-shutdown result (non-detect)
- ◆ CUSUM value
- — — Upper and Lower Shewhart Control Limits (SCL= -4.5, +4.5 standardized units)
- ····· Upper and Lower CUSUM Limits (h= -5, +5 standardized units)
- — — Upper and Lower Reference Displacement Values (k= -1, +1 standardized units)
- —— Pre-Shutdown Mean

figure 4

Post-Shutdown vs. Pre-Shutdown Shewhart-CUSUM Control Charts

for Evaluation of Groundwater Monitoring Data

Summit National Supefund Site

Deerfield, Ohio

TABLE 1

MANN-KENDALL TREND TEST RESULTS - OVERALL DATA (1994 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-4						
bis(2-Ethylhexyl)phthalate	µg/L	10	90%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	17	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	24	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	24	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	20	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	23	100%	--	--	100% ND
Acetone	µg/L	24	100%	--	--	100% ND
Benzene	µg/L	17	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	11	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	14	100%	--	--	100% ND
Ethylbenzene	µg/L	24	100%	--	--	100% ND
Toluene	µg/L	24	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	10	100%	--	--	100% ND
Trichloroethene	µg/L	23	100%	--	--	100% ND
Vinyl chloride	µg/L	17	100%	--	--	100% ND
Xylene (total)	µg/L	24	100%	--	--	100% ND
MW-11						
bis(2-Ethylhexyl)phthalate	µg/L	9	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	17	0%	-75	0.002	**Decreasing Trend**
1,1-Dichloroethane	µg/L	24	4%	-43	0.298	No trend identified
1,2-Dichloroethane	µg/L	21	29%	56	0.097	No trend identified *
1,2-Dichloroethene (total)	µg/L	20	10%	99	0.001	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	23	100%	--	--	100% ND
Acetone	µg/L	24	79%	--	--	>50% ND
Benzene	µg/L	17	41%	68	0.006	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	11	73%	--	--	>50% ND
cis-1,2-Dichloroethene	µg/L	14	0%	11	0.584	No trend identified
Ethylbenzene	µg/L	24	100%	--	--	100% ND
Toluene	µg/L	24	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	10	10%	19	0.107	No trend identified
Trichloroethene	µg/L	23	0%	169	0.00001	**Increasing Trend**
Vinyl chloride	µg/L	17	29%	82	0.001	**Increasing Trend**
Xylene (total)	µg/L	24	100%	--	--	100% ND
MW-106						
bis(2-Ethylhexyl)phthalate	µg/L	5	60%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	13	46%	44	0.009	**Increasing Trend**
1,1-Dichloroethane	µg/L	20	70%	--	--	>50% ND
1,2-Dichloroethane	µg/L	20	70%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	16	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	19	100%	--	--	100% ND
Acetone	µg/L	20	95%	--	--	>50% ND
Benzene	µg/L	13	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	7	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	10	100%	--	--	100% ND
Ethylbenzene	µg/L	20	100%	--	--	100% ND
Toluene	µg/L	20	95%	--	--	>50% ND
trans-1,2-Dichloroethene	µg/L	6	100%	--	--	100% ND
Trichloroethene	µg/L	19	100%	--	--	100% ND
Vinyl chloride	µg/L	13	100%	--	--	100% ND
Xylene (total)	µg/L	20	100%	--	--	100% ND

TABLE 1

MANN-KENDALL TREND TEST RESULTS - OVERALL DATA (1994 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-107						
bis(2-Ethylhexyl)phthalate	µg/L	9	67%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	16	13%	15	0.528	No trend identified
1,1-Dichloroethane	µg/L	23	4%	111	0.004	**Increasing Trend**
1,2-Dichloroethane	µg/L	23	4%	75	0.051	No trend identified
1,2-Dichloroethene (total)	µg/L	19	53%	--	--	>50% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	22	64%	--	--	>50% ND
Acetone	µg/L	23	57%	--	--	>50% ND
Benzene	µg/L	16	13%	69	0.002	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	10	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	13	31%	48	0.004	**Increasing Trend**
Ethylbenzene	µg/L	23	9%	166	0.000	**Increasing Trend**
Toluene	µg/L	23	0%	101	0.008	**Increasing Trend**
trans-1,2-Dichloroethene	µg/L	9	89%	--	--	>50% ND
Trichloroethene	µg/L	22	82%	--	--	>50% ND
Vinyl chloride	µg/L	16	25%	50	0.027	**Increasing Trend**
Xylene (total)	µg/L	23	0%	161	0.00002	**Increasing Trend**
MW-108						
bis(2-Ethylhexyl)phthalate	µg/L	8	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	14	36%	63	0.001	**Increasing Trend**
1,1-Dichloroethane	µg/L	21	0%	122	0.0003	**Increasing Trend**
1,2-Dichloroethane	µg/L	21	0%	81	0.016	**Increasing Trend**
1,2-Dichloroethene (total)	µg/L	18	6%	71	0.008	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	20	100%	--	--	100% ND
Acetone	µg/L	21	62%	--	--	>50% ND
Benzene	µg/L	14	21%	80	0.00002	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	9	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	12	0%	56	0.0002	**Increasing Trend**
Ethylbenzene	µg/L	21	90%	--	--	>50% ND
Toluene	µg/L	21	76%	--	--	>50% ND
trans-1,2-Dichloroethene	µg/L	9	11%	26	0.009	**Increasing Trend**
Trichloroethene	µg/L	20	10%	115	0.0002	**Increasing Trend**
Vinyl chloride	µg/L	14	36%	80	0.00002	**Increasing Trend**
Xylene (total)	µg/L	21	100%	--	--	100% ND
MW-109						
bis(2-Ethylhexyl)phthalate	µg/L	7	86%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	13	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	20	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	20	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	16	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	19	100%	--	--	100% ND
Acetone	µg/L	20	95%	--	--	>50% ND
Benzene	µg/L	13	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	7	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	10	100%	--	--	100% ND
Ethylbenzene	µg/L	20	100%	--	--	100% ND
Toluene	µg/L	20	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	6	100%	--	--	100% ND
Trichloroethene	µg/L	19	100%	--	--	100% ND
Vinyl chloride	µg/L	13	100%	--	--	100% ND
Xylene (total)	µg/L	20	100%	--	--	100% ND

TABLE 1

MANN-KENDALL TREND TEST RESULTS - OVERALL DATA (1994 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-111						
bis(2-Ethylhexyl)phthalate	µg/L	8	88%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	18	22%	48	0.075	No trend identified
1,1-Dichloroethane	µg/L	25	4%	159	0.0002	**Increasing Trend**
1,2-Dichloroethane	µg/L	25	0%	-12	0.797	No trend identified
1,2-Dichloroethene (total)	µg/L	21	33%	149	0.00001	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	24	100%	--	--	100% ND
Acetone	µg/L	25	92%	--	--	>50% ND
Benzene	µg/L	18	94%	--	--	>50% ND
Chloromethane (Methyl Chloride)	µg/L	11	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	15	0%	49	0.018	**Increasing Trend**
Ethylbenzene	µg/L	25	100%	--	--	100% ND
Toluene	µg/L	25	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	11	100%	--	--	100% ND
Trichloroethene	µg/L	24	100%	--	--	100% ND
Vinyl chloride	µg/L	18	28%	89	0.001	**Increasing Trend**
Xylene (total)	µg/L	25	100%	--	--	100% ND
MW-115						
bis(2-Ethylhexyl)phthalate	µg/L	10	80%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	18	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	25	20%	20	0.657	No trend identified
1,2-Dichloroethane	µg/L	25	68%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	21	0%	-39	0.251	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	24	100%	--	--	100% ND
Acetone	µg/L	25	100%	--	--	100% ND
Benzene	µg/L	18	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	11	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	15	0%	-43	0.038	**Decreasing Trend**
Ethylbenzene	µg/L	25	100%	--	--	100% ND
Toluene	µg/L	25	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	11	100%	--	--	100% ND
Trichloroethene	µg/L	24	100%	--	--	100% ND
Vinyl chloride	µg/L	18	100%	--	--	100% ND
Xylene (total)	µg/L	25	100%	--	--	100% ND
MW-118						
bis(2-Ethylhexyl)phthalate	µg/L	7	43%	13	0.072	No trend identified
1,1,1-Trichloroethane	µg/L	13	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	20	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	20	45%	56	0.074	No trend identified
1,2-Dichloroethene (total)	µg/L	16	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	19	100%	--	--	100% ND
Acetone	µg/L	20	100%	--	--	100% ND
Benzene	µg/L	13	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	7	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	10	100%	--	--	100% ND
Ethylbenzene	µg/L	20	100%	--	--	100% ND
Toluene	µg/L	20	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	6	100%	--	--	100% ND
Trichloroethene	µg/L	19	100%	--	--	100% ND
Vinyl chloride	µg/L	13	100%	--	--	100% ND
Xylene (total)	µg/L	20	100%	--	--	100% ND

TABLE 1

MANN-KENDALL TREND TEST RESULTS - OVERALL DATA (1994 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-209						
bis(2-Ethylhexyl)phthalate	µg/L	10	80%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	17	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	24	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	24	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	20	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	23	96%	--	--	>50% ND
Acetone	µg/L	24	54%	--	--	>50% ND
Benzene	µg/L	17	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	11	91%	--	--	>50% ND
cis-1,2-Dichloroethene	µg/L	14	100%	--	--	100% ND
Ethylbenzene	µg/L	24	100%	--	--	100% ND
Toluene	µg/L	24	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	10	100%	--	--	100% ND
Trichloroethene	µg/L	23	100%	--	--	100% ND
Vinyl chloride	µg/L	17	100%	--	--	100% ND
Xylene (total)	µg/L	24	100%	--	--	100% ND
MW-223						
bis(2-Ethylhexyl)phthalate	µg/L	5	80%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	12	92%	--	--	>50% ND
1,1-Dichloroethane	µg/L	19	11%	-24	0.421	No trend identified
1,2-Dichloroethane	µg/L	19	5%	-105	0.0003	**Decreasing Trend**
1,2-Dichloroethene (total)	µg/L	15	13%	-11	0.621	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	18	100%	--	--	100% ND
Acetone	µg/L	19	100%	--	--	100% ND
Benzene	µg/L	12	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	11	0%	11	0.436	No trend identified
Ethylbenzene	µg/L	19	95%	--	--	>50% ND
Toluene	µg/L	19	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Trichloroethene	µg/L	18	72%	--	--	>50% ND
Vinyl chloride	µg/L	12	100%	--	--	100% ND
Xylene (total)	µg/L	19	95%	--	--	>50% ND

Notes:

* Three non-detects with high detection limits were eliminated from the calculations.

TABLE 2

MANN-KENDALL TREND TEST RESULTS - PRE-SHUTDOWN DATA (1994 -2005)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-4						
bis(2-Ethylhexyl)phthalate	µg/L	5	80%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	10	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	14	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	100%	--	--	100% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND
MW-11						
bis(2-Ethylhexyl)phthalate	µg/L	4	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	10	0%	-34	0.003	**Decreasing Trend**
1,1-Dichloroethane	µg/L	17	6%	-28	0.266	No trend identified
1,2-Dichloroethane	µg/L	17	53%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	14	14%	54	0.004	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	71%	--	--	>50% ND
Benzene	µg/L	10	60%	--	--	>50% ND
Chloromethane (Methyl Chloride)	µg/L	5	80%	--	--	>50% ND
cis-1,2-Dichloroethene	µg/L	7	0%	13	0.072	No trend identified
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	33%	--	--	Insufficient data
Trichloroethene	µg/L	16	0%	96	0.000	**Increasing Trend**
Vinyl chloride	µg/L	10	40%	26	0.025	**Increasing Trend**
Xylene (total)	µg/L	17	100%	--	--	100% ND
MW-106						
bis(2-Ethylhexyl)phthalate	µg/L	2	50%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	10	60%	--	--	>50% ND
1,1-Dichloroethane	µg/L	17	82%	--	--	>50% ND
1,2-Dichloroethane	µg/L	17	82%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	14	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	100%	--	--	100% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND

TABLE 2

MANN-KENDALL TREND TEST RESULTS - PRE-SHUTDOWN DATA (1994 -2005)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-107						
bis(2-Ethylhexyl)phthalate	µg/L	5	60%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	10	20%	4	0.788	No trend identified
1,1-Dichloroethane	µg/L	17	6%	30	0.232	No trend identified
1,2-Dichloroethane	µg/L	17	6%	6	0.837	No trend identified
1,2-Dichloroethene (total)	µg/L	14	71%	--	--	>50% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	50%	-76	0.001	**Decreasing Trend**
Acetone	µg/L	17	41%	-83	0.001	**Decreasing Trend**
Benzene	µg/L	10	20%	24	0.040	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	57%	--	--	>50% ND
Ethylbenzene	µg/L	17	12%	71	0.004	**Increasing Trend**
Toluene	µg/L	17	0%	54	0.029	**Increasing Trend**
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	88%	--	--	>50% ND
Vinyl chloride	µg/L	10	40%	-3	0.858	No trend identified
Xylene (total)	µg/L	17	0%	64	0.009455362	**Increasing Trend**
MW-108						
bis(2-Ethylhexyl)phthalate	µg/L	3	100%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	7	71%	--	--	>50% ND
1,1-Dichloroethane	µg/L	14	0%	13	0.5112	No trend identified
1,2-Dichloroethane	µg/L	14	0%	-6	0.784	No trend identified
1,2-Dichloroethene (total)	µg/L	12	8%	-6	0.732	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	13	100%	--	--	100% ND
Acetone	µg/L	14	64%	--	--	>50% ND
Benzene	µg/L	7	43%	14	0.051	No trend identified
Chloromethane (Methyl Chloride)	µg/L	3	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	5	0%	6	0.221	No trend identified
Ethylbenzene	µg/L	14	100%	--	--	100% ND
Toluene	µg/L	14	93%	--	--	>50% ND
trans-1,2-Dichloroethene	µg/L	2	50%	--	--	Insufficient data
Trichloroethene	µg/L	13	15%	21	0.222	No trend identified
Vinyl chloride	µg/L	7	71%	--	--	>50% ND
Xylene (total)	µg/L	14	100%	--	--	100% ND
MW-109						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	10	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	14	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	94%	--	--	>50% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND

TABLE 2

MANN-KENDALL TREND TEST RESULTS - PRE-SHUTDOWN DATA (1994 -2005)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-111						
bis(2-Ethylhexyl)phthalate	µg/L	3	100%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	10	30%	26	0.025	**Increasing Trend**
1,1-Dichloroethane	µg/L	17	6%	49	0.048	**Increasing Trend**
1,2-Dichloroethane	µg/L	17	0%	-12.00	0.650	No trend identified
1,2-Dichloroethene (total)	µg/L	14	50%	52	0.005	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	88%	--	--	>50% ND
Benzene	µg/L	10	90%	--	--	>50% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	0%	11	0.133	No trend identified
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	50%	29	0.012266061	**Increasing Trend**
Xylene (total)	µg/L	17	100%	--	--	100% ND
MW-115						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	10	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	17	29%	33	0.187	No trend identified
1,2-Dichloroethane	µg/L	17	76%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	14	0%	38	0.043	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	100%	--	--	100% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	0%	-13	0.072	No trend identified
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND
MW-118						
bis(2-Ethylhexyl)phthalate	µg/L	5	60%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	10	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	17	53%	--	--	>50% ND
1,2-Dichloroethene (total)	µg/L	14	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	100%	--	--	100% ND
Acetone	µg/L	17	100%	--	--	100% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND

TABLE 2

MANN-KENDALL TREND TEST RESULTS - PRE-SHUTDOWN DATA (1994 -2005)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-209						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	10	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	17	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	14	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	16	94%	--	--	>50% ND
Acetone	µg/L	17	71%	--	--	>50% ND
Benzene	µg/L	10	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	100%	--	--	100% ND
Ethylbenzene	µg/L	17	100%	--	--	100% ND
Toluene	µg/L	17	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	16	100%	--	--	100% ND
Vinyl chloride	µg/L	10	100%	--	--	100% ND
Xylene (total)	µg/L	17	100%	--	--	100% ND
MW-223						
bis(2-Ethylhexyl)phthalate	µg/L	3	67%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	8	88%	--	--	>50% ND
1,1-Dichloroethane	µg/L	15	13%	-28	0.181	No trend identified
1,2-Dichloroethane	µg/L	15	0%	-70	0.001	**Decreasing Trend**
1,2-Dichloroethene (total)	µg/L	12	17%	-13	0.411	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	14	100%	--	--	100% ND
Acetone	µg/L	15	100%	--	--	100% ND
Benzene	µg/L	8	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	3	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	7	0%	4	0.652	No trend identified
Ethylbenzene	µg/L	15	93%	--	--	>50% ND
Toluene	µg/L	15	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	3	100%	--	--	Insufficient data
Trichloroethene	µg/L	14	93%	--	--	>50% ND
Vinyl chloride	µg/L	8	100%	--	--	100% ND
Xylene (total)	µg/L	15	93%	--	--	>50% ND

TABLE 3

MANN-KENDALL TREND TEST RESULTS - POST-SHUTDOWN DATA (2005 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-4						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	8	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	8	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	8	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	7	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	8	100%	--	--	100% ND
Acetone	µg/L	8	100%	--	--	100% ND
Benzene	µg/L	8	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	6	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	8	100%	--	--	100% ND
Ethylbenzene	µg/L	8	100%	--	--	100% ND
Toluene	µg/L	8	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	8	100%	--	--	100% ND
Trichloroethene	µg/L	8	100%	--	--	100% ND
Vinyl chloride	µg/L	8	100%	--	--	100% ND
Xylene (total)	µg/L	8	100%	--	--	100% ND
MW-11						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	8	0%	4	0.711	No trend identified
1,1-Dichloroethane	µg/L	8	0%	10	0.266	No trend identified
1,2-Dichloroethane	µg/L	8	0%	7	0.458	No trend identified
1,2-Dichloroethene (total)	µg/L	7	0%	-3	0.764	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	8	100%	--	--	100% ND
Acetone	µg/L	8	100%	--	--	100% ND
Benzene	µg/L	8	13%	-1	1.000	No trend identified
Chloromethane (Methyl Chloride)	µg/L	6	67%	--	--	>50% ND
cis-1,2-Dichloroethene	µg/L	8	0%	-2	0.902	No trend identified
Ethylbenzene	µg/L	8	100%	--	--	100% ND
Toluene	µg/L	8	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	8	0%	7	0.458	No trend identified
Trichloroethene	µg/L	8	0%	0	1.000	No trend identified
Vinyl chloride	µg/L	8	13%	17	0.048	**Increasing Trend**
Xylene (total)	µg/L	8	100%	--	--	100% ND
MW-106						
bis(2-Ethylhexyl)phthalate	µg/L	2	50%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	4	25%	4	0.334	No trend identified
1,1-Dichloroethane	µg/L	4	25%	4	0.334	No trend identified
1,2-Dichloroethane	µg/L	4	25%	4	0.334	No trend identified
1,2-Dichloroethene (total)	µg/L	3	100%	--	--	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	4	100%	--	--	100% ND
Acetone	µg/L	4	75%	--	--	>50% ND
Benzene	µg/L	4	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	2	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Ethylbenzene	µg/L	4	100%	--	--	100% ND
Toluene	µg/L	4	75%	--	--	>50% ND
trans-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Trichloroethene	µg/L	4	100%	--	--	100% ND
Vinyl chloride	µg/L	4	100%	--	--	100% ND
Xylene (total)	µg/L	4	100%	--	--	100% ND

TABLE 3

MANN-KENDALL TREND TEST RESULTS - POST-SHUTDOWN DATA (2005 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-107						
bis(2-Ethylhexyl)phthalate	µg/L	4	75%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	7	0%	-7	0.368	No trend identified
1,1-Dichloroethane	µg/L	7	0%	-1	1.000	No trend identified
1,2-Dichloroethane	µg/L	7	0%	11	0.133	No trend identified
1,2-Dichloroethene (total)	µg/L	6	0%	3	0.707	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	7	100%	--	--	100% ND
Acetone	µg/L	7	100%	--	--	100% ND
Benzene	µg/L	7	0%	3	0.764	No trend identified
Chloromethane (Methyl Chloride)	µg/L	5	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	7	0%	1	1.000	No trend identified
Ethylbenzene	µg/L	7	0%	3	0.764	No trend identified
Toluene	µg/L	7	0%	-13	0.072	No trend identified
trans-1,2-Dichloroethene	µg/L	7	86%	--	--	>50% ND
Trichloroethene	µg/L	7	71%	--	--	>50% ND
Vinyl chloride	µg/L	7	0%	11	0.133	No trend identified
Xylene (total)	µg/L	7	0%	5	0.548005572	No trend identified
MW-108						
bis(2-Ethylhexyl)phthalate	µg/L	5	100%	--	--	100% ND
1,1,1-Trichloroethane	µg/L	8	0%	14	0.108	No trend identified
1,1-Dichloroethane	µg/L	8	0%	24	0.0044	**Increasing Trend**
1,2-Dichloroethane	µg/L	8	0%	16	0.063	No trend identified
1,2-Dichloroethene (total)	µg/L	7	0%	19	0.007	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	8	100%	--	--	100% ND
Acetone	µg/L	8	63%	--	--	>50% ND
Benzene	µg/L	8	0%	26	0.002	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	6	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	8	0%	24	0.004	**Increasing Trend**
Ethylbenzene	µg/L	8	75%	--	--	>50% ND
Toluene	µg/L	8	50%	16	0.063	No trend identified
trans-1,2-Dichloroethene	µg/L	8	13%	22	0.009	**Increasing Trend**
Trichloroethene	µg/L	8	0%	22	0.009	**Increasing Trend**
Vinyl chloride	µg/L	8	0%	28	0.001	**Increasing Trend**
Xylene (total)	µg/L	8	100%	--	--	100% ND
MW-109						
bis(2-Ethylhexyl)phthalate	µg/L	2	50%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	4	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	4	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	4	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	3	100%	--	--	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	4	100%	--	--	100% ND
Acetone	µg/L	4	100%	--	--	100% ND
Benzene	µg/L	4	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	2	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Ethylbenzene	µg/L	4	100%	--	--	100% ND
Toluene	µg/L	4	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Trichloroethene	µg/L	4	100%	--	--	100% ND
Vinyl chloride	µg/L	4	100%	--	--	100% ND
Xylene (total)	µg/L	4	100%	--	--	100% ND

TABLE 3

MANN-KENDALL TREND TEST RESULTS - POST-SHUTDOWN DATA (2005 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-111						
bis(2-Ethylhexyl)phthalate	µg/L	5	80%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	9	11%	5	0.677	No trend identified
1,1-Dichloroethane	µg/L	9	0%	4	0.754	No trend identified
1,2-Dichloroethane	µg/L	9	0%	6.00	0.602	No trend identified
1,2-Dichloroethene (total)	µg/L	8	0%	10	0.266	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	9	100%	--	--	100% ND
Acetone	µg/L	9	100%	--	--	100% ND
Benzene	µg/L	9	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	6	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	9	0%	10	0.348	No trend identified
Ethylbenzene	µg/L	9	100%	--	--	100% ND
Toluene	µg/L	9	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	9	100%	--	--	100% ND
Trichloroethene	µg/L	9	100%	--	--	100% ND
Vinyl chloride	µg/L	9	0%	9	0.404248495	No trend identified
Xylene (total)	µg/L	9	100%	--	--	100% ND
MW-115						
bis(2-Ethylhexyl)phthalate	µg/L	5	60%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	9	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	9	0%	12	0.251	No trend identified
1,2-Dichloroethane	µg/L	9	44%	-8	0.466	No trend identified
1,2-Dichloroethene (total)	µg/L	8	0%	4	0.711	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	9	100%	--	--	100% ND
Acetone	µg/L	9	100%	--	--	100% ND
Benzene	µg/L	9	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	6	100%	--	--	100% ND
cis-1,2-Dichloroethene	µg/L	9	0%	6	0.602	No trend identified
Ethylbenzene	µg/L	9	100%	--	--	100% ND
Toluene	µg/L	9	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	9	100%	--	--	100% ND
Trichloroethene	µg/L	9	100%	--	--	100% ND
Vinyl chloride	µg/L	9	100%	--	--	100% ND
Xylene (total)	µg/L	9	100%	--	--	100% ND
MW-118						
bis(2-Ethylhexyl)phthalate	µg/L	2	0%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	4	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	4	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	4	25%	0	0.625	No trend identified
1,2-Dichloroethene (total)	µg/L	3	100%	--	--	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	4	100%	--	--	100% ND
Acetone	µg/L	4	100%	--	--	100% ND
Benzene	µg/L	4	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	2	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Ethylbenzene	µg/L	4	100%	--	--	100% ND
Toluene	µg/L	4	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	4	100%	--	--	100% ND
Trichloroethene	µg/L	4	100%	--	--	100% ND
Vinyl chloride	µg/L	4	100%	--	--	100% ND
Xylene (total)	µg/L	4	100%	--	--	100% ND

TABLE 3

MANN-KENDALL TREND TEST RESULTS - POST-SHUTDOWN DATA (2005 - 2009)
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific Indicator Parameter	*Unit*	*Number of Samples*	*Percent Non-detects*	*Mann-Kendall Trend test*		
				Statistic	*Probability*	*Conclusion*
MW-209						
bis(2-Ethylhexyl)phthalate	µg/L	5	60%	--	--	>50% ND
1,1,1-Trichloroethane	µg/L	8	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	8	100%	--	--	100% ND
1,2-Dichloroethane	µg/L	8	100%	--	--	100% ND
1,2-Dichloroethene (total)	µg/L	7	100%	--	--	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	8	100%	--	--	100% ND
Acetone	µg/L	8	13%	-4	0.711	No trend identified
Benzene	µg/L	8	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	6	83%	--	--	>50% ND
cis-1,2-Dichloroethene	µg/L	8	100%	--	--	100% ND
Ethylbenzene	µg/L	8	100%	--	--	100% ND
Toluene	µg/L	8	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	8	100%	--	--	100% ND
Trichloroethene	µg/L	8	100%	--	--	100% ND
Vinyl chloride	µg/L	8	100%	--	--	100% ND
Xylene (total)	µg/L	8	100%	--	--	100% ND
MW-223						
bis(2-Ethylhexyl)phthalate	µg/L	2	100%	--	--	Insufficient data
1,1,1-Trichloroethane	µg/L	5	100%	--	--	100% ND
1,1-Dichloroethane	µg/L	5	0%	-1	1.000	No trend identified
1,2-Dichloroethane	µg/L	5	20%	-3	0.624	No trend identified
1,2-Dichloroethene (total)	µg/L	4	0%	-2	0.750	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	5	100%	--	--	100% ND
Acetone	µg/L	5	100%	--	--	100% ND
Benzene	µg/L	5	100%	--	--	100% ND
Chloromethane (Methyl Chloride)	µg/L	2	100%	--	--	Insufficient data
cis-1,2-Dichloroethene	µg/L	5	0%	-4	0.462	No trend identified
Ethylbenzene	µg/L	5	100%	--	--	100% ND
Toluene	µg/L	5	100%	--	--	100% ND
trans-1,2-Dichloroethene	µg/L	5	100%	--	--	100% ND
Trichloroethene	µg/L	5	0%	-2	0.806	No trend identified
Vinyl chloride	µg/L	5	100%	--	--	100% ND
Xylene (total)	µg/L	5	100%	--	--	100% ND

TABLE 4

MANN-KENDALL TREND TEST RESULTS
COMPARISON BETWEEN OVERALL, PRE-SHUTDOWN AND POST-SHUTDOWN PERIODS
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific		*Mann-Kendall Trend test Comparison*		
Indicator Parameter	*Unit*	*Overall*	*Pre-Shutdown*	*Post-Shutdown*
MW-4				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	>50% ND	100% ND
1,1,1-Trichloroethane	µg/L	100% ND	100% ND	100% ND
1,1-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethene (total)	µg/L	100% ND	100% ND	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	100% ND	100% ND	100% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	100% ND
cis-1,2-Dichloroethene	µg/L	100% ND	100% ND	100% ND
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-11				
bis(2-Ethylhexyl)phthalate	µg/L	100% ND	100% ND	100% ND
1,1,1-Trichloroethane	µg/L	**Decreasing Trend**	**Decreasing Trend**	No trend identified
1,1-Dichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,2-Dichloroethane	µg/L	No trend identified *	>50% ND	No trend identified
1,2-Dichloroethene (total)	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	>50% ND	>50% ND	100% ND
Benzene	µg/L	**Increasing Trend**	>50% ND	No trend identified
Chloromethane (Methyl Chloride)	µg/L	>50% ND	>50% ND	>50% ND
cis-1,2-Dichloroethene	µg/L	No trend identified	No trend identified	No trend identified
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	No trend identified	Insufficient data	No trend identified
Trichloroethene	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
Vinyl chloride	µg/L	**Increasing Trend**	**Increasing Trend**	**Increasing Trend**
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-106				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	Insufficient data	Insufficient data
1,1,1-Trichloroethane	µg/L	**Increasing Trend**	>50% ND	No trend identified
1,1-Dichloroethane	µg/L	>50% ND	>50% ND	No trend identified
1,2-Dichloroethane	µg/L	>50% ND	>50% ND	No trend identified
1,2-Dichloroethene (total)	µg/L	100% ND	100% ND	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	>50% ND	100% ND	>50% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	Insufficient data
cis-1,2-Dichloroethene	µg/L	100% ND	100% ND	100% ND

TABLE 4

MANN-KENDALL TREND TEST RESULTS
COMPARISON BETWEEN OVERALL, PRE-SHUTDOWN AND POST-SHUTDOWN PERIODS
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific		*Mann-Kendall Trend test Comparison*		
Indicator Parameter	*Unit*	*Overall*	*Pre-Shutdown*	*Post-Shutdown*
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	>50% ND	100% ND	>50% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-107				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	>50% ND	>50% ND
1,1,1-Trichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,1-Dichloroethane	µg/L	**Increasing Trend**	No trend identified	No trend identified
1,2-Dichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,2-Dichloroethene (total)	µg/L	>50% ND	>50% ND	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	>50% ND	**Decreasing Trend**	100% ND
Acetone	µg/L	>50% ND	**Decreasing Trend**	100% ND
Benzene	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	100% ND
cis-1,2-Dichloroethene	µg/L	**Increasing Trend**	>50% ND	No trend identified
Ethylbenzene	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
Toluene	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
trans-1,2-Dichloroethene	µg/L	>50% ND	Insufficient data	>50% ND
Trichloroethene	µg/L	>50% ND	>50% ND	>50% ND
Vinyl chloride	µg/L	**Increasing Trend**	No trend identified	No trend identified
Xylene (total)	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
MW-108				
bis(2-Ethylhexyl)phthalate	µg/L	100% ND	Insufficient data	100% ND
1,1,1-Trichloroethane	µg/L	**Increasing Trend**	>50% ND	No trend identified
1,1-Dichloroethane	µg/L	**Increasing Trend**	No trend identified	**Increasing Trend**
1,2-Dichloroethane	µg/L	**Increasing Trend**	No trend identified	No trend identified
1,2-Dichloroethene (total)	µg/L	**Increasing Trend**	No trend identified	**Increasing Trend**
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	>50% ND	>50% ND	>50% ND
Benzene	µg/L	**Increasing Trend**	No trend identified	**Increasing Trend**
Chloromethane (Methyl Chloride)	µg/L	100% ND	Insufficient data	100% ND
cis-1,2-Dichloroethene	µg/L	**Increasing Trend**	No trend identified	**Increasing Trend**
Ethylbenzene	µg/L	>50% ND	100% ND	>50% ND
Toluene	µg/L	>50% ND	>50% ND	No trend identified
trans-1,2-Dichloroethene	µg/L	**Increasing Trend**	Insufficient data	**Increasing Trend**
Trichloroethene	µg/L	**Increasing Trend**	No trend identified	**Increasing Trend**
Vinyl chloride	µg/L	**Increasing Trend**	>50% ND	**Increasing Trend**
Xylene (total)	µg/L	100% ND	100% ND	100% ND

TABLE 4

MANN-KENDALL TREND TEST RESULTS
COMPARISON BETWEEN OVERALL, PRE-SHUTDOWN AND POST-SHUTDOWN PERIODS
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific		*Mann-Kendall Trend test Comparison*		
Indicator Parameter	*Unit*	*Overall*	*Pre-Shutdown*	*Post-Shutdown*
MW-109				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	100% ND	Insufficient data
1,1,1-Trichloroethane	µg/L	100% ND	100% ND	100% ND
1,1-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethene (total)	µg/L	100% ND	100% ND	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	>50% ND	>50% ND	100% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	Insufficient data
cis-1,2-Dichloroethene	µg/L	100% ND	100% ND	100% ND
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-111				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	Insufficient data	>50% ND
1,1,1-Trichloroethane	µg/L	No trend identified	**Increasing Trend**	No trend identified
1,1-Dichloroethane	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
1,2-Dichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,2-Dichloroethene (total)	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	>50% ND	>50% ND	100% ND
Benzene	µg/L	>50% ND	>50% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	100% ND
cis-1,2-Dichloroethene	µg/L	**Increasing Trend**	No trend identified	No trend identified
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	**Increasing Trend**	**Increasing Trend**	No trend identified
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-115				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	100% ND	>50% ND
1,1,1-Trichloroethane	µg/L	100% ND	100% ND	100% ND
1,1-Dichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,2-Dichloroethane	µg/L	>50% ND	>50% ND	No trend identified
1,2-Dichloroethene (total)	µg/L	No trend identified	**Increasing Trend**	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	100% ND	100% ND	100% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	100% ND
cis-1,2-Dichloroethene	µg/L	**Decreasing Trend**	No trend identified	No trend identified

TABLE 4

MANN-KENDALL TREND TEST RESULTS
COMPARISON BETWEEN OVERALL, PRE-SHUTDOWN AND POST-SHUTDOWN PERIODS
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific		*Mann-Kendall Trend test Comparison*		
Indicator Parameter	*Unit*	*Overall*	*Pre-Shutdown*	*Post-Shutdown*
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-118				
bis(2-Ethylhexyl)phthalate	µg/L	No trend identified	>50% ND	Insufficient data
1,1,1-Trichloroethane	µg/L	100% ND	100% ND	100% ND
1,1-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethane	µg/L	No trend identified	>50% ND	No trend identified
1,2-Dichloroethene (total)	µg/L	100% ND	100% ND	Insufficient data
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	100% ND	100% ND	100% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	100% ND	Insufficient data
cis-1,2-Dichloroethene	µg/L	100% ND	100% ND	100% ND
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND
MW-209				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	100% ND	>50% ND
1,1,1-Trichloroethane	µg/L	100% ND	100% ND	100% ND
1,1-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethane	µg/L	100% ND	100% ND	100% ND
1,2-Dichloroethene (total)	µg/L	100% ND	100% ND	100% ND
2-Butanone (Methyl Ethyl Ketone)	µg/L	>50% ND	>50% ND	100% ND
Acetone	µg/L	>50% ND	>50% ND	No trend identified
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	>50% ND	100% ND	>50% ND
cis-1,2-Dichloroethene	µg/L	100% ND	100% ND	100% ND
Ethylbenzene	µg/L	100% ND	100% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	100% ND	100% ND	100% ND
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	100% ND	100% ND	100% ND

TABLE 4

MANN-KENDALL TREND TEST RESULTS
COMPARISON BETWEEN OVERALL, PRE-SHUTDOWN AND POST-SHUTDOWN PERIODS
EVALUATION OF GROUNDATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific		*Mann-Kendall Trend test Comparison*		
Indicator Parameter	*Unit*	*Overall*	*Pre-Shutdown*	*Post-Shutdown*
MW-223				
bis(2-Ethylhexyl)phthalate	µg/L	>50% ND	Insufficient data	Insufficient data
1,1,1-Trichloroethane	µg/L	>50% ND	>50% ND	100% ND
1,1-Dichloroethane	µg/L	No trend identified	No trend identified	No trend identified
1,2-Dichloroethane	µg/L	**Decreasing Trend**	**Decreasing Trend**	No trend identified
1,2-Dichloroethene (total)	µg/L	No trend identified	No trend identified	No trend identified
2-Butanone (Methyl Ethyl Ketone)	µg/L	100% ND	100% ND	100% ND
Acetone	µg/L	100% ND	100% ND	100% ND
Benzene	µg/L	100% ND	100% ND	100% ND
Chloromethane (Methyl Chloride)	µg/L	100% ND	Insufficient data	Insufficient data
cis-1,2-Dichloroethene	µg/L	No trend identified	No trend identified	No trend identified
Ethylbenzene	µg/L	>50% ND	>50% ND	100% ND
Toluene	µg/L	100% ND	100% ND	100% ND
trans-1,2-Dichloroethene	µg/L	100% ND	Insufficient data	100% ND
Trichloroethene	µg/L	>50% ND	>50% ND	No trend identified
Vinyl chloride	µg/L	100% ND	100% ND	100% ND
Xylene (total)	µg/L	>50% ND	>50% ND	100% ND

Notes:

* Three non-detects with high detection limits were eliminated from the calculations.

TABLE 5

STATISTICAL CONTROL ANALYSIS (SHEWHART-CUSUM) RESULTS
EVALUATION OF GROUNDWATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific	*Pre-Shutdown*					*Post-Shutdown*			
Indicator Parameter	*n*	*x*	*sd*	*SCL*	*h*	*n*	*n of points above SCL*	*CUSUM above h?*	*Control Analysis Conclusion*
MW-11									
1,1,1-Trichloroethane	7	54	5.88	81	84	7	0	No	within limits
1,2-Dichloroethane	7	1.7	0.40	3.5	3.7	7	0	No	within limits
1,2-Dichloroethene (total)	5	66	47	279	303	6	0	No	within limits
Benzene	7	0.59	0.10	1.0	1.1	7	0	No	within limits
Trichloroethene	7	121	127	692	756	7	0	No	within limits
Vinyl chloride	7	2.3	0.90	6.4	6.8	7	0	Yes	**above limits**
1,1-Dichloroethane	7	83	9.56	126	130	7	0	No	within limits
cis-1,2-Dichloroethene	7	59	39	233	253	7	0	No	within limits
trans-1,2-Dichloroethene	7	2.3	0.83	6.0	6.4	3	0	No	within limits
MW-106									
1,1,1-Trichloroethane	7	1.08	0.74	4.4	4.8	3	0	No	within limits
1,1-Dichloroethane	7	1.07	0.86	4.9	5.3	3	0	No	within limits
1,2-Dichloroethane	7	0.77	0.20	1.7	1.8	3	0	No	within limits
MW-107									
1,1,1-Trichloroethane	7	100	78	451	490	6	0	No	within limits
1,1-Dichloroethane	7	754	344	2302	2474	6	0	No	within limits
1,2-Dichloroethane	7	144	83	518	560	6	0	No	within limits
1,2-Dichloroethene (total)	5	194	102	653	704	5	0	No	within limits
Benzene	7	50	22	149	160	6	0	Yes	**above limits**
cis-1,2-Dichloroethene	7	220	115	737	795	6	0	No	within limits
Ethylbenzene	7	606	343	2149	2321	6	0	No	within limits
Toluene	7	5499	3270	20214	21849	6	0	No	within limits
Vinyl chloride	7	43	24	148	160	6	0	Yes	**above limits**
Xylene (total)	7	2050	1100	7000	7550	6	0	No	within limits
MW-108									
1,1,1-Trichloroethane	5	2.6	1.20	8.0	8.6	7	3	Yes	**above limits**
1,1-Dichloroethane	6	26	17	103	112	7	5	Yes	**above limits**
1,2-Dichloroethane	6	26	24	132	144	7	0	Yes	**above limits**
1,2-Dichloroethene (total)	5	16	15	85	93	6	4	Yes	**above limits**
Acetone	6	5.0	1.42	11	12	7	0	No	within limits
Benzene	5	4.5	5.17	28	30	7	5	Yes	**above limits**
cis-1,2-Dichloroethene	5	25	22	123	134	7	1	Yes	**above limits**
trans-1,2-Dichloroethene	2	2.0	1.06	6.8	7.3	7	0	No	within limits
Trichloroethene	6	4.6	4.14	23	25	7	2	Yes	**above limits**
Vinyl chloride	5	5.5	2.74	18	19	7	5	Yes	**above limits**
MW-111									
1,1,1-Trichloroethane	7	2.4	1.55	9.4	10	8	0	No	within limits
1,1-Dichloroethane	7	20	14	82	89	8	0	No	within limits
1,2-Dichloroethane	7	69	35	228	245	8	0	No	within limits
1,2-Dichloroethene (total)	5	2.9	1.20	8.3	8.9	7	0	Yes	**above limits**
cis-1,2-Dichloroethene	7	3.4	2.43	14	16	8	0	No	within limits
Vinyl chloride	7	3.0	3.04	17	18	8	0	No	within limits

TABLE 5

STATISTICAL CONTROL ANALYSIS (SHEWHART-CUSUM) RESULTS
EVALUATION OF GROUNDWATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Site-Specific	*Pre-Shutdown*					*Post-Shutdown*			
Indicator Parameter	*n*	*x*	*sd*	*SCL*	*h*	*n*	*n of points above SCL*	*CUSUM above h?*	*Control Analysis Conclusion*
MW-115									
1,1-Dichloroethane	7	2.4	0.78	5.9	6.3	8	0	No	within limits
1,2-Dichloroethene (total)	6	10	3.04	23	25	7	0	No	within limits
cis-1,2-Dichloroethene	7	9.4	3.46	25	27	8	0	No	within limits
1,2-Dichloroethane	7	1.0	0.30	2.4	2.5	8	0	No	within limits
MW-118									
1,2-Dichloroethane	8	2.2	1.06	7.0	7.5	3	0	No	within limits
MW-209									
Acetone	8	11	5.54	36	39	7	0	No	within limits
MW-223									
1,1-Dichloroethane	7	2.1	0.21	3.0	3.1	4	0	No	within limits
1,2-Dichloroethane	7	4.3	0.31	5.7	5.9	4	0	No	within limits
1,2-Dichloroethene (total)	6	4.4	0.33	5.8	6.0	3	0	No	within limits
cis-1,2-Dichloroethene	7	2.4	0.31	3.8	4.0	4	0	No	within limits
Trichloroethene	7	0.31	0.07	0.6	0.7	4	0	No	within limits

Notes:

Statistical control analysis were performed for data sets with more than 4 data points (pre- and post-shutdown) and with percentage of non-detects less than 50.

n: Number of samples
x: mean
sd: standard deviation
SCL: Upper Shewhart Control Limit
h: Upper CUSUM limit

TABLE 6

CORRELATION ANALYSIS RESULTS COMPARING ON-SITE (MW-11) AND OFF-SITE DOWNGRADIENT (MW-115) WELLS
EVALUATION OF GROUNDWATER MONITORING DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

	Number of Paired Data	*Pearson Correlation*		*Conclusion*
		R^2	*Probability*	
(i) Overall Data (1994-2009)				
1,1-Dichloroethane	23	0.274	0.010	Poor correlation
1,2-Dichloroethene (total)	19	4.60E-05	0.978	NSS
cis-1,2-Dichloroethene	14	0.004	0.946	NSS
(ii) Post-Shutdown Data (2005-2009)				
1,1-Dichloroethane	8	0.546	0.037	Moderate correlation
1,2-Dichloroethene (total)	7	0.228	0.280	NSS
cis-1,2-Dichloroethene	8	0.469	0.062	NSS

Note:
R^2 - Correlation coefficient
NSS - Not statistically significant at 95 percent confidence.

ATTACHMENT K

NUMBER OF DETECTIONS

TABLE K-1

SUMMARY OF GROUNDWATER DATA
WATER TABLE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	305	73	0.66	1300
1,1,2,2-Tetrachloroethane	µg/L	141	0	--	--
1,1,2-Trichloroethane	µg/L	141	5	0.24	32
1,1-Dichloroethane	µg/L	454	138	0.91	1530
1,1-Dichloroethene	µg/L	141	10	0.69	32.3
1,2-Dichloroethane	µg/L	454	125	0.66	1800
1,2-Dichloroethene (total)	µg/L	372	90	1.1	369
1,2-Dichloropropane	µg/L	141	0	--	--
2-Butanone (Methyl Ethyl Ketone)	µg/L	432	11	85.2	18000
2-Hexanone	µg/L	141	2	29.8	33.7
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	141	2	1200	1300
Acetone	µg/L	454	34	3	34000
Benzene	µg/L	305	45	0.24	108
Bromodichloromethane	µg/L	141	0	--	--
Bromoform	µg/L	141	0	--	--
Bromomethane (Methyl Bromide)	µg/L	141	0	--	--
Carbon disulfide	µg/L	141	0	--	--
Carbon tetrachloride	µg/L	141	0	--	--
Chlorobenzene	µg/L	141	4	53.4	70.6
Chloroethane	µg/L	278	7	1.1	13.9
Chloroform (Trichloromethane)	µg/L	141	5	0.28	8
Chloromethane (Methyl Chloride)	µg/L	176	3	0.61	0.75
cis-1,2-Dichloroethene	µg/L	245	74	6.4	374
cis-1,3-Dichloropropene	µg/L	141	0	--	--
Dibromochloromethane	µg/L	141	0	--	--
Ethylbenzene	µg/L	453	34	--	1420
Methylene chloride	µg/L	141	3	19	380
Styrene	µg/L	141	0	--	--
Tetrachloroethene	µg/L	270	3	--	18
Toluene	µg/L	454	42	--	11600
trans-1,2-Dichloroethene	µg/L	162	21	3.2	4.2
trans-1,3-Dichloropropene	µg/L	141	0	--	--
Trichloroethene	µg/L	432	54	0.27	349
Vinyl chloride	µg/L	305	55	0.38	260
Xylene (total)	µg/L	454	35	1.9	4950
Semi-Volatile Organic Compounds					
1,2,4-Trichlorobenzene	µg/L	128	0	--	--
1,2-Dichlorobenzene	µg/L	128	4	1.4	2
1,3-Dichlorobenzene	µg/L	128	0	--	--
1,4-Dichlorobenzene	µg/L	128	0	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	128	0	--	--
2,4,5-Trichlorophenol	µg/L	113	0	--	--
2,4,6-Trichlorophenol	µg/L	113	0	--	--
2,4-Dichlorophenol	µg/L	113	0	--	--
2,4-Dimethylphenol	µg/L	120	10	4.9	29
2,4-Dinitrophenol	µg/L	113	0	--	--
2,4-Dinitrotoluene	µg/L	128	0	--	--
2,6-Dinitrotoluene	µg/L	128	0	--	--
2-Chloronaphthalene	µg/L	128	0	--	--
2-Chlorophenol	µg/L	113	0	--	--
2-Methylnaphthalene	µg/L	128	6	0.53	12

TABLE K-1

SUMMARY OF GROUNDWATER DATA
WATER TABLE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
2-Methylphenol	µg/L	120	10	9	63
2-Nitroaniline	µg/L	128	0	--	--
2-Nitrophenol	µg/L	113	0	--	--
3&4-Methylphenol	µg/L	85	7	6.6	104
3,3'-Dichlorobenzidine	µg/L	128	0	--	--
3-Nitroaniline	µg/L	128	0	--	--
4,6-Dinitro-2-methylphenol	µg/L	112	0	--	--
4-Bromophenyl phenyl ether	µg/L	128	0	--	--
4-Chloro-3-methylphenol	µg/L	112	5	8	18
4-Chloroaniline	µg/L	128	0	--	--
4-Chlorophenyl phenyl ether	µg/L	128	0	--	--
4-Methylphenol	µg/L	35	3	220	450
4-Nitroaniline	µg/L	128	0	--	--
4-Nitrophenol	µg/L	113	0	--	--
Acenaphthene	µg/L	128	0	--	--
Acenaphthylene	µg/L	128	0	--	--
Anthracene	µg/L	128	0	--	--
Benzo(a)anthracene	µg/L	128	0	--	--
Benzo(a)pyrene	µg/L	128	0	--	--
Benzo(b)fluoranthene	µg/L	126	0	--	--
Benzo(g,h,i)perylene	µg/L	128	0	--	--
Benzo(k)fluoranthene	µg/L	128	0	--	--
bis(2-Chloroethoxy)methane	µg/L	128	0	--	--
bis(2-Chloroethyl)ether	µg/L	128	0	--	--
bis(2-Ethylhexyl)phthalate	µg/L	154	24	0.54	6.1
Butyl benzylphthalate	µg/L	126	0	--	--
Carbazole	µg/L	128	0	--	--
Chrysene	µg/L	128	0	--	--
Dibenz(a,h)anthracene	µg/L	128	0	--	--
Dibenzofuran	µg/L	128	0	--	--
Diethyl phthalate	µg/L	128	4	0.47	4.4
Dimethyl phthalate	µg/L	128	0	--	--
Di-n-butylphthalate	µg/L	128	6	1	3.1
Di-n-octyl phthalate	µg/L	128	1	1.9	1.9
Fluoranthene	µg/L	128	1	0.89	0.89
Fluorene	µg/L	128	0	--	--
Hexachlorobenzene	µg/L	128	0	--	--
Hexachlorobutadiene	µg/L	128	0	--	--
Hexachlorocyclopentadiene	µg/L	127	0	--	--
Hexachloroethane	µg/L	128	0	--	--
Indeno(1,2,3-cd)pyrene	µg/L	128	0	--	--
Isophorone	µg/L	135	7	3.8	28
Naphthalene	µg/L	128	6	1.9	10.7
Nitrobenzene	µg/L	128	0	--	--
N-Nitrosodi-n-propylamine	µg/L	128	0	--	--
N-Nitrosodiphenylamine	µg/L	78	0	--	--
Pentachlorophenol	µg/L	113	0	--	--
Phenanthrene	µg/L	128	1	0.77	0.77
Phenol	µg/L	120	4	45.4	310
Pyrene	µg/L	128	1	0.8	0.8

TABLE K-1

SUMMARY OF GROUNDWATER DATA
WATER TABLE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Pesticides					
4,4'-DDD	µg/L	132	0	--	--
4,4'-DDE	µg/L	132	0	--	--
4,4'-DDT	µg/L	132	0	--	--
Aldrin	µg/L	132	0	--	--
alpha-BHC	µg/L	132	0	--	--
alpha-Chlordane	µg/L	78	0	--	--
beta-BHC	µg/L	132	0	--	--
Chlordane	µg/L	54	0	--	--
delta-BHC	µg/L	132	0	--	--
Dieldrin	µg/L	132	0	--	--
Endosulfan I	µg/L	132	0	--	--
Endosulfan II	µg/L	132	0	--	--
Endosulfan sulfate	µg/L	132	0	--	--
Endrin	µg/L	132	0	--	--
Endrin aldehyde	µg/L	116	0	--	--
Endrin ketone	µg/L	81	0	--	--
gamma-BHC (Lindane)	µg/L	132	0	--	--
gamma-Chlordane	µg/L	78	0	--	--
Heptachlor	µg/L	132	0	--	--
Heptachlor epoxide	µg/L	132	0	--	--
Methoxychlor	µg/L	132	0	--	--
Toxaphene	µg/L	132	0	--	--
PCBs					
Aroclor-1016 (PCB-1016)	µg/L	132	0	--	--
Aroclor-1221 (PCB-1221)	µg/L	132	0	--	--
Aroclor-1232 (PCB-1232)	µg/L	132	0	--	--
Aroclor-1242 (PCB-1242)	µg/L	132	0	--	--
Aroclor-1248 (PCB-1248)	µg/L	132	2	2	39.7
Aroclor-1254 (PCB-1254)	µg/L	132	0	--	--
Aroclor-1260 (PCB-1260)	µg/L	132	0	--	--
Metals					
Aluminum	µg/L	137	116	170	170000
Aluminum (Dissolved)	µg/L	26	19	61	5100
Antimony	µg/L	137	3	5.6	14.5
Antimony (Dissolved)	µg/L	26	0	--	--
Arsenic	µg/L	137	92	3.1	186
Arsenic (Dissolved)	µg/L	26	5	6	46.8
Barium	µg/L	137	65	8	1700
Barium (Dissolved)	µg/L	26	26	7	1040
Beryllium	µg/L	137	13	1	16
Beryllium (Dissolved)	µg/L	26	0	--	--
Cadmium	µg/L	286	72	1	87
Cadmium (Dissolved)	µg/L	26	6	5	12
Calcium	µg/L	137	137	5600	554000
Calcium (Dissolved)	µg/L	26	26	37000	530000
Chromium	µg/L	137	74	10	290
Chromium Total (Dissolved)	µg/L	26	0	--	--
Cobalt	µg/L	137	43	10	232
Cobalt (Dissolved)	µg/L	26	16	20	100

TABLE K-1

SUMMARY OF GROUNDWATER DATA
WATER TABLE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Metals (cont'd)					
Copper	µg/L	137	77	2	350
Copper (Dissolved)	µg/L	26	21	2	11
Iron	µg/L	137	137	391	540000
Iron (Dissolved)	µg/L	26	26	150	210000
Lead	µg/L	368	203	1	190
Lead (Dissolved)	µg/L	24	4	2	6
Magnesium	µg/L	137	137	41400	619000
Magnesium (Dissolved)	µg/L	25	25	20300	410000
Manganese	µg/L	137	137	68.1	13000
Manganese (Dissolved)	µg/L	26	26	550	8500
Mercury	µg/L	137	7	0.33	1.6
Mercury (Dissolved)	µg/L	26	1	0.3	0.3
Nickel	µg/L	367	211	11	770
Nickel (Dissolved)	µg/L	26	20	22	146
Potassium	µg/L	136	112	1400	35700
Potassium (Dissolved)	µg/L	26	26	4400	25000
Selenium	µg/L	136	10	5.1	19
Selenium (Dissolved)	µg/L	26	0	--	--
Silver	µg/L	136	0	--	--
Silver (Dissolved)	µg/L	26	0	--	--
Sodium	µg/L	136	130	2700	530000
Sodium (Dissolved)	µg/L	26	26	18000	290000
Thallium	µg/L	136	2	12.3	12.5
Thallium (Dissolved)	µg/L	26	0	--	--
Vanadium	µg/L	136	20	50	289
Vanadium (Dissolved)	µg/L	26	0	--	--
Zinc	µg/L	136	104	18	11700
Zinc (Dissolved)	µg/L	26	25	20	1900
General Chemistry					
Cyanide (total)	mg/L	41	1	0.013	0.013
Cyanide (total)	µg/L	82	3	6	1200

Notes:
mg/L = milligams per Liter
ug/L = micrograms per Liter

TABLE K-2

SUMMARY OF GROUNDWATER DATA
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OH
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	179	1	0.34	0.34
1,1,2,2-Tetrachloroethane	µg/L	84	0	--	--
1,1,2-Trichloroethane	µg/L	84	0	--	--
1,1-Dichloroethane	µg/L	275	18	2.4	3.9
1,1-Dichloroethene	µg/L	84	0	--	--
1,2-Dichloroethane	µg/L	275	27	0.41	8.9
1,2-Dichloroethene (total)	µg/L	224	15	0.93	6
1,2-Dichloropropane	µg/L	84	0	--	--
2-Butanone (Methyl Ethyl Ketone)	µg/L	262	1	7.8	7.8
2-Hexanone	µg/L	84	0	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	84	0	--	--
Acetone	µg/L	275	19	3.2	1200
Benzene	µg/L	179	0	--	--
Bromodichloromethane	µg/L	84	0	--	--
Bromoform	µg/L	84	0	--	--
Bromomethane (Methyl Bromide)	µg/L	84	0	--	--
Carbon disulfide	µg/L	84	0	--	--
Carbon tetrachloride	µg/L	84	0	--	--
Chlorobenzene	µg/L	84	0	--	--
Chloroethane	µg/L	167	0	--	--
Chloroform (Trichloromethane)	µg/L	84	0	--	--
Chloromethane (Methyl Chloride)	µg/L	98	1	0.56	0.56
cis-1,2-Dichloroethene	µg/L	147	12	0.93	4
cis-1,3-Dichloropropene	µg/L	84	0	--	--
Dibromochloromethane	µg/L	84	0	--	--
Ethylbenzene	µg/L	275	3	0.56	0.89
Methylene chloride	µg/L	84	1	7	7
Styrene	µg/L	84	0	--	--
Tetrachloroethene	µg/L	165	1	11	11
Toluene	µg/L	275	3	0.3	6.7
trans-1,2-Dichloroethene	µg/L	95	0	--	--
trans-1,3-Dichloropropene	µg/L	84	0	--	--
Trichloroethene	µg/L	262	5	0.31	--
Vinyl chloride	µg/L	179	0	--	--
Xylene (total)	µg/L	275	3	1.5	3.2
Semi-Volatile Organic Compounds					
1,2,4-Trichlorobenzene	µg/L	82	0	--	--
1,2-Dichlorobenzene	µg/L	82	0	--	--
1,3-Dichlorobenzene	µg/L	82	0	--	--
1,4-Dichlorobenzene	µg/L	82	0	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	82	0	--	--
2,4,5-Trichlorophenol	µg/L	79	0	--	--
2,4,6-Trichlorophenol	µg/L	79	0	--	--

TABLE K-2

SUMMARY OF GROUNDWATER DATA
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OH
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
2,4-Dichlorophenol	µg/L	79	0	--	--
2,4-Dimethylphenol	µg/L	85	0	--	--
2,4-Dinitrophenol	µg/L	79	0	--	--
2,4-Dinitrotoluene	µg/L	82	0	--	--
2,6-Dinitrotoluene	µg/L	82	0	--	--
2-Chloronaphthalene	µg/L	82	0	--	--
2-Chlorophenol	µg/L	79	0	--	--
2-Methylnaphthalene	µg/L	82	0	--	--
2-Methylphenol	µg/L	85	0	--	--
2-Nitroaniline	µg/L	82	0	--	--
2-Nitrophenol	µg/L	79	0	--	--
3&4-Methylphenol	µg/L	58	0	--	--
3,3'-Dichlorobenzidine	µg/L	82	0	--	--
3-Nitroaniline	µg/L	82	0	--	--
4,6-Dinitro-2-methylphenol	µg/L	79	0	--	--
4-Bromophenyl phenyl ether	µg/L	82	0	--	--
4-Chloro-3-methylphenol	µg/L	79	0	--	--
4-Chloroaniline	µg/L	82	0	--	--
4-Chlorophenyl phenyl ether	µg/L	82	0	--	--
4-Methylphenol	µg/L	27	0	--	--
4-Nitroaniline	µg/L	82	0	--	--
4-Nitrophenol	µg/L	79	0	--	--
Acenaphthene	µg/L	82	0	--	--
Acenaphthylene	µg/L	82	0	--	--
Anthracene	µg/L	82	0	--	--
Benzo(a)anthracene	µg/L	82	0	--	--
Benzo(a)pyrene	µg/L	82	0	--	--
Benzo(b)fluoranthene	µg/L	82	0	--	--
Benzo(g,h,i)perylene	µg/L	82	0	--	--
Benzo(k)fluoranthene	µg/L	82	0	--	--
bis(2-Chloroethoxy)methane	µg/L	82	0	--	--
bis(2-Chloroethyl)ether	µg/L	82	0	--	--
bis(2-Ethylhexyl)phthalate	µg/L	92	14	0.61	44
Butyl benzylphthalate	µg/L	82	0	--	--
Carbazole	µg/L	82	0	--	--
Chrysene	µg/L	82	0	--	--
Dibenz(a,h)anthracene	µg/L	82	0	--	--
Dibenzofuran	µg/L	82	0	--	--
Diethyl phthalate	µg/L	82	0	--	--
Dimethyl phthalate	µg/L	82	0	--	--
Di-n-butylphthalate	µg/L	82	4	0.95	3.9
Di-n-octyl phthalate	µg/L	82	0	--	--
Fluoranthene	µg/L	82	0	--	--
Fluorene	µg/L	82	0	--	--
Hexachlorobenzene	µg/L	82	0	--	--

TABLE K-2

SUMMARY OF GROUNDWATER DATA
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OH
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
Hexachlorobutadiene	µg/L	82	0	--	--
Hexachlorocyclopentadiene	µg/L	82	0	--	--
Hexachloroethane	µg/L	82	0	--	--
Indeno(1,2,3-cd)pyrene	µg/L	82	0	--	--
Isophorone	µg/L	88	1	0.85	0.85
Naphthalene	µg/L	82	0	--	--
Nitrobenzene	µg/L	82	0	--	--
N-Nitrosodi-n-propylamine	µg/L	82	0	--	--
N-Nitrosodiphenylamine	µg/L	52	0	--	--
Pentachlorophenol	µg/L	79	0	--	--
Phenanthrene	µg/L	82	0	--	--
Phenol	µg/L	86	0	--	--
Pyrene	µg/L	82	0	--	--
Pesticides					
4,4'-DDD	µg/L	84	0	--	--
4,4'-DDE	µg/L	84	0	--	--
4,4'-DDT	µg/L	84	0	--	--
Aldrin	µg/L	84	0	--	--
alpha-BHC	µg/L	84	0	--	--
alpha-Chlordane	µg/L	52	0	--	--
beta-BHC	µg/L	84	0	--	--
Chlordane	µg/L	32	0	--	--
delta-BHC	µg/L	84	0	--	--
Dieldrin	µg/L	84	0	--	--
Endosulfan I	µg/L	84	0	--	--
Endosulfan II	µg/L	84	0	--	--
Endosulfan sulfate	µg/L	84	0	--	--
Endrin	µg/L	84	0	--	--
Endrin aldehyde	µg/L	71	0	--	--
Endrin ketone	µg/L	53	0	--	--
gamma-BHC (Lindane)	µg/L	84	0	--	--
gamma-Chlordane	µg/L	52	0	--	--
Heptachlor	µg/L	84	0	--	--
Heptachlor epoxide	µg/L	84	0	--	--
Methoxychlor	µg/L	84	0	--	--
Toxaphene	µg/L	84	0	--	--
PCBs					
Aroclor-1016 (PCB-1016)	µg/L	84	0	--	--
Aroclor-1221 (PCB-1221)	µg/L	84	0	--	--
Aroclor-1232 (PCB-1232)	µg/L	84	0	--	--
Aroclor-1242 (PCB-1242)	µg/L	84	0	--	--

TABLE K-2

SUMMARY OF GROUNDWATER DATA
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OH
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
PCBs (cont'd)					
Aroclor-1248 (PCB-1248)	µg/L	84	2	4.1	10.6
Aroclor-1254 (PCB-1254)	µg/L	84	0	--	--
Aroclor-1260 (PCB-1260)	µg/L	84	0	--	--
Metals					
Aluminum	µg/L	83	53	190	40800
Aluminum (Dissolved)	µg/L	7	1	80	80
Antimony	µg/L	82	2	5.4	7.2
Antimony (Dissolved)	µg/L	8	1	10	10
Arsenic	µg/L	83	19	3	22
Arsenic (Dissolved)	µg/L	9	1	31	31
Barium	µg/L	83	32	9	2500
Barium (Dissolved)	µg/L	8	8	10	1000
Beryllium	µg/L	83	0	--	--
Beryllium (Dissolved)	µg/L	8	0	--	--
Cadmium	µg/L	179	18	1	10.6
Cadmium (Dissolved)	µg/L	8	0	--	--
Calcium	µg/L	83	83	6500	520000
Calcium (Dissolved)	µg/L	8	8	6100	470000
Chromium	µg/L	83	38	10	118
Chromium Total (Dissolved)	µg/L	8	0	--	--
Cobalt	µg/L	83	15	10	40
Cobalt (Dissolved)	µg/L	8	1	10	10
Copper	µg/L	83	38	3	2840
Copper (Dissolved)	µg/L	8	6	3	14
Iron	µg/L	83	82	105	183000
Iron (Dissolved)	µg/L	8	8	30	74000
Lead	µg/L	231	93	2	79.8
Lead (Dissolved)	µg/L	7	0	--	--
Magnesium	µg/L	83	75	2800	260000
Magnesium (Dissolved)	µg/L	5	5	2600	190000
Manganese	µg/L	82	73	16.9	6910
Manganese (Dissolved)	µg/L	9	9	6	3300
Mercury	µg/L	83	1	0.22	0.22
Mercury (Dissolved)	µg/L	8	0	--	--
Nickel	µg/L	231	60	14.9	152
Nickel (Dissolved)	µg/L	9	1	30	30
Potassium	µg/L	83	78	4000	31300
Potassium (Dissolved)	µg/L	8	8	4120	17000
Selenium	µg/L	83	1	10.1	10.1
Selenium (Dissolved)	µg/L	8	0	--	--
Silver	µg/L	83	1	10	10
Silver (Dissolved)	µg/L	8	0	--	--
Sodium	µg/L	83	83	23000	851000

TABLE K-2

SUMMARY OF GROUNDWATER DATA
UPPER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OH
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Metals (cont'd)					
Sodium (Dissolved)	µg/L	8	8	121000	550000
Thallium	µg/L	83	0	--	--
Thallium (Dissolved)	µg/L	7	0	--	--
Vanadium	µg/L	83	4	50	84
Vanadium (Dissolved)	µg/L	8	0	--	--
Zinc	µg/L	83	43	10	340
Zinc (Dissolved)	µg/L	8	6	30	64
General Chemistry					
Cyanide (total)	mg/L	26	0	--	--
Cyanide (total)	µg/L	51	0	--	--

Notes:
mg/L = milligams per Liter
ug/L = micrograms per Liter

TABLE K-3

SUMMARY OF GROUNDWATER DATA
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	191	0	--	--
1,1,2,2-Tetrachloroethane	µg/L	99	0	--	--
1,1,2-Trichloroethane	µg/L	99	0	--	--
1,1-Dichloroethane	µg/L	299	5	0.57	0.64
1,1-Dichloroethene	µg/L	99	0	--	--
1,2-Dichloroethane	µg/L	299	14	2	3.6
1,2-Dichloroethene (total)	µg/L	235	0	--	--
1,2-Dichloropropane	µg/L	99	0	--	--
2-Butanone (Methyl Ethyl Ketone)	µg/L	284	0	--	--
2-Hexanone	µg/L	99	0	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	99	0	--	--
Acetone	µg/L	299	3	65	130
Benzene	µg/L	191	0	--	--
Bromodichloromethane	µg/L	99	0	--	--
Bromoform	µg/L	99	0	--	--
Bromomethane (Methyl Bromide)	µg/L	99	0	--	--
Carbon disulfide	µg/L	99	0	--	--
Carbon tetrachloride	µg/L	99	0	--	--
Chlorobenzene	µg/L	99	0	--	--
Chloroethane	µg/L	191	0	--	--
Chloroform (Trichloromethane)	µg/L	99	0	--	--
Chloromethane (Methyl Chloride)	µg/L	99	0	--	--
cis-1,2-Dichloroethene	µg/L	156	0	--	--
cis-1,3-Dichloropropene	µg/L	99	0	--	--
Dibromochloromethane	µg/L	99	0	--	--
Ethylbenzene	µg/L	299	0	--	--
Methylene chloride	µg/L	99	1	6	6
Styrene	µg/L	99	0	--	--
Tetrachloroethene	µg/L	191	0	--	--
Toluene	µg/L	299	9	0.38	5
trans-1,2-Dichloroethene	µg/L	93	0	--	--
trans-1,3-Dichloropropene	µg/L	99	0	--	--
Trichloroethene	µg/L	284	0	--	--
Vinyl chloride	µg/L	191	0	--	--
Xylene (total)	µg/L	299	3	0.63	1.6
Semi-Volatile Organic Compounds					
1,2,4-Trichlorobenzene	µg/L	100	0	--	--
1,2-Dichlorobenzene	µg/L	100	0	--	--
1,3-Dichlorobenzene	µg/L	100	0	--	--
1,4-Dichlorobenzene	µg/L	100	0	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	100	0	--	--
2,4,5-Trichlorophenol	µg/L	99	0	--	--
2,4,6-Trichlorophenol	µg/L	99	0	--	--

TABLE K-3

SUMMARY OF GROUNDWATER DATA
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
2,4-Dichlorophenol	µg/L	99	0	--	--
2,4-Dimethylphenol	µg/L	99	0	--	--
2,4-Dinitrophenol	µg/L	99	0	--	--
2,4-Dinitrotoluene	µg/L	100	0	--	--
2,6-Dinitrotoluene	µg/L	100	0	--	--
2-Chloronaphthalene	µg/L	100	0	--	--
2-Chlorophenol	µg/L	99	0	--	--
2-Methylnaphthalene	µg/L	100	0	--	--
2-Methylphenol	µg/L	99	0	--	--
2-Nitroaniline	µg/L	100	0	--	--
2-Nitrophenol	µg/L	99	0	--	--
3&4-Methylphenol	µg/L	65	0	--	--
3,3'-Dichlorobenzidine	µg/L	100	0	--	--
3-Nitroaniline	µg/L	100	0	--	--
4,6-Dinitro-2-methylphenol	µg/L	99	0	--	--
4-Bromophenyl phenyl ether	µg/L	100	0	--	--
4-Chloro-3-methylphenol	µg/L	99	0	--	--
4-Chloroaniline	µg/L	100	0	--	--
4-Chlorophenyl phenyl ether	µg/L	100	0	--	--
4-Methylphenol	µg/L	34	0	--	--
4-Nitroaniline	µg/L	100	0	--	--
4-Nitrophenol	µg/L	99	0	--	--
Acenaphthene	µg/L	100	0	--	--
Acenaphthylene	µg/L	100	0	--	--
Anthracene	µg/L	100	0	--	--
Benzo(a)anthracene	µg/L	100	0	--	--
Benzo(a)pyrene	µg/L	100	0	--	--
Benzo(b)fluoranthene	µg/L	100	0	--	--
Benzo(g,h,i)perylene	µg/L	100	0	--	--
Benzo(k)fluoranthene	µg/L	100	0	--	--
bis(2-Chloroethoxy)methane	µg/L	100	0	--	--
bis(2-Chloroethyl)ether	µg/L	100	0	--	--
bis(2-Ethylhexyl)phthalate	µg/L	100	21	0.69	14
Butyl benzylphthalate	µg/L	100	0	--	--
Carbazole	µg/L	100	0	--	--
Chrysene	µg/L	100	0	--	--
Dibenz(a,h)anthracene	µg/L	100	0	--	--
Dibenzofuran	µg/L	100	0	--	--
Diethyl phthalate	µg/L	100	0	--	--
Dimethyl phthalate	µg/L	100	0	--	--
Di-n-butylphthalate	µg/L	100	7	0.56	4.4
Di-n-octyl phthalate	µg/L	100	0	--	--
Fluoranthene	µg/L	100	0	--	--
Fluorene	µg/L	100	0	--	--
Hexachlorobenzene	µg/L	100	0	--	--

TABLE K-3

SUMMARY OF GROUNDWATER DATA
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
Hexachlorobutadiene	µg/L	100	0	--	--
Hexachlorocyclopentadiene	µg/L	100	0	--	--
Hexachloroethane	µg/L	100	0	--	--
Indeno(1,2,3-cd)pyrene	µg/L	100	0	--	--
Isophorone	µg/L	100	0	--	--
Naphthalene	µg/L	100	2	0.48	0.68
Nitrobenzene	µg/L	100	0	--	--
N-Nitrosodi-n-propylamine	µg/L	100	0	--	--
N-Nitrosodiphenylamine	µg/L	65	0	--	--
Pentachlorophenol	µg/L	99	0	--	--
Phenanthrene	µg/L	100	1	0.56	0.56
Phenol	µg/L	99	0	--	--
Pyrene	µg/L	100	0	--	--
Pesticides					
4,4'-DDD	µg/L	100	1	0.18	0.18
4,4'-DDE	µg/L	100	0	--	--
4,4'-DDT	µg/L	100	1	0.26	0.26
Aldrin	µg/L	100	0	--	--
alpha-BHC	µg/L	100	2	0.15	0.2
alpha-Chlordane	µg/L	65	0	--	--
beta-BHC	µg/L	100	0	--	--
Chlordane	µg/L	35	0	--	--
delta-BHC	µg/L	100	0	--	--
Dieldrin	µg/L	100	0	--	--
Endosulfan I	µg/L	100	2	0.22	0.29
Endosulfan II	µg/L	100	2	0.096	0.12
Endosulfan sulfate	µg/L	100	2	0.07	0.097
Endrin	µg/L	100	0	--	--
Endrin aldehyde	µg/L	82	0	--	--
Endrin ketone	µg/L	66	0	--	--
gamma-BHC (Lindane)	µg/L	100	1	0.024	0.024
gamma-Chlordane	µg/L	65	0	--	--
Heptachlor	µg/L	100	0	--	--
Heptachlor epoxide	µg/L	100	0	--	--
Methoxychlor	µg/L	100	1	1	1
Toxaphene	µg/L	100	1	2	2

TABLE K-3

SUMMARY OF GROUNDWATER DATA
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
PCBs					
Aroclor-1016 (PCB-1016)	µg/L	100	0	--	--
Aroclor-1221 (PCB-1221)	µg/L	100	0	--	--
Aroclor-1232 (PCB-1232)	µg/L	100	0	--	--
Aroclor-1242 (PCB-1242)	µg/L	100	0	--	--
Aroclor-1248 (PCB-1248)	µg/L	100	0	--	--
Aroclor-1254 (PCB-1254)	µg/L	100	0	--	--
Aroclor-1260 (PCB-1260)	µg/L	100	0	--	--
Metals					
Aluminum	µg/L	100	61	75	45000
Aluminum (Dissolved)	µg/L	8	5	56	350
Antimony	µg/L	100	4	5.9	13
Antimony (Dissolved)	µg/L	8	0	--	--
Arsenic	µg/L	100	8	3.8	34
Arsenic (Dissolved)	µg/L	8	0	--	--
Barium	µg/L	100	35	6	690
Barium (Dissolved)	µg/L	8	8	36	360
Beryllium	µg/L	100	0	--	--
Beryllium (Dissolved)	µg/L	8	0	--	--
Cadmium	µg/L	208	3	1.5	7
Cadmium (Dissolved)	µg/L	8	0	--	--
Calcium	µg/L	100	81	4070	451000
Calcium (Dissolved)	µg/L	8	8	2800	8190
Chromium	µg/L	100	47	10	259
Chromium Total (Dissolved)	µg/L	8	0	--	--
Cobalt	µg/L	100	4	10	90
Cobalt (Dissolved)	µg/L	8	0	--	--
Copper	µg/L	100	45	2	199
Copper (Dissolved)	µg/L	8	6	2	22
Iron	µg/L	100	94	85	130000
Iron (Dissolved)	µg/L	8	8	22	240
Lead	µg/L	271	94	1	58.2
Lead (Dissolved)	µg/L	6	2	2	36
Magnesium	µg/L	100	60	992	137000
Magnesium (Dissolved)	µg/L	3	3	690	1500
Manganese	µg/L	100	77	7	3000
Manganese (Dissolved)	µg/L	8	8	5	22
Mercury	µg/L	100	1	0.83	0.83
Mercury (Dissolved)	µg/L	8	0	--	--
Nickel	µg/L	271	55	10	210
Nickel (Dissolved)	µg/L	8	0	--	--
Potassium	µg/L	100	70	2800	28100
Potassium (Dissolved)	µg/L	8	8	2400	4520
Selenium	µg/L	100	0	--	--

TABLE K-3

SUMMARY OF GROUNDWATER DATA
LOWER INTERMEDIATE UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Metals (cont'd)					
Selenium (Dissolved)	µg/L	8	0	--	--
Silver	µg/L	100	1	10	10
Silver (Dissolved)	µg/L	8	0	--	--
Sodium	µg/L	100	100	--	900000
Sodium (Dissolved)	µg/L	8	8	319000	540000
Thallium	µg/L	100	0	--	--
Thallium (Dissolved)	µg/L	8	0	--	--
Vanadium	µg/L	100	2	60	90
Vanadium (Dissolved)	µg/L	8	0	--	--
Zinc	µg/L	100	39	10	2300
Zinc (Dissolved)	µg/L	8	7	13	140
General Chemistry					
Cyanide (total)	mg/L	26	0	--	--
Cyanide (total)	µg/L	63	0	--	--

Notes:
mg/L = milligams per Liter
ug/L = micrograms per Liter

TABLE K-4

SUMMARY OF GROUNDWATER DATA
UPPER SHARON UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	90	0	--	--
1,1,2,2-Tetrachloroethane	µg/L	55	0	--	--
1,1,2-Trichloroethane	µg/L	55	0	--	--
1,1-Dichloroethane	µg/L	118	0	--	--
1,1-Dichloroethene	µg/L	55	0	--	--
1,2-Dichloroethane	µg/L	118	0	--	--
1,2-Dichloroethene (total)	µg/L	93	0	--	--
1,2-Dichloropropane	µg/L	55	0	--	--
2-Butanone (Methyl Ethyl Ketone)	µg/L	118	0	--	--
2-Hexanone	µg/L	55	0	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	55	0	--	--
Acetone	µg/L	118	2	88	270
Benzene	µg/L	90	4	0.31	0.49
Bromodichloromethane	µg/L	55	0	--	--
Bromoform	µg/L	55	0	--	--
Bromomethane (Methyl Bromide)	µg/L	55	0	--	--
Carbon dioxide	µg/L	1	1	68	68
Carbon disulfide	µg/L	55	2	0.81	1.1
Carbon tetrachloride	µg/L	55	0	--	--
Chlorobenzene	µg/L	55	0	--	--
Chloroethane	µg/L	90	0	--	--
Chloroform (Trichloromethane)	µg/L	55	0	--	--
Chloromethane (Methyl Chloride)	µg/L	55	0	--	--
cis-1,2-Dichloroethene	µg/L	68	0	--	--
cis-1,3-Dichloropropene	µg/L	55	0	--	--
Dibromochloromethane	µg/L	55	0	--	--
Ethylbenzene	µg/L	118	0	--	--
Methylene chloride	µg/L	55	1	21	21
Styrene	µg/L	55	0	--	--
Tetrachloroethene	µg/L	90	1	0.34	0.34
Toluene	µg/L	118	5	0.85	1.7
trans-1,2-Dichloroethene	µg/L	49	0	--	--
trans-1,3-Dichloropropene	µg/L	55	0	--	--
Trichloroethene	µg/L	118	0	--	--
Vinyl chloride	µg/L	90	0	--	--
Xylene (total)	µg/L	118	1	1.7	1.7
Semi-Volatile Organic Compounds					
1,2,4-Trichlorobenzene	µg/L	55	0	--	--
1,2-Dichlorobenzene	µg/L	55	0	--	--
1,3-Dichlorobenzene	µg/L	55	0	--	--
1,4-Dichlorobenzene	µg/L	55	0	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	55	0	--	--
2,4,5-Trichlorophenol	µg/L	55	0	--	--
2,4,6-Trichlorophenol	µg/L	55	0	--	--
2,4-Dichlorophenol	µg/L	55	0	--	--
2,4-Dimethylphenol	µg/L	55	0	--	--
2,4-Dinitrophenol	µg/L	54	0	--	--
2,4-Dinitrotoluene	µg/L	55	0	--	--
2,6-Dinitrotoluene	µg/L	55	0	--	--
2-Chloronaphthalene	µg/L	55	0	--	--
2-Chlorophenol	µg/L	55	0	--	--
2-Methylnaphthalene	µg/L	55	0	--	--

TABLE K-4

SUMMARY OF GROUNDWATER DATA
UPPER SHARON UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Semi-Volatile Organic Compounds (cont'd)					
2-Methylphenol	µg/L	55	0	--	--
2-Nitroaniline	µg/L	55	0	--	--
2-Nitrophenol	µg/L	55	0	--	--
3&4-Methylphenol	µg/L	34	0	--	--
3,3'-Dichlorobenzidine	µg/L	55	0	--	--
3-Nitroaniline	µg/L	55	0	--	--
4,6-Dinitro-2-methylphenol	µg/L	55	0	--	--
4-Bromophenyl phenyl ether	µg/L	55	0	--	--
4-Chloro-3-methylphenol	µg/L	55	0	--	--
4-Chloroaniline	µg/L	55	0	--	--
4-Chlorophenyl phenyl ether	µg/L	55	0	--	--
4-Methylphenol	µg/L	21	0	--	--
4-Nitroaniline	µg/L	55	0	--	--
4-Nitrophenol	µg/L	55	0	--	--
Acenaphthene	µg/L	55	0	--	--
Acenaphthylene	µg/L	55	0	--	--
Anthracene	µg/L	55	0	--	--
Benzo(a)anthracene	µg/L	55	0	--	--
Benzo(a)pyrene	µg/L	55	0	--	--
Benzo(b)fluoranthene	µg/L	55	0	--	--
Benzo(g,h,i)perylene	µg/L	55	0	--	--
Benzo(k)fluoranthene	µg/L	55	0	--	--
bis(2-Chloroethoxy)methane	µg/L	55	0	--	--
bis(2-Chloroethyl)ether	µg/L	55	0	--	--
bis(2-Ethylhexyl)phthalate	µg/L	55	3	1.4	2.5
Butyl benzylphthalate	µg/L	55	0	--	--
Carbazole	µg/L	55	0	--	--
Chrysene	µg/L	55	0	--	--
Dibenz(a,h)anthracene	µg/L	55	0	--	--
Dibenzofuran	µg/L	55	0	--	--
Diethyl phthalate	µg/L	55	0	--	--
Dimethyl phthalate	µg/L	55	0	--	--
Di-n-butylphthalate	µg/L	55	0	--	--
Di-n-octyl phthalate	µg/L	55	0	--	--
Fluoranthene	µg/L	55	0	--	--
Fluorene	µg/L	55	0	--	--
Hexachlorobenzene	µg/L	55	0	--	--
Hexachlorobutadiene	µg/L	55	0	--	--
Hexachlorocyclopentadiene	µg/L	55	0	--	--
Hexachloroethane	µg/L	55	0	--	--
Indeno(1,2,3-cd)pyrene	µg/L	55	0	--	--
Isophorone	µg/L	55	0	--	--
Naphthalene	µg/L	55	1	0.81	0.81
Nitrobenzene	µg/L	55	0	--	--
N-Nitrosodi-n-propylamine	µg/L	55	0	--	--
N-Nitrosodiphenylamine	µg/L	34	0	--	--
Pentachlorophenol	µg/L	55	0	--	--
Phenanthrene	µg/L	55	0	--	--
Phenol	µg/L	55	0	--	--
Pyrene	µg/L	55	0	--	--

TABLE K-4

SUMMARY OF GROUNDWATER DATA
UPPER SHARON UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Pesticides					
4,4'-DDD	µg/L	55	0	--	--
4,4'-DDE	µg/L	55	0	--	--
4,4'-DDT	µg/L	55	0	--	--
Aldrin	µg/L	55	0	--	--
alpha-BHC	µg/L	55	0	--	--
alpha-Chlordane	µg/L	34	0	--	--
beta-BHC	µg/L	55	0	--	--
Chlordane	µg/L	21	0	--	--
delta-BHC	µg/L	55	0	--	--
Dieldrin	µg/L	55	0	--	--
Endosulfan I	µg/L	55	0	--	--
Endosulfan II	µg/L	55	0	--	--
Endosulfan sulfate	µg/L	55	0	--	--
Endrin	µg/L	55	0	--	--
Endrin aldehyde	µg/L	49	0	--	--
Endrin ketone	µg/L	37	0	--	--
gamma-BHC (Lindane)	µg/L	55	0	--	--
gamma-Chlordane	µg/L	34	0	--	--
Heptachlor	µg/L	55	0	--	--
Heptachlor epoxide	µg/L	55	0	--	--
Methoxychlor	µg/L	55	0	--	--
Toxaphene	µg/L	55	0	--	--
PCBs					
Aroclor-1016 (PCB-1016)	µg/L	55	0	--	--
Aroclor-1221 (PCB-1221)	µg/L	55	0	--	--
Aroclor-1232 (PCB-1232)	µg/L	55	0	--	--
Aroclor-1242 (PCB-1242)	µg/L	55	0	--	--
Aroclor-1248 (PCB-1248)	µg/L	55	0	--	--
Aroclor-1254 (PCB-1254)	µg/L	55	0	--	--
Aroclor-1260 (PCB-1260)	µg/L	55	0	--	--
Metals					
Aluminum	µg/L	53	36	65	9700
Aluminum (Dissolved)	µg/L	6	5	52	327
Antimony	µg/L	53	0	--	--
Antimony (Dissolved)	µg/L	6	0	--	--
Arsenic	µg/L	53	4	4	7.5
Arsenic (Dissolved)	µg/L	6	1	5	5
Barium	µg/L	53	23	10	1280
Barium (Dissolved)	µg/L	6	6	26	1260
Beryllium	µg/L	53	0	--	--
Beryllium (Dissolved)	µg/L	6	0	--	--
Cadmium	µg/L	81	2	5	6
Cadmium (Dissolved)	µg/L	6	1	5	5
Calcium	µg/L	53	31	1740	349000
Calcium (Dissolved)	µg/L	6	6	1950	341000
Chromium	µg/L	53	11	10	67.8
Chromium Total (Dissolved)	µg/L	6	0	--	--
Cobalt	µg/L	53	1	20	20
Cobalt (Dissolved)	µg/L	6	0	--	--
Copper	µg/L	53	30	2	129

TABLE K-4

SUMMARY OF GROUNDWATER DATA
UPPER SHARON UNIT MONITORING WELLS
SUMMIT NATIONAL SITE
DEERFIELD, OHIO
1994 - 2009

		Number of Samples	*Number of Detects*	*Minimum Detected Value*	*Maximum Detected Value*
Metals (cont'd)					
Copper (Dissolved)	µg/L	6	4	2	43
Iron	µg/L	53	50	60	59600
Iron (Dissolved)	µg/L	6	6	20	290
Lead	µg/L	100	31	1	17
Lead (Dissolved)	µg/L	6	4	1.7	3
Magnesium	µg/L	53	21	566	6360
Magnesium (Dissolved)	µg/L	6	5	862	2000
Manganese	µg/L	53	43	6	461
Manganese (Dissolved)	µg/L	6	5	5	9
Mercury	µg/L	53	1	2.5	2.5
Mercury (Dissolved)	µg/L	6	0	--	--
Nickel	µg/L	100	23	10.8	112
Nickel (Dissolved)	µg/L	6	0	--	--
Potassium	µg/L	53	26	2380	35700
Potassium (Dissolved)	µg/L	6	6	2860	36700
Selenium	µg/L	53	1	5.3	5.3
Selenium (Dissolved)	µg/L	6	0	--	--
Silver	µg/L	53	0	--	--
Silver (Dissolved)	µg/L	6	0	--	--
Silver, Low Level	µg/L	2	0	--	--
Sodium	µg/L	53	53	233000	943000
Sodium (Dissolved)	µg/L	6	6	438000	590000
Thallium	µg/L	53	0	--	--
Thallium (Dissolved)	µg/L	6	0	--	--
Vanadium	µg/L	53	0	--	--
Vanadium (Dissolved)	µg/L	6	0	--	--
Zinc	µg/L	53	33	10	1100
Zinc (Dissolved)	µg/L	6	4	20	118
General Chemistry					
Cyanide (total)	mg/L	15	0	--	--
Cyanide (total)	µg/L	38	0	--	--

Notes:
mg/L = milligams per Liter
ug/L = micrograms per Liter