



# **VOLUNTARY REMEDIATION PLAN APPLICATION**

**FOR THE ARIVEC CHEMICALS PROPERTY  
(PART OF HSI NO. 10123)  
DOUGLAS COUNTY  
DOUGLASVILLE, GEORGIA**

**JULY 2011  
REF. NO. 035029 (14)**

**Prepared by:  
Conestoga-Rovers  
& Associates**

3075 Breckinridge Blvd., Suite 470  
Duluth, Georgia  
United States 30096

Office: (770) 441-0027  
Fax: (770) 441-2050

web: <http://www.CRAworld.com>

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## 1.0 INTRODUCTION

### 1.1 GENERAL

The following Voluntary Remediation Plan (VRP) Application is being submitted on behalf of the Arivec Chemicals Site PRP Group (Group) for the Arivec Chemicals property located at 7962 Huey Road in Douglasville, Georgia (Property). A Voluntary Remediation Program Application form and checklist are included in Appendix A. Tax Map and Warranty Deed information are provided in Appendix B. The application fee is provided under separate cover.

By letter dated May 9, 2011, the Georgia Environmental Protection Division (EPD) requested a revised Corrective Action Plan (CAP) be submitted for the Arivec Chemicals Site (Site). This VRP Application is being submitted in place of the CAP, as discussed at a meeting between representatives of the Group and EPD conducted on April 21, 2011.

### 1.2 SITE LOCATION AND DESCRIPTION

The Arivec Property is located in a mixed industrial and residential use area within the Douglasville, Georgia, city limits. The Property is approximately 3.64 acres and is bordered on four sides by industrial land. Signal Energy Holdings Corporation (formerly Young Refining) borders the Property to the north by an unused gravel lot and former industrial ponds, to the east by a closed RCRA pond and several above ground storage tanks which are currently being dismantled, and to the southeast by an operating asphalt plant. To the south, the Property is bordered by Blacklidge Emulsions and other industrial property owned by Ruth Walters. Huey Road is to the west of the Arivec Property and west of Huey Road is vacant industrial land owned by Dillon Transport, Inc. Huey Road runs north-south for less than a mile and is lined by residential homes. The local topography generally slopes from south to north-northwest. A Site Location Map and a Site Plan are provided on Figure 1.1 and Figure 1.2, respectively.

Arivec Chemicals recycled solvents on the Property until the mid-1990s. Structures on the Property such as tanks have since been removed in stages. As of June 2011, only derelict buildings, concrete pads and walls, and one steel vessel remain. In 2010, a buried drum removal was completed on the Property. Approximately 1500 buried drums containing wastes were removed and disposed of at off-site disposal facilities. The entire Property is fenced and gated with a 5-foot high chain-link fence.

Residences and industries located in the vicinity of the Arivec Property are served by public water. Two private wells have been identified in the general vicinity of the Property. One well is located 2,600 feet north of the Property and one well is located 2,200 feet northwest of the Property, beyond the limits of any reported groundwater impacts. The well owners indicated the wells are used for potable water. These wells were sampled by the Group on July 18, 2011.

### **1.3 VRP PROPERTY**

The VPR Application applies only to the Arivec Property. Contamination from the Arivec Property that extends off the Property will continue to be addressed under the Hazardous Site Response Act (HSRA).

## 2.0 SOIL CONTAMINATION

Based on the historical soil data collected for the Compliance Status Report (CSR) (including additional sampling conducted in July 2006 and July 2007), 25 of the 87 borehole (59 out of 188 soil samples) locations sampled for volatile organic compounds (VOCs), RCRA metals, and PCB analyses showed detections of select VOCs (only) above the Type 1 Risk Reduction Standard (RRS). Concentrations of one or more select VOCs were reported in the shallow (less than 4 feet) and the deep soil (4 to 12 feet) above the Type 1 RRS on specific sections of the Site.

Select VOCs exceeding the Type 1 RRS in the shallow soil zone (0 to 4 feet):

- Within the southeast portion of the Property (B-1, B-1B, B-21, B-27 and B-28)
- Within the southwest portion of the Property (B-9, B-11 and B-63)
- Within the center and northeast portion of the Property (B-26, B-55, B-68 and B-73)

Select VOCs exceeding the Type 1 RRS in the deep soil zone (4 to 12 feet):

- Within the east, southeast and eastern portion of the Property (B-1, B-1B, B-1C, B-16 and B-22)
- Within the southwest and southern portion of the Property (B-48 and B-63)
- Within the center and northeast portion of the Property (B-4, B-4A, B-55, B-56, B-68 and B-73)

All soil sample locations to date including off-Property locations, are shown on Figure 2.1. Historical soil analytical results are summarized on Table 2.1.

In general, impact to soil above the Type 1 RRS has been delineated:

- To the south by sample locations B-2, B-2A, B-2C, B-11C, and B-45
- To the southeast of B-16 is partially delineated by bedrock outcropping (i.e., absence of soil cover)
- To the east by sample locations B-32, B-51, B-8C and B-52
- To the north by sample locations B-12, B-13, B-15, B-65, B-66, and off-property locations to the north: B-29, B-30 and B-31

On-Property soils were disturbed by the excavation and drum removal activities performed in 2009 and 2010. The activities included excavation and removal of over 1,500 buried waste drums and a total of approximately 150 cubic yards of crushed empty drums and drum carcasses. All excavated materials were disposed off Site in accordance with applicable State and Federal regulations.

As shown on Figure 2.2, the soil sample locations from western (B-11A and B-61), northern (B-3, B-14, B-44, B-57, B-58, B-59, B-62, B-63 and B-67) and northeastern (B-8, B-8A, B-8B, B-47, B-69 through B-72) portions of the Property are within the extent of the 2009 and 2010 excavations. As provided on Table 2.1, most of the soil exceedances were reported in the samples collected from less than 12 ft bgs except at sample locations B-3, B-62, B-69, B-71 and B-72. Therefore, the historical soil analytical results from these locations that were significantly disturbed during the drum removals are not representative of the current Property conditions with regard to soil impact.

Cross section locations A-A' and B-B' are shown on Figure 2.3. The cross sections NW-SE (A-A') and NE-SW (B-B') are presented on Figures 2.4A and 2.4B, respectively.

### 3.0 GROUNDWATER CONTAMINATION

Groundwater monitoring conducted to date at the Site shows that there are two distinct water-bearing units: 1) overburden; and, 2) competent rock with no appreciable weathered zone. Visual observations of the bedrock outcrops along the southern boundary of the Property also suggest that the bedrock is competent with few fractures.

The recent (May/June 2011) groundwater monitoring locations at the Property and surrounding areas are illustrated on Figure 3.1. Locations that are highlighted in yellow on Figure 3.1 indicate the monitoring well locations associated with the groundwater sampling conducted in May/June 2011. The remaining locations identified on this figure are monitoring wells that were sampled by others (i.e., for the Signal Energy Holdings Corporation (SEHC) (formerly Young Refinery)). Table 3.1 lists the groundwater elevation data collected by CRA since 2004. Groundwater elevation contours for the overburden and bedrock units are presented on Figures 3.2A and 3.2B, respectively.

Table 3.2 tabulates the VOC data associated with the Site investigation during the May/June 2011 sampling event. The table also provides a comparison of the regulated compounds at the Site to applicable RRS (Type 1 for off-Property locations and Type 4 for on-Property locations). Exceedances of the applicable RRS by compounds in groundwater are clearly identified in the tables. Identified impacts are attributable to releases from both the Arivec Property and adjacent SEHC property. The RRS previously calculated for the Site are presented in Appendix C and summarized on Table 3.3. The laboratory report and associated sample key and the data validation are provided in Appendix D. A summary of historical groundwater concentrations since 2002, including 2009 data and correspondence, laboratory reports and associated documentation, is presented in Appendix E.

To illustrate the general extent of the commingled contaminant plumes associated with the Site and the SEHC property, total VOC concentrations from the overburden and bedrock monitoring wells were utilized. Figures 3.3A and 3.3B provide isopleths of the total VOC concentrations in groundwater from overburden and bedrock monitoring wells respectively for the May/June 2011 sampling event. The contoured drawings presented demonstrate a commingled plume resulting from releases associated with the Arivec Property and surrounding SEHC property.

#### 4.0 SEDIMENT DATA

The stormwater retention pond identified at the northeast corner of the Property discharges to a dry ditch that appears to be linked to a ditch that is locally known as Cracker Creek. The pond is located in close proximity to the monitoring well showing the greatest level of impact to groundwater, MW-17R. The pond was constructed for stormwater retention; water in the pond is thus reflective of precipitation, and not groundwater. Past sampling was conducted by EPD, the results of which showed no impacts from regulated substances to the pond. Reportedly, sediment sampling conducted in 2002 by EPD showed only trace amounts of contamination and not at sufficient concentrations to impact groundwater.

Three sediment samples (SE-1, SE-2 and SE-3), the locations of which are shown on Figure 4.1, were collected by CRA in 2004 and 2005. The samples were analyzed for VOCs and RCRA metals. All of the results were reported as non-detect, with the exception of SE-3 where select analytes were detected with concentrations below the Type 1 RRS for soil. A summary of the analytical results for the sediment samples is provided on Table 4.1.

## 5.0 CONCEPTUAL SITE MODEL

The current conceptual site model as described herein incorporates the recent removal of over 1,500 buried drums of waste that represented the primary identified source of residual on-Property contamination.

The residual soil contamination can be categorized as shallow (0-4 feet) and deep (4 feet to groundwater). A summary of the analytical data for the shallow and deep soil samples is provided on Tables 5.1 and 5.2, respectively. As shown on Figure 5.1, the extent of soil impact for the shallow zone is limited to specific sections of the northern, eastern and southwestern portions of the Property. The extent of the deep soil impact is presented on Figure 5.2.

It is assumed that vertical migration of groundwater through the overburden soil takes place until the bedrock is encountered, at which point the preferential movement is assumed to be lateral along the face of the rock, with some infiltration into fractures and structural gaps of the rock as they are encountered. Groundwater generally flows to the northwest in both groundwater bearing units as shown on the groundwater elevation maps (Figures 3.2A and 3.2B).

On-Property and off-Property groundwater contamination is present in both the overburden and bedrock units. The highest VOC concentrations in groundwater are in the overburden unit within the southeast (CRA-MW-6S) and northeast (CRA-MW-17R) sections of the Property. Groundwater contamination in the bedrock unit is mostly located within the northeast (CRA-MW-17B) and northwest (AW-2) sections of the Property. No groundwater contamination has been found in the bedrock in the southern portion of the Property.

Potential Human Receptors and Exposure pathways associated with the Arivec Property are:

- **Trespassers:** The Site is secured with chain-link fencing limiting the possibility of on-going trespassers. However, a trespasser that finds their way onto the Property could be exposed to shallow soils or surface water via ingestion, dermal contact or inhalation.
- **Construction Worker/Utility Worker:** There are no known plans for future construction activities at the Property and no plans for installation of utilities. In the unlikely event that utility workers were required to access the Site for utility maintenance, installation or abandonment, such workers could be exposed to:

- Contaminated soil
  - Surface water
  - Soil vapors
- 
- **Surface Water:** There are no natural surface water bodies on the Property that serve as habitat. The on-Property stormwater retention basin overflows to a drainage swale on SEHC's property that appears to form the head waters of a ditch that is locally known as Cracker Creek.
  - **Groundwater:** Groundwater contamination extends off the Property. Exposure to residents may occur as a result of direct ingestion of impacted groundwater or inhalation of vapors. Public water is provided to residents in the vicinity of the Site; however, two residential properties are reported to use groundwater for drinking water purposes, but are approximately 2,200 and 2,600 feet away from the Property.

## 6.0 PROPOSED CLEAN-UP STANDARDS

The clean-up standards proposed for the various media at the Arivec Property are as follows:

- Soils exceeding the Type 3 RRS shall be remediated to meet the Type 5 RRS with the exception of potential source material as noted below.
- Potential source material (i.e.: soils with potential leaching to impact off-Site groundwater quality in excess of the Type 1 RRS) shall be remediated such that future threats to groundwater are mitigated. Groundwater protection requirements for soil shall be based on the assessment of multiple points of exposure including existing off-Site wells, existing residences with no wells but potential for vapor intrusion, and/or a hypothetical point of drinking water exposure located at a distance of 1,000 feet downgradient of the Site. In addition, potential source material shall be characterized to determine whether free product is present.
- Exposure to groundwater shall be addressed by remediating soils as described above and by on-going monitoring combined with natural attenuation. If testing shows that there is an unacceptable exposure to soil vapor, active remediation to mitigate the exposure will be used.

## 7.0 INTERIM REMEDIAL ACTIONS

Interim remedial actions shall be performed to improve Site conditions in the short term while supplemental delineation activities are completed. Interim actions to be performed include:

- Install visible and more frequent bi-lingual warning and no trespassing signage
- Upgrade isolated portions of the existing chain-link fence to enhance security
- Divert surface water storm runoff from upgradient areas around the Property to reduce on-Property stormwater management requirements

## 8.0 SUPPLEMENTAL SOIL SAMPLING

Soil delineation will be completed to Type 1 RRS. In 2009 and 2010, soil in areas previously characterized was significantly disturbed by the buried drum removal work. Therefore, these areas require further soil sampling and analysis for those constituents associated with the drum removal work. Figure 2.2 identifies these areas as Limits of Excavation for 2009 and 2010. The soil sampling and analysis will characterize these soils within the 0-2 foot horizon, and to the water table or to bedrock/refusal.

Soil sampling is also required for areas that were previously inaccessible due to the presence of steel tanks, vessels and piping. These areas are primarily covered with concrete surfaces. Figure 2.2 illustrates the locations of the concrete pads and where soil borings were completed in these areas. The soil sampling and analysis will characterize these soils within the 0-2 foot horizon, and to the water table or to bedrock/refusal.

Figure 8.1 and Table 8.1 illustrate impacted soil areas that exceed Type 3 RRS at depths greater than 4 feet. It is currently not known what impact these soils may have on groundwater quality. In order to determine if these soils are potential source materials, an initial screening shall be performed to determine if they have the potential to impact off-Site groundwater at the various off-Site groundwater receptor locations in excess of applicable RRS. Depending on the results of the initial screening, select locations exhibiting a greater degree of contamination may be sampled and subject to the Standard Precipitation Leaching Procedure (SPLP) to further assess potential impacts on groundwater.

## 9.0 GROUNDWATER DELINEATION

Horizontal delineation of groundwater on the Property is complete as illustrated on Figures 3.3A and 3.3B. Further vertical delineation is needed. The on-Site bedrock monitoring well MW-17B shows impact at a depth of 42 to 47 feet below grade. Therefore, an additional bedrock delineation monitoring well will be installed in the vicinity of MW-17B with a minimum proposed outer casing depth of 67 feet below grade, with an appropriate screen depth dependent on rock quality and occurrence of water bearing fractures. Following completion of the deep vertical delineation well, the groundwater will be analyzed for VOCs.

Off-Property groundwater delineation will be conducted. Horizontal delineation of groundwater as illustrated by Figures 3.3A and 3.3B is incomplete to the west and north for both shallow overburden and bedrock groundwater downgradient of the Property. As illustrated by Figure 3.3A, delineation is also incomplete upgradient of the Property adjacent to the asphalt plant on SEHC property. Bedrock horizontal delineation of off-Property groundwater is also incomplete to the west and north, downgradient of the Property as illustrated by Figure 3.3B. Additional off-Property monitoring wells are planned to the west, north and southeast to provide the horizontal delineation. These additional locations are dependent on the groundwater quality associated with monitoring well locations CRA-MW-5S, CRA-MW-5B, CRA-MW-6S, and to a lesser degree, MW-15B. An additional vertical bedrock delineation monitoring well is also required in the vicinity of CRA-MW-5B with a minimum proposed outer casing depth of 61 feet below grade and appropriate screen depth dependent on rock quality and occurrence of water bearing fractures. Following completion of the additional delineation wells, the groundwater will be analyzed for VOCs.

## 10.0 PRELIMINARY REMEDIATION PLAN

Following completion of the additional sampling and analysis described above, the Conceptual Site Model (CSM) will be updated based on the newly obtained and existing data sets. It is anticipated that the additional information will be sufficient to develop a final Remediation Plan for the Site soils and groundwater. The CSM will be updated on a semi-annual basis as required under the VRP.

### 10.1 REMEDICATION PLAN - SOILS

As illustrated by Figure 10.1 and Table 10.1, less than 5000 square feet of the 3.64 acre Property has shallow soils (0 to 2 feet below grade) with contaminant concentrations that exceed Type 3 RRS and are not covered by concrete. Supplemental soil sampling in areas where data are insufficient will define the extent of these areas. Once the limits are confirmed, a 2-foot thick cover of clean imported soil will be placed over the impacted areas to mitigate any near surface exposures. The soil cover will be completed with a grass cover to prevent erosion.

Deeper soils that are determined to have the potential to impact groundwater quality above applicable RRS at the off-Site groundwater exposure points shall be remediated. Remediation may consist of one or more of the following (to be determined based on additional delineation):

- Installation of a low permeability cap/cover to mitigate infiltration and leaching from soils.
- In-situ treatment using chemical oxidants, zero valent iron, Portland cement, etc., to eliminate the contaminants and/or eliminate their potential to leach to groundwater. The actual method of treatment shall be determined by treatability and/or pilot studies, if required.
- Installation of a downgradient permeable reactive barrier wall or infiltration gallery to treat groundwater migrating from the Property such that it will not contribute to an exceedence at the downgradient points of groundwater exposure.

**10.2      REMEDICATION PLAN - GROUNDWATER**

On-Property soil treatment as described above and natural attenuation will be the primary remedy for groundwater. A localized remedy will be applied at off-Property points of exposure if needed.

**10.3      ENVIRONMENTAL COVENANT**

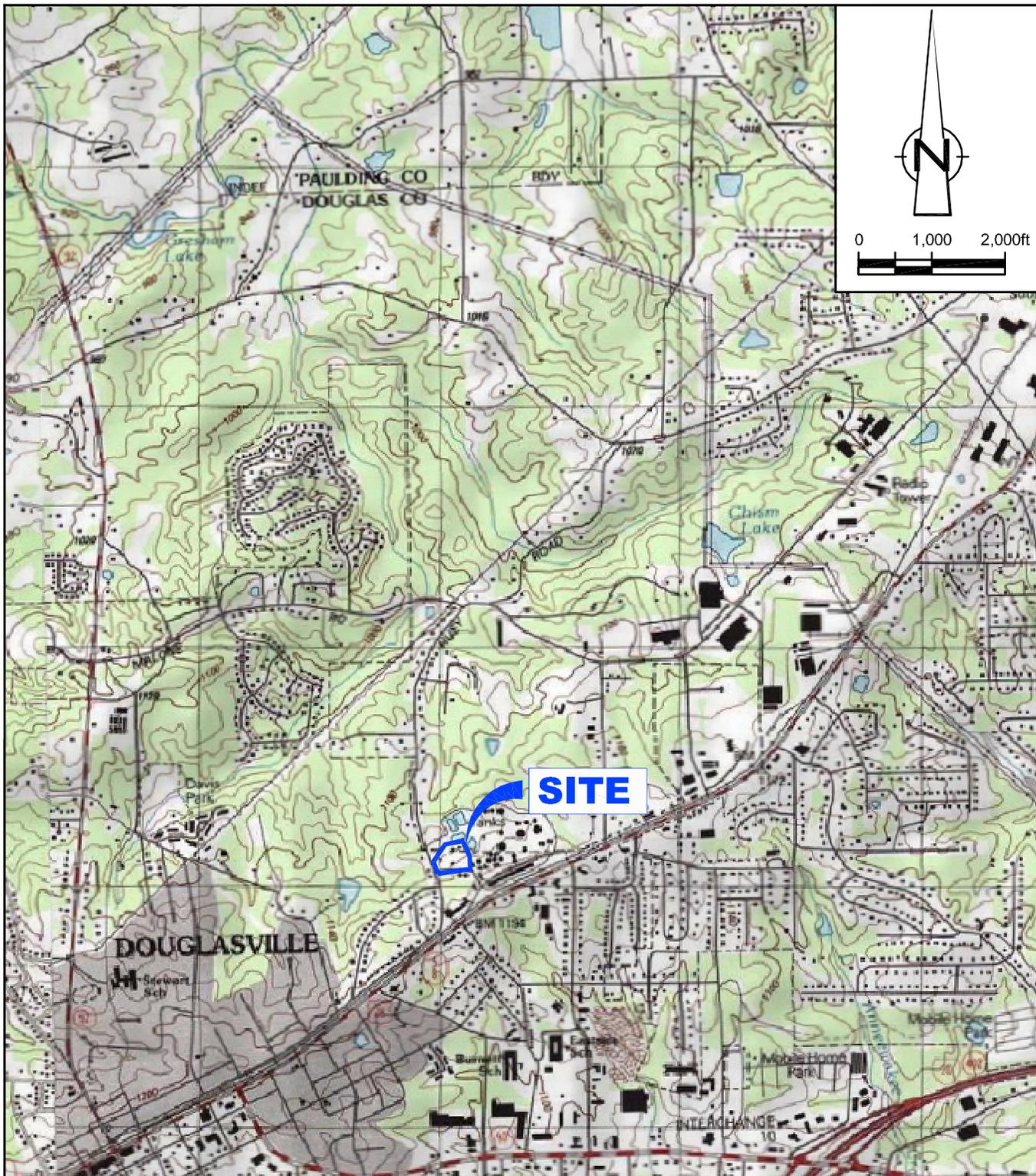
The PRP Group will request an Environmental Covenant be executed by the Property owner to identify the contamination on the Property and the necessary use restrictions.

## 11.0 SCHEDULE

The Voluntary Remediation Plan will be implemented in following sequence:

- Supplemental on-Site horizontal delineation
- Off-Site horizontal delineation
- Update Site CSM to include vertical delineation and remediation plan
- Submit CSR and certifications

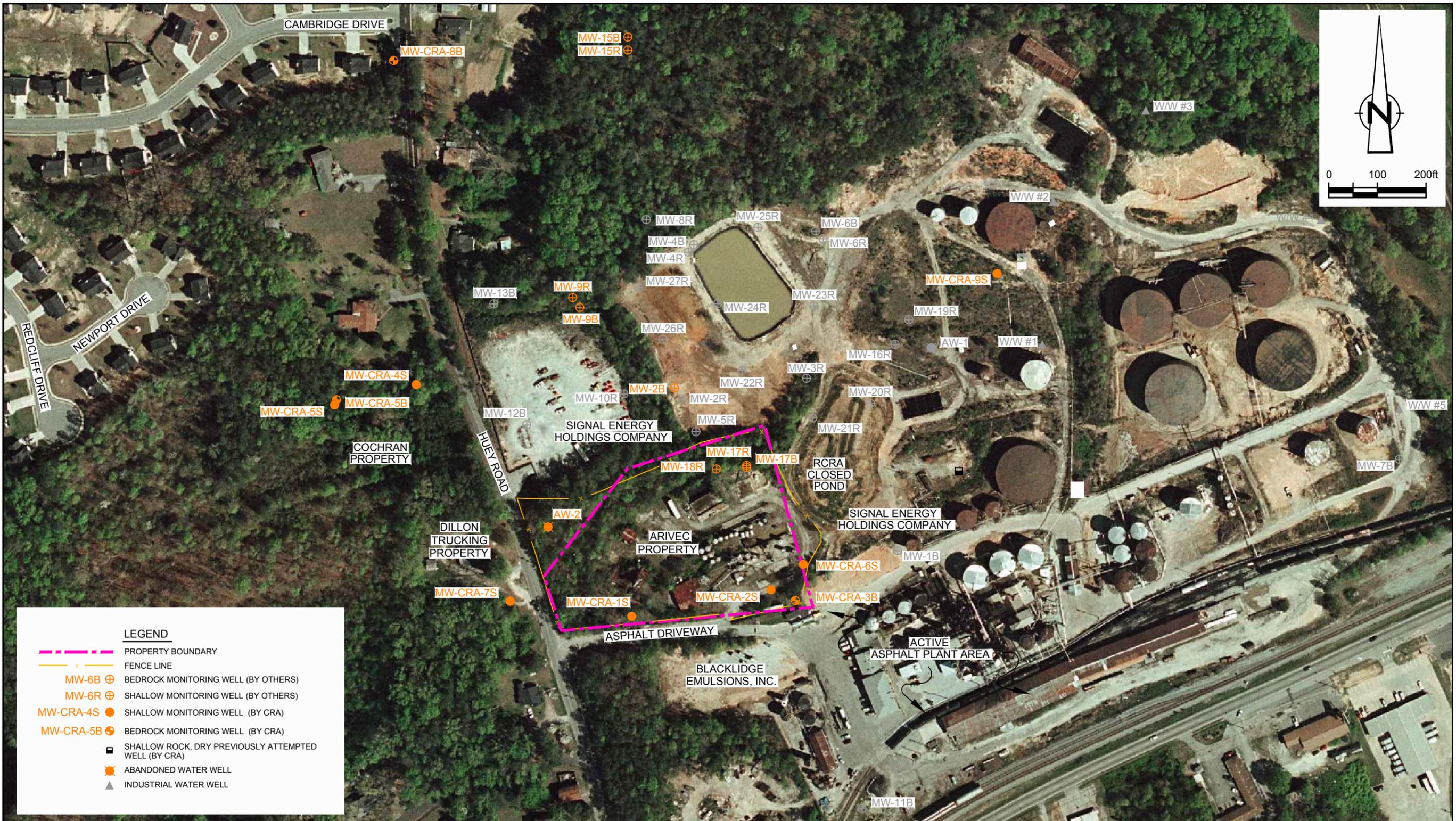
The anticipated duration for each plan is presented on Table 11.1. The schedule will be updated as part of the development of the CSM and the Site Remediation Plan once the final scope of remediation is confirmed.



RE: USGS 7.5 MINUTE TOPOGRAPHIC MAP,  
 "AUSTEL, GEORGIA" DATED 1992.

figure 1.1  
 SITE LOCATION MAP  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia





RE: USGS 2008 AERIAL PHOTOGRAPH.  
 PT&B ENGINEERING, INC. DRAWING TITLED, "SPECIAL  
 USE SURVEY," DATED 9/16/09.



035029-08(014)GN-BR003 JUL 25/2011

Figure 1.2  
 SITE PLAN  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia

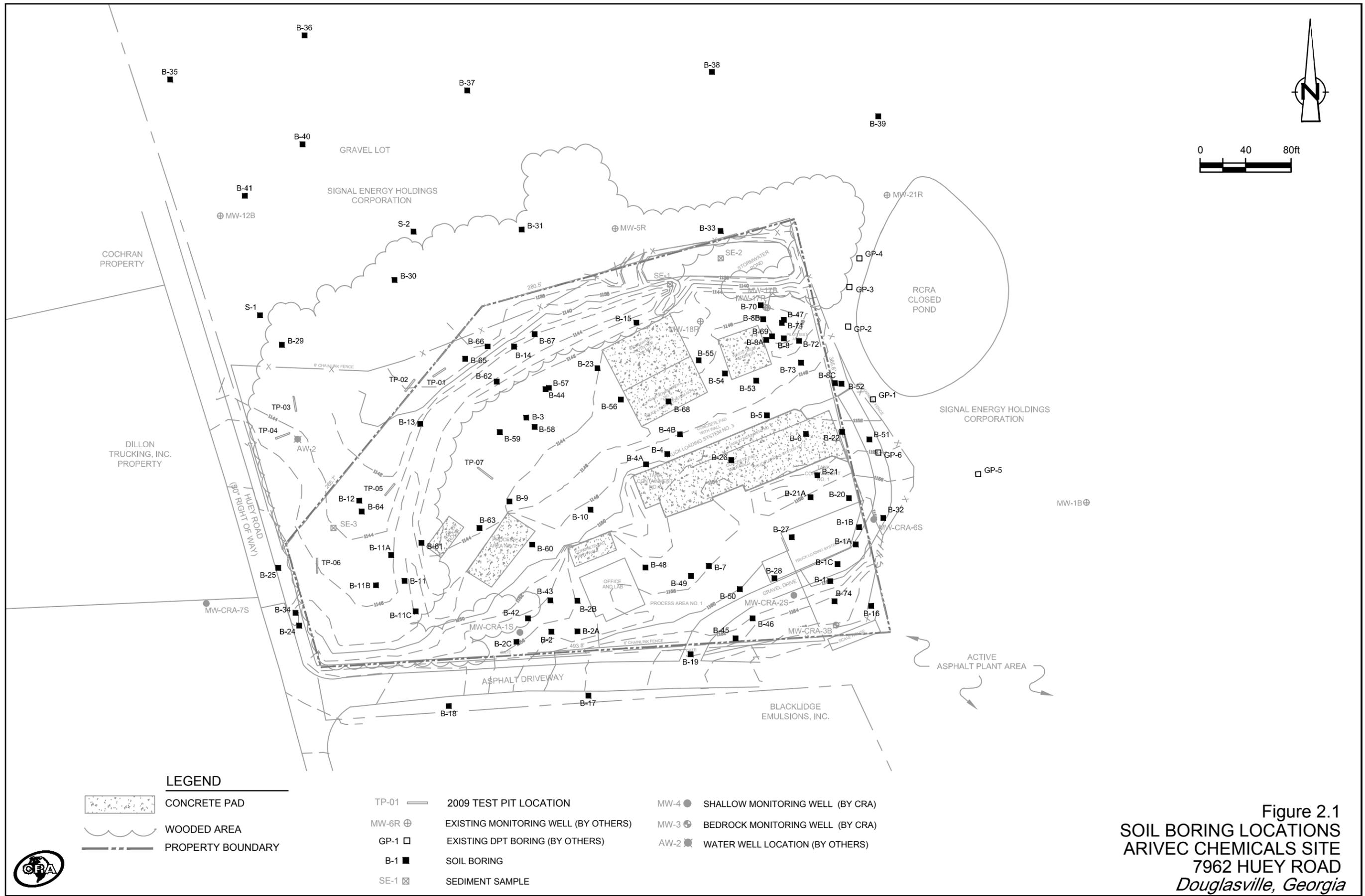
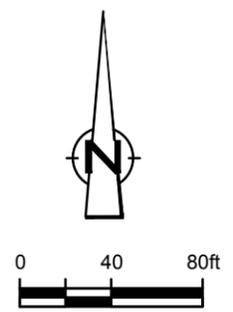
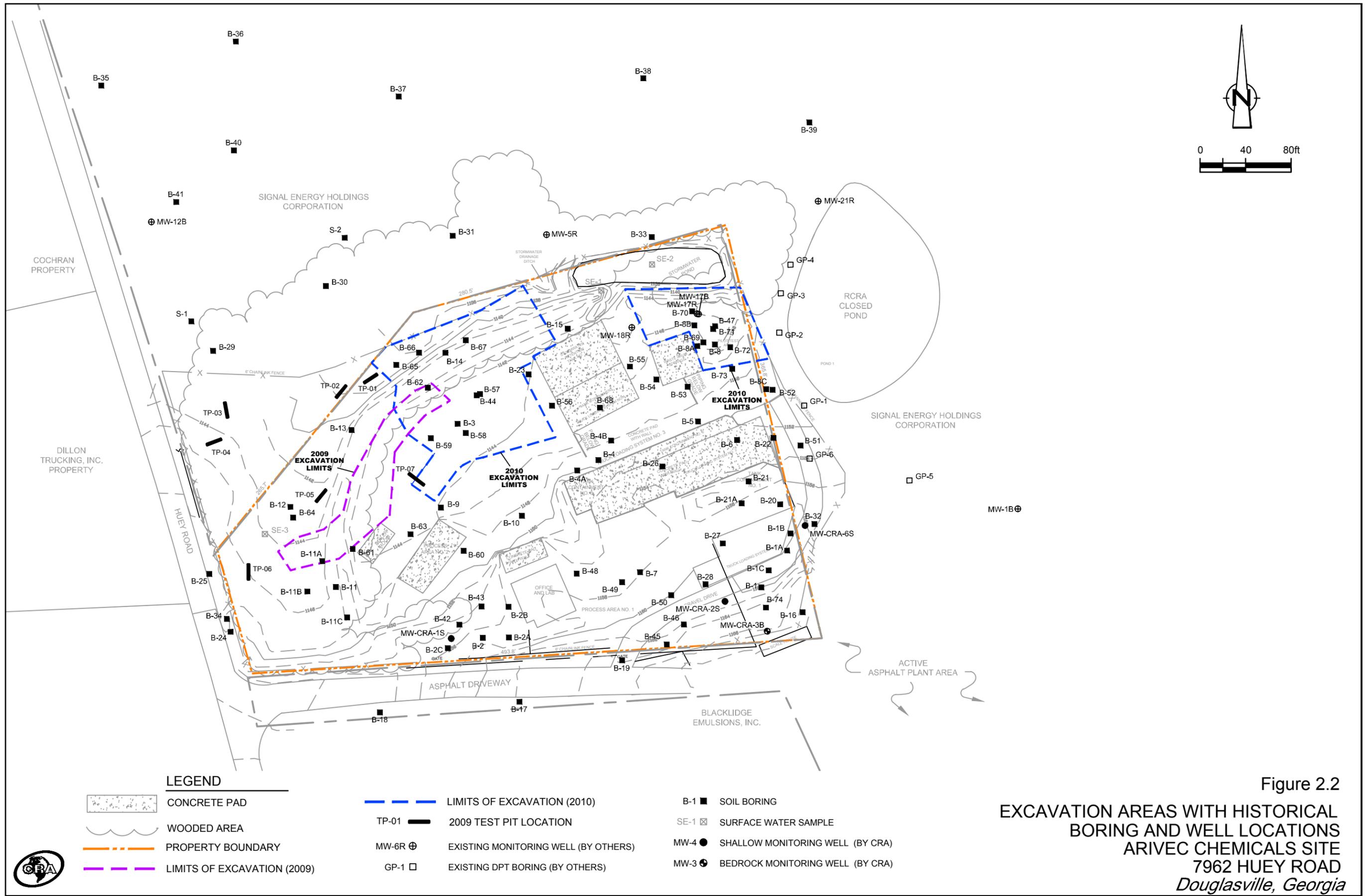


Figure 2.1  
 SOIL BORING LOCATIONS  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia



**LEGEND**

- |   |   |   |
|---|---|---|
|  CONCRETE PAD                |  LIMITS OF EXCAVATION (2010)                |  B-1 SOIL BORING                       |
|  WOODED AREA                 |  TP-01 2009 TEST PIT LOCATION               |  SE-1 SURFACE WATER SAMPLE             |
|  PROPERTY BOUNDARY           |  MW-6R EXISTING MONITORING WELL (BY OTHERS) |  MW-4 SHALLOW MONITORING WELL (BY CRA) |
|  LIMITS OF EXCAVATION (2009) |  GP-1 EXISTING DPT BORING (BY OTHERS)       |  MW-3 BEDROCK MONITORING WELL (BY CRA) |

Figure 2.2  
 EXCAVATION AREAS WITH HISTORICAL  
 BORING AND WELL LOCATIONS  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia

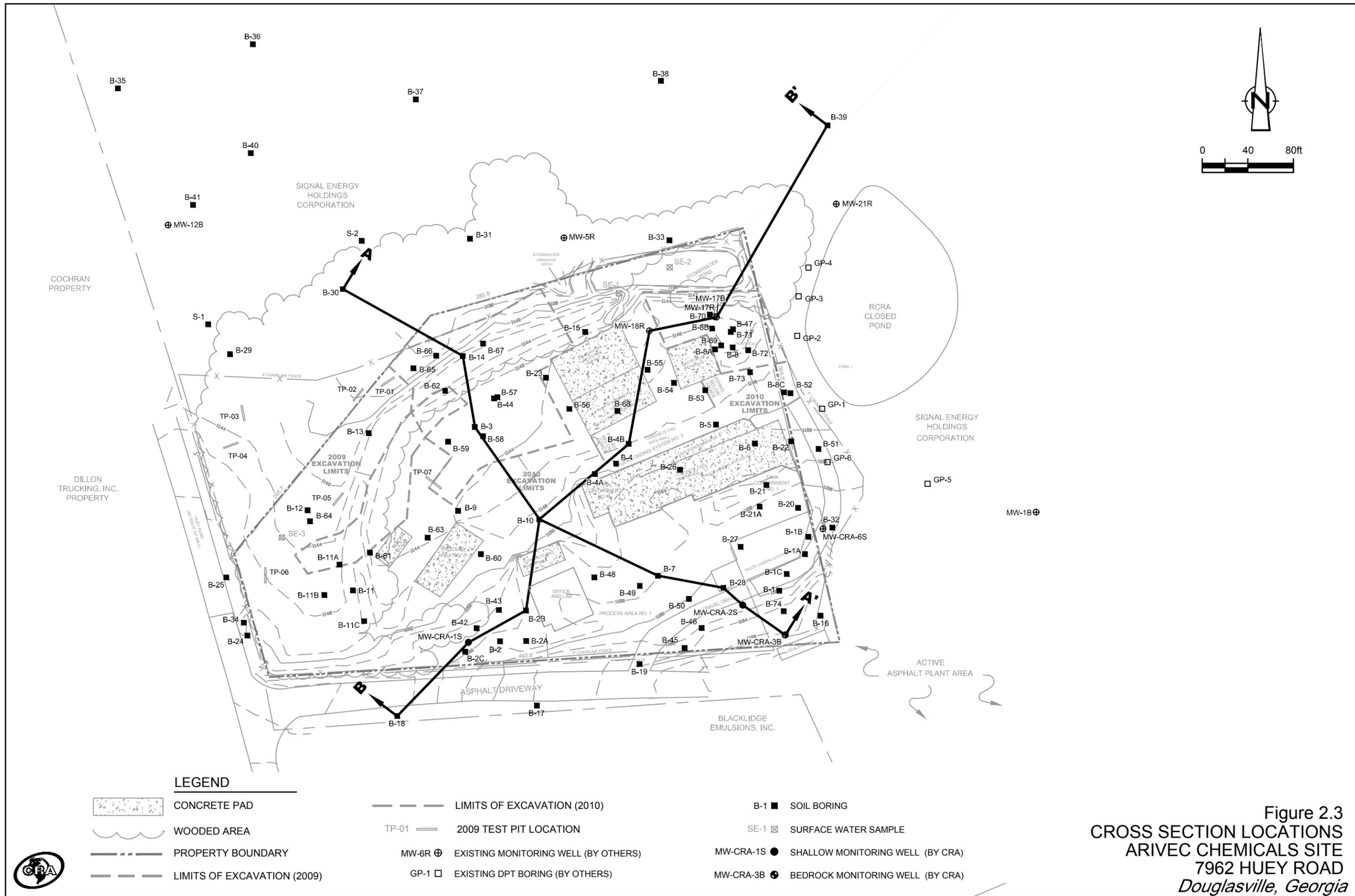
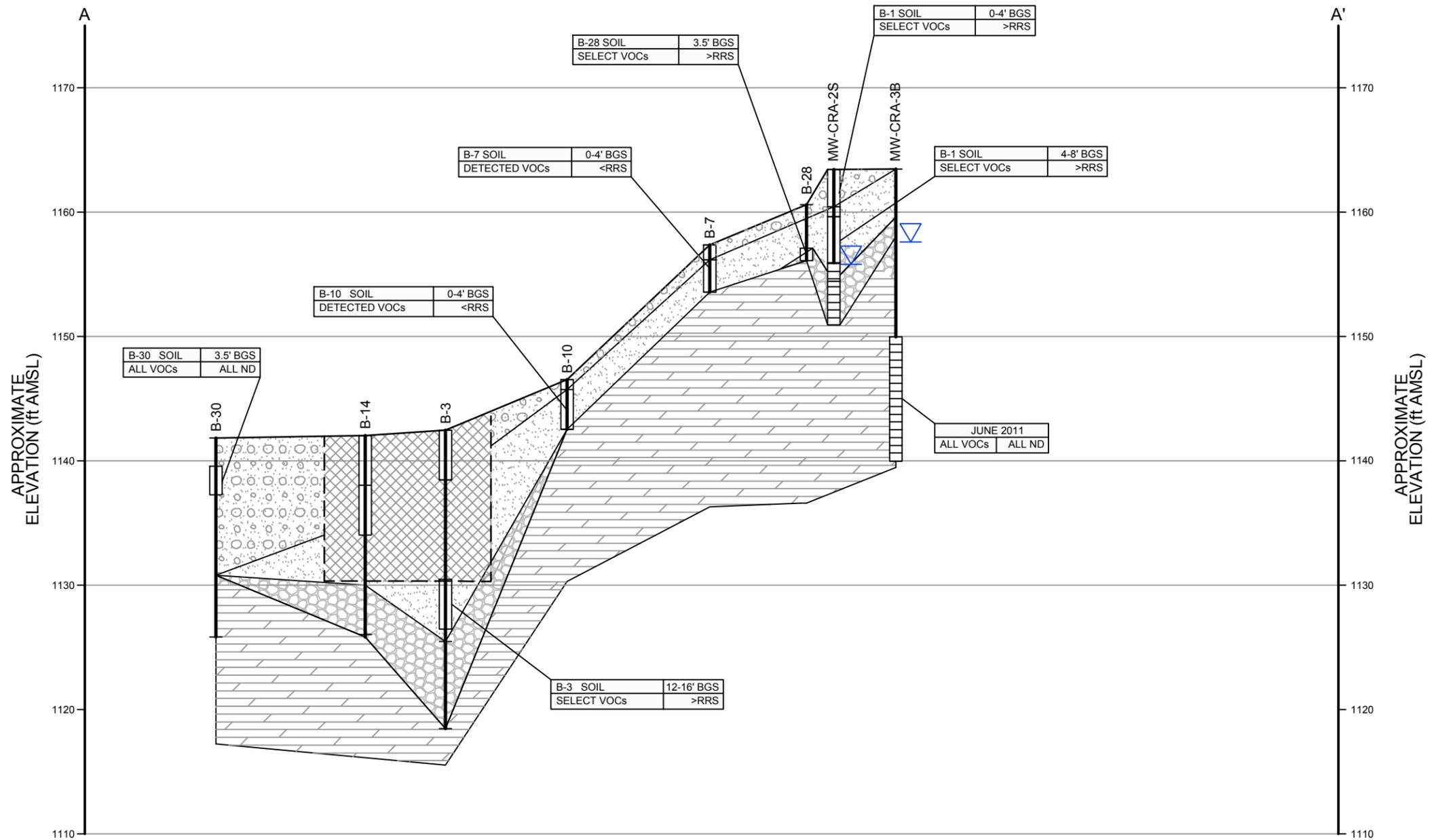


Figure 2.3  
**CROSS SECTION LOCATIONS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
*Douglasville, Georgia*



**LEGEND**

- SILTY SAND WITH SOME GRAVEL, FILL
- FINE TO MEDIUM GRAVEL, SILTY SAND
- BEDROCK (GNEISS)
- SAPROLITE (WEATHERED BEDROCK)

- 2010 EXCAVATION AREA
- APPROXIMATE STATIC WATER LEVEL, MAY 24, 2011

NOTES: VOCs VOLATILE ORGANIC COMPOUNDS ANALYZED  
 RRS TYPE 1 RISK REDUCTION STANDARDS

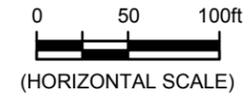
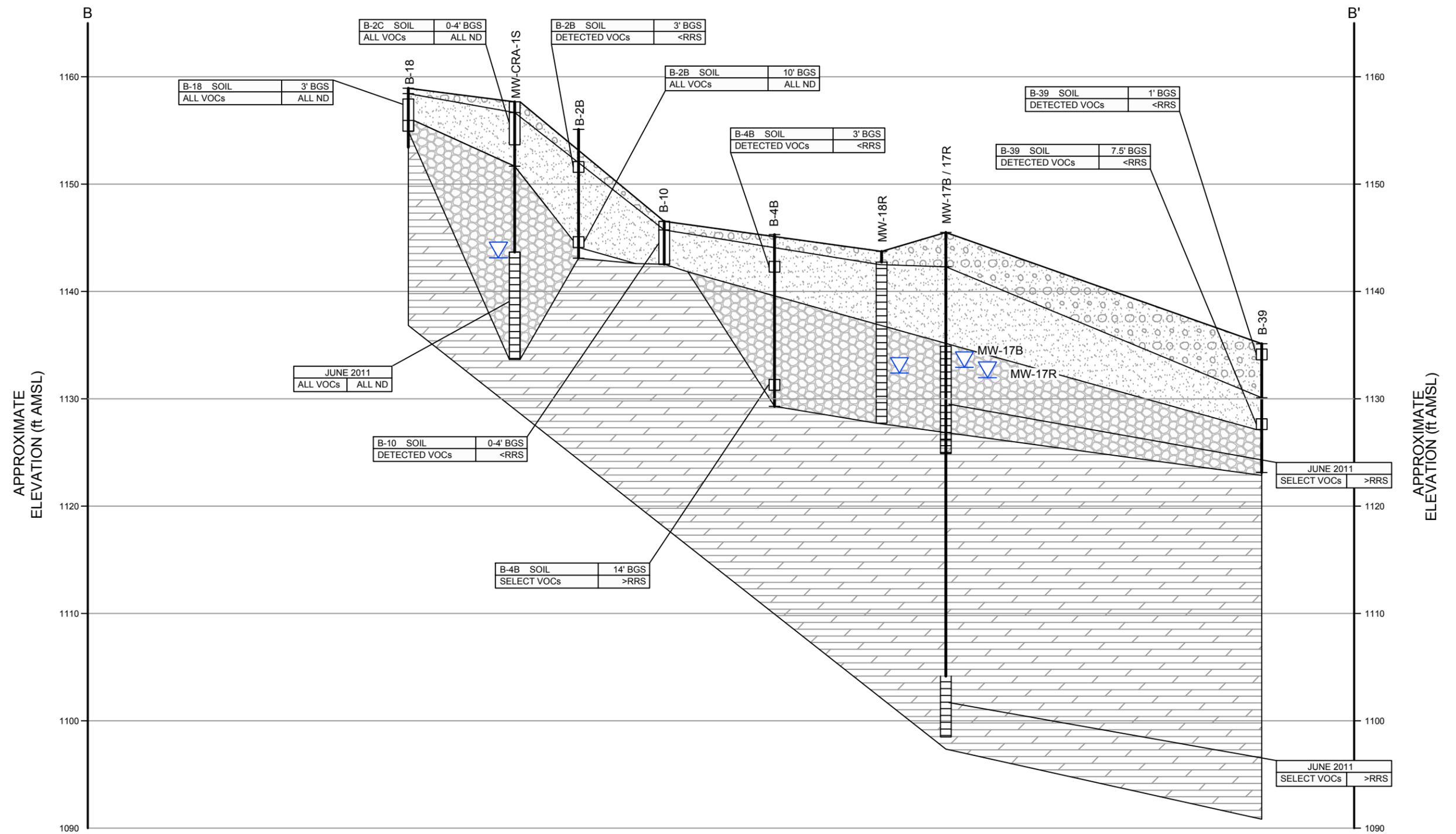


figure 2.4A  
 CROSS SECTION A-A'  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia





**LEGEND**

- SILTY SAND WITH SOME GRAVEL, FILL
- FINE TO MEDIUM GRAVEL, SILTY SAND
- BEDROCK, WEATHERED AND FRESH GNEISS
- SAPROLITE (WEATHERED BEDROCK)

APPROXIMATE STATIC WATER LEVEL, MAY 24, 2011

NOTES: VOCs VOLATILE ORGANIC COMPOUNDS ANALYZED  
RRS TYPE 1 RISK REDUCTION STANDARDS

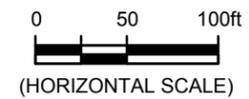
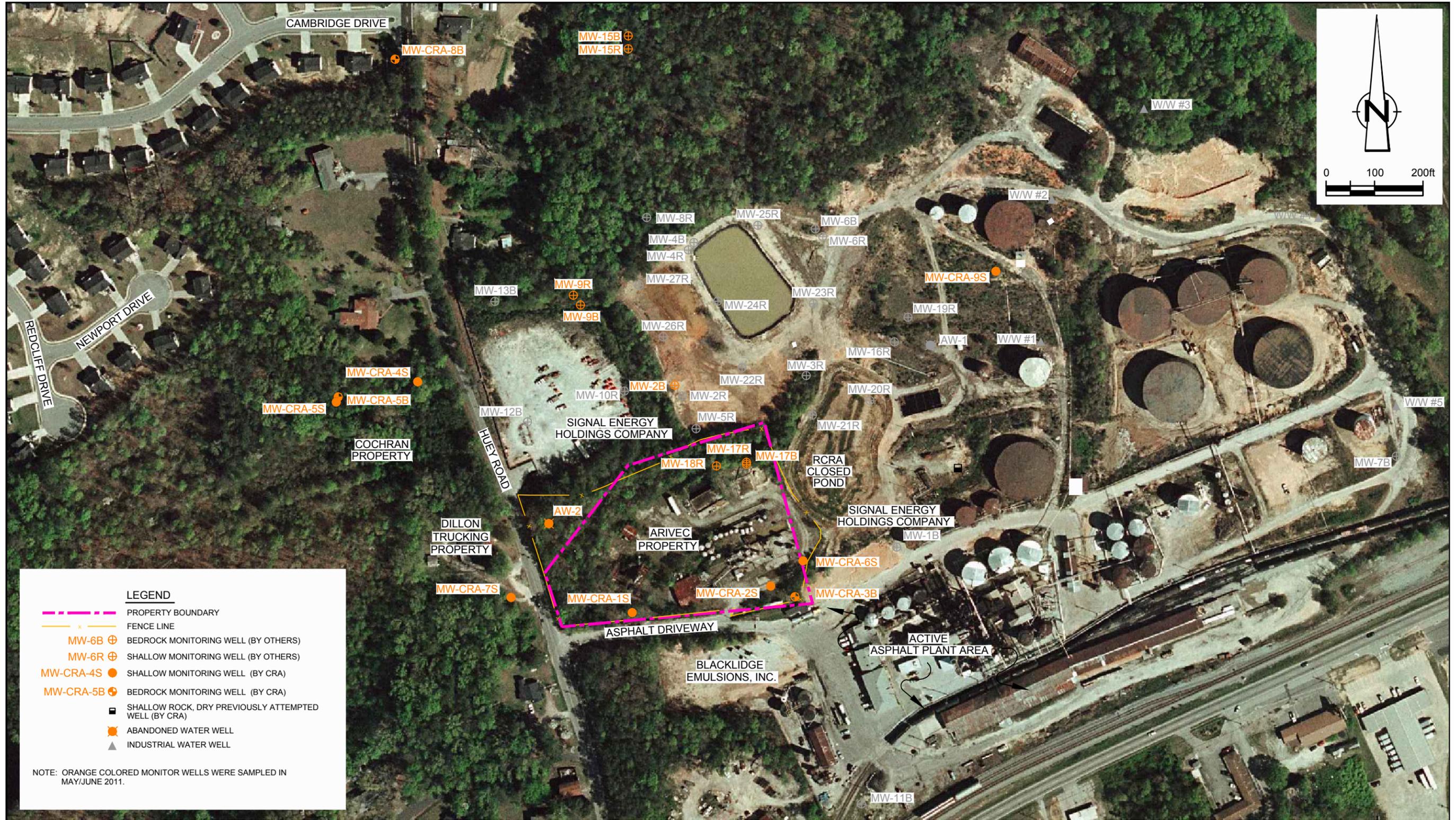


figure 2.4B

CROSS SECTION B-B'  
ARIVEC CHEMICALS SITE  
7962 HUEY ROAD  
Douglasville, Georgia

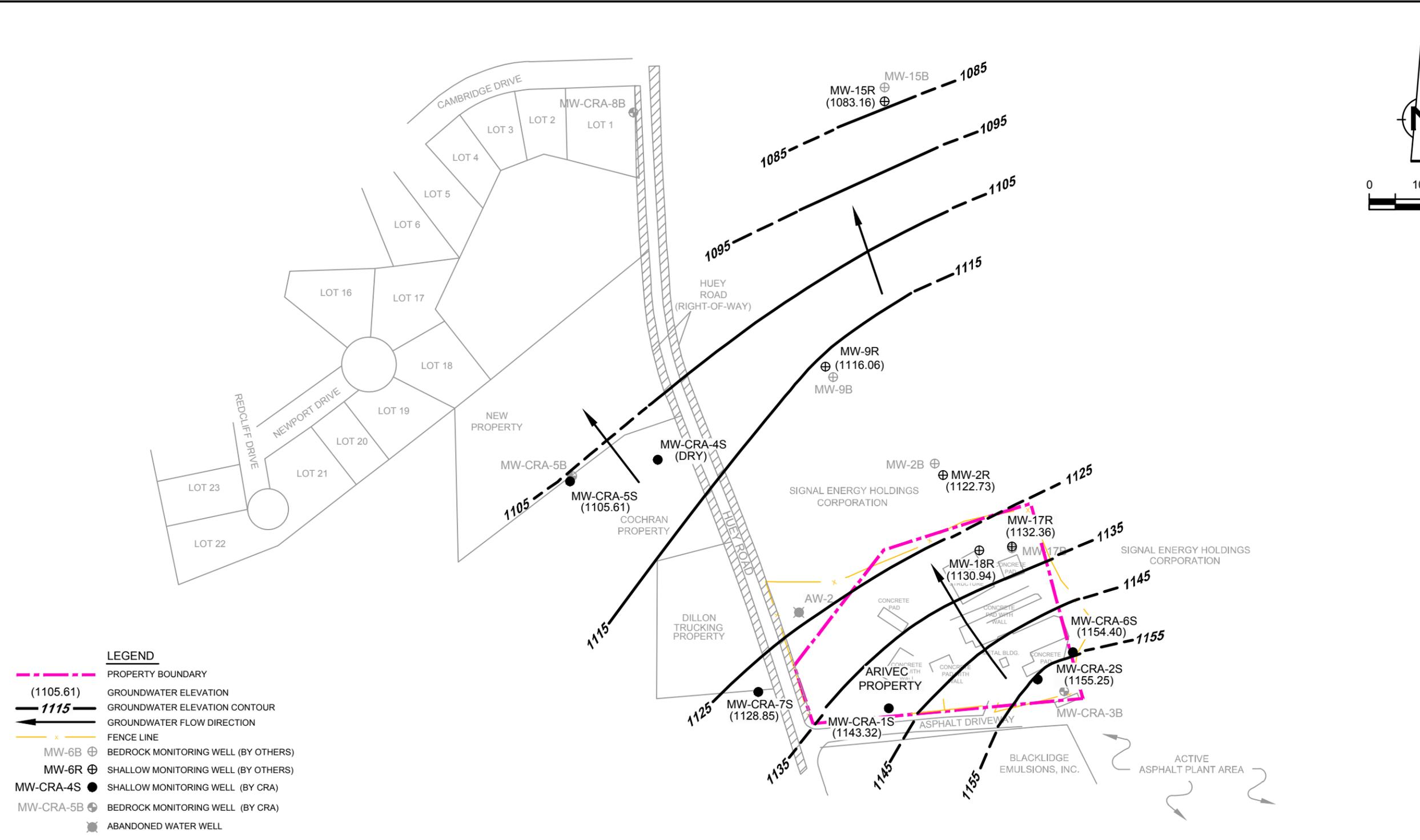




RE: USGS 2008 AERIAL PHOTOGRAPH.  
PT&B ENGINEERING, INC. DRAWING TITLED, "SPECIAL  
USE SURVEY," DATED 9/16/09.

Figure 3.1  
MAY / JUNE 2011 GROUNDWATER MONITORING LOCATIONS  
ARIVEC CHEMICALS SITE  
7962 HUEY ROAD  
Douglasville, Georgia





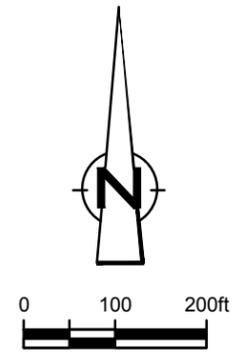
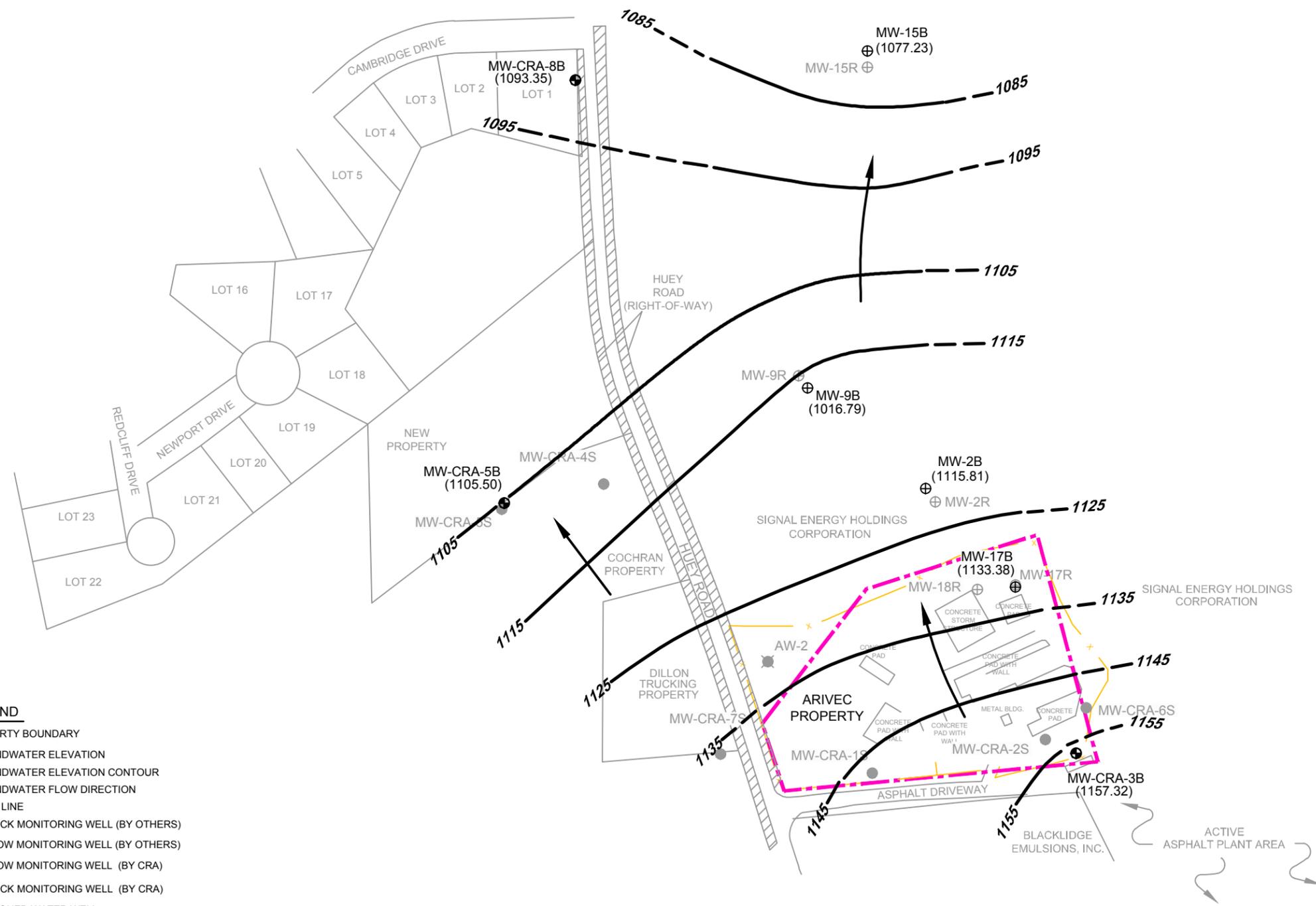
NOTE: GROUNDWATER ELEVATION AT MW-17R AND MW-18R ARE APPROXIMATE. TOP OF CASING (TOC) ELEVATIONS WERE ALTERED DURING THE 2010 DRUM REMOVAL WORK. TOC WERE EXTENDED APPROXIMATELY 2.7 FEET AT EACH LOCATION.

Figure 3.2A

SHALLOW GROUNDWATER ELEVATION MAP - MAY 24, 2011  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia



RE: USGS 2008 AERIAL PHOTOGRAPH.  
 PT&B ENGINEERING, INC. DRAWING TITLED, "SPECIAL  
 USE SURVEY," DATED 9/16/09.

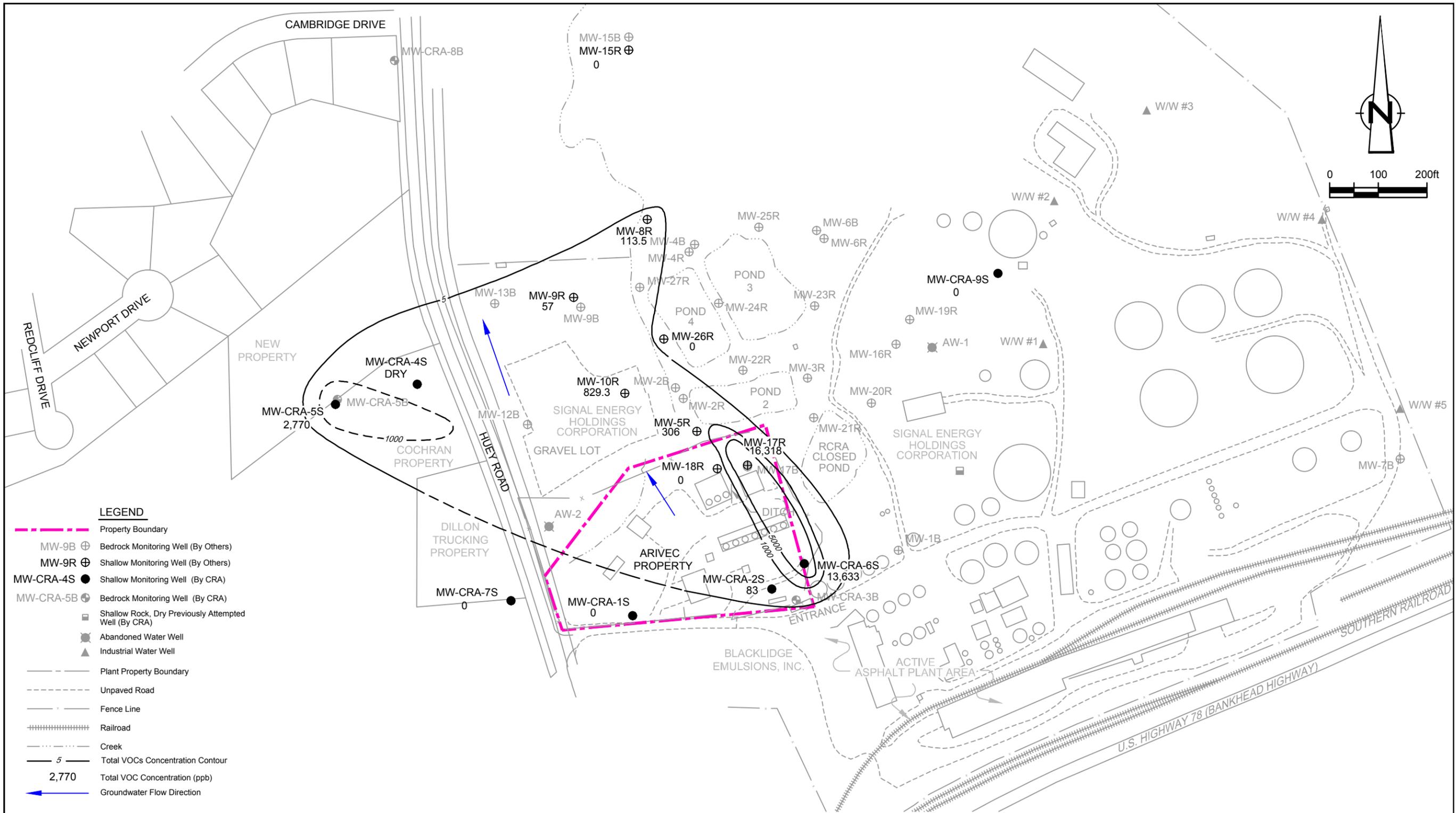


- LEGEND**
- PROPERTY BOUNDARY
  - (1105.50) GROUNDWATER ELEVATION
  - 1105 GROUNDWATER ELEVATION CONTOUR
  - GROUNDWATER FLOW DIRECTION
  - FENCE LINE
  - MW-6B BEDROCK MONITORING WELL (BY OTHERS)
  - MW-6R SHALLOW MONITORING WELL (BY OTHERS)
  - MW-CRA-4S SHALLOW MONITORING WELL (BY CRA)
  - MW-CRA-5B BEDROCK MONITORING WELL (BY CRA)
  - ABANDONED WATER WELL

NOTE: GROUNDWATER ELEVATION AT MW-17B IS APPROXIMATE. TOP OF CASING (TOC) ELEVATION WAS ALTERED DURING THE 2010 DRUM REMOVAL WORK. TOC WAS EXTENDED APPROXIMATELY BY 2.7 FEET AT EACH LOCATION.

Figure 3.2B  
 BEDROCK GROUNDWATER ELEVATION MAP - MAY 24, 2011  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia

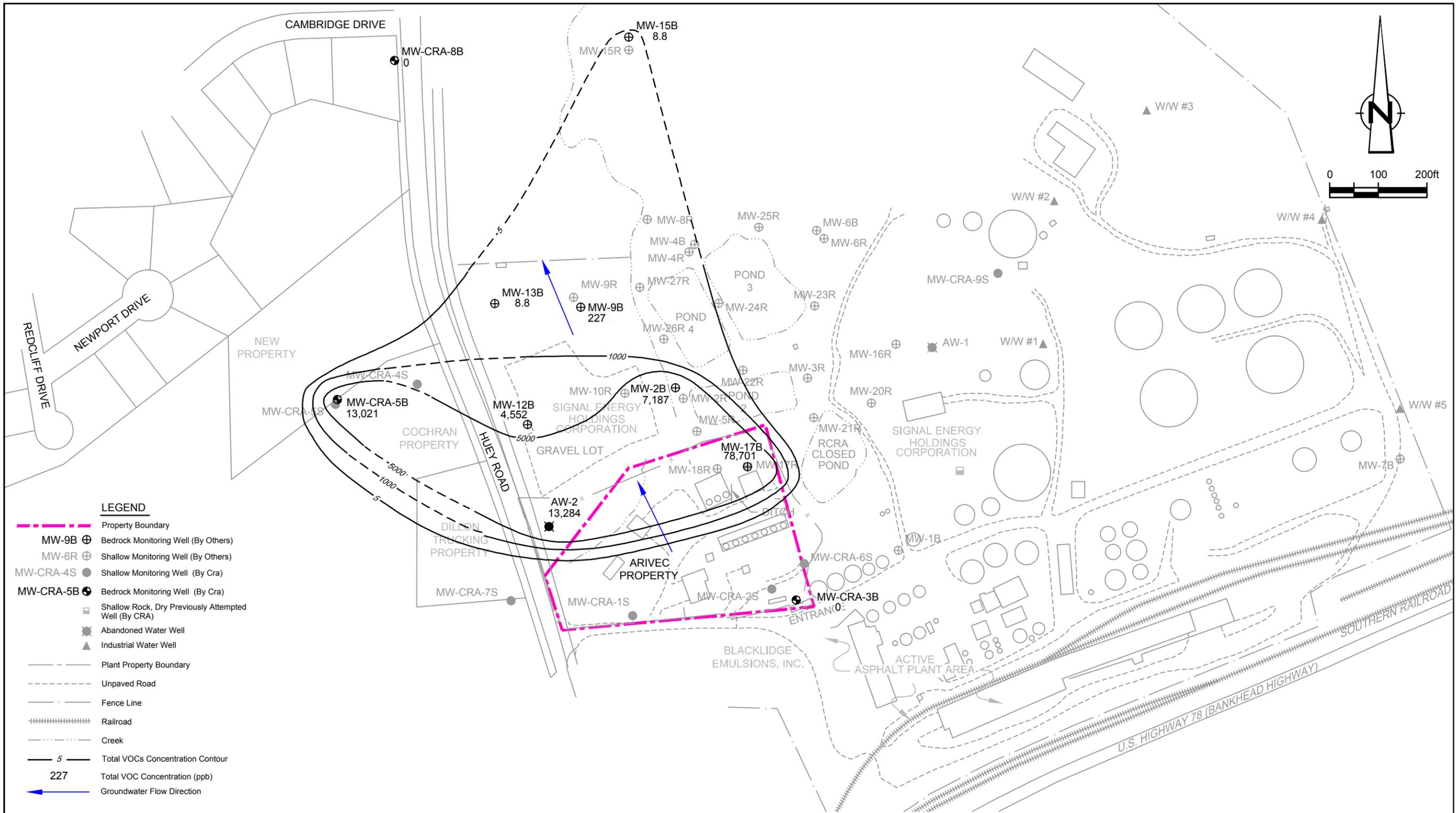
RE: USGS 2008 AERIAL PHOTOGRAPH.  
 PT&B ENGINEERING, INC. DRAWING TITLED, "SPECIAL  
 USE SURVEY," DATED 9/16/09.



Re:  
 1) Pt&b Engineering, Inc. Drawing Titled, "Special Use Survey," Dated 9/16/09.  
 2) VOC Concentration for MW-5R, MW-8R, MW-10R & MW-26R taken from Signal Energy March 2011 Groundwater Sampling Event Report.

**Figure 3.3A**  
**OVERBURDEN MONITORING WELLS**  
**MAY / JUNE 2011 GROUNDWATER VOC CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
**Douglasville, Georgia**

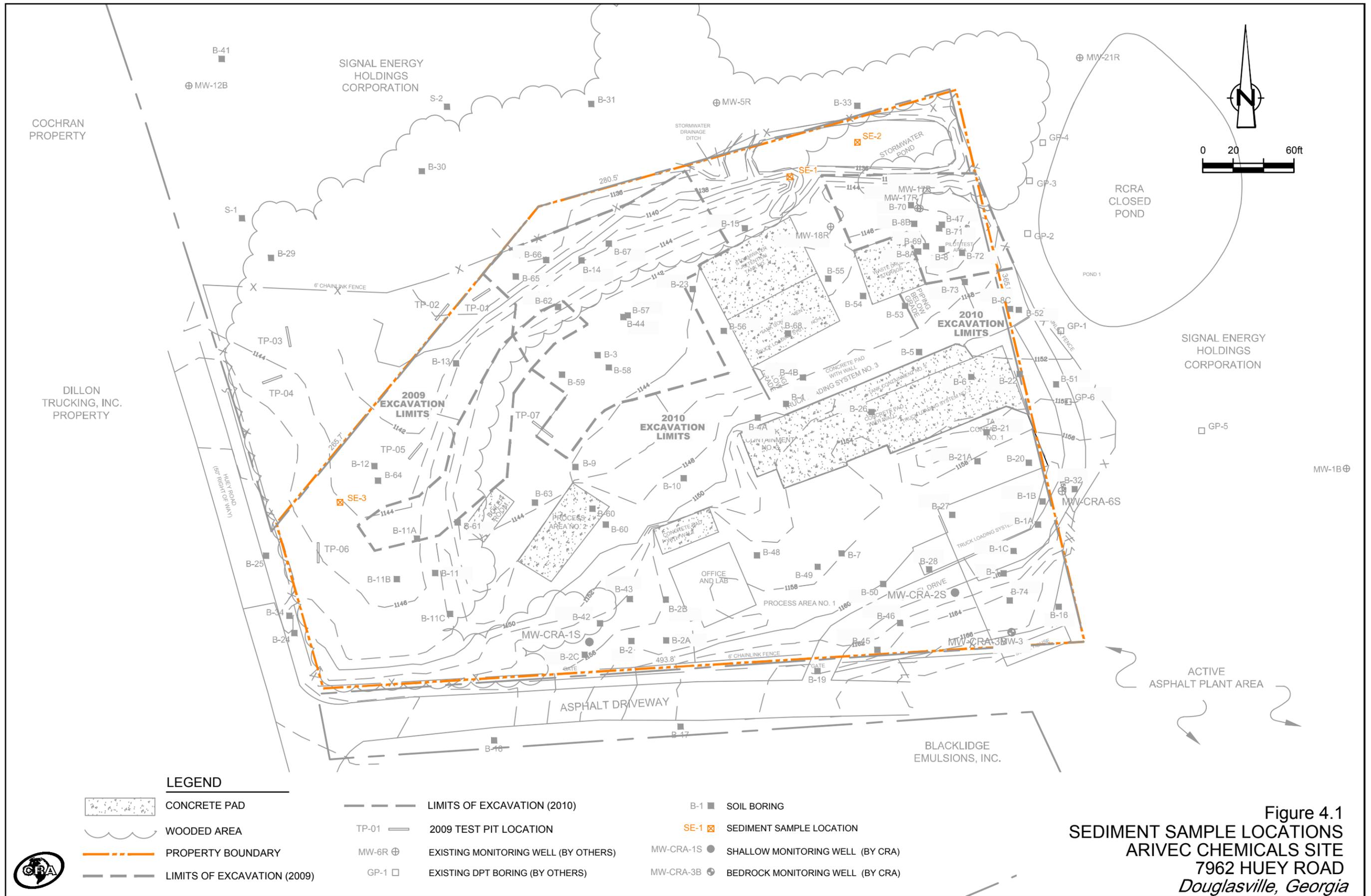




Re:  
 1) Pt&b Engineering, Inc. Drawing Titled, "Special Use Survey," Dated 9/16/09.  
 2) VOC Concentration for MW-12B & MW-13B taken from Signal Energy  
 March 2011 Groundwater Sampling Event Report.

**Figure 3.3B**  
**BEDROCK MONITORING WELLS**  
**MAY / JUNE 2011 GROUNDWATER VOC CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
**Douglasville, Georgia**





**Figure 4.1**  
**SEDIMENT SAMPLE LOCATIONS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
**Douglasville, Georgia**

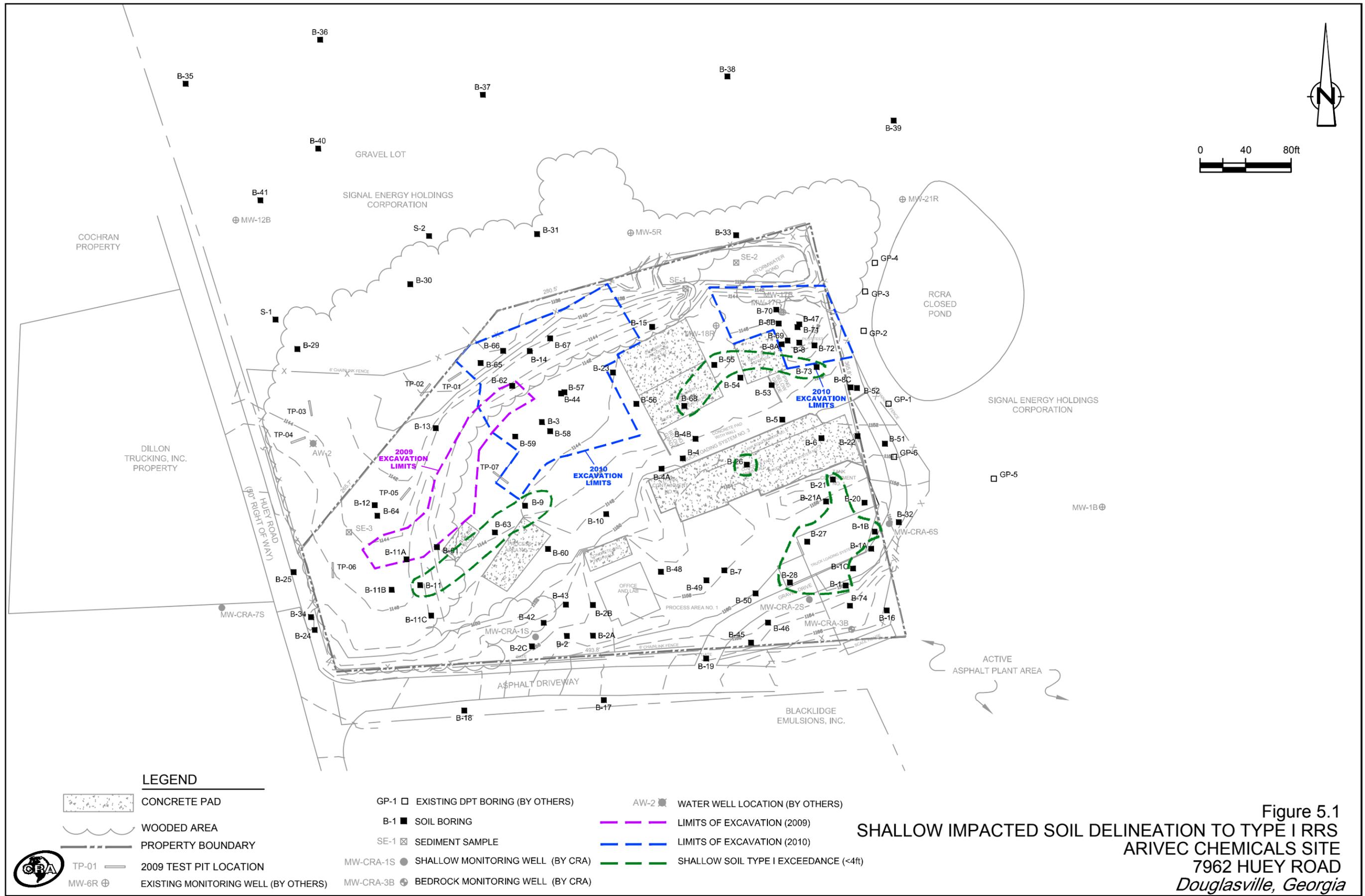


Figure 5.1  
**SHALLOW IMPACTED SOIL DELINEATION TO TYPE I RRS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
*Douglasville, Georgia*



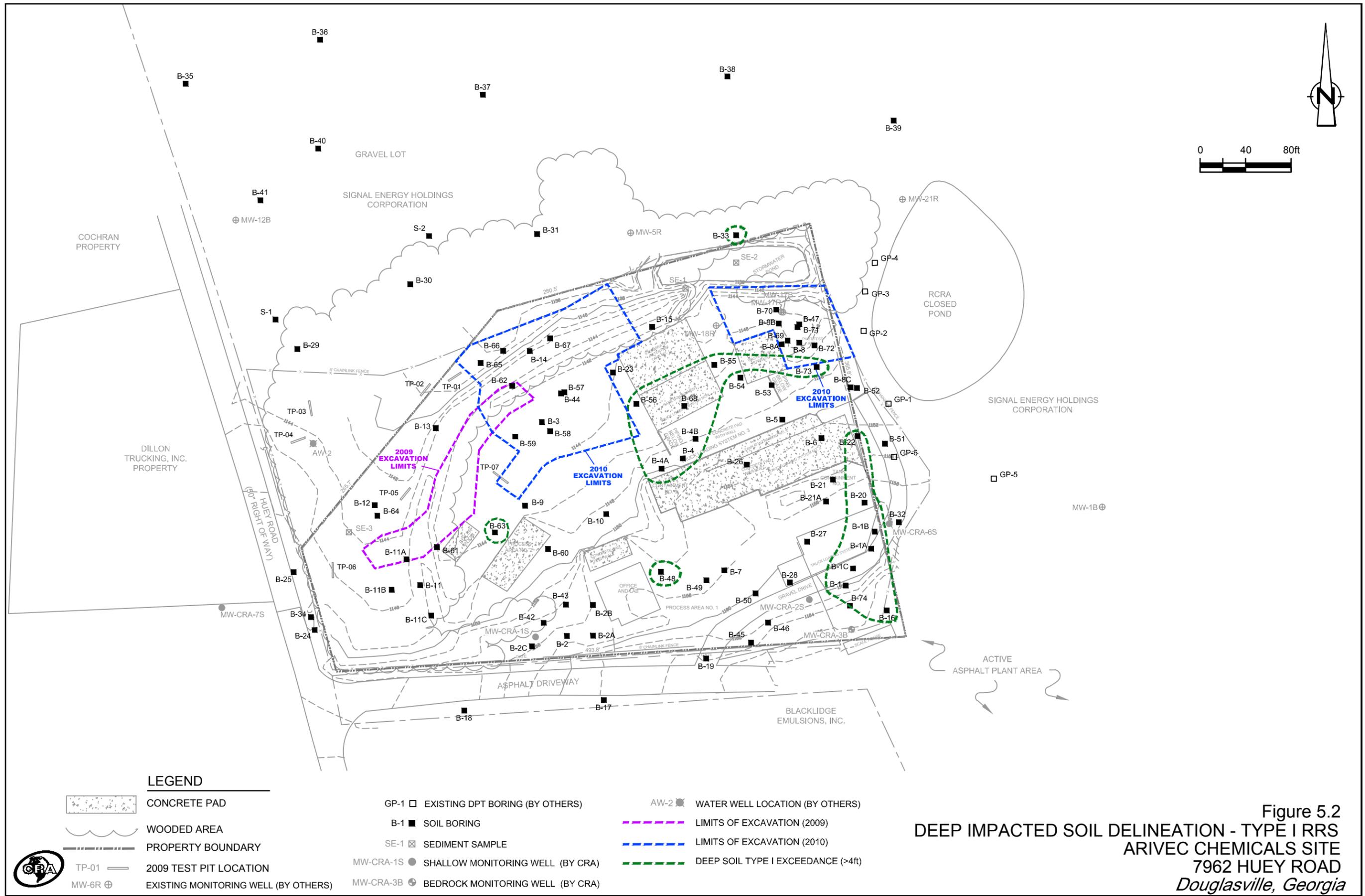
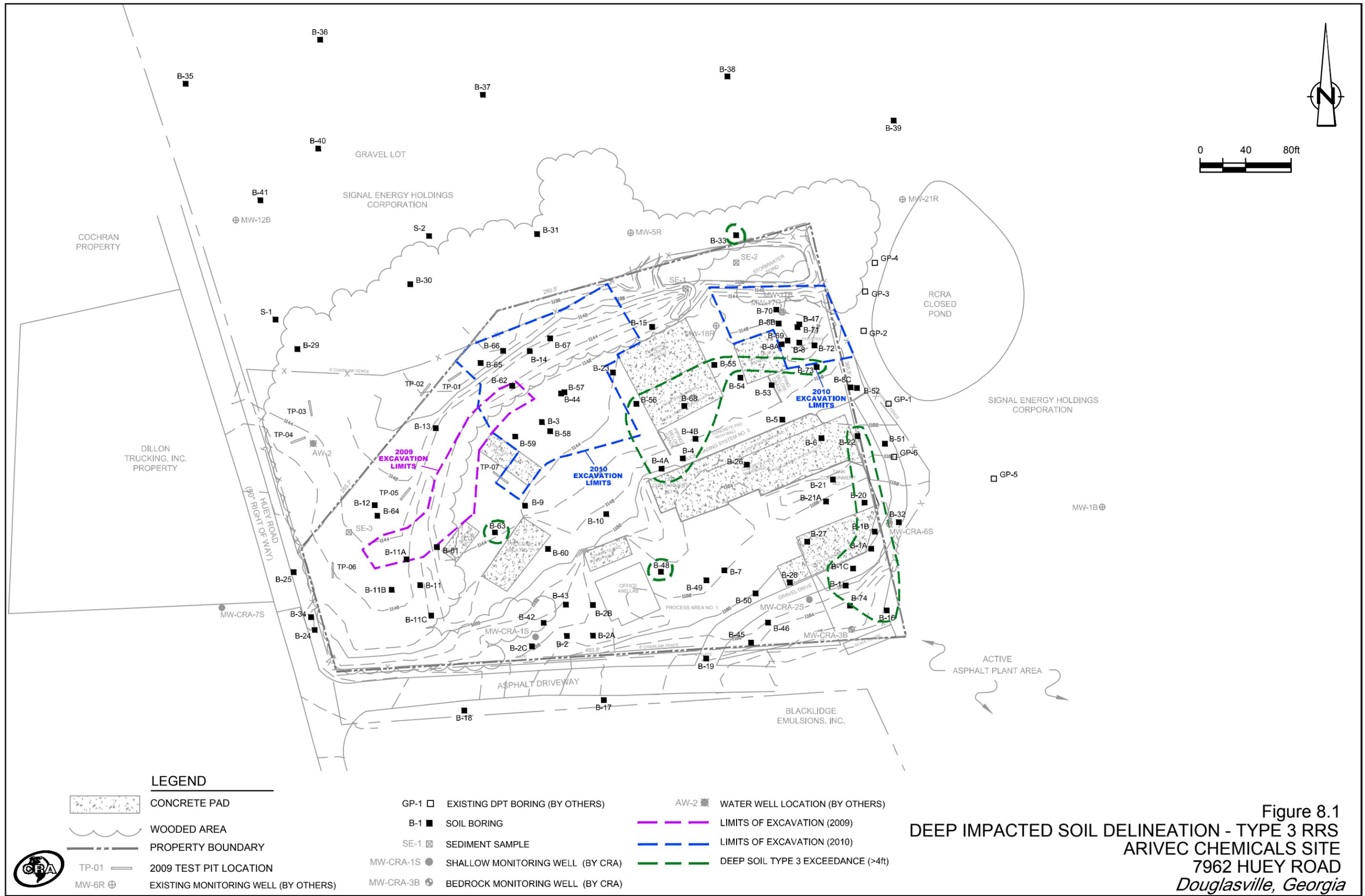


Figure 5.2  
**DEEP IMPACTED SOIL DELINEATION - TYPE I RRS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
**Douglasville, Georgia**



**LEGEND**

- |  |                                      |             |                                  |        |                                    |
|--|--------------------------------------|-------------|----------------------------------|--------|------------------------------------|
|  | CONCRETE PAD                         | GP-1 □      | EXISTING DPT BORING (BY OTHERS)  | AW-2 ■ | WATER WELL LOCATION (BY OTHERS)    |
|  | WOODED AREA                          | B-1 ■       | SOIL BORING                      | — — —  | LIMITS OF EXCAVATION (2009)        |
|  | PROPERTY BOUNDARY                    | SE-1 □      | SEDIMENT SAMPLE                  | — — —  | LIMITS OF EXCAVATION (2010)        |
|  | 2009 TEST PIT LOCATION               | MW-CRA-1S ● | SHALLOW MONITORING WELL (BY CRA) | — — —  | DEEP SOIL TYPE 3 EXCEEDANCE (>4ft) |
|  | EXISTING MONITORING WELL (BY OTHERS) | MW-CRA-3B ⊕ | BEDROCK MONITORING WELL (BY CRA) |        |                                    |

**Figure 8.1**  
**DEEP IMPACTED SOIL DELINEATION - TYPE 3 RRS**  
**ARIVEC CHEMICALS SITE**  
**7962 HUEY ROAD**  
*Douglasville, Georgia*

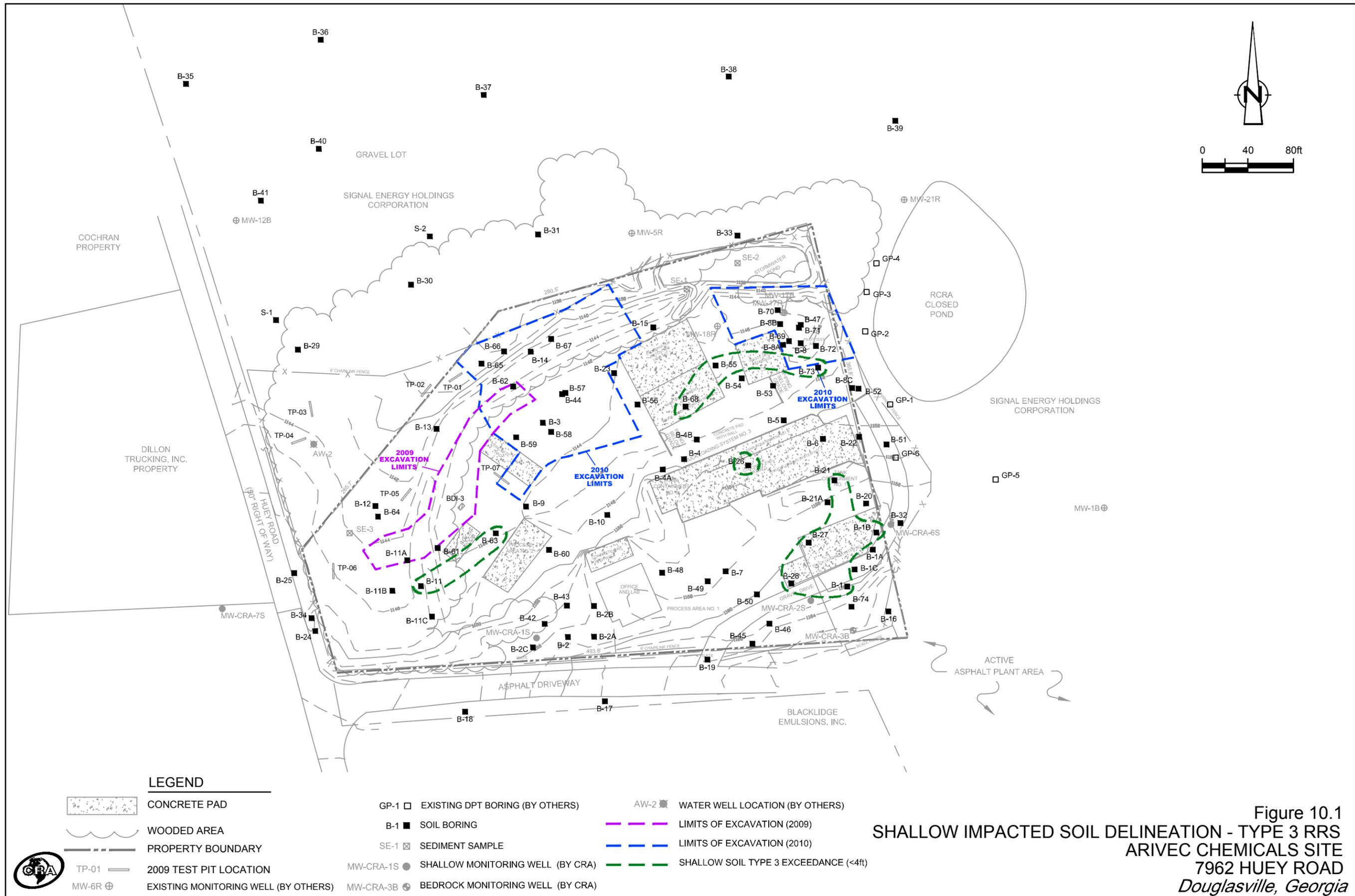


Figure 10.1  
 SHALLOW IMPACTED SOIL DELINEATION - TYPE 3 RRS  
 ARIVEC CHEMICALS SITE  
 7962 HUEY ROAD  
 Douglasville, Georgia



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-1	B-1	B-1A	B-1A	B-1B	B-1B	B-1C	B-1C	B-2	B-2A	B-2B	B-2B	B-2C
Sample Name:			S-B-1 (0-4)	S-B1 (4-8)	S-081804-TBM-001	S-081804-TBM-002	S-081804-TBM-004	S-081804-TBM-003	S-081804-TBM-005	S-081804-TBM-006	S-B 2 (0-4)	S-081904-TBM-016	S-081904-TBM-017	S-081904-TBM-018	S-081904-TBM-019
Sample Date:			6/9/2004	6/9/2004	8/18/2004	8/18/2004	8/18/2004	8/18/2004	8/18/2004	8/18/2004	6/9/2004	8/19/2004	8/19/2004	8/19/2004	8/19/2004
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:			0-4 ft BGS	4-8 ft BGS	0-2 ft BGS	7-7.5 ft BGS	4- ft BGS	9-9.5 ft BGS	3- ft BGS	7- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	10- ft BGS	3- ft BGS
	Type 1														
	RRS	Units													
Methyl acetate	500.0	ug/kg	-	-	4.6 U	4.6 U	190 U	160 U	3.6 U	1600 U	-	4.2 U	3.8 U	4.1 U	4.0 U
Methyl cyclohexane	500.0	ug/kg	-	-	4.6 U	78	830	25000	21	47000	-	4.2 U	3.8 U	4.1 U	4.0 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	325 U	300 U	4.6 U	4.6 U	190 U	160 U	3.6 U	1600 U	348 U	4.2 U	3.8 U	4.1 U	4.0 U
Methylene chloride	500.0	ug/kg	325 U	300 U	4.6 U	4.6 U	190 U	160 U	3.6 U	1600 U	348 U	4.2 U	3.8 U	4.1 U	4.0 U
Naphthalene	100,000.0	ug/kg	2500 I	1300	-	-	-	-	-	-	690 I	-	-	-	-
N-Butylbenzene	500.0	ug/kg	7600 I	650	-	-	-	-	-	-	340 I	-	-	-	-
N-Propylbenzene	500.0	ug/kg	7600 I	270	-	-	-	-	-	-	139 U	-	-	-	-
o-Xylene	854,000.0	ug/kg	26000	130	4.6 U	4.6 U	260	4000	31	20000	170 I	4.2 U	3.8 U	4.1 U	4.0 U
Styrene	14,000.0	ug/kg	65 U	60 U	4.6 U	4.6 U	190 U	160 U	3.6 U	1600 U	70 U	4.2 U	3.8 U	4.1 U	4.0 U
tert-Butylbenzene	500.0	ug/kg	1100 I	120 U	-	-	-	-	-	-	139 U	-	-	-	-
Tetrachloroethene	500.0	ug/kg	8000	60 U	4.6 U	360	390	3000	240	2300	70 U	4.2 U	10	4.1 U	4.0 U
Toluene	100,000.0	ug/kg	190000	180	4.6 U	4.6 U	190 U	33000	38	13000	100 I	4.2 U	3.8 U	4.1 U	4.0 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	65 U	60 U	4.6 U	4.6 U	190 U	160 U	21	1600 U	70 U	4.2 U	3.8 U	4.1 U	4.0 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	65 U	60 U	4.6 U	4.6 U	190 U	160 U	3.6 U	1600 U	70 U	4.2 U	3.8 U	4.1 U	4.0 U
Trichloroethene	500.0	ug/kg	32000	60 U	4.6 U	9.1	370	4900	140	1600 U	70 U	4.2 U	3.8 U	4.1 U	4.0 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	325 U	300 U	4.6 U	4.6 U	440	36000	3.6 U	1600 U	348 U	4.2 U	3.8 U	4.1 U	4.0 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	-	-	9.3 U	9.1 U	380 U	330 U	7.1 U	3300 U	-	8.4 U	7.7 U	8.2 U	8.0 U
Vinyl chloride	200.0	ug/kg	130 U	120 U	9.3 U	9.1 U	380 U	330 U	24	3300 U	139 U	8.4 U	7.7 U	8.2 U	8.0 U
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:		B-2C	B-3	B-3	B-4	B-4A	B-4A	B-4B	B-4B	B-5	B-6	B-7	B-8	B-8	
Sample Name:		S-081904-TBM-020	S-B 3 (0-4)	S-B-3 (12-16)	B-4 (4-8)	S-081904-TBM-012	S-081904-TBM-013	S-081904-TBM-014	S-081904-TBM-015	B-5 (0-3)	B-6 (0-4)	B-7 (0-4)	B-8 (0-4)	B-8 (8-12)	
Sample Date:		8/19/2004	6/9/2004	6/9/2004	6/9/2004	8/19/2004	8/19/2004	8/19/2004	8/19/2004	6/9/2004	6/9/2004	6/30/2004	6/9/2004	6/9/2004	
Sample Area:		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	
Sample Depth:		19- ft BGS	0-4 ft BGS	12-16 ft BGS	4-8 ft BGS	3- ft BGS	7- ft BGS	3- ft BGS	14- ft BGS	0-3 ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	8-12 ft BGS	
	Type 1														
	RRS	Units													
Methyl acetate	500.0	ug/kg	4.2 U	-	-	-	230 U	200 U	4.2 U	180 U	-	-	-	-	
Methyl cyclohexane	500.0	ug/kg	4.2 U	-	-	-	230 U	26000	33	30000	-	-	-	-	
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.2 U	260 U	336 U	7862 U	230 U	200 U	4.2 U	180 U	315 U	300 U	8 U	303 U	367 U
Methylene chloride	500.0	ug/kg	4.2 U	260 U	336 U	7862 U	230 U	200 U	4.2 U	180 U	315 U	300 U	8 U	303 U	367 U
Naphthalene	100,000.0	ug/kg	-	260 U	890	19000	-	-	-	-	2100	450	8 U	303 U	367 U
N-Butylbenzene	500.0	ug/kg	-	104 U	2000	5600	-	-	-	-	410	120 U	3 U	121 U	147 U
N-Propylbenzene	500.0	ug/kg	-	104 U	10000	7200	-	-	-	-	67	120 U	3 U	121 U	147 U
o-Xylene	854,000.0	ug/kg	4.2 U	52 U	20000	2500	1400	140000	13	28000	63 U	60 U	2 U	110	97
Styrene	14,000.0	ug/kg	4.2 U	52 U	670	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	61 U	73 U
tert-Butylbenzene	500.0	ug/kg	-	104 U	5500	3145 U	-	-	-	-	126 U	120 U	3 U	121 U	147 U
Tetrachloroethene	500.0	ug/kg	4.2 U	130	980	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	61 U	73 U
Toluene	100,000.0	ug/kg	4.2 U	74	71000	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	61 U	73 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.2 U	52 U	67 U	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	61 U	73 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.2 U	52 U	67 U	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	61 U	73 U
Trichloroethene	500.0	ug/kg	4.2 U	52 U	470	1572 U	230 U	200 U	4.2 U	180 U	63 U	60 U	2 U	110	87
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.2 U	260 U	336 U	7862 U	230 U	200 U	4.2 U	180 U	315 U	300 U	8 U	303 U	367 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	8.4 U	-	-	-	460 U	410 U	8.5 U	370 U	-	-	-	-	-
Vinyl chloride	200.0	ug/kg	8.4 U	104 U	134 U	3145 U	460 U	410 U	8.5 U	370 U	126 U	120 U	3 U	121 U	147 U
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-8A	B-8A	B-8B	B-8C	B-8C	B-9	B-9	B-9	B-10	B-11	B-11	B-11A	B-11A
	Sample Name:		S-081804-TBM-008	S-081804-TBM-007	S-081804-TBM-009	S-081804-TBM-010	S-081804-TBM-011	S B-9 (0-4)	S B-9 (8-9.5)	S-B-9 (8-9.5)	SB-10 (0-4)	S B-11 (0-4)	B-11 (4-8)	S-081904-TBM-021	S-081904-TBM-022
Sample Date:		8/18/2004	8/18/2004	8/18/2004	8/18/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004	6/10/2004	6/10/2004	6/10/2004	6/10/2004	8/19/2004	8/19/2004
Sample Area:		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:		3- ft BGS	7- ft BGS	8- ft BGS	1.5- ft BGS	5.5- ft BGS	0-4 ft BGS	8-9.5 ft BGS	8-9.5 ft BGS	0-4 ft BGS	0-4 ft BGS	4-8 ft BGS	3- ft BGS	9- ft BGS	
		Type 1													
		RRS	Units												
Methyl acetate	500.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	-	-	-	-	-	-	4.0 UJ	3.7 U
Methyl cyclohexane	500.0	ug/kg	10	2500	2200	3.7 U	6.5 U	-	-	-	-	-	-	4.0 UJ	3.7 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	293 U	290 U	292 U	290 U	314 U	303 U	4.0 UJ	3.7 U
Methylene chloride	500.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	293 U	290 U	292 U	290 U	314 U	303 U	4.0 UJ	3.7 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	293 U	290 U	292 U	290 U	1700 I	303 U	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	117 U	140	117 U	140	1400 I	121 U	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	440	350	117 U	350	560 I	121 U	-	-
o-Xylene	854,000.0	ug/kg	4.5 U	9700	19000	3.7 U	6.5 U	59 U	58 U	58 U	58 U	4900 I	94	4.0 UJ	3.7 U
Styrene	14,000.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	59 U	58 U	58 U	58 U	63 U	61 U	4.0 UJ	3.7 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	360	116 U	117 U	116 U	360 I	121 U	-	-
Tetrachloroethene	500.0	ug/kg	4.5 U	2000	1600 U	130	6.5 U	63	58 U	310	58 U	740	61 U	650	3.7 U
Toluene	100,000.0	ug/kg	4.5 U	24000	890000	6.3	6.5 U	59 U	58 U	150	58 U	44000 J	330	4.0 UJ	3.7 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	59 U	58 U	58 U	58 U	110	61 U	4.0 UJ	3.7 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	59 U	58 U	58 U	58 U	63 U	61 U	4.0 UJ	3.7 U
Trichloroethene	500.0	ug/kg	4.5 U	5100	1600 U	3.7 U	6.5 U	59 U	110	58 U	110	190	61 U	53 J	3.7 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.5 U	180 U	1600 U	3.7 U	6.5 U	293 U	290 U	292 U	290 U	314 U	303 U	4.0 UJ	3.7 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	9.1 U	370 U	3300 U	7.5 U	13 U	-	-	-	-	-	-	13 J	7.4 U
Vinyl chloride	200.0	ug/kg	9.1 U	370 U	3300 U	7.5 U	13 U	117 U	116 U	117 U	116 U	126 U	121 U	8.0 UJ	7.4 U
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>			<i>B-11B</i>	<i>B-11B</i>	<i>B-11C</i>	<i>B-11C</i>	<i>B-12</i>	<i>B-12</i>	<i>B-13</i>	<i>B-13</i>	<i>B-14</i>	<i>B-14</i>	<i>B-15</i>	<i>B-15</i>	<i>B-16</i>	
<i>Sample Name:</i>			<i>S-081904-TBM-023</i>	<i>S-081904-TBM-024</i>	<i>S-081904-TBM-025</i>	<i>S-081904-TBM-026</i>	<i>S B-12 (0-4)</i>	<i>S B-12 (4-8)</i>	<i>S B-13 (0-4)</i>	<i>B-13 (8-12)</i>	<i>B-14 (0-4)</i>	<i>B-14 (4-8)</i>	<i>B-15 (0-4)</i>	<i>B-15 (4-8)</i>	<i>0310005-TBM-01</i>	
<i>Sample Date:</i>			<i>8/19/2004</i>	<i>8/19/2004</i>	<i>8/19/2004</i>	<i>8/19/2004</i>	<i>6/10/2004</i>	<i>6/10/2004</i>	<i>6/11/2004</i>	<i>6/11/2004</i>	<i>6/11/2004</i>	<i>6/11/2004</i>	<i>6/11/2004</i>	<i>6/11/2004</i>	<i>3/10/2005</i>	
<i>Sample Area:</i>			<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	<i>On-site</i>	
<i>Sample Depth:</i>			<i>3- ft BGS</i>	<i>10- ft BGS</i>	<i>3- ft BGS</i>	<i>7- ft BGS</i>	<i>0-4 ft BGS</i>	<i>4-8 ft BGS</i>	<i>0-4 ft BGS</i>	<i>8-12 ft BGS</i>	<i>0-4 ft BGS</i>	<i>4-8 ft BGS</i>	<i>0-4 ft BGS</i>	<i>4-8 ft BGS</i>	<i>3- ft BGS</i>	
	<i>Type 1</i>	<i>RRS</i>	<i>Units</i>													
Methyl acetate		500.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	-	-	-	-	-	-	-	-	
Methyl cyclohexane		500.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	-	-	-	-	-	-	-	-	
Methyl tert butyl ether (MTBE)		500.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	318 U	653 U	332 U	349 U	353 U	290 U	308 U	325 U	5 U
Methylene chloride		500.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	318 U	653 U	332 U	349 U	353 U	290 U	308 U	325 U	10 U
Naphthalene		100,000.0	ug/kg	-	-	-	-	318 U	653 U	332 U	349 U	353 U	<b>2500</b>	308 U	325 U	5 U
N-Butylbenzene		500.0	ug/kg	-	-	-	-	127 U	261 U	133 U	139 U	141 U	<b>370</b>	123 U	130 U	5 U
N-Propylbenzene		500.0	ug/kg	-	-	-	-	127 U	261 U	133 U	139 U	141 U	<b>190</b>	123 U	130 U	5 U
o-Xylene		854,000.0	ug/kg	4.1 U	3.6 U	<b>24</b>	3.2 U	64 U	131 U	66 U	70 U	71 U	58 U	62 U	<b>180</b>	5 U
Styrene		14,000.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	64 U	131 U	66 U	70 U	71 U	58 U	62 U	65 U	5 U
tert-Butylbenzene		500.0	ug/kg	-	-	-	-	127 U	261 U	133 U	139 U	141 U	116 U	123 U	130 U	5 U
Tetrachloroethene		500.0	ug/kg	4.1 U	3.6 U	<b>8.2</b>	3.2 U	64 U	131 U	66 U	70 U	71 U	58 U	62 U	65 U	5 U
Toluene		100,000.0	ug/kg	4.1 U	3.6 U	<b>5900</b>	3.2 U	64 U	<b>160</b>	66 U	70 U	71 U	58 U	62 U	<b>530</b>	5 U
trans-1,2-Dichloroethene		10,000.0	ug/kg	4.1 U	3.6 U	<b>7.0</b>	3.2 U	64 U	131 U	66 U	70 U	71 U	58 U	62 U	65 U	5 U
trans-1,3-Dichloropropene		2,220.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	64 U	131 U	66 U	70 U	71 U	58 U	62 U	65 U	5 U
Trichloroethene		500.0	ug/kg	4.1 U	3.6 U	<b>19</b>	3.2 U	64 U	131 U	66 U	70 U	71 U	<b>780</b>	62 U	65 U	5 U
Trichlorofluoromethane (CFC-11)		200,000.0	ug/kg	4.1 U	3.6 U	3.3 U	3.2 U	318 U	653 U	332 U	349 U	353 U	290 U	308 U	325 U	5 U
Trifluorotrchloroethane (Freon 113)		17,800,000.0	ug/kg	8.2 U	<b>21</b>	<b>21</b>	6.4 U	-	-	-	-	-	-	-	-	
Vinyl chloride		200.0	ug/kg	8.2 U	7.1 U	<b>130</b>	6.4 U	127 U	261 U	133 U	139 U	141 U	116 U	123 U	130 U	5 U
Xylenes (total)		774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Metals</b>																
Arsenic		4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Barium		1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium		2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium		100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Lead		75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury		0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Selenium		2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Silver		2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1221 (PCB-1221)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1232 (PCB-1232)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1242 (PCB-1242)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1248 (PCB-1248)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1254 (PCB-1254)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1260 (PCB-1260)		1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
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 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
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Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>			B-16	B-16	B-17	B-18	B-19	B-19	B-20	B-20	B-21	B-22	B-22	B-23	B-23	
<i>Sample Name:</i>			0310005-TBM-02	0310005-TBM-03	0310005-TBM-04	0310005-TBM-05	0310005-TBM-06	0310005-TBM-07	0310005-TBM-08	0310005-TBM-09	0310005-TBM-10	0310005-TBM-11	0310005-TBM-12	0310005-TBM-13	0310005-TBM-14	
<i>Sample Date:</i>			3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	
<i>Sample Area:</i>			On-site	On-site	Off-site	Off-site	Off-site	Off-site	On-site							
<i>Sample Depth:</i>			8- ft BGS	12- ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	6- ft BGS	3- ft BGS	6.5- ft BGS	3- ft BGS	3- ft BGS	7- ft BGS	5- ft BGS	14- ft BGS	
	<i>Type 1</i>	<i>RRS</i>														
		<i>Units</i>														
Methyl acetate	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl cyclohexane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl tert butyl ether (MTBE)	500.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Methylene chloride	500.0	ug/kg	10 U													
Naphthalene	100,000.0	ug/kg	5 U	4800	5 U	5 U	5 U	5 U	5 U	5 U	445	5 U	5100	5 U	5 U	
N-Butylbenzene	500.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
N-Propylbenzene	500.0	ug/kg	5 U	4700	5 U	5 U	5 U	5 U	5 U	4800	5 U	5 U	5 U	5 U	5 U	
o-Xylene	854,000.0	ug/kg	360	5200	5 U	5 U	5 U	5 U	5 U	7600	590	5 U	10700	38	980	
Styrene	14,000.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
tert-Butylbenzene	500.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Tetrachloroethene	500.0	ug/kg	1080	120100	5	5 U	5 U	5 U	5 U	10250	5 U	5 U	640	5 U	5 U	
Toluene	100,000.0	ug/kg	760	3680	5 U	5	5 U	5 U	5 U	1390	900	5 U	8350	8	2060	
trans-1,2-Dichloroethene	10,000.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
trans-1,3-Dichloropropene	2,220.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Trichloroethene	500.0	ug/kg	5 U	4140	5 U	5 U	5 U	5 U	5 U	787	5 U	5 U	5 U	5 U	5 U	
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Vinyl chloride	200.0	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
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**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>		<i>B-24</i>	<i>B-24</i>	<i>B-25</i>	<i>B-25</i>	<i>B-26</i>	<i>B-27</i>	<i>B-28</i>	<i>B-29</i>	<i>B-30</i>	<i>B-31</i>	<i>B-32</i>	<i>B-32</i>	<i>B-33</i>
<i>Sample Name:</i>		S-031405-TBM-15	S-031405-TBM-16	S-031405-TBM-17	S-031405-TBM-18	S-032805-TBM-100	S-032805-TBM-101	S-032805-TBM-102	S-050505-TBM-001	S-050505-TBM-002	S-050505-TBM-003	S-050505-TBM-004	S-050505-TBM-005	S-050505-TBM-006
<i>Sample Date:</i>		3/14/2005	3/14/2005	3/14/2005	3/14/2005	3/28/2005	3/28/2005	3/28/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005
<i>Sample Area:</i>		On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	On-site	On-site	Off-site
<i>Sample Depth:</i>		3- ft BGS	7- ft BGS	3- ft BGS	7- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	6- ft BGS	3- ft BGS
	<i>Type 1</i>													
	<i>RRS</i>	<i>Units</i>												
<i>Volatile Organic Compounds</i>														
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	6400	220	910	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,1,2-Trichloroethane	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,1-Dichloroethane	311,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	2200	570	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,1-Dichloroethene	700.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	460	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	213.0	ug/kg	-	-	-	-	-	-	-	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2,4-Trichlorobenzene	10,800.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2-Dichlorobenzene	6,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2-Dichloroethane	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,2-Dichloropropane	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
2,2-Dichloropropane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	360 U	340 U	360 U	35 U	32 U	33 U	37 U	49 U
2-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	197,000.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	360 U	340 U	360 U	7 U	6.4 U	6.7 U	7.4 U	9.8 U
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	360 U	340 U	360 U	7 U	6.4 U	6.7 U	7.4 U	9.8 U
Acetone	400,000.0	ug/kg	66 U	71 U	66 U	70 U	360 U	340 U	360 U	70 U	64 U	67 U	74 U	110
Benzene	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	200	250	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Bromobenzene	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	-	-	-	-	-
Bromodichloromethane	2,740.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Bromoform	10,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Bromomethane (Methyl bromide)	1,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Carbon disulfide	400,000.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	360 U	340 U	360 U	7 U	6.4 U	6.7 U	7.4 U	10
Carbon tetrachloride	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Chlorobenzene	10,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Chlorobromomethane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	1,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	7 U	6.4 U	6.7 U	7.4 U	9.8 U
Chloroform (Trichloromethane)	2,870.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Chloromethane (Methyl chloride)	300.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	7 U	6.4 U	6.7 U	7.4 U	9.8 U
cis-1,2-Dichloroethene	7,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	10000	5500	1500	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
cis-1,3-Dichloropropene	18,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Cyclohexane	20,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	2300	2100	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7,180.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Dibromomethane	782,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	7 U	6.4 U	6.7 U	7.4 U	98 U
Ethylbenzene	70,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	14000	4300	1700	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	21,900.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	1000	800	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U
m&p-Xylenes	729,000.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	72000	18000	13000	7 U	6.4 U	6.7 U	7.4 U	9.8 U

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-24	B-24	B-25	B-25	B-26	B-27	B-28	B-29	B-30	B-31	B-32	B-32	B-33
Sample Name:			S-031405-TBM-15	S-031405-TBM-16	S-031405-TBM-17	S-031405-TBM-18	S-032805-TBM-100	S-032805-TBM-101	S-032805-TBM-102	S-050505-TBM-001	S-050505-TBM-002	S-050505-TBM-003	S-050505-TBM-004	S-050505-TBM-005	S-050505-TBM-006
Sample Date:			3/14/2005	3/14/2005	3/14/2005	3/14/2005	3/28/2005	3/28/2005	3/28/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	On-site	On-site	Off-site
Sample Depth:			3- ft BGS	7- ft BGS	3- ft BGS	7- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	6- ft BGS	3- ft BGS
	Type 1	Units													
	RRS														
Methyl acetate	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Methyl cyclohexane	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	7200	6100	240	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Methylene chloride	500.0	ug/kg	6.6 U	7.1 U	6.6 U	7.0 U	360 U	340 U	360 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	23000	7000	5400	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Styrene	14,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	6400	2900	180000	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Toluene	100,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	65000	32000	3000	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Trichloroethene	500.0	ug/kg	3.3 U	3.5 U	3.3 U	5.3	260	170 U	6000	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	7.8	3.5 U	3.3 U	3.5 U	510	170 U	150 U	3.5 U	3.2 U	3.3 U	3.7 U	4.9 U	3.3 U
Vinyl chloride	200.0	ug/kg	3.3 U	3.5 U	3.3 U	3.5 U	370	170 U	150 U	7 U	6.4 U	6.7 U	7.4 U	9.8 U	6.5 U
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
ARIV EC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-33	B-34	B-34	B-35	B-35	B-36	B-36	B-37	B-37	B-38	B-39	B-39	B-42
Sample Name:			S-050505-TBM-007	S-050505-TBM-008	S-050505-TBM-009	S-001	S-002	S-003	S-004	S-005	S-006	S-007	S-008	S-009	S-071206-DJB-001
Sample Date:			5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006
Sample Area:			Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site
Sample Depth:			5- ft BGS	3- ft BGS	6- ft BGS	1.5- ft BGS	5- ft BGS	1- ft BGS	14- ft BGS	1.5- ft BGS	11- ft BGS	6- ft BGS	1- ft BGS	7.5- ft BGS	2- ft BGS
	Type 1														
	RRS	Units													
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20,000.0	ug/kg	5300	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,1,2-Trichloroethane	500.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,1-Dichloroethane	311,000.0	ug/kg	170	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,1-Dichloroethene	700.0	ug/kg	290	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2,3-Trichloropropane	213.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2,4-Trichlorobenzene	10,800.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2-Dichlorobenzene	6,000.0	ug/kg	2900	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2-Dichloroethane	500.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,2-Dichloropropane	500.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	43	27
1,3-Dichlorobenzene	6,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	360	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
2,2-Dichloropropane	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	1500 U	33 U	38 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	-
2-Chlorotoluene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
2-Hexanone	197,000.0	ug/kg	290 U	6.6 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
4-Chlorotoluene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	290 U	6.6 U	7.5 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	-
Acetone	400,000.0	ug/kg	2900 U	92	75 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	-
Benzene	500.0	ug/kg	5900	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	173
Bromobenzene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Bromodichloromethane	2,740.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Bromoform	10,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Bromomethane (Methyl bromide)	1,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Carbon disulfide	400,000.0	ug/kg	290 U	6.6 U	3.8 U	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	500.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Chlorobenzene	10,000.0	ug/kg	160	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Chlorobromomethane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	1,000.0	ug/kg	290 U	6.6 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Chloroform (Trichloromethane)	2,870.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Chloromethane (Methyl chloride)	300.0	ug/kg	290 U	6.6 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
cis-1,2-Dichloroethene	7,000.0	ug/kg	14000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
cis-1,3-Dichloropropene	18,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Cyclohexane	20,000.0	ug/kg	150 U	3.3 U	3.8 U	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Dibromochloromethane	7,180.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Dibromomethane	782,000.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	290 U	6.6 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Ethylbenzene	70,000.0	ug/kg	25000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	16
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	5 U	44	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Isopropyl benzene	21,900.0	ug/kg	4400	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
m&p-Xylenes	729,000.0	ug/kg	89000	6.6 U	7.5 U	10 U	10 U	10 U	10 U	10 U	10 U	10	10 U	10 U	-

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>			B-33	B-34	B-34	B-35	B-35	B-36	B-36	B-37	B-37	B-38	B-39	B-39	B-42
<i>Sample Name:</i>			S-050505-TBM-007	S-050505-TBM-008	S-050505-TBM-009	S-001	S-002	S-003	S-004	S-005	S-006	S-007	S-008	S-009	S-071206-DJB-001
<i>Sample Date:</i>			5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006
<i>Sample Area:</i>			Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site
<i>Sample Depth:</i>			5- ft BGS	3- ft BGS	6- ft BGS	1.5- ft BGS	5- ft BGS	1- ft BGS	14- ft BGS	1.5- ft BGS	11- ft BGS	6- ft BGS	1- ft BGS	7.5- ft BGS	2- ft BGS
	Type 1	Units													
	RRS														
Methyl acetate	500.0	ug/kg	150 U	3.3 U	3.8 U	-	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	500.0	ug/kg	58000	3.3 U	3.8 U	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	500.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Methylene chloride	500.0	ug/kg	150 U	3.3 U	3.8 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	-
Naphthalene	100,000.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
N-Butylbenzene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
N-Propylbenzene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	96
o-Xylene	854,000.0	ug/kg	32000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	7	5 U	5	-
Styrene	14,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
tert-Butylbenzene	500.0	ug/kg	-	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Tetrachloroethene	500.0	ug/kg	32000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	93
Toluene	100,000.0	ug/kg	140000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	139	5 U	5 U	-
trans-1,2-Dichloroethene	10,000.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
trans-1,3-Dichloropropene	2,220.0	ug/kg	150 U	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Trichloroethene	500.0	ug/kg	41000	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	430	3.3 U	3.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	680	3.3 U	3.8 U	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	200.0	ug/kg	290 U	6.6 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	5.32 U
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	54.1
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	2.66 U
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	20.2
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	11.6
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	0.144 U
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	5.32 U
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	2.66 U
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	48 U

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:	B-42	B-43	B-43	B-44	B-45	B-45	B-46	B-46	B-47	B-47	B-48	B-48	B-48
Sample Name:	S-071206-DJB-002	S-071206-DJB-003	S-071206-DJB-004	S-071206-DJB-006	S-071206-DJB-007	S-071206-DJB-008	S-071206-DJB-009	S-071206-DJB-010	S-071206-DJB-011	S-071206-DJB-012	S-071607-DJB-002	S-071607-DJB-003	S-071607-DJB-004
Sample Date:	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/16/2007	7/16/2007	7/16/2007
Sample Area:	On-site												
Sample Depth:	5- ft BGS	2-3 ft BGS	5- ft BGS	2-3 ft BGS	2-2.8 ft BGS	4-5 ft BGS	2-2.7 ft BGS	5-5.7 ft BGS	2-3 ft BGS	5-5.7 ft BGS	3-4 ft BGS	7.5-8.5 ft BGS	10-12 ft BGS
Type 1													
RRS													
Units													
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,1,2-Trichloroethane	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,1-Dichloroethane	311,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,1-Dichloroethene	700.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	-	-	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2,3-Trichloropropane	213.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10,800.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2-Dichlorobenzene	6,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2-Dichloroethane	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,2-Dichloropropane	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
2,2-Dichloropropane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
2-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	197,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
Acetone	400,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
Benzene	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Bromobenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	2,740.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Bromoform	10,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Bromomethane (Methyl bromide)	1,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Carbon disulfide	400,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
Carbon tetrachloride	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Chlorobenzene	10,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Chlorobromomethane	500.0	ug/kg	-	-	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Chloroethane	1,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
Chloroform (Trichloromethane)	2,870.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Chloromethane (Methyl chloride)	300.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
cis-1,2-Dichloroethene	7,000.0	ug/kg	-	-	-	23	-	-	-	-	3.7 U	5.1 U	5.3 U
cis-1,3-Dichloropropene	18,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Cyclohexane	20,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	1100	5.3 U
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7,180.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	5.1 U	5.3 U
Dibromomethane	782,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	7.5 U	10 U	11 U
Ethylbenzene	70,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	200	5.3 U
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	21,900.0	ug/kg	-	-	-	4.2 U	-	-	-	-	3.7 U	72	5.3 U
m&p-Xylenes	729,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	-	-	-

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-42	B-43	B-43	B-44	B-45	B-45	B-46	B-46	B-47	B-47	B-48	B-48	B-48
Sample Name:			S-071206-DJB-002	S-071206-DJB-003	S-071206-DJB-004	S-071206-DJB-006	S-071206-DJB-007	S-071206-DJB-008	S-071206-DJB-009	S-071206-DJB-010	S-071206-DJB-011	S-071206-DJB-012	S-071607-DJB-002	S-071607-DJB-003	S-071607-DJB-004
Sample Date:			7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/16/2007	7/16/2007	7/16/2007
Sample Area:			On-site												
Sample Depth:			5- ft BGS	2-3 ft BGS	5- ft BGS	2-3 ft BGS	2-2.8 ft BGS	4-5 ft BGS	2-2.7 ft BGS	5-5.7 ft BGS	2-3 ft BGS	5-5.7 ft BGS	3-4 ft BGS	7.5-8.5 ft BGS	10-12 ft BGS
	Type 1														
	RRS	Units													
Methyl acetate	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Methyl cyclohexane	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	4200	34
Methyl tert butyl ether (MTBE)	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Methylene chloride	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Toluene	100,000.0	ug/kg	-	-	-	37	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Trichloroethene	500.0	ug/kg	-	-	-	4.5	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	-	-	-	4.2 U	-	-	-	-	-	-	3.7 U	5.1 U	5.3 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	-	-	-	8.4 U	-	-	-	-	-	-	7.5 U	10 U	11 U
Vinyl chloride	200.0	ug/kg	-	-	-	8.4 U	-	-	-	-	-	-	7.5 U	10 U	11 U
Xylenes (total)	774,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	3.7 U	420	20
<b>Metals</b>															
Arsenic	4.26	mg/kg	3.68 U	5.00 U	5.51 U	4.83 U	4.67 U	3.91 U	2.87 U	4.90 U	3.60 U	3.91 U	-	-	-
Barium	1000	mg/kg	49.1	38.2	32.1	25.2	38.7	12.3	23.6	31.4	52.7	42.3	-	-	-
Cadmium	2	mg/kg	1.84 U	2.50 U	2.75 U	2.42 U	2.33 U	1.95 U	1.43 U	2.45 U	1.80 U	1.95 U	-	-	-
Chromium	100	mg/kg	12.9	10.7	7.54	4.81	20.9	1.95 U	5.69	18.8	92.8	14.6	-	-	-
Lead	75	mg/kg	22.3	12.9	17.9	7.61	10.8	5.64	11.3	15.1	257	24.6	-	-	-
Mercury	0.5	mg/kg	0.140 U	0.116 U	0.124 U	0.120 U	0.139 U	0.130 U	0.106 U	0.130 U	0.230	0.232	-	-	-
Selenium	2	mg/kg	3.68 U	5.00 U	5.51 U	4.83 U	4.67 U	3.91 U	2.87 U	4.90 U	3.60 U	3.91 U	-	-	-
Silver	2	mg/kg	1.84 U	2.50 U	2.75 U	2.42 U	2.33 U	1.95 U	1.43 U	2.45 U	1.80 U	1.95 U	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	41 U	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	41 U	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	41 U	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	41 U	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	41 U	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	140	710	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	47 U	39 U	41 U	40 U	46 U	44 U	35 U	43 U	35 U	260	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>			<i>B-49</i>	<i>B-49</i>	<i>B-49</i>	<i>B-50</i>	<i>B-50</i>	<i>B-50</i>	<i>B-51</i>	<i>B-52</i>	<i>B-54</i>	<i>B-54</i>	<i>B-55</i>	<i>B-55</i>	<i>B-55</i>	
<i>Sample Name:</i>			<i>S-071607-DJB-007</i>	<i>S-071607-DJB-008</i>	<i>S-071607-DJB-009</i>	<i>S-071607-DJB-011</i>	<i>S-071607-DJB-012</i>	<i>S-071607-DJB-013</i>	<i>S-071607-DJB-014</i>	<i>S-071607-DJB-017</i>	<i>S-071607-DJB-019</i>	<i>S-071607-DJB-020</i>	<i>S-071607-DJB-022</i>	<i>S-071607-DJB-023</i>	<i>S-071607-DJB-025</i>	
<i>Sample Date:</i>			<i>7/16/2007</i>													
<i>Sample Area:</i>			<i>On-site</i>													
<i>Sample Depth:</i>			<i>2.5-3.5 ft BGS</i>	<i>7-9 ft BGS</i>	<i>10-12 ft BGS</i>	<i>2.5-3.5 ft BGS</i>	<i>7-9 ft BGS</i>	<i>11.5-12.5 ft BGS</i>	<i>2.5-3.5 ft BGS</i>	<i>2.5-3.5 ft BGS</i>	<i>2.5-3.5 ft BGS</i>	<i>6-7 ft BGS</i>	<i>2.5-3.5 ft BGS</i>	<i>8- ft BGS</i>	<i>11- ft BGS</i>	
	<i>Type 1</i>	<i>RRS</i>	<i>Units</i>													
Methyl acetate	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
Methyl cyclohexane	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	18	4.2 U	5 U	4.2 U	2500	7000	6.8 U	
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
Methylene chloride	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Styrene	14,000.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	8.2	6.8	7.6 U	9.3	5 U	4.2 U	5.8 U	46	6.8 U	
Toluene	100,000.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	760	56000	27	
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	71	6.8 U	
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
Trichloroethene	500.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	19	3.6 U	7.6 U	4.2 U	5 U	4.2 U	14	15	6.8 U	
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	7.6 U	4.2 U	5 U	4.2 U	5.8 U	4.1 U	6.8 U	
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	9.6 U	8.1 U	9.4 U	9.3 U	9.4 U	7.3 U	15 U	8.4 U	10 U	8.3 U	12 U	100	14 U	
Vinyl chloride	200.0	ug/kg	9.6 U	8.1 U	9.4 U	9.3 U	9.4 U	7.3 U	15 U	8.4 U	10 U	8.3 U	12 U	57	14 U	
Xylenes (total)	774,000.0	ug/kg	4.8 U	4 U	4.7 U	4.6 U	4.7 U	3.6 U	19	4.2 U	5 U	4.2 U	34000	160000	61	
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
 ARIVEC CHEMICALS SITE  
 DOUGLASVILLE, GEORGIA

Location Name:		B-56	B-56	B-56	B-56	B-57	B-57	B-57	B-57	B-57	B-58	B-58	B-58	B-59	
Sample Name:		S-071607-DJB-027	S-071607-DJB-028	S-071607-DJB-029	S-071607-DJB-030	S-071707-DJB-032	S-071707-DJB-033	S-071707-DJB-034	S-071707-DJB 031	S-071707-DJB 035	S-071707-DJB-037	S-071707-DJB-038	S-071707-DJB-039	S-071707-DJB-042	
Sample Date:		7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	
Sample Area:		On-site													
Sample Depth:		2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	19-20 ft BGS	2.5-3.5 ft BGS	7.5-8.5 ft BGS	11.5-12 ft BGS	0 - 2 ft BGS	14 - 15 ft BGS	2.5-3.5 ft BGS	7.5-8.5 ft BGS	11-12 ft BGS	2.5-3.5 ft BGS	
Type 1															
RRS															
Units															
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,1-Trichloroethane	20,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	1200	390000	6600 E	5.5 U	24000 U	4.0 U	47	48	2800
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,1,2-Trichloroethane	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,1-Dichloroethane	311,000.0	ug/kg	7.3 U	9.6	14	4.5 U	3400	300000	4800 E	23	24000 U	200	220	200	8100
1,1-Dichloroethene	700.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	620 E	5.5 U	24000 U	15	45	61	6500 E
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	2.7 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,2,3-Trichloropropane	213.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10,800.0	ug/kg	7.3 U	3.5 U	120	4.5 U	5.3 U	3.5 U	8.3	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,2-Dichlorobenzene	6,000.0	ug/kg	7.3 U	4300	4900	430	5.3 U	670000	3100 E	5.5 U	24000 U	27	12	7.5	52
1,2-Dichloroethane	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,2-Dichloropropane	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6,000.0	ug/kg	7.3 U	13	180	4.5 U	5.3 U	21000	120	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	7.3 U	49	640	46	5.3 U	54000	310 E	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	18
2,2-Dichloropropane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	73 U	35 U	40 U	45 U	44000	470000	330000	55 U	970000	40 U	37 U	39 U	11000
2-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	197,000.0	ug/kg	15 U	7.1 U	8 U	8.9 U	770 E	7.0 U	23000 E	11 U	48000 U	8.0 U	7.4 U	7.8 U	7.8 U
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	15 U	7.1 U	8 U	8.9 U	18000	620000	40000	11 U	56000	8.0 U	7.4 U	7.8 U	8900
Acetone	400,000.0	ug/kg	150 U	71 U	80 U	89 U	13000	17000	87000	110 U	480000 U	160	74 U	78 U	21000
Benzene	500.0	ug/kg	7.3 U	17	74	4.5 U	11	2100	45	5.5 U	24000 U	18	5.1	4.5	83
Bromobenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	2,740.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Bromoform	10,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Bromomethane (Methyl bromide)	1,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Carbon disulfide	400,000.0	ug/kg	15 U	7.1 U	8 U	8.9 U	11 U	7.0 U	6.1 U	11 U	48000 U	8.0 U	7.4 U	7.8 U	7.8 U
Carbon tetrachloride	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Chlorobenzene	10,000.0	ug/kg	7.3 U	120	600	23	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	1000
Chlorobromomethane	500.0	ug/kg	2.7 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Chloroethane	1,000.0	ug/kg	15 U	7.1 U	8.2	8.9 U	30	1400	24	11 U	48000 U	49	66	40	1200 E
Chloroform (Trichloromethane)	2,870.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Chloromethane (Methyl chloride)	300.0	ug/kg	15 U	7.1 U	8 U	8.9 U	11 U	8.3	6.1 U	11 U	48000 U	8.0 U	7.4 U	7.8 U	7.8 U
cis-1,2-Dichloroethene	7,000.0	ug/kg	7.3 U	11	2200	160	2100	13000	220 E	5.5 U	24000 U	130	370	270	1800 E
cis-1,3-Dichloropropene	18,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Cyclohexane	20,000.0	ug/kg	7.3 U	65	300	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7,180.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Dibromomethane	782,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	15 U	7.1 U	8 U	8.9 U	11 U	220 E	6.1 U	11 U	48000 U	8.0 U	7.4 U	7.8 U	7.8 U
Ethylbenzene	70,000.0	ug/kg	7.3 U	4700	1800	87	100000	2300000	31000	66	24000 U	61	1100	300	2900
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	21,900.0	ug/kg	7.3 U	16	150	15	140	42000	990 E	5.5 U	24000 U	9.8	3.7 U	3.9 U	420 E
m&p-Xylenes	729,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name: Sample Name: Sample Date: Sample Area: Sample Depth:			B-56	B-56	B-56	B-56	B-57	B-57	B-57	B-57	B-57	B-58	B-58	B-58	B-59
			S-071607-DJB-027	S-071607-DJB-028	S-071607-DJB-029	S-071607-DJB-030	S-071707-DJB-032	S-071707-DJB-033	S-071707-DJB-034	S-071707-DJB-031	S-071707-DJB-035	S-071707-DJB-037	S-071707-DJB-038	S-071707-DJB-039	S-071707-DJB-042
			7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007
			On-site												
			2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	19-20 ft BGS	2.5-3.5 ft BGS	7.5-8.5 ft BGS	11.5-12 ft BGS	0 - 2 ft BGS	14 - 15 ft BGS	2.5-3.5 ft BGS	7.5-8.5 ft BGS	11-12 ft BGS	2.5-3.5 ft BGS
		Type 1													
		RRS													
		Units													
Methyl acetate	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Methyl cyclohexane	500.0	ug/kg	7.3 U	5200	1500	92	76	26000	1100 E	5.5 U	24000 U	22	5.3	4.6	5000 E
Methyl tert butyl ether (MTBE)	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Methylene chloride	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	6100	610000	27000	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	1600
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	62000	850000	10000	3.6	24000 U	22	6.7	5.5	400 E
Toluene	100,000.0	ug/kg	7.3 U	15000	37000	470	100000	3200000	21000	32	6700	1500	1600	320	7000
trans-1,2-Dichloroethene	10,000.0	ug/kg	7.3 U	3.5 U	17	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.5	3.7 U	3.9 U	3.9 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Trichloroethene	500.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	3000	120000	1700 E	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	9900 E
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	7.3 U	3.5 U	4 U	4.5 U	5.3 U	3.5 U	3.1 U	5.5 U	24000 U	4.0 U	3.7 U	3.9 U	3.9 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	15 U	7.1 U	8 U	8.9 U	2900	20000	480 E	11 U	48000 U	91	120	130	7.8 U
Vinyl chloride	200.0	ug/kg	15 U	37	91	8.9 U	52	1700	87	11 U	48000 U	43	48	41	120
Xylenes (total)	774,000.0	ug/kg	17	12000	15000	400	340000	7,700,000	130000	74	24000 U	450	3000	1000	26000
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
J - Estimated, below Quantitation Limits  
U - Non-detect at associated value  
E - Value above quantitation range  
I - Quantitation of compounds influenced by hydrocarbon interference  
X - Sample run beyond hold time results considered questionable  
Detection below RRS in blue highlight  
Detection above RRS in red highlight  
2011 Type 3 Risk Reduction Standard for soils  
Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:	B-59				B-60			B-61				B-62			
	S-071707-DJB-043	S-071707-DJB-044	S-071707-DJB 041	S-071707-DJB 045	S-071707-DJB-047	S-071707-DJB-048	S-071707-DJB 048	S-071707-DJB-050	S-071707-DJB-051	S-071707-DJB-052	S-071707-DJB 049	S-071707-DJB-054	S-071707-DJB-055		
Sample Name:	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007		
Sample Date:	On-site														
Sample Area:	7-8 ft BGS	11-12 ft BGS	0 - 2 ft BGS	14-15 ft BGS	2.5-3.5 ft BGS	7-8 ft BGS	7-8 ft BGS	2.5-3.5 ft BGS	8- ft BGS	10-11 ft BGS	0 - 2 ft	2.5-3 ft BGS	8- ft BGS		
Sample Depth:															
	Type 1	RRS	Units												
Methyl acetate	500.0	ug/kg	3.8 U	3.6 U	4.4 U	44000	6.1 U	5.0 U	4.8 U	6.7 U	6.9 U	4.7 U	47	5.9 U	5.6 U
Methyl cyclohexane	500.0	ug/kg	62000	560 E	4.4 U	9300	6.1 U	5.0 U	4.8 U	8.6	6.9 U	8100 E	4.3 U	5.9 U	5.6 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	3.8 U	3.6 U	4.4 U	18000 U	6.1 U	5.0 U	4.8 U	6.7 U	6.9 U	4.7 U	4.3 U	5.9 U	5.6 U
Methylene chloride	500.0	ug/kg	20000	250 E	6.3	18000 U	13	5.0 U	4.8 U	11	120	15	11	5.9 U	5.6 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	3.8 U	3.6 U	4.4 U	18000 U	6.1 U	5.0 U	4.8 U	6.7 U	6.9 U	4.7 U	4.3 U	5.9 U	5.6 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	13000	20	12	18000 U	6.1 U	5.0 U	4.8 U	460	40000	960 E	4.3 U	230	11
Toluene	100,000.0	ug/kg	3800000	13000	140	190000	110	32	8.4	21000	2700000	100000	100	100	55
trans-1,2-Dichloroethene	10,000.0	ug/kg	3.8 U	3.6 U	4.4 U	18000 U	6.1 U	5.0 U	4.8 U	6.7 U	59	86	4.3 U	5.9 U	5.6 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	3.8 U	3.6 U	4.4 U	18000 U	6.1 U	5.0 U	4.8 U	6.7 U	6.9 U	4.7 U	4.3 U	5.9 U	5.6 U
Trichloroethene	500.0	ug/kg	220000	1200 E	3.8	120000	29	9.3	2.6	9600	520000	780 E	14	15	9.7
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	3.8 U	3.6 U	4.4 U	18000 U	6.1 U	5.0 U	4.8 U	6.7 U	6.9 U	4.7 U	4.3 U	5.9 U	5.6 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	7.6 U	7.1 U	8.7 U	37000 U	12 U	10 U	9.5 U	13 U	1000 E	4200 E	8.6 U	12 U	11 U
Vinyl chloride	200.0	ug/kg	970 E	30	8.7 U	37000 U	12 U	10 U	9.5 U	13 U	26	270 E	8.6 U	12 U	11 U
Xylenes (total)	774,000.0	ug/kg	1,800,000	16000	340	300000	6.1 U	5.0 U	4.8 U	3700	580000	50000	19	40	10

<b>Metals</b>														
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

<b>Polychlorinated Biphenyls (PCBs)</b>														
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
J - Estimated, below Quantitation Limits  
U - Non-detect at associated value  
E - Value above quantitation range  
I - Quantitation of compounds influenced by hydrocarbon interference  
X - Sample run beyond hold time results considered questionable  
Detection below RRS in blue highlight  
Detection above RRS in red highlight  
2011 Type 3 Risk Reduction Standard for soils  
Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-62	B-62	B-63	B-63	B-63	B-64	B-64	B-64	B-65	B-65	B-65	B-66	B-66
Sample Name:		S-071707-DJB-056	S-071707-DJB 057	S-071707-DJB-059	S-071707-DJB-060	S-071707-DJB 058	S-071707-DJB-066	S-071707-DJB-067	S-071707-DJB-068	S-071707-DJB-062	S-071707-DJB-063	S-071707-DJB-064	S-071807-DJB-070	S-071807-DJB-071
Sample Date:		7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007
Sample Area:		On-site												
Sample Depth:		11-12 ft BGS	14-15 ft BGS	3- ft BGS	7-8 ft BGS	1-2 ft BGS	2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	0-2 ft BGS	3- ft BGS
	Type 1													
	RRS	Units												
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20,000.0	ug/kg	9.6	120000	3.2 U	20	180 U	3.2 U	3.7 U	4.0 U	28	4.3 U	4.0 U	4.5 U
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,1,2-Trichloroethane	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,1-Dichloroethane	311,000.0	ug/kg	49	59000	3.2 U	4.7 U	170	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,1-Dichloroethene	700.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2,3-Trichloropropane	213.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10,800.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2-Dichlorobenzene	6,000.0	ug/kg	110	40000	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2-Dichloroethane	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,2-Dichloropropane	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6,000.0	ug/kg	5.6	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	23	12000	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
2,2-Dichloropropane	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	43 U	280000 U	32 U	47 U	1800 U	32 U	37 U	40 U	39 U	43 U	40 U	45 U
2-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	197,000.0	ug/kg	8.5 U	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	220	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
Acetone	400,000.0	ug/kg	85 U	120000	65 U	94 U	3600 U	64 U	75 U	80 U	78 U	86 U	80 U	89 U
Benzene	500.0	ug/kg	8.2	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Bromobenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	2,740.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Bromoform	10,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Bromomethane (Methyl bromide)	1,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Carbon disulfide	400,000.0	ug/kg	8.5 U	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
Carbon tetrachloride	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Chlorobenzene	10,000.0	ug/kg	170	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Chlorobromomethane	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Chloroethane	1,000.0	ug/kg	110	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
Chloroform (Trichloromethane)	2,870.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Chloromethane (Methyl chloride)	300.0	ug/kg	8.5 U	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
cis-1,2-Dichloroethene	7,000.0	ug/kg	310	260000	480	3900	360	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
cis-1,3-Dichloropropene	18,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Cyclohexane	20,000.0	ug/kg	11	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7,180.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Dibromomethane	782,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	8.5 U	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.9 U
Ethylbenzene	70,000.0	ug/kg	2500	910000	3.2 U	660	1100	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	21,900.0	ug/kg	80	63000	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.5 U
m&p-Xylenes	729,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-62	B-62	B-63	B-63	B-63	B-64	B-64	B-64	B-65	B-65	B-65	B-66	B-66
Sample Name:			S-071707-DJB-056	S-071707-DJB 057	S-071707-DJB-059	S-071707-DJB-060	S-071707-DJB 058	S-071707-DJB-066	S-071707-DJB-067	S-071707-DJB-068	S-071707-DJB-062	S-071707-DJB-063	S-071707-DJB-064	S-071807-DJB-070	S-071807-DJB-071
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007
Sample Area:			On-site												
Sample Depth:			11-12 ft BGS	14-15 ft BGS	3- ft BGS	7-8 ft BGS	1-2 ft BGS	2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	2.5-3.5 ft BGS	8- ft BGS	11-12 ft BGS	0-2 ft BGS	3- ft BGS
	Type 1	RRS	Units												
Methyl acetate	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Methyl cyclohexane	500.0	ug/kg	160	8300	3.2 U	4.7 U	79	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Methylene chloride	500.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	120	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	20	57000	960	5100	40	3.2 U	3.7 U	4.0 U	45	4.3 U	4.0 U	4.2 U	4.5 U
Toluene	100,000.0	ug/kg	11000	4100000	9.8	3100	1300	22	16	9.3	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Trichloroethene	500.0	ug/kg	16	28000 U	40	6800	180 U	8.5	9.2	5.3	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.3 U	28000 U	3.2 U	4.7 U	180 U	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	32	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.4 U	8.9 U
Vinyl chloride	200.0	ug/kg	24	56000 U	6.5 U	9.4 U	360 U	6.4 U	7.5 U	8.0 U	7.8 U	8.6 U	8.0 U	8.4 U	8.9 U
Xylenes (total)	774,000.0	ug/kg	14000	4,700,000	3.2 U	2600	3200	3.2 U	3.7 U	4.0 U	3.9 U	4.3 U	4.0 U	4.2 U	4.5 U
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS
ARIVEC CHEMICALS SITE
DOUGLASVILLE, GEORGIA

Table with columns for Location Name, Sample Name, Sample Date, Sample Area, Sample Depth, and 15 monitoring wells (B-66 to B-69). Rows list various Volatile Organic Compounds (VOCs) with their respective concentrations in ug/kg across the wells. Includes compounds like 1,1,1,2-Tetrachloroethane, Benzene, Chlorobenzene, etc.

**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-66	B-67	B-67	B-67	B-67	B-68	B-68	B-68	B-69	B-69	B-69	B-69	B-69
Sample Name:			S-071807-DJB-072	S-071807-DJB-073	S-071807-DJB-074	S-071807-DJB-075	S-071807-DJB-076	S-071807-DJB-077	S-071807-DJB-078	S-071807-DJB-079	S-071807-DJB-080	S-071807-DJB-081	S-071807-DJB-082	S-071807-DJB-083	S-071807-DJB-084
Sample Date:			7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site												
Sample Depth:			8- ft BGS	0-2 ft BGS	3- ft BGS	8- ft BGS	12- ft BGS	0-2 ft BGS	3- ft BGS	7-8 ft BGS	0-2 ft BGS	3- ft BGS	8- ft BGS	12- ft BGS	15-16 ft BGS
Type 1															
RRS															
Units															
Methyl acetate	500.0	ug/kg	4.0 U	3.9 U	3.5 U	4.4 U	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	54	5.9 U	2100 U
Methyl cyclohexane	500.0	ug/kg	41	3.9 U	3.5 U	500	5.2 U	3300	17000	10000	4.2 U	2900	170	670	5500
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.0 U	3.9 U	3.5 U	4.4 U	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	5.6 U	5.9 U	2100 U
Methylene chloride	500.0	ug/kg	4.0 U	3.9 U	3.5 U	57	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	11	5.9 U	2100 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	4.0 U	3.9 U	3.5 U	4.4 U	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	11	5.9 U	2100 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	4.0 U	3.9 U	11	87	5.2 U	430	1300	27	4.2 U	3.8 U	85	100	2100 U
Toluene	100,000.0	ug/kg	23	3.9 U	3.5 U	83000	11	2800	49000	12000	4.2 U	13	3800	5400	53000
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.0 U	3.9 U	3.5 U	87	5.2 U	190 U	6.0	4.4 U	4.2 U	3.8 U	5.6 U	5.9 U	2100 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.0 U	3.9 U	3.5 U	4.4 U	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	5.6 U	5.9 U	2100 U
Trichloroethene	500.0	ug/kg	14	3.9 U	8.4	4.4 U	5.2 U	190 U	7.8	4.4 U	4.2 U	5.6	200	69	2100 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.0 U	3.9 U	3.5 U	4.4 U	5.2 U	190 U	3.9 U	4.4 U	4.2 U	3.8 U	5.6 U	5.9 U	2100 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	7.9 U	7.9 U	7.0 U	8.7 U	10 U	380 U	48	8.8 U	8.4 U	7.5 U	11 U	12 U	4300 U
Vinyl chloride	200.0	ug/kg	7.9 U	7.9 U	7.0 U	430	10 U	380 U	7.8 U	8.8 U	8.4 U	7.5 U	11 U	12 U	4300 U
Xylenes (total)	774,000.0	ug/kg	8.0	3.9 U	3.5 U	250000	200	13000	59000	30000	4.2 U	650	2800	700	51000
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



**TABLE 2.1**  
**SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Location Name:			B-70	B-70	B-70	B-71	B-71	B-71	B-71	B-71	B-72	B-72	B-72	B-72	B-73
Sample Name:			S-071807-DJB-085	S-071807-DJB-086	S-071807-DJB-087	S-071807-DJB-088	S-071807-DJB-089	S-071807-DJB-090	S-071807-DJB-091	S-071807-DJB-092	S-071807-DJB-093	S-071807-DJB-094	S-071807-DJB-095	S-071807-DJB-096	S-071807-DJB-097
Sample Date:			7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site												
Sample Depth:			0-2 ft BGS	3-4 ft BGS	8-9 ft BGS	0-2 ft BGS	3- ft BGS	8- ft BGS	12- ft BGS	17-18 ft BGS	0-2 ft BGS	3- ft BGS	8- ft BGS	13-14 ft BGS	0-2 ft BGS
	Type 1	Units													
Methyl acetate	500.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	4.3 U	4.9 U	19000 U	4.2 U	4.0 U	4.8 U	22000 U	3.7 U
Methyl cyclohexane	500.0	ug/kg	4.1 U	2000	4.3 U	4.6 U	4.9 U	3600 E	4.9 U	78000	4.2 U	9.8	230	110000	3.7 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	4.3 U	4.9 U	19000 U	4.2 U	4.0 U	4.8 U	22000 U	3.7 U
Methylene chloride	500.0	ug/kg	4.1 U	3.8 U	68000	4.6 U	4.9 U	4.3 U	4.9 U	19000 U	4.2 U	4.0 U	4.8 U	22000 U	3.7 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14,000.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	4.3 U	4.9 U	19000 U	4.2 U	4.0 U	4.8 U	22000 U	3.7 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	4.1 U	3.8 U	22	4.6 U	7.7	34000	96000	120000	4.2 U	4.0 U	310	290000	8.4
Toluene	100,000.0	ug/kg	4.1 U	3800	1600000	27	22	2800000	470000	240000	4.2 U	6.1	2800	270000	5.6
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	93	4.9 U	19000 U	4.2 U	4.0 U	12	22000 U	3.7 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	4.3 U	4.9 U	19000 U	4.2 U	4.0 U	4.8 U	22000 U	3.7 U
Trichloroethene	500.0	ug/kg	4.1 U	16	4000 E	37	280	790000	1000000	220000	4.2 U	4.0 U	1500	22000 U	3.7 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	4.1 U	3.8 U	4.3 U	4.6 U	4.9 U	4.3 U	6.7	19000 U	4.2 U	4.0 U	270 E	22000 U	3.7 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	8.1 U	7.5 U	8.5 U	9.1 U	9.7 U	77	24	38000 U	8.4 U	8.0 U	870 E	43000 U	7.4 U
Vinyl chloride	200.0	ug/kg	8.1 U	7.5	250 E	9.1 U	9.7 U	600 E	110	38000 U	8.4 U	8.0 U	240 E	43000 U	7.4 U
Xylenes (total)	774,000.0	ug/kg	4.1 U	5400	260000	4.6 U	16	490000	120000	200000	4.2 U	8.3	3100	270000	3.7 U
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
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 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-73	B-73	S-1	S-1	S-2	S-2
Sample Name:			S-071807-DJB-098	S-071807-DJB-099	S-091106-DJB-003	S-091106-DJB-004	S-091106-DJB-001	S-091106-DJB-002
Sample Date:			7/18/2007	7/18/2007	9/11/2006	9/11/2006	9/11/2006	9/11/2006
Sample Area:			On-site	On-site	Off-site	Off-site	Off-site	Off-site
Sample Depth:			3- ft BGS	4-5 ft BGS	3-5 ft BGS	11-13 ft BGS	3-5 ft BGS	5-7 ft BGS
	Type 1							
	RRS	Units						
<b>Volatile Organic Compounds</b>								
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-
1,1,1-Trichloroethane	20,000.0	ug/kg	6300	430	4.5 U	4.8 U	4.8 U	3.9 U
1,1,2,2-Tetrachloroethane	20,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,1,2-Trichloroethane	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,1-Dichloroethane	311,000.0	ug/kg	2100	25	4.5 U	4.8 U	4.8 U	3.9 U
1,1-Dichloroethene	700.0	ug/kg	7.6	14	4.5 U	4.8 U	31	100
1,1-Dichloropropene	500.0	ug/kg	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10,800.0	ug/kg	4.9 U	4.4 U	-	-	-	-
1,2,3-Trichloropropane	213.0	ug/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10,800.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,2,4-Trimethylbenzene	7,000.0	ug/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,2-Dibromoethane (Ethylene dibromide)	359.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,2-Dichlorobenzene	6,000.0	ug/kg	7.4	110	4.5 U	4.8 U	4.8 U	3.9 U
1,2-Dichloroethane	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,2-Dichloropropane	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,3,5-Trimethylbenzene	500.0	ug/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	6,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	7,500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
2,2-Dichloropropane	500.0	ug/kg	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200,000.0	ug/kg	75	360 E	45 U	48 U	48 U	39 U
2-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-
2-Hexanone	197,000.0	ug/kg	9.8 U	8.9 U	9.0 U	9.6 U	9.5 U	7.8 U
2-Methylnaphthalene	1,000.0	ug/kg	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500.0	ug/kg	-	-	-	-	-	-
4-Chlorotoluene	500.0	ug/kg	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200,000.0	ug/kg	98	280	9.0 U	9.6 U	9.5 U	7.8 U
Acetone	400,000.0	ug/kg	98 U	89 U	90 U	96 U	95 U	78 U
Benzene	500.0	ug/kg	5000	82	4.5 U	4.8 U	4.8 U	3.9 U
Bromobenzene	500.0	ug/kg	-	-	-	-	-	-
Bromodichloromethane	2,740.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Bromoform	10,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Bromomethane (Methyl bromide)	1,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Carbon disulfide	400,000.0	ug/kg	9.8 U	8.9 U	9.0 U	9.6 U	9.5 U	7.8 U
Carbon tetrachloride	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Chlorobenzene	10,000.0	ug/kg	9.3	11	4.5 U	4.8 U	4.8 U	3.9 U
Chlorobromomethane	500.0	ug/kg	4.9 U	4.4 U	-	-	-	-
Chloroethane	1,000.0	ug/kg	9.8 U	8.9 U	9.0 U	9.6 U	9.5 U	14
Chloroform (Trichloromethane)	2,870.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Chloromethane (Methyl chloride)	300.0	ug/kg	9.8 U	8.9 U	9.0 U	9.6 U	9.5 U	7.8 U
cis-1,2-Dichloroethene	7,000.0	ug/kg	12000	530	4.5 U	13	19	46
cis-1,3-Dichloropropene	18,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Cyclohexane	20,000.0	ug/kg	8500	41	4.5 U	4.8 U	4.8 U	3.9 U
Cymene (p-Isopropyltoluene)	500.0	ug/kg	-	-	-	-	-	-
Dibromochloromethane	7,180.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Dibromomethane	782,000.0	ug/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000.0	ug/kg	9.8 U	8.9 U	9.0 U	9.6 U	9.5 U	7.8 U
Ethylbenzene	70,000.0	ug/kg	130	2700	4.5 U	4.8 U	4.8 U	3.9 U
Hexachlorobutadiene	17,500.0	ug/kg	-	-	-	-	-	-
Isopropyl benzene	21,900.0	ug/kg	9.2	97	4.5 U	4.8 U	4.8 U	3.9 U
m&p-Xylenes	729,000.0	ug/kg	-	-	9.0 U	9.6 U	9.5 U	7.8 U

TABLE 2.1

SUMMARY OF HISTORICAL SOIL ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

<i>Location Name:</i>			B-73	B-73	S-1	S-1	S-2	S-2
<i>Sample Name:</i>			S-071807-DJB-098	S-071807-DJB-099	S-091106-DJB-003	S-091106-DJB-004	S-091106- DJB-001	S-091106-DJB-002
<i>Sample Date:</i>			7/18/2007	7/18/2007	9/11/2006	9/11/2006	9/11/2006	9/11/2006
<i>Sample Area:</i>			On-site	On-site	Off-site	Off-site	Off-site	Off-site
<i>Sample Depth:</i>			3- ft BGS	4-5 ft BGS	3-5 ft BGS	11-13 ft BGS	3-5 ft BGS	5-7 ft BGS
	<i>Type 1</i>	<i>RRS</i>						
		<i>Units</i>						
Methyl acetate	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Methyl cyclohexane	500.0	ug/kg	18000	7300	4.5 U	4.8 U	4.8 U	3.9 U
Methyl tert butyl ether (MTBE)	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Methylene chloride	500.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Naphthalene	100,000.0	ug/kg	-	-	-	-	-	-
N-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-
N-Propylbenzene	500.0	ug/kg	-	-	-	-	-	-
o-Xylene	854,000.0	ug/kg	-	-	4.5 U	4.8 U	4.8 U	3.9 U
Styrene	14,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
tert-Butylbenzene	500.0	ug/kg	-	-	-	-	-	-
Tetrachloroethene	500.0	ug/kg	27000	14000	4.5 U	4.8 U	4.8 U	3.9 U
Toluene	100,000.0	ug/kg	200000	15000	4.5 U	4.8 U	18	28
trans-1,2-Dichloroethene	10,000.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
trans-1,3-Dichloropropene	2,220.0	ug/kg	4.9 U	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Trichloroethene	500.0	ug/kg	8.9	82	4.5 U	4.8 U	4.8 U	3.9 U
Trichlorofluoromethane (CFC-11)	200,000.0	ug/kg	6.9	4.4 U	4.5 U	4.8 U	4.8 U	3.9 U
Trifluorotrchloroethane (Freon 113)	17,800,000.0	ug/kg	120	20	9.0 U	9.6 U	9.5 U	7.8 U
Vinyl chloride	200.0	ug/kg	3100	15	9.0 U	9.6 U	23	110
Xylenes (total)	774,000.0	ug/kg	50000	14000	-	-	-	-
<i>Metals</i>								
Arsenic	4.26	mg/kg	-	-	5.82 U	5.71 U	4.71 U	10.1
Barium	1000	mg/kg	-	-	40.9	31.6	18.1	112
Cadmium	2	mg/kg	-	-	2.91 U	2.86 U	2.36 U	2.29
Chromium	100	mg/kg	-	-	3.14	2.86 U	7.52	12.7
Lead	75	mg/kg	-	-	17.0	39.8	19.6	161
Mercury	0.5	mg/kg	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	5.82 U	5.71 U	4.71 U	4.44 U
Silver	2	mg/kg	-	-	2.91 U	2.86 U	2.36 U	2.22 U
<i>Polychlorinated Biphenyls (PCBs)</i>								
Aroclor-1016 (PCB-1016)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1,550	ug/kg	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1,550	ug/kg	-	-	-	-	-	-

Notes:

J - Estimated, below Quantitation Limits

U - Non-detect at associated value

E - Value above quantitation range

I - Quantitation of compounds influenced by hydrocarbon interference

X - Sample run beyond hold time results considered questionable

Detection below RRS in blue highlight

Detection above RRS in red highlight

2011 Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 3.1

**GROUNDWATER ELEVATIONS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

Well ID	Well location	Date Measured	Well depth (ft)	Screen Interval (ft)	Top of Casing (ft)	Depth to water (ft)	Water elevation (ft)
AW-2	on-site	3/25/2009	66.5	--	1145.83	18.93	1126.90
		5/24/2011				19.97	1125.86
MW-CRA-1S	on-site	9/30/2004	24	14.0 - 24.0	1157.81	14.00	1143.81
		3/28/2005				10.12	1147.69
		7/15/2005				9.40	1148.41
		3/25/2009				14.44	1143.37
		5/24/2011				14.49	1143.32
MW-CRA-2S	on-site	9/30/2004	12	7.5 - 12.5	1163.48	6.03	1157.45
		3/28/2005				3.20	1160.28
		7/15/2005				3.81	1159.67
		3/25/2009				6.37	1157.11
		5/24/2011				8.23	1155.25
MW-CRA-3B	on-site	3/28/2005	24	13.5 - 23.5	1166.2	4.92	1161.28
		7/15/2005				5.10	1161.10
		3/25/2009				8.01	1158.19
		5/24/2011				8.88	1157.32
MW-CRA-4S <sup>1</sup>	off-site	3/28/2005	18	8.0 - 18.0	1131.8	10.92	1120.88
		7/15/2005				17.18	1114.62
		3/25/2009				dry	--
		5/24/2011				Not found	--
MW-CRA-5S	off-site	7/15/2005	20	10.0 - 20.0	1117.31	7.70	1109.61
		3/25/2009				12.66	1104.65
		5/24/2011				11.70	1105.61
MW-CRA-5B	off-site	7/15/2005	23.9	18.9 - 23.9	1116.83	7.42	1109.41
		3/25/2009		Fractured Rock		12.39	1104.44
		5/24/2011		Cave in to 41 ft		11.33	1105.50
MW-CRA-6S	off-site	3/25/2009	15	5.0 - 15.0	1161.45	5.67	1155.78
		5/24/2011				7.05	1154.40
MW-CRA-7S	off-site	3/25/2009	31.5	21.5 - 31.5	1147.89	20.40	1127.49
		5/24/2011				19.04	1128.85
MW-CRA-8B	off-site	3/25/2009	27.5	17.0 - 27.0	1108.99	13.70	1095.29
		5/24/2011				15.64	1093.35
MW-CRA-9S	off-site	3/25/2009	18	8.0 - 10.0	NS	9.31	--
		5/24/2011				9.18	--
MW-17B	on-site	9/29/2004	47	42.0 - 47.0	1145.63	12.64	1132.99
		3/28/2005				10.15	1135.48
		7/15/2005				9.45	1136.18
		3/25/2009				11.54	1134.09
		5/24/2011				1148.1	14.72

TABLE 3.1

**GROUNDWATER ELEVATIONS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

Well ID	Well location	Date Measured	Well depth (ft)	Screen Interval (ft)	Top of Casing (ft)	Depth to water (ft)	Water elevation (ft)
MW-17R	on-site	9/29/2004	20	10.0 - 20.0	1145.81	14.12	1131.69
		3/28/2005				11.50	1134.31
		7/15/2005				11.20	1134.61
		3/25/2009				13.26	1132.55
		5/24/2011				1148.5	16.14
MW-18R	on-site	9/29/2004	16	1.0 - 16.0	1141.55	3.82	1137.73
		3/28/2005				1.46	1140.09
		7/15/2005				2.15	1139.40
		3/25/2009				3.99	1137.56
		5/24/2011				1144.2	13.26
MW-2B <sup>2</sup>	off-site	3/25/2009	168	100 - 168	1130.88	5.35	1125.53
		5/24/2011				15.07	1115.81
MW-2R <sup>2</sup>	off-site	3/25/2009	14	4 - 14	1131.83	not gauged	--
		5/24/2011				9.1	1122.73
MW-9B <sup>2</sup>	off-site	3/25/2009	197	16 - 197	1133.81	41.16	1092.65
		5/24/2011				117.02	1016.79
MW-9R <sup>2</sup>	off-site	3/25/2009	17	7 - 17	1131.39	15.19	1116.20
		5/24/2011				15.33	1116.06
MW-15B <sup>2</sup>	off-site	3/25/2009	77	66 - 77	1095.76	20.59	1075.17
		5/24/2011				18.53	1077.23
MW-15R <sup>2</sup>	off-site	3/25/2009	22	12 - 22	1095.58	8.71	1086.87
		5/24/11				12.42	1083.16

Notes:

<sup>1</sup> MW-CRA-4 is 1- inch diameter well, elevation is for ground surface, TOC was not surveyed

<sup>2</sup> Top of casing survey data taken from Young Refining (former surveying)

NS - Not surveyed

Top of casing elevations of MW-17BR, MW-17R and MW-18R were altered during Drum Removal work

TABLE 3.2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
MAY-JUNE 2011  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Sample Location:			AW-2	MW-CRA-1S	MW-2B	MW-CRA-2S	MW-CRA-3B	MW-CRA-5B	MW-CRA-5S	MW-CRA-6S	MW-CRA-7S	MW-CRA-8B	MW-9B	
	Sample ID:	Type 1	Type 4	GW-060311-DJB-116	GW-052711-DJB-106	GW-052511-BAH-001	GW-052711-DJB-104	GW-060211-DJB-111	GW-060111-DJB-108	GW-060111-DJB-109	GW-060211-DJB-112	GW-060111-DJB-107	GW-060111-DJB-110	GW-052711-DJB-105
	Sample Date:	RRS	RRS	6/3/2011	5/27/2011	5/25/2011	5/27/2011	6/2/2011	6/1/2011	6/1/2011	6/2/2011	6/1/2011	6/1/2011	5/27/2011
Sample Area:	CRITERIA		On-site	On-site	Off-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	
Units	a	b												
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	
1,1,1-Trichloroethane	ug/L	200	13600	88	5.0 U	5.0 U	6.7	5.0 U	7.0	5.0 U	150	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	200	200	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5	46.4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	9.3 <sup>a</sup>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	4000	4000	130	5.0 U	150	5.0 U	5.0 U	440	110	27	5.0 U	5.0 U	13
1,1-Dichloroethene	ug/L	7	524	49	5.0 U	32	5.0 U	5.0 U	130 <sup>a</sup>	47 <sup>a</sup>	14	5.0 U	5.0 U	6.7
1,1-Dichloropropene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	ug/L	40	40	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	70	70	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	ug/L	70	70	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	600	600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	12	5.0 U	8.4	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5	5	5.0 U	5.0 U	5.6 <sup>ab</sup>	5.0 U	5.0 U	12 <sup>ab</sup>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5	7.41	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	600	600	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	75	75	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	ug/L	NV	NV	150 U	150 U	150 U	150 U	150 U	550 <sup>ab</sup>	150 U	150 U	150 U	150 U	150 U
2,2-Dichloropropane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2000	11800	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Chlorotoluene	ug/L	5	2040	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	2000	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	ug/L	10	409	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	2000	4230	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	ug/L	4000	45600	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L	5	8.72	32 <sup>ab</sup>	5.0 U	52 <sup>ab</sup>	5.0 U	5.0 U	77 <sup>ab</sup>	7.3 <sup>a</sup>	290 <sup>ab</sup>	5.0 U	5.0 U	5.0 U
Bromobenzene	ug/L	5	144	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	100	100	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	100	100	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	ug/L	10	13.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L	4000	4000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L	5	102	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	100	136	8.6	5.0 U	5.0 U	5.0 U	5.0 U	26	5.2	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobromomethane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	10	29200	10 U	10 U	10 U	10 U	10 U	21 <sup>a</sup>	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	ug/L	100	100	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	ug/L	3	263	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	ug/L	70	204	8800 <sup>ab</sup>	5.0 U	5200 <sup>ab</sup>	38	5.0 U	9900 <sup>a</sup>	2200 <sup>a</sup>	10000 <sup>ab</sup>	5.0 U	5.0 U	200
cis-1,3-Dichloropropene	ug/L	5	11.9	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5	17500	5.0 U	5.0 U	15	5.0 U	5.0 U	5.0 U	5.0 U	72	5.0 U	5.0 U	5.0 U
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	100	100	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromomethane	ug/L	500	1020	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	10 U	10 U	10 U	10 U	10 U	17	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	ug/L	700	700	100	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120	5.0 U	5.0 U	5.0 U

TABLE 3.2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
MAY-JUNE 2011  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Sample Location:			AW-2	MW-CRA-1S	MW-2B	MW-CRA-2S	MW-CRA-3B	MW-CRA-5B	MW-CRA-5S	MW-CRA-6S	MW-CRA-7S	MW-CRA-8B	MW-9B
Sample ID:	Type 1	Type 4	GW-060311-DJB-116	GW-052711-DJB-106	GW-052511-BAH-001	GW-052711-DJB-104	GW-060211-DJB-111	GW-060111-DJB-108	GW-060111-DJB-109	GW-060211-DJB-112	GW-060111-DJB-107	GW-060111-DJB-110	GW-052711-DJB-105
Sample Date:	RRS	RRS	6/3/2011	5/27/2011	5/25/2011	5/27/2011	6/2/2011	6/1/2011	6/1/2011	6/2/2011	6/1/2011	6/1/2011	5/27/2011
Sample Area:	CRITERIA		On-site	On-site	Off-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site
Units	a	b											
Hexachlorobutadiene	ug/L	10	33.7	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	ug/L	5	1050	7.2	5.0 U	5.0 U	5.0 U	5.0 U	8.2*	5.0 U	11	5.0 U	5.0 U
m&p-Xylenes	ug/L	10000	10000	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	5	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	ug/L	5	5	5.0 U	5.0 U	6.6	5.0 U	5.0 U	5.0 U	5.0 U	71	5.0 U	5.0 U
Methyl tert butyl ether (MTBE)	ug/L	5	263	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L	5	119	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	53*	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	20	20	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	ug/L	5	5110	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-
o-Xylene	ug/L	10000	10000	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	100	2560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	5	5	5.0 U	5.0 U	5.0 U	11 <sup>ab</sup>	5.0 U	53*	15*	280 <sup>ab</sup>	5.0 U	5.0 U
Toluene	ug/L	1000	5240	1700	5.0 U	5.0 U	5.0 U	5.0 U	20	5.0 U	1100	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	100	161	39	5.0 U	5.0 U	5.0 U	5.0 U	33	6.3	140	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5	11.9	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5	37.7	5.0 U	5.0 U	16	27	5.0 U	280*	140*	180 <sup>ab</sup>	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	410	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	1000000	1000000	330	10 U	10 U	10 U	10 U	540	150	10 U	10 U	10 U
Vinyl chloride	ug/L	2	3.27	1600 <sup>ab</sup>	2.0 U	1700 <sup>ab</sup>	2.0 U	2.0 U	770*	90*	350 <sup>ab</sup>	2.0 U	2.0 U
Xylenes (total)	ug/L	10000	10000	400	5.0 U	5.0 U	5.0 U	5.0 U	62	5.0 U	410	5.0 U	5.0 U

Notes:  
Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a)  
The Remainder of the Wells are compared to Type 4 RRS (b)  
Exceedance of RRS is noted in red and bold with letter  
NV- No Value  
J - Estimated, below Quantitation Limits  
5.0 U - Below associated reporting limit  
"- " - Not analyzed  
ug/L - Micrograms per Liter

TABLE 3.2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
MAY-JUNE 2011  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Sample Location:	MW-9R	MW-9R	MW-CRA-9S	MW-15B	MW-15R	MW-15R	MW-17B	MW-17R	MW-18R
Sample ID:	GW-052511-BAH-003	GW-052511-BAH-004	GW-052511-BAH-002	GW-052511-DJB-101	GW-052511-DJB-102	GW-052511-DJB-103	GW-060211-DJB-113	GW-060211-DJB-114	GW-060211-DJB-115
Sample Date:	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	6/2/2011	6/2/2011	6/2/2011
Sample Area:	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	On-site	On-site
Units									
<b>Volatile Organic Compounds</b>									
1,1,1,2-Tetrachloroethane	ug/L	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	5.0 U	480	110	5.0 U				
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U					
1,1,2-Trichloroethane	ug/L	5.0 U	220 <sup>uo</sup>	5.0 U	5.0 U				
1,1-Dichloroethane	ug/L	76	76	5.0 U	5.0 U	5.0 U	1600	98	5.0 U
1,1-Dichloroethene	ug/L	31	31	5.0 U	5.0 U	5.0 U	520	46	5.0 U
1,1-Dichloropropene	ug/L	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	ug/L	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	ug/L	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U					
1,2,4-Trimethylbenzene	ug/L	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	5.0 U	5.0 U	5.0 U					
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.0 U	5.0 U	5.0 U					
1,2-Dichlorobenzene	ug/L	5.0 U	18	5.0 U	5.0 U				
1,2-Dichloroethane	ug/L	6.9 <sup>uo</sup>	6.7 <sup>uo</sup>	5.0 U	5.0 U	5.0 U	230 <sup>uo</sup>	9.4 <sup>uo</sup>	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U					
1,3,5-Trimethylbenzene	ug/L	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U					
1,3-Dichloropropane	ug/L	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U					
1,4-Dioxane	ug/L	150 U	150 U	150 U					
2,2-Dichloropropane	ug/L	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	50 U	50 U	50 U					
2-Chlorotoluene	ug/L	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	10 U	19	24	10 U				
2-Methylnaphthalene	ug/L	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	ug/L	-	-	-	-	-	-	-	-
4-Chlorotoluene	ug/L	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	10 U	89	390	10 U				
Acetone	ug/L	50 U	460	83	50 U				
Benzene	ug/L	5.0 U	1500 <sup>uo</sup>	140 <sup>uo</sup>	5.0 U				
Bromobenzene	ug/L	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U					
Bromoform	ug/L	5.0 U	5.0 U	5.0 U					
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U	5.0 U					
Carbon disulfide	ug/L	5.0 U	5.0 U	5.0 U					
Carbon tetrachloride	ug/L	5.0 U	5.0 U	5.0 U					
Chlorobenzene	ug/L	5.0 U	11	6.6	5.0 U				
Chlorobromomethane	ug/L	-	-	-	-	-	-	-	-
Chloroethane	ug/L	10 U	400	10 U	10 U				
Chloroform (Trichloromethane)	ug/L	5.0 U	5.0 U	5.0 U					
Chloromethane (Methyl chloride)	ug/L	10 U	10 U	10 U					
cis-1,2-Dichloroethene	ug/L	410 <sup>uo</sup>	420 <sup>uo</sup>	5.0 U	6.6	5.0 U	54000 <sup>uo</sup>	11000 <sup>uo</sup>	7.3
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U					
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U					
Cymene (p-Isopropyltoluene)	ug/L	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U					
Dibromomethane	ug/L	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/L	10 U	10 U	10 U					
Ethylbenzene	ug/L	5.0 U	730 <sup>uo</sup>	66	5.0 U				

TABLE 3.2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
MAY-JUNE 2011  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Sample Location:	MW-9R	MW-9R	MW-CRA-9S	MW-15B	MW-15R	MW-15R	MW-17B	MW-17R	MW-18R
Sample ID:	GW-052511-BAH-003	GW-052511-BAH-004	GW-052511-BAH-002	GW-052511-DJB-101	GW-052511-DJB-102	GW-052511-DJB-103	GW-060211-DJB-113	GW-060211-DJB-114	GW-060211-DJB-115
Sample Date:	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	5/25/2011	6/2/2011	6/2/2011	6/2/2011
Sample Area:	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	On-site	On-site
Units									
Hexachlorobutadiene	ug/L	-	-	-	-	-	-	-	-
Isopropyl benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	37	5.0 U	5.0 U
m&p-Xylenes	ug/L	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>95</b>	<b>24</b>	5.0 U
Methyl tert butyl ether (MTBE)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	64	5.0 U	5.0 U
Naphthalene	ug/L	-	-	-	-	-	-	-	-
N-Butylbenzene	ug/L	-	-	-	-	-	-	-	-
N-Propylbenzene	ug/L	-	-	-	-	-	-	-	-
o-Xylene	ug/L	-	-	-	-	-	-	-	-
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
tert-Butylbenzene	ug/L	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	<b>12<sup>ab</sup></b>	<b>13<sup>ab</sup></b>	5.0 U	5.0 U	5.0 U	<b>21<sup>ab</sup></b>	<b>9.6<sup>ab</sup></b>	5.0 U
Toluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>9800<sup>ab</sup></b>	620	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>440<sup>ab</sup></b>	11	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	7.9	7.7	5.0 U	8.8	5.0 U	27	<b>2400<sup>ab</sup></b>	5.0 U
Trichlorofluoromethane (CFC-11)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrchloroethane (Freon 113)	ug/L	10 U	10 U	10 U	10 U	10 U	51	10 U	10 U
Vinyl chloride	ug/L	<b>16<sup>ab</sup></b>	<b>16<sup>ab</sup></b>	2.0 U	2.0 U	2.0 U	<b>4500<sup>ab</sup></b>	<b>1000<sup>ab</sup></b>	2.0 U
Xylenes (total)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3400	280	5.0 U

Notes:  
Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RI  
The Remainder of the Wells are compared to Type 4 RRS (b)  
Exceedance of RRS is noted in red and bold with letter  
NV- No Value  
J - Estimated, below Quantitation Limits  
5.0 U - Below associated reporting limit  
"- " - Not analyzed  
ug/L - Micrograms per Liter

**HSRA RISK REDUCTION STANDARDS (RRS)  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater</i>	<i>Type 4 RRS Groundwater</i>	<i>Type 1 RRS for Soil</i>	<i>Type 3 RRS for Soil</i>
	<i>(mg/L)</i>	<i>(mg/L)</i>	<i>(mg/kg)</i>	<i>(mg/kg)</i>
<b><u>VOCS</u></b>				
1,1,1-Trichloroethane	2.00E-01	1.36E+01	2.00E+01	2.00E+01
1,1,2-Trichloroethane	5.00E-03	4.64E-02	5.00E-01	5.00E-01
1,1-Dichloroethane	4.00E+00	4.00E+00	3.11E+02	4.00E+02
1,1-Dichloroethene	7.00E-03	5.24E-01	7.00E-01	7.00E-01
1,2-Dibromo-3-Chloropropane	2.00E-04	5.00E-03	2.00E-02	2.00E-02
1,2-Dichloroethane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Butanone	2.00E+00	1.18E+01	2.00E+02	2.00E+02
4-Methyl-2-pentanone (=MIBK)	2.00E+00	4.23E+00	2.00E+02	2.00E+02
Acetone	4.00E+00	4.56E+01	4.00E+02	4.00E+02
Benzene	5.00E-03	8.72E-03	5.00E-01	5.00E-01
Carbon disulfide	4.00E+00	4.00E+00	4.00E+02	4.00E+02
Carbon tetrachloride	5.00E-03	1.02E-02	5.00E-01	5.00E-01
Chlorobenzene	1.00E-01	1.36E-01	1.00E+01	1.00E+01
Chloroethane	1.00E-02	2.92E+01	1.00E+00	1.00E+00
Chloroform	1.00E-01	1.00E-01	2.87E+00	1.00E+01
Chloromethane (methyl chloride)	3.00E-03	2.63E-01	3.00E-01	3.00E-01
cis-1,2-Dichloroethene	7.00E-02	2.04E-01	7.00E+00	7.00E+00
Cyclohexane	5.00E-03	1.75E+01	2.00E+01	2.00E+01
Ethylbenzene	7.00E-01	7.00E-01	7.00E+01	7.00E+01
Freon 113 (trichlorotrifluoroethane)	1.00E+03	1.00E+03	1.78E+04	1.00E+05
Isopropylbenzene (cumene)	5.00E-03	1.05E+00	2.19E+01	2.19E+01
m-Xylenes	1.00E+01	1.00E+01	7.29E+02	1.00E+03
Methylene chloride	5.00E-03	1.19E-01	5.00E-01	5.00E-01
o-Xylene	1.00E+01	1.00E+01	8.54E+02	1.00E+03
p-Xylenes	1.00E+01	1.00E+01	7.43E+02	1.00E+03
Tetrachloroethene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Toluene	1.00E+00	5.24E+00	1.00E+02	1.00E+02
trans-1,2-Dichloroethene	1.00E-01	1.61E-01	1.00E+01	1.00E+01
Trichloroethene	5.00E-03	3.77E-02	5.00E-01	5.00E-01
Vinyl chloride	2.00E-03	3.27E-03	2.00E-01	2.00E-01
Xylenes (Total)	1.00E+01	1.00E+01	7.74E+02	1.00E+03

**HSRA RISK REDUCTION STANDARDS (RRS)  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater</i>	<i>Type 4 RRS Groundwater</i>	<i>Type 1 RRS for Soil</i>	<i>Type 3 RRS for Soil</i>
	<i>(mg/L)</i>	<i>(mg/L)</i>	<i>(mg/kg)</i>	<i>(mg/kg)</i>
<i>Additional VOCS</i>				
1,2,3-Trichloropropane	4.00E-02	4.00E-02	2.13E-01	4.00E+00
1,2,4-Trimethylbenzene	7.00E-02	7.00E-02	7.00E+00	7.00E+00
1,3,5-Trimethylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Hexanone	2.00E+00	2.00E+00	1.97E+02	2.00E+02
2-Phenylbutane (sec-Butylbenzene)	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Bromomethane (Methyl bromide)	1.00E-02	1.32E-02	1.00E+00	1.00E+00
Chlorobromomethane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
cis-1,3-Dichloropropene	5.00E-03	1.19E-02	1.80E+01	1.00E+03
Cymene (p-Isopropyltoluene)	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Dichlorodifluoromethane (CFC-12)	1.00E+00	2.04E+01	1.00E+02	1.00E+02
Methyl acetate	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Methyl cyclohexane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
N-Butylbenzene	5.00E-03	5.11E+00	5.00E-01	5.00E-01
N-Propylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Styrene	1.00E-01	2.56E+00	1.40E+01	1.40E+01
tert-Butylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Trichlorofluoromethane (CFC-11)	2.00E+00	2.00E+00	2.00E+02	2.00E+02
1,1,2,2-Tetrachloroethane	2.00E-01	2.00E-01	2.00E+01	2.00E+01
1,1-Dichloropropene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
1,2,3-Trichlorobenzene	5.00E-03	5.00E-03	1.08E+01	1.08E+01
1,2-Dibromoethane (EDB)	5.00E-03	5.00E-03	3.59E-01	5.00E-01
1,2-Dichloropropane	5.00E-03	7.41E-03	5.00E-01	5.00E-01
2,2-Dichloropropane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Chlorotoluene	5.00E-03	2.04E+00	5.00E-01	5.00E-01
2-Methylnaphthalene	1.00E-02	4.09E-01	1.00E+00	1.00E+00
4-Chlorotoluene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Bromobenzene	5.00E-03	1.44E-01	5.00E-01	5.00E-01
Bromodichloromethane	1.00E-01	1.00E-01	2.74E+00	1.00E+01
Bromoform	1.00E-01	1.00E-01	1.00E+01	1.00E+01
Dibromochloromethane	1.00E-01	1.00E-01	7.18E+00	1.00E+01
Dibromomethane	5.00E-03	1.02E+00	7.82E+02	1.00E+03
Methyl tert-butyl ether (MTBE)	5.00E-03	2.63E-01	5.00E-01	5.00E-01
trans-1,3-Dichloropropene	5.00E-03	1.19E-02	2.22E+00	2.22E+00
<i>SVOCs</i>				
1,2,4-Trichlorobenzene	7.00E-02	7.00E-02	1.08E+01	1.08E+01
1,2-Dichlorobenzene	6.00E-01	6.00E-01	6.00E+01	6.00E+01
1,3-Dichlorobenzene	6.00E-01	6.00E-01	6.00E+01	6.00E+01
1,4-Dichlorobenzene	7.50E-02	7.50E-02	7.50E+00	7.50E+00
Hexachlorobutadiene	1.00E-02	3.37E-02	1.75E+01	1.75E+01
Naphthalene	2.00E-02	2.00E-02	1.00E+02	1.00E+02

**HSRA RISK REDUCTION STANDARDS (RRS)  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater (mg/L)</i>	<i>Type 4 RRS Groundwater (mg/L)</i>	<i>Type 1 RRS for Soil (mg/kg)</i>	<i>Type 3 RRS for Soil (mg/kg)</i>
<b><u>PCBs</u></b>				
Aroclor-1016	5.00E-04	7.15E-03	1.55E+00	1.55E+00
Aroclor-1221	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1232	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1242	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1248	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1254	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1260	5.00E-04	1.43E-03	1.55E+00	1.55E+00
<b><u>Pesticides</u></b>				
4,4'-DDD	1.00E-04	1.19E-02	6.60E-01	2.80E+00
4,4'-DDE	1.00E-04	8.42E-03	6.60E-01	1.98E+00
4,4'-DDT	1.00E-04	8.42E-03	6.60E-01	2.84E+00
Aldrin	5.00E-05	1.68E-04	3.67E-01	6.60E-01
alpha-BHC	5.00E-05	4.54E-04	6.60E-01	6.60E-01
alpha-Chlordane	5.00E-05	8.18E-03	9.20E+00	9.20E+00
beta-BHC	5.00E-05	1.59E-02	6.60E-01	6.60E-01
delta-BHC	5.00E-05	5.00E-05	2.50E+01	2.50E+01
Dieldrin	1.00E-04	1.79E-04	3.90E-01	6.60E-01
Endosulfan I	5.00E-04	5.00E-04	1.00E+01	1.00E+01
Endosulfan II	1.00E-04	1.00E-04	1.00E+01	1.00E+01
Endosulfan sulfate	1.00E-04	1.00E-04	1.65E+00	1.65E+00
Endrin	2.00E-03	3.07E-02	1.00E+01	1.00E+01
Endrin Aldehyde	1.00E-04	1.00E-04	1.00E+01	1.00E+01
Endrin ketone	1.00E-04	1.00E-04	1.00E+01	1.00E+01
gamma-BHC (Lindane)	2.00E-04	2.60E-02	9.20E+00	9.20E+00
gamma-Chlordane	5.00E-05	8.18E-03	6.60E-01	6.60E-01
Heptachlor	4.00E-04	6.36E-04	6.60E-01	6.60E-01
Heptachlor epoxide	2.00E-04	3.14E-04	6.71E-01	1.65E+00
Methoxychlor	4.00E-02	5.11E-01	1.00E+01	2.76E+01
Toxaphene	3.00E-03	5.00E-03	5.76E+00	1.09E+01
<b><u>Metals</u></b>				
Arsenic	1.00E-02	1.00E-02	4.26E+00	2.00E+01
Barium	2.00E+00	2.04E+01	1.00E+03	1.00E+03
Cadmium	5.00E-03	5.11E-02	2.00E+00	2.00E+00
Chromium	1.00E-01	1.53E+02	1.00E+02	1.00E+02
Lead	1.50E-02	1.50E-02	7.50E+01	7.50E+01
Mercury	2.00E-03	1.02E-02	5.00E-01	5.00E-01
Selenium	5.00E-02	5.11E-01	2.00E+00	2.00E+00
Silver	1.00E-01	5.11E-01	2.00E+00	2.00E+00

**SUMMARY OF SEDIMENT ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Sample Location:</i>			SE-1	SE-2	SE-3
<i>Sample ID:</i>			081904-TAL-001	081904-TAL-002	031405-TBM-001
<i>Sample Date:</i>			8/19/2004	8/19/2004	3/14/2005
<i>Sample Depth:</i>			-	-	-
	Type 3				
Volatiles	RRS	Units			
1,1,1-Trichloroethane	20,000	ug/kg	4.4 U	4.1 U	4.1 U
1,1,2,2-Tetrachloroethane	20,000	ug/kg	4.4 U	4.1 U	4.1 U
1,1,2-Trichloroethane	500	ug/kg	4.4 U	4.1 U	4.1 U
1,1-Dichloroethane	400,000	ug/kg	4.4 U	4.1 U	4.1 U
1,1-Dichloroethene	700	ug/kg	4.4 U	4.1 U	4.1 U
1,2,3-Trichlorobenzene	10,800	ug/kg	-	-	-
1,2,3-Trichloropropane	4,000	ug/kg	-	-	-
1,2,4-Trichlorobenzene	10,830	ug/kg	4.4 U	4.1 U	4.1 U
1,2,4-Trimethylbenzene	7,000	ug/kg	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20.0	ug/kg	4.4 U	4.1 U	4.1 U
1,2-Dibromoethane (Ethylene Dibromide)	500	ug/kg	4.4 U	4.1 U	4.1 U
1,2-Dichlorobenzene	60,000	ug/kg	4.4 U	4.1 U	4.1 U
1,2-Dichloroethane	500	ug/kg	4.4 U	4.1 U	4.1 U
1,2-Dichloropropane	500	ug/kg	4.4 U	4.1 U	4.1 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-
1,3-Dichlorobenzene	60,000	ug/kg	4.4 U	4.1 U	4.1 U
1,4-Dichlorobenzene	7,500	ug/kg	4.4 U	4.1 U	4.1 U
2,2-Dichloropropane	500	ug/kg	-	-	-
2-Chlorotoluene	500	ug/kg	-	-	-
2-Methylnaphthalene	1,000	ug/kg	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-
2-Butanone	200,000	ug/kg	8.8 U	8.2 U	8.1 U
2-Hexanone (Methyl Butyl Ketone)	200,000	ug/kg	8.8 U	8.2 U	8.1 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	200,000	ug/kg	8.8 U	8.2 U	8.1 U
Acetone	400,000	ug/kg	88 U	82 U	110
Benzene	500	ug/kg	4.4 U	4.1 U	4.1 U
Bromobenzene	500	ug/kg	-	-	-
Bromodichloromethane	10,000	ug/kg	4.4 U	4.1 U	4.1 U
Bromoform	10,000	ug/kg	4.4 U	4.1 U	4.1 U
Bromomethane (Methyl Bromide)	1,000	ug/kg	4.4 U	4.1 U	4.1 U
Carbon Disulfide	400,000	ug/kg	8.8 U	8.2 U	8.1 U
Carbon Tetrachloride	500	ug/kg	4.4 U	4.1 U	4.1 U
Chlorobenzene	10,000	ug/kg	4.4 U	4.1 U	4.1 U
Chlorobromomethane	500	ug/kg	-	-	-
Chloroethane	1,000	ug/kg	8.8 U	8.2 U	8.1 U
Chloroform (Trichloromethane)	1,000	ug/kg	4.4 U	4.1 U	4.1 U
Chloromethane (Methyl Chloride)	300	ug/kg	8.8 U	8.2 U	8.1 U
cis-1,2-Dichloroethene	7000	ug/kg	4.4 U	4.1 U	4.1 U
cis-1,3-Dichloropropene	1,000,000	ug/kg	4.4 U	4.1 U	4.1 U
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-
Cyclohexane	20,000	ug/kg	4.4 U	4.1 U	4.1 U
Dibromochloromethane	10,000	ug/kg	4.4 U	4.1 U	4.1 U
Dibromomethane	1,000,000	ug/kg	-	-	-
Dichlorodifluoromethane (CFC-12)	100,000	ug/kg	8.8 U	8.2 U	8.1 U
Ethylbenzene	70,000	ug/kg	4.4 U	4.1 U	4.1 U
Hexachlorobutadiene	17,500	ug/kg	-	-	-
Isopropylbenzene	21,900	ug/kg	4.4 U	4.1 U	4.1 U
m&p-Xylene	1,000,000	ug/kg	8.8 U	8.2 U	8.1 U
Methyl Acetate	500	ug/kg	4.4 U	4.1 U	4.1 U

**SUMMARY OF SEDIMENT ANALYTICAL RESULTS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Sample Location:</i>			SE-1	SE-2	SE-3
<i>Sample ID:</i>			081904-TAL-001	081904-TAL-002	031405-TBM-001
<i>Sample Date:</i>			8/19/2004	8/19/2004	3/14/2005
<i>Sample Depth:</i>			-	-	-
	<i>Type 3</i>				
<i>Volatiles</i>	<i>RRS</i>	<i>Units</i>			
Methyl Cyclohexane	500	ug/kg	4.4 U	4.1 U	4.1 U
Methyl Tert Butyl Ether	500	ug/kg	4.4 U	4.1 U	4.1 U
Methylene chloride	500	ug/kg	4.4 U	4.1 U	4.1 U
Naphthalene	100,000	ug/kg	-	-	-
n-Butylbenzene	500	ug/kg	-	-	-
n-Propylbenzene	500	ug/kg	-	-	-
o-Xylene	1,000,000	ug/kg	4.4 U	4.1 U	4.1 U
Styrene	14,000	ug/kg	4.4 U	4.1 U	4.1 U
tert-Butylbenzene	500	ug/kg	-	-	-
Tetrachloroethene	500	ug/kg	4.4 U	4.1 U	4.1 U
Toluene	100,000	ug/kg	4.4 U	4.1 U	4.1 U
trans-1,2-Dichloroethene	10,000	ug/kg	4.4 U	4.1 U	4.1 U
trans-1,3-Dichloropropene	2,220	ug/kg	4.4 U	4.1 U	4.1 U
Trichloroethene	500	ug/kg	4.4 U	4.1 U	4.1 U
Trichlorofluoromethane (CFC-11)	200,000	ug/kg	4.4 U	4.1 U	4.1 U
Trifluorotrchloroethane (Freon 113)	100,000,000	ug/kg	8.8 U	8.2 U	8.1 U
Vinyl chloride	200	ug/kg	8.8 U	8.2 U	8.1 U
<b>Polychlorinated Biphenyls</b>					
Arochlor 1016	NV	ug/kg	-	-	-
Arochlor 1221	NV	ug/kg	-	-	-
Arochlor 1232	NV	ug/kg	-	-	-
Arochlor 1242	1,550	ug/kg	-	-	-
Arochlor 1248	1,550	ug/kg	-	-	-
Arochlor 1254	1,550	ug/kg	-	-	-
Arochlor 1260	1,550	ug/kg	-	-	-
<b>RCRA Metals</b>					
Arsenic	20	mg/kg	-	-	4.86 U
Barium	1,000	mg/kg	-	-	<b>10.1</b>
Cadmium	2	mg/kg	-	-	2.43 U
Chromium	100	mg/kg	-	-	<b>2.65</b>
Lead	75	mg/kg	-	-	<b>18.1</b>
Selenium	2	mg/kg	-	-	4.86 U
Silver	2	mg/kg	-	-	2.43 U
Mercury	0.5	mg/kg	-	-	0.0986 U

Notes:

J - Estimated, below Quantitation Limits

U - Non-detect at associated value

Detection below RRS in blue highlight

Type 3 RRS for soils

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIV EC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:	Type 1 RRS															
Sample Name:	B-1	B-1A	B-1B	B-1C	B-2	B-2A	B-2B	B-2C	B-3	B-4A	B-4B	B-5	B-6	B-7		
Sample Date:	6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/9/2004	8/19/2004	8/19/2004	8/19/2004	6/9/2004	8/19/2004	8/19/2004	6/9/2004	6/9/2004	6/30/2004		
Sample Area:	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site		
Sample Depth:	0-4 ft BGS	0-2 ft BGS	4- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	0-3 ft BGS	0-4 ft BGS	0-4 ft BGS		
Parameter:	Units															
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	NV	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
1,1,1-Trichloroethane	20000	ug/kg	6600	4.6 U	190 U	11	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
1,1,2-Trichloroethane	500	ug/kg	65 U	4.6 U	190 U	30	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,1-Dichloroethane	311000	ug/kg	65 U	4.6 U	190 U	27	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,1-Dichloroethene	700	ug/kg	160	4.6 U	190 U	4.4	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,1-Dichloropropene	500	ug/kg	65 U	-	-	-	70 U	-	-	-	52 U	-	-	63 U	60 U	2 U
1,2,3-Trichlorobenzene	10800	ug/kg	325 U	-	-	-	348 U	-	-	-	260 U	-	-	315 U	300 U	8 U
1,2,3-Trichloropropane	213	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
1,2,4-Trichlorobenzene	10800	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
1,2,4-Trimethylbenzene	7000	ug/kg	42000	-	-	-	460 I	-	-	-	104 U	-	-	1400 X	150	3 U
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,2-Dichlorobenzene	6000	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
1,2-Dichloroethane	500	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,2-Dichloropropane	500	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
1,3,5-Trimethylbenzene	500	ug/kg	16000	-	-	-	230 I	-	-	-	104 U	-	-	450 X	120 U	3 U
1,3-Dichlorobenzene	6000	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
1,3-Dichloropropane	NV	ug/kg	65 U	-	-	-	70 U	-	-	-	52 U	-	-	63 U	60 U	2 U
1,4-Dichlorobenzene	7500	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
2,2-Dichloropropane	500	ug/kg	65 U	-	-	-	70 U	-	-	-	52 U	-	-	63 U	60 U	2 U
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	-	9.3 U	1400	7.1 U	-	8.4 U	7.7 U	8.0 U	-	2300	8.5 U	-	-	-
2-Chlorotoluene	500	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
2-Hexanone	197000	ug/kg	-	9.3 U	380 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	460 U	8.5 U	-	-	-
2-Methylnaphthalene	1000	ug/kg	325 U	-	-	-	348 U	-	-	-	260 U	-	-	315 U	300 U	8 U
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	4300 I	-	-	-	139 U	-	-	-	104 U	-	-	200	120 U	3 U
4-Chlorotoluene	500	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	-	9.3 U	380 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	460 U	8.5 U	-	-	-
Acetone	400000	ug/kg	-	9.3 U	3800 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	4600 U	8.5 U	-	-	-
Benzene	500	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Bromobenzene	500	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
Bromodichloromethane	2740	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
Bromoform	10000	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
Bromomethane (Methyl bromide)	1000	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
Carbon disulfide	400000	ug/kg	-	9.3 U	380 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	460 U	8.5 U	-	-	-
Carbon tetrachloride	500	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Chlorobenzene	10000	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Chlorobromomethane	500	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
Chloroethane	1000	ug/kg	325 U	9.3 U	380 U	7.1 U	348 U	8.4 U	7.7 U	8.0 U	260 U	460 U	8.5 U	315 U	300 U	8 U
Chloroform (Trichloromethane)	2870	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Chloromethane (Methyl chloride)	300	ug/kg	325 U	9.3 U	380 U	7.1 U	348 U	8.4 U	7.7 U	8.0 U	260 U	460 U	8.5 U	315 U	300 U	8 U
cis-1,2-Dichloroethene	7000	ug/kg	680	4.6 U	190 U	3100	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
cis-1,3-Dichloropropene	18000	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Cyclohexane	20000	ug/kg	-	4.6 U	190 U	3.6 U	-	4.2 U	3.8 U	4.0 U	-	230 U	4.2 U	-	-	-
Cymene (p-Isopropyltoluene)	500	ug/kg	4600 I	-	-	-	139 U	-	-	-	104 U	-	-	220	120 U	3 U
Dibromochloromethane	7180	ug/kg	130 U	4.6 U	190 U	3.6 U	139 U	4.2 U	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
Dibromomethane	782000	ug/kg	130 U	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	325 U	9.3 U	380 U	7.1 U	348 U	8.4 U	7.7 U	8.0 U	260 U	460 U	8.5 U	315 U	300 U	8 U
Ethylbenzene	70000	ug/kg	21000	4.6 U	190 U	27	110 I	4.2 U	3.8 U	4.0 U	52 U	980	11	64	60 U	2 U
Hexachlorobutadiene	17500	ug/kg	325 U	-	-	-	348 U	-	-	-	260 U	-	-	315 U	300 U	8 U
Isopropyl benzene	21900	ug/kg	3100 I	4.6 U	190 U	5.6	139 U	4.9	3.8 U	4.0 U	104 U	230 U	4.2 U	126 U	120 U	3 U
m&p-Xylenes	729000	ug/kg	87000	9.3 U	380 U	66	530 I	8.4 U	7.7 U	8.0 U	104 U	3600	8.5 U	300	120 U	3 U
Methyl acetate	500	ug/kg	-	4.6 U	190 U	3.6 U	-	4.2 U	3.8 U	4.0 U	-	230 U	4.2 U	-	-	-

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-1	B-1A	B-1B	B-1C	B-2	B-2A	B-2B	B-2C	B-3	B-4A	B-4B	B-5	B-6	B-7
Sample Name:		S-B-1 (0-4)	S-081804-TBM-001	S-081804-TBM-004	S-081804-TBM-005	S-B 2 (0-4)	S-081904-TBM-016	S-081904-TBM-017	S-081904-TBM-019	S-B 3 (0-4)	S-081904-TBM-012	S-081904-TBM-014	B-5 (0-3)	B-6 (0-4)	B-7 (0-4)
Sample Date:		6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/9/2004	8/19/2004	8/19/2004	8/19/2004	6/9/2004	8/19/2004	8/19/2004	6/9/2004	6/9/2004	6/30/2004
Sample Area:		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:		0-4 ft BGS	0-2 ft BGS	4- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	0-3 ft BGS	0-4 ft BGS	0-4 ft BGS
Type 1 RRS															
Parameter:		Units													
Methyl cyclohexane	500	ug/kg	-	4.6 U	830	21	-	4.2 U	3.8 U	4.0 U	-	230 U	33	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U
Methylene chloride	500	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U
Naphthalene	100000	ug/kg	2500 I	-	-	-	690 I	-	-	-	260 U	-	-	2100	450
N-Butylbenzene	500	ug/kg	7600 I	-	-	-	340 I	-	-	-	104 U	-	-	410	120 U
N-Propylbenzene	500	ug/kg	7600 I	-	-	-	139 U	-	-	-	104 U	-	-	67	120 U
o-Xylene	854000	ug/kg	26000	4.6 U	260	31	170 I	4.2 U	3.8 U	4.0 U	52 U	1400	13	63 U	60 U
Styrene	14000	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U
tert-Butylbenzene	500	ug/kg	1100 I	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U
Tetrachloroethene	500	ug/kg	8000	4.6 U	390	240	70 U	4.2 U	10	4.0 U	130	230 U	4.2 U	63 U	61
Toluene	100000	ug/kg	190000	4.6 U	190 U	38	100 I	4.2 U	3.8 U	4.0 U	74	1600	21	63 U	60 U
trans-1,2-Dichloroethene	10000	ug/kg	65 U	4.6 U	190 U	21	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U
trans-1,3-Dichloropropene	2220	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U
Trichloroethene	500	ug/kg	32000	4.6 U	370	140	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	325 U	4.6 U	440	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	9.3 U	380 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	460 U	8.5 U	-	-
Vinyl chloride	200	ug/kg	130 U	9.3 U	380 U	24	139 U	8.4 U	7.7 U	8.0 U	104 U	460 U	8.5 U	126 U	120 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-8	B-8A	B-8C	B-9	B-10	B-11	B-11A	B-11B	B-11C	B-12	B-13	B-14	B-15	B-16
Sample Name:			B-8 (0-4)	S-081804-TBM-008	S-081804-TBM-010	S B-9 (0-4)	SB-10 (0-4)	S B-11 (0-4)	S-081904-TBM-021	S-081904-TBM-023	S-081904-TBM-025	S B-12 (0-4)	S B-13 (0-4)	B-14 (0-4)	B-15 (0-4)	0310005-TBM-01
Sample Date:			6/9/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004	6/10/2004	8/19/2004	8/19/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:			0-4 ft BGS	3- ft BGS	1.5- ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	3- ft BGS
Parameter:	Type 1 RRS	Units														
Methyl cyclohexane	500	ug/kg	-	10	3.7 U	-	-	-	4.0 UJ	4.1 U	3.3 U	-	-	-	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	5 U
Methylene chloride	500	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	10 U
Naphthalene	100000	ug/kg	303 U	-	-	293 U	290 U	1700 I	-	-	-	318 U	332 U	353 U	308 U	5 U
N-Butylbenzene	500	ug/kg	121 U	-	-	117 U	140	1400 I	-	-	-	127 U	133 U	141 U	123 U	5 U
N-Propylbenzene	500	ug/kg	121 U	-	-	440	350	560 I	-	-	-	127 U	133 U	141 U	123 U	5 U
o-Xylene	854000	ug/kg	110	4.5 U	3.7 U	59 U	58 U	4900 I	4.0 UJ	4.1 U	24	64 U	66 U	71 U	62 U	5 U
Styrene	14000	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	63 U	4.0 UJ	4.1 U	3.3 U	64 U	66 U	71 U	62 U	5 U
tert-Butylbenzene	500	ug/kg	121 U	-	-	360	116 U	360 I	-	-	-	127 U	133 U	141 U	123 U	5 U
Tetrachloroethene	500	ug/kg	62	4.5 U	130	63	58 U	740	650	4.1 U	8.2	64 U	66 U	71 U	62 U	5 U
Toluene	100000	ug/kg	350	4.5 U	6.3	59 U	58 U	44000 J	4.0 UJ	4.1 U	5900	64 U	66 U	71 U	62 U	5 U
trans-1,2-Dichloroethene	10000	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	110	4.0 UJ	4.1 U	7.0	64 U	66 U	71 U	62 U	5 U
trans-1,3-Dichloropropene	2220	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	63 U	4.0 UJ	4.1 U	3.3 U	64 U	66 U	71 U	62 U	5 U
Trichloroethene	500	ug/kg	110	4.5 U	3.7 U	59 U	110	190	53 J	4.1 U	19	64 U	66 U	71 U	62 U	5 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	5 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	9.1 U	7.5 U	-	-	-	13 J	8.2 U	21	-	-	-	-	-
Vinyl chloride	200	ug/kg	121 U	9.1 U	7.5 U	117 U	116 U	126 U	8.0 UJ	8.2 U	130	127 U	133 U	141 U	123 U	5 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
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 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit



SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-17	B-18	B-19	B-20	B-21	B-22	B-24	B-25	B-26	B-27	B-28	B-29	B-30	B-31
Sample Name:			0310005-TBM-04	0310005-TBM-05	0310005-TBM-06	0310005-TBM-08	0310005-TBM-10	0310005-TBM-11	S-031405-TBM-15	S-031405-TBM-17	S-032805-TBM-100	S-032805-TBM-101	S-032805-TBM-102	S-050505-TBM-001	S-050505-TBM-002	S-050505-TBM-003
Sample Date:			3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/14/2005	3/14/2005	3/28/2005	3/28/2005	3/28/2005	5/5/2005	5/5/2005	5/5/2005
Sample Area:			Off-site	Off-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site
Sample Depth:			3- ft BGS	3- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS						
Parameter:	Type 1 RRS	Units														
Methyl cyclohexane	500	ug/kg	-	-	-	-	-	-	3.3 U	3.3 U	7200	6100	240	3.5 U	3.2 U	3.3 U
Methyl tert butyl ether (MTBE)	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Methylene chloride	500	ug/kg	10 U	6.6 U	6.6 U	360 U	340 U	360 U	3.5 U	3.2 U	3.3 U					
Naphthalene	100000	ug/kg	5 U	5 U	5 U	5 U	445	5 U	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	5 U	5 U	5 U	5 U	590	5 U	3.3 U	3.3 U	23000	7000	5400	3.5 U	3.2 U	3.3 U
Styrene	14000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
tert-Butylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	5	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	6400	2900	180000	3.5 U	3.2 U	3.3 U
Toluene	100000	ug/kg	5 U	5	5 U	5 U	900	5 U	3.3 U	3.3 U	65000	32000	3000	3.5 U	3.2 U	3.3 U
trans-1,2-Dichloroethene	10000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
trans-1,3-Dichloropropene	2220	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Trichloroethene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	260	170 U	6000	3.5 U	3.2 U	3.3 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	-	-	-	-	-	7.8	3.3 U	510	170 U	150 U	3.5 U	3.2 U	3.3 U
Vinyl chloride	200	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	370	170 U	150 U	7 U	6.4 U	6.7 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

- J - Estimated, below Quantitation Limits
- U - Non-detect at associated value
- E - Value above quantitation range
- I - Quantitation of compounds influenced by hydrocarbon interference
- X - Sample run beyond hold time results considered questionable
- Detection below RRS in blue highlight
- Detection above RRS in red highlight
- Soil Criteria - Type 1 Risk Reduction Standard
- Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.1

**SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>		B-32	B-33	B-34	B-35	B-36	B-37	B-39	B-42	B-43	B-44	B-45	B-46	B-47	B-48
<i>Sample Name:</i>		S-050505-TBM-004	S-050505-TBM-006	S-050505-TBM-008	S-001	S-003	S-005	S-008	S-071206-DJB-001	S-071206-DJB-003	S-071206-DJB-006	S-071206-DJB-007	S-071206-DJB-009	S-071206-DJB-011	S-071607-DJB-002
<i>Sample Date:</i>		5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/16/2007
<i>Sample Area:</i>		On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site						
<i>Sample Depth:</i>		3.5- ft BGS	3- ft BGS	3- ft BGS	1.5- ft BGS	1- ft BGS	1.5- ft BGS	1- ft BGS	2- ft BGS	2-3 ft BGS	2-3 ft BGS	2-2.8 ft BGS	2-2.7 ft BGS	2-3 ft BGS	3-4 ft BGS
<i>Parameter:</i>	Type 1 RRS	<i>Units</i>													
<i>Volatile Organic Compounds</i>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,1,2-Trichloroethane	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,1-Dichloroethane	311000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,1-Dichloroethene	700	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	3.7 U
1,2,3-Trichloropropane	213	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10800	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,2-Dichlorobenzene	6000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,2-Dichloroethane	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,2-Dichloropropane	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	43	-	-	-	-	-	-
1,3-Dichlorobenzene	6000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
2,2-Dichloropropane	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	37 U	33 U	33 U	10 U	10 U	10 U	-	-	42 U	-	-	-	37 U
2-Chlorotoluene	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
2-Hexanone	197000	ug/kg	7.4 U	6.5 U	6.6 U	5 U	5 U	5 U	-	-	8.4 U	-	-	-	7.5 U
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	7.4 U	6.5 U	6.6 U	50 U	50 U	50 U	-	-	8.4 U	-	-	-	7.5 U
Acetone	400000	ug/kg	74 U	66	92	50 U	50 U	50 U	-	-	84 U	-	-	-	75 U
Benzene	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Bromobenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
Bromodichloromethane	2740	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Bromoform	10000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Bromomethane (Methyl bromide)	1000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Carbon disulfide	400000	ug/kg	7.4 U	6.5 U	6.6 U	-	-	-	-	-	8.4 U	-	-	-	7.5 U
Carbon tetrachloride	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Chlorobenzene	10000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Chlorobromomethane	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	3.7 U
Chloroethane	1000	ug/kg	7.4 U	6.5 U	6.6 U	5 U	5 U	5 U	-	-	8.4 U	-	-	-	7.5 U
Chloroform (Trichloromethane)	2870	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Chloromethane (Methyl chloride)	300	ug/kg	74 U	65 U	66 U	5 U	5 U	5 U	-	-	84 U	-	-	-	75 U
cis-1,2-Dichloroethene	7000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	23	-	-	-	3.7 U
cis-1,3-Dichloropropene	18000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Cyclohexane	20000	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	4.2 U	-	-	-	3.7 U
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
Dibromochloromethane	7180	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Dibromomethane	782000	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	7.4 U	6.5 U	6.6 U	5 U	5 U	5 U	-	-	8.4 U	-	-	-	7.5 U
Ethylbenzene	70000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Hexachlorobutadiene	17500	ug/kg	-	-	-	5 U	5 U	5 U	-	-	-	-	-	-	-
Isopropyl benzene	21900	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
m&p-Xylenes	729000	ug/kg	7.4 U	6.5 U	6.6 U	10 U	10 U	10 U	-	-	8.4 U	-	-	-	-
Methyl acetate	500	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	4.2 U	-	-	-	3.7 U

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-32	B-33	B-34	B-35	B-36	B-37	B-39	B-42	B-43	B-44	B-45	B-46	B-47	B-48	
Sample Name:		S-050505-TBM-004	S-050505-TBM-006	S-050505-TBM-008	S-001	S-003	S-005	S-008	S-071206-DJB-001	S-071206-DJB-003	S-071206-DJB-006	S-071206-DJB-007	S-071206-DJB-009	S-071206-DJB-011	S-071607-DJB-002	
Sample Date:		5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/16/2007	
Sample Area:		On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site							
Sample Depth:		3.5- ft BGS	3- ft BGS	3- ft BGS	1.5- ft BGS	1- ft BGS	1.5- ft BGS	1- ft BGS	2- ft BGS	2-3 ft BGS	2-3 ft BGS	2-2.8 ft BGS	2-2.7 ft BGS	2-3 ft BGS	3-4 ft BGS	
Parameter:	Type 1 RRS	Units														
Methyl cyclohexane	500	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	-	4.2 U	-	-	-	3.7 U
Methyl tert butyl ether (MTBE)	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Methylene chloride	500	ug/kg	3.7 U	3.3 U	3.3 U	10 U	10 U	10 U	10 U	-	-	4.2 U	-	-	-	3.7 U
Naphthalene	100000	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	-
Styrene	14000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
tert-Butylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Toluene	100000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	37	-	-	-	3.7 U
trans-1,2-Dichloroethene	10000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
trans-1,3-Dichloropropene	2220	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Trichloroethene	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.5	-	-	-	3.7 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	-	8.4 U	-	-	-	7.5 U
Vinyl chloride	200	ug/kg	7.4 U	6.5 U	6.6 U	5 U	5 U	5 U	5 U	-	-	8.4 U	-	-	-	7.5 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7 U
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	5.32 U	5.00 U	4.83 U	4.67 U	2.87 U	3.60 U	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	54.1	38.2	25.2	38.7	23.6	52.7	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	2.66 U	2.50 U	2.42 U	2.33 U	1.43 U	1.80 U	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	20.2	10.7	4.81	20.9	5.69	92.8	-	-
Lead	75	mg/kg	-	-	-	-	-	-	11.6	12.9	7.61	10.8	11.3	257	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	0.144 U	0.116 U	0.120 U	0.139 U	0.106 U	0.230	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	5.32 U	5.00 U	4.83 U	4.67 U	2.87 U	3.60 U	-	-
Silver	2	mg/kg	-	-	-	-	-	-	2.66 U	2.50 U	2.42 U	2.33 U	1.43 U	1.80 U	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	140	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVFC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:	B-49	B-50	B-51	B-52	B-54	B-55	B-56	B-57	B-57	B-58	B-59	B-59	B-60	B-61	
Sample Name:	S-071607-DJB-007	S-071607-DJB-011	S-071607-DJB-014	S-071607-DJB-017	S-071607-DJB-019	S-071607-DJB-022	S-071607-DJB-027	S-071707-DJB 031	S-071707-DJB-032	S-071707-DJB-037	S-071707-DJB 041	S-071707-DJB-042	S-071707-DJB-047	S-071707-DJB 049	
Sample Date:	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	
Sample Area:	On-site														
Sample Depth:	2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS							
Parameter:	Type 1 RRS	Units													
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,1-Trichloroethane	20000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	1200	4.0 U	4.0	2800	
1,1,2,2-Tetrachloroethane	20000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,1,2-Trichloroethane	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,1-Dichloroethane	311000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	12	5.8 U	7.3 U	23	3400	200	25	8100	
1,1-Dichloroethene	700	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.4 U	15	6500 E	
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene	10800	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	2.7 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,2,3-Trichloropropane	213	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	10800	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,2-Dichlorobenzene	6000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	27	
1,2-Dichloroethane	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,2-Dichloropropane	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,3-Dichlorobenzene	6000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
1,4-Dichlorobenzene	7500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	18	
2,2-Dichloropropane	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	48 U	46 U	76 U	42 U	50 U	58 U	73 U	55 U	44000	40 U	22	11000	
2-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
2-Hexanone	197000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	770 E	8.0 U	8.7 U	7.8 U	
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
4-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	18000	8.0 U	8.7 U	8900	
Acetone	400000	ug/kg	96 U	93 U	150 U	84 U	100 U	160	150 U	110 U	13000	160	170	21000	
Benzene	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	11	18	3.1	83	
Bromobenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	2740	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Bromoform	10000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Bromomethane (Methyl bromide)	1000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Carbon disulfide	400000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	11 U	8.0 U	1.9	7.8 U	
Carbon tetrachloride	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Chlorobenzene	10000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	74	1000	
Chlorobromomethane	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	2.7 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Chloroethane	1000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	11 U	30	49	290	
Chloroform (Trichloromethane)	2870	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Chloromethane (Methyl chloride)	300	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	11 U	8.0 U	8.7 U	7.8 U	
cis-1,2-Dichloroethene	7000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	21	22	7.3 U	5.5 U	2100	130	1.9	1800 E	
cis-1,3-Dichloropropene	18000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	8.6	3.9 U	
Cyclohexane	20000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	110	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Dibromochloromethane	7180	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	
Dibromomethane	782000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	11 U	8.0 U	8.7 U	7.8 U	
Ethylbenzene	70000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	7000	7.3 U	66	100000	61	180	2900	
Hexachlorobutadiene	17500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Isopropyl benzene	21900	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	710	7.3 U	5.5 U	140	9.8	4.4 U	420 E	
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl acetate	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-49	B-50	B-51	B-52	B-54	B-55	B-56	B-57	B-57	B-58	B-59	B-59	B-60	B-61
Sample Name:		S-071607-DJB-007	S-071607-DJB-011	S-071607-DJB-014	S-071607-DJB-017	S-071607-DJB-019	S-071607-DJB-022	S-071607-DJB-027	S-071707-DJB 031	S-071707-DJB-032	S-071707-DJB-037	S-071707-DJB 041	S-071707-DJB-042	S-071707-DJB-047	S-071707-DJB 049
Sample Date:		7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007
Sample Area:		On-site													
Sample Depth:		2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS						
Parameter:	Type 1 RRS														
	Units														
Methyl cyclohexane	500 ug/kg	4.8 U	4.6 U	18	4.2 U	5 U	2500	7.3 U	5.5 U	76	22	4.4 U	5000 E	6.1 U	4.3 U
Methyl tert butyl ether (MTBE)	500 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Methylene chloride	500 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	6100	4.0 U	6.3	1600	13	11
Naphthalene	100000 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854000 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
tert-Butylbenzene	500 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500 ug/kg	4.8 U	4.6 U	7.6 U	9.3	5 U	5.8 U	7.3 U	3.6	62000	22	12	400 E	6.1 U	4.3 U
Toluene	100000 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	760	7.3 U	32	100000	1500	140	7000	110	100
trans-1,2-Dichloroethene	10000 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.5	4.4 U	3.9 U	6.1 U	4.3 U
trans-1,3-Dichloropropene	2220 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Trichloroethene	500 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	14	7.3 U	5.5 U	3000	4.0 U	3.8	9900 E	29	14
Trichlorofluoromethane (CFC-11)	200000 ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Trifluorotrchloroethane (Freon 113)	17800000 ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	2900	91	8.7 U	7.8 U	12 U	8.6 U
Vinyl chloride	200 ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	52	43	8.7 U	120	12 U	8.6 U
Xylenes (total)	774000 ug/kg	4.8 U	4.6 U	19	4.2 U	5 U	34000	17	74	340000	450	340	26000	6.1 U	19

Metals

Arsenic	4.26 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2 mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls (PCBs)

Aroclor-1016 (PCB-1016)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550 ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

<i>Location Name:</i>															
<i>Sample Name:</i>		<b>B-61</b>	<b>B-62</b>	B-63	B-63	B-64	<b>B-65</b>	<b>B-66</b>	<b>B-66</b>	<b>B-67</b>	<b>B-67</b>	B-68	B-68	<b>B-69</b>	<b>B-69</b>
<i>Sample Date:</i>		S-071707-DJB-050	S-071707-DJB-054	S-071707-DJB 058	S-071707-DJB-059	S-071707-DJB-066	S-071707-DJB-062	S-071807-DJB-070	S-071807-DJB-071	S-071807-DJB-073	S-071807-DJB-074	S-071807-DJB-077	S-071807-DJB-078	S-071807-DJB-080	S-071807-DJB-081
<i>Sample Area:</i>		7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
<i>Sample Depth:</i>		On-site													
<i>Parameter:</i>	Type 1 RRS	2.5-3.5 ft BGS	2.5-3 ft BGS	1-2 ft BGS	3- ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS
<i>Units:</i>	<i>Units:</i>														
<b>Volatil Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	23	5.9 U	180 U	3.2 U	3.2 U	28	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,1,2-Trichloroethane	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,1-Dichloroethane	311000	ug/kg	28	5.9 U	170	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	25	4.2 U 3.8 U
1,1-Dichloroethene	700	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,2,3-Trichloropropane	213	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10800	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,2-Dichlorobenzene	6000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	1700	8700	4.2 U 3.8 U
1,2-Dichloroethane	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,2-Dichloropropane	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
2,2-Dichloropropane	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	67 U	59 U	1800 U	32 U	32 U	39 U	42 U	45 U	39 U	35 U	1900 U	39 U	42 U 38 U
2-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	197000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U 7.5 U
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	55	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U 7.5 U
Acetone	400000	ug/kg	200	120 U	3600 U	65 U	64 U	78 U	84 U	89 U	79 U	70 U	1400	170	84 U 75 U
Benzene	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	200	130	4.2 U 3.8 U
Bromobenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	2740	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Bromoform	10000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Bromomethane (Methyl bromide)	1000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Carbon disulfide	400000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U 7.5 U
Carbon tetrachloride	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Chlorobenzene	10000	ug/kg	210	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Chlorobromomethane	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Chloroethane	1000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	8.2	8.4 U 7.5 U
Chloroform (Trichloromethane)	2870	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Chloromethane (Methyl chloride)	300	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U 7.5 U
cis-1,2-Dichloroethene	7000	ug/kg	980	5.9 U	360	480	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	28	190 U	12	4.2 U 3.8 U
cis-1,3-Dichloropropene	18000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Cyclohexane	20000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	560	3200	4.2 U 53
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7180	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U
Dibromomethane	782000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U 7.5 U
Ethylbenzene	70000	ug/kg	760	5.9 U	1100	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	2200	9400	4.2 U 98
Hexachlorobutadiene	17500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	21900	ug/kg	10	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	1400	4.2 U 3.8 U
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U 3.8 U

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-61	B-62	B-63	B-63	B-64	B-65	B-66	B-66	B-67	B-67	B-68	B-68	B-69	B-69
Sample Name:			S-071707-DJB-050	S-071707-DJB-054	S-071707-DJB 058	S-071707-DJB-059	S-071707-DJB-066	S-071707-DJB-062	S-071807-DJB-070	S-071807-DJB-071	S-071807-DJB-073	S-071807-DJB-074	S-071807-DJB-077	S-071807-DJB-078	S-071807-DJB-080	S-071807-DJB-081
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site													
Sample Depth:			2.5-3.5 ft BGS	2.5-3 ft BGS	1-2 ft BGS	3- ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS
Parameter:	Type 1 RRS	Units														
Methyl cyclohexane	500	ug/kg	8.6	5.9 U	79	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	3300	17000	4.2 U	2900
Methyl tert butyl ether (MTBE)	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Methylene chloride	500	ug/kg	11	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	460	230	40	960	3.2 U	45	4.2 U	4.5 U	3.9 U	11	430	1300	4.2 U	3.8 U
Toluene	100000	ug/kg	21000	100	1300	9.8	22	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	2800	49000	4.2 U	13
trans-1,2-Dichloroethene	10000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	6.0	4.2 U	3.8 U
trans-1,3-Dichloropropene	2220	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Trichloroethene	500	ug/kg	9600	15	180 U	40	8.5	3.9 U	4.2 U	4.5 U	3.9 U	8.4	190 U	7.8	4.2 U	5.6
Trichlorofluoromethane (CFC-11)	200000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	48	8.4 U	7.5 U
Vinyl chloride	200	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U	7.5 U
Xylenes (total)	774000	ug/kg	3700	40	3200	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	13000	59000	4.2 U	650
<b>Metals</b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-70	B-70	B-71	B-71	B-72	B-72	B-73	B-73
Sample Name:		S-071807-DJB-085	S-071807-DJB-086	S-071807-DJB-088	S-071807-DJB-089	S-071807-DJB-093	S-071807-DJB-094	S-071807-DJB-097	S-071807-DJB-098
Sample Date:		7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:		On-site							
Sample Depth:		0-2 ft BGS	3-4 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS
Parameter:		Type 1 RRS							
Units:									
<b>Volatiles Organic Compounds</b>									
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,1,2-Trichloroethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,1-Dichloroethane	311000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,1-Dichloroethene	700	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2,3-Trichloropropane	213	ug/kg	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	10800	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2-Dichlorobenzene	6000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2-Dichloroethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,2-Dichloropropane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	-	-	-	-
1,3-Dichlorobenzene	6000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
2,2-Dichloropropane	500	ug/kg	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	41 U	38 U	46 U	49 U	42 U	40 U	37 U
2-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-
2-Hexanone	197000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	-	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	8.1 U	7.5 U	79	9.7 U	8.4 U	8.0 U	7.4 U
Acetone	400000	ug/kg	81 U	75 U	91 U	97 U	84 U	80 U	74 U
Benzene	500	ug/kg	4.1 U	7.3	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Bromobenzene	500	ug/kg	-	-	-	-	-	-	-
Bromodichloromethane	2740	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Bromoform	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Bromomethane (Methyl bromide)	1000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Carbon disulfide	400000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U
Carbon tetrachloride	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Chlorobenzene	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Chlorobromomethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Chloroethane	1000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U
Chloroform (Trichloromethane)	2870	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Chloromethane (Methyl chloride)	300	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U
cis-1,2-Dichloroethene	7000	ug/kg	4.1 U	30	68	340	4.2 U	4.0 U	5.4
cis-1,3-Dichloropropene	18000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Cyclohexane	20000	ug/kg	4.1 U	260	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	-	-	-	-
Dibromochloromethane	7180	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Dibromomethane	782000	ug/kg	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U
Ethylbenzene	70000	ug/kg	4.1 U	1200	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
Hexachlorobutadiene	17500	ug/kg	-	-	-	-	-	-	-
Isopropyl benzene	21900	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-
Methyl acetate	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U

TABLE 5.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-70	B-70	B-71	B-71	B-72	B-72	B-73	B-73	
Sample Name:		S-071807-DJB-085	S-071807-DJB-086	S-071807-DJB-088	S-071807-DJB-089	S-071807-DJB-093	S-071807-DJB-094	S-071807-DJB-097	S-071807-DJB-098	
Sample Date:		7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	
Sample Area:		On-site								
Sample Depth:		0-2 ft BGS	3-4 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	
Type 1 RRS										
Parameter:		Units								
Methyl cyclohexane	500	ug/kg	4.1 U	2000	4.6 U	4.9 U	4.2 U	9.8	3.7 U	18000
Methyl tert butyl ether (MTBE)	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Methylene chloride	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	4.1 U	3.8 U	4.6 U	7.7	4.2 U	4.0 U	8.4	27000
Toluene	100000	ug/kg	4.1 U	3800	27	22	4.2 U	6.1	5.6	200000
trans-1,2-Dichloroethene	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
trans-1,3-Dichloropropene	2220	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Trichloroethene	500	ug/kg	4.1 U	16	37	280	4.2 U	4.0 U	3.7 U	8.9
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	6.9
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	120
Vinyl chloride	200	ug/kg	8.1 U	7.5	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	3100
Xylenes (total)	774000	ug/kg	4.1 U	5400	4.6 U	16	4.2 U	8.3	3.7 U	50000
<b>Metals</b>										
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>										
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-

Notes:

- J - Estimated, below Quantitation Limits
- U - Non-detect at associated value
- E - Value above quantitation range
- I - Quantitation of compounds influenced by hydrocarbon interference
- X - Sample run beyond hold time results considered questionable
- Detection below RRS in blue highlight
- Detection above RRS in red highlight
- Soil Criteria - Type 1 Risk Reduction Standard

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

<i>Location Name:</i>			B-1	B-1A	B-1B	B-1C	B-2B	B-4	B-4A	B-8	B-8A	B-8B	B-8C	B-9	B-9
<i>Sample Name:</i>			S-B1 (4-8)	S-081804-TBM-002	S-081804-TBM-003	S-081804-TBM-006	S-081904-TBM-018	B-4 (4-8)	S-081904-TBM-013	B-8 (8-12)	S-081804-TBM-007	S-081804-TBM-009	S-081804-TBM-011	S B-9 (8-9.5)	S-B-9 (8-9.5)
<i>Sample Date:</i>			6/9/2004	8/18/2004	8/18/2004	8/18/2004	8/19/2004	6/9/2004	8/19/2004	6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004
<i>Sample Area:</i>			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
<i>Sample Depth:</i>			4-8 ft BGS	7-7.5 ft BGS	9-9.5 ft BGS	7- ft BGS	10- ft BGS	4-8 ft BGS	7- ft BGS	8-12 ft BGS	7- ft BGS	8- ft BGS	5.5- ft BGS	8-9.5 ft BGS	8-9.5 ft BGS
<i>Parameter:</i>	Type 1 RRS	Units													
<i>Volatile Organic Compounds</i>															
1,1,1,2-Tetrachloroethane	NV	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
1,1,1-Trichloroethane	20000	ug/kg	60 U	4.8	3100	3100	4.1 U	1572 U	220 J	73 U	1100	1600 U	6.5 U	58 U	58 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	200 U	147 U	180 U	1600 U	6.5 U	116 U	117 U
1,1,2-Trichloroethane	500	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,1-Dichloroethane	311000	ug/kg	60 U	7.1	160 U	1600 U	4.1 U	1572 U	260 J	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,1-Dichloroethene	700	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,1-Dichloropropene	500	ug/kg	60 U	-	-	-	-	1572 U	-	73 U	-	-	-	58 U	58 U
1,2,3-Trichlorobenzene	10800	ug/kg	300 U	-	-	-	-	7862 U	-	367 U	-	-	-	290 U	292 U
1,2,3-Trichloropropane	213	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
1,2,4-Trichlorobenzene	10800	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
1,2,4-Trimethylbenzene	7000	ug/kg	1400	-	-	-	-	79000	-	210	-	-	-	530	117 U
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,2-Dichlorobenzene	6000	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	6600	2500 J	147 U	180 U	1600 U	6.5 U	116 U	117 U
1,2-Dichloroethane	500	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,2-Dichloropropane	500	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
1,3,5-Trimethylbenzene	500	ug/kg	710	-	-	-	-	36000	-	147 U	-	-	-	260	117 U
1,3-Dichlorobenzene	6000	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	200 U	147 U	180 U	1600 U	6.5 U	116 U	117 U
1,3-Dichloropropane	NV	ug/kg	60 U	-	-	-	-	1572 U	-	73 U	-	-	-	58 U	58 U
1,4-Dichlorobenzene	7500	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	640 J	147 U	180 U	1600 U	6.5 U	116 U	117 U
2,2-Dichloropropane	500	ug/kg	60 U	-	-	-	-	1572 U	-	73 U	-	-	-	58 U	58 U
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	1400	1700000	13 U	-	-
2-Chlorotoluene	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
2-Hexanone	197000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	370 U	3300 U	13 U	-	-
2-Methylnaphthalene	1000	ug/kg	300 U	-	-	-	-	7862 U	-	367 U	-	-	-	290 U	292 U
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	340	-	-	-	-	9400	-	147 U	-	-	-	230	117 U
4-Chlorotoluene	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	370 U	440000	13 U	-	-
Acetone	400000	ug/kg	-	91 U	3300 U	33000 U	82 U	-	4100 U	-	3700 U	100000	130 U	-	-
Benzene	500	ug/kg	60 U	4.6 U	1300	1600 U	4.1 U	1572 U	210 J	73 U	420	1600 U	29	58 U	58 U
Bromobenzene	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
Bromodichloromethane	2740	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	200 U	147 U	180 U	1600 U	6.5 U	116 U	117 U
Bromoform	10000	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	200 U	147 U	180 U	1600 U	6.5 U	116 U	117 U
Bromomethane (Methyl bromide)	1000	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Carbon disulfide	400000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	370 U	3300 U	13 U	-	-
Carbon tetrachloride	500	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Chlorobenzene	10000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Chlorobromomethane	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
Chloroethane	1000	ug/kg	300 U	9.1 U	330 U	3300 U	8.2 U	7862 U	410 U	367 U	370 U	3300 U	13 U	290 U	292 U
Chloroform (Trichloromethane)	2870	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Chloromethane (Methyl chloride)	300	ug/kg	300 U	9.1 U	330 U	3300 U	8.2 U	7862 U	410 U	367 U	370 U	3300 U	13 U	290 U	292 U
cis-1,2-Dichloroethene	7000	ug/kg	60 U	38	4500	15000	4.1 U	1572 U	4300 J	1000	7000	1600 U	21	58 U	99
cis-1,3-Dichloropropene	18000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Cyclohexane	20000	ug/kg	-	25	6200	15000	4.1 U	-	200 U	-	940	1600 U	6.5 U	-	-
Cymene (p-Isopropyltoluene)	500	ug/kg	370	-	-	-	-	12000	-	147 U	-	-	-	180	117 U
Dibromochloromethane	7180	ug/kg	120 U	4.6 U	160 U	1600 U	4.1 U	3145 U	200 U	147 U	180 U	1600 U	6.5 U	116 U	117 U
Dibromomethane	782000	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	300 U	9.1 U	330 U	3300 U	8.2 U	7862 U	410 U	367 U	370 U	3300 U	13 U	290 U	292 U
Ethylbenzene	70000	ug/kg	60 U	4.6 U	3100	15000	4.1 U	16000	130000	73 U	5100	16000	6.5 U	410	58 U
Hexachlorobutadiene	17500	ug/kg	300 U	-	-	-	-	7862 U	-	367 U	-	-	-	290 U	292 U
Isopropyl benzene	21900	ug/kg	120 U	4.6 U	680	2900	4.1 U	3600	6100 J	147 U	2000	1600 U	6.5 U	190	117 U

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-1	B-1A	B-1B	B-1C	B-2B	B-4	B-4A	B-8	B-8A	B-8B	B-8C	B-9	B-9	
Sample Name:		S-B1 (4-8)	S-081804-TBM-002	S-081804-TBM-003	S-081804-TBM-006	S-081904-TBM-018	B-4 (4-8)	S-081904-TBM-013	B-8 (8-12)	S-081804-TBM-007	S-081804-TBM-009	S-081804-TBM-011	S B-9 (8-9.5)	S-B-9 (8-9.5)	
Sample Date:		6/9/2004	8/18/2004	8/18/2004	8/18/2004	8/19/2004	6/9/2004	8/19/2004	6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004	
Sample Area:		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	
Sample Depth:		4-8 ft BGS	7-7.5 ft BGS	9-9.5 ft BGS	7- ft BGS	10- ft BGS	4-8 ft BGS	7- ft BGS	8-12 ft BGS	7- ft BGS	8- ft BGS	5.5- ft BGS	8-9.5 ft BGS	8-9.5 ft BGS	
Parameter:	Type 1 RRS	Units													
m&p-Xylenes	729000	ug/kg	280	9.1 U	9100	57000	8.2 U	68000	500000	180	20000	63000	13 U	180	130
Methyl acetate	500	ug/kg	-	4.6 U	160 U	1600 U	4.1 U	-	200 U	-	180 U	1600 U	6.5 U	-	-
Methyl cyclohexane	500	ug/kg	-	78	25000	47000	4.1 U	-	26000	-	2500	2200	6.5 U	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Methylene chloride	500	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Naphthalene	100000	ug/kg	1300	-	-	-	-	19000	-	367 U	-	-	-	290 U	292 U
N-Butylbenzene	500	ug/kg	650	-	-	-	-	5600	-	147 U	-	-	-	140	117 U
N-Propylbenzene	500	ug/kg	270	-	-	-	-	7200	-	147 U	-	-	-	350	117 U
o-Xylene	854000	ug/kg	130	4.6 U	4000	20000	4.1 U	2500	140000	97	9700	19000	6.5 U	58 U	58 U
Styrene	14000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
tert-Butylbenzene	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
Tetrachloroethene	500	ug/kg	60 U	360	3000	2300	4.1 U	1572 U	200 U	73 U	2000	1600 U	6.5 U	58 U	310
Toluene	100000	ug/kg	180	4.6 U	33000	13000	4.1 U	1572 U	210000	420	24000	890000	6.5 U	58 U	150
trans-1,2-Dichloroethene	10000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
trans-1,3-Dichloropropene	2220	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Trichloroethene	500	ug/kg	60 U	9.1	4900	1600 U	4.1 U	1572 U	200 U	87	5100	1600 U	6.5 U	110	58 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	300 U	4.6 U	36000	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	370 U	3300 U	13 U	-	-
Vinyl chloride	200	ug/kg	120 U	9.1 U	330 U	3300 U	8.2 U	3145 U	410 U	147 U	370 U	3300 U	13 U	116 U	117 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:	B-11	B-11A	B-11B	B-11C	B-12	B-13	B-14	B-15	B-16	B-16	B-19	B-20	B-22
Sample Name:	B-11 (4-8)	S-081904-TBM-022	S-081904-TBM-024	S-081904-TBM-026	S B-12 (4-8)	B-13 (8-12)	B-14 (4-8)	B-15 (4-8)	0310005-TBM-02	0310005-TBM-03	0310005-TBM-07	0310005-TBM-09	0310005-TBM-12
Sample Date:	6/10/2004	8/19/2004	8/19/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005
Sample Area:	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	On-site	On-site
Sample Depth:	4-8 ft BGS	9- ft BGS	10- ft BGS	7- ft BGS	4-8 ft BGS	8-12 ft BGS	4-8 ft BGS	4-8 ft BGS	8- ft BGS	12- ft BGS	6- ft BGS	6.5- ft BGS	7- ft BGS
Parameter:	Type 1 RRS	Units											
Volatile Organic Compounds													
1,1,1,2-Tetrachloroethane	NV	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
1,1,2-Trichloroethane	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,1-Dichloroethane	311000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,1-Dichloroethene	700	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,1-Dichloropropene	500	ug/kg	61 U	-	-	-	131 U	70 U	58 U	65 U	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	303 U	-	-	-	653 U	349 U	290 U	325 U	5 U	5 U	5 U
1,2,3-Trichloropropane	213	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	10800	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
1,2,4-Trimethylbenzene	7000	ug/kg	121 U	-	-	-	261 U	139 U	2400	390	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,2-Dichlorobenzene	6000	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
1,2-Dichloroethane	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,2-Dichloropropane	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
1,3,5-Trimethylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	690	140	5 U	20400	5 U
1,3-Dichlorobenzene	6000	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
1,3-Dichloropropane	NV	ug/kg	61 U	-	-	-	131 U	70 U	58 U	65 U	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
2,2-Dichloropropane	500	ug/kg	61 U	-	-	-	131 U	70 U	58 U	65 U	5 U	5 U	5 U
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	-	7.4 U	7.1 U	6.4 U	-	-	-	-	10 U	10 U	10 U
2-Chlorotoluene	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U
2-Hexanone	197000	ug/kg	-	7.4 U	7.1 U	6.4 U	-	-	-	-	5 U	5 U	5 U
2-Methylnaphthalene	1000	ug/kg	303 U	-	-	-	653 U	349 U	290 U	325 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	121 U	-	-	-	261 U	139 U	220	130 U	5 U	5 U	5 U
4-Chlorotoluene	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200000	ug/kg	-	7.4 U	7.1 U	6.4 U	-	-	-	-	50 U	50 U	50 U
Acetone	400000	ug/kg	-	7.4 U	7.1 U	6.4 U	-	-	-	-	-	-	-
Benzene	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	1045
Bromobenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	1250
Bromodichloromethane	2740	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
Bromoform	10000	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
Bromomethane (Methyl bromide)	1000	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
Carbon disulfide	400000	ug/kg	-	7.4 U	7.1 U	6.4 U	-	-	-	-	-	-	-
Carbon tetrachloride	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
Chlorobenzene	10000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	9800	70 U	58 U	65 U	5 U	5 U	5 U
Chlorobromomethane	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	-	-	-
Chloroethane	1000	ug/kg	303 U	7.4 U	7.1 U	6.4 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
Chloroform (Trichloromethane)	2870	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
Chloromethane (Methyl chloride)	300	ug/kg	303 U	7.4 U	7.1 U	6.4 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	7000	ug/kg	61 U	3.7 U	3.6 U	4.9	131 U	70 U	58 U	65 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	18000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U
Cyclohexane	20000	ug/kg	-	3.7 U	3.6 U	3.2 U	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	500	ug/kg	121 U	-	-	-	261 U	139 U	230	130 U	5 U	5 U	5 U
Dibromochloromethane	7180	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U
Dibromomethane	782000	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	303 U	7.4 U	7.1 U	6.4 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U
Ethylbenzene	70000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	420	370	530	14100	5 U
Hexachlorobutadiene	17500	ug/kg	303 U	-	-	-	653 U	349 U	290 U	325 U	5 U	5 U	5 U
Isopropyl benzene	21900	ug/kg	121 U	3.7 U	3.6 U	3.2 U	261 U	139 U	116 U	130 U	5 U	5 U	2800

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-11	B-11A	B-11B	B-11C	B-12	B-13	B-14	B-15	B-16	B-16	B-19	B-20	B-22	
Sample Name:		B-11 (4-8)	S-081904-TBM-022	S-081904-TBM-024	S-081904-TBM-026	S B-12 (4-8)	B-13 (8-12)	B-14 (4-8)	B-15 (4-8)	0310005-TBM-02	0310005-TBM-03	0310005-TBM-07	0310005-TBM-09	0310005-TBM-12	
Sample Date:		6/10/2004	8/19/2004	8/19/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	
Sample Area:		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	On-site	On-site	
Sample Depth:		4-8 ft BGS	9- ft BGS	10- ft BGS	7- ft BGS	4-8 ft BGS	8-12 ft BGS	4-8 ft BGS	4-8 ft BGS	8- ft BGS	12- ft BGS	6- ft BGS	6.5- ft BGS	7- ft BGS	
Parameter:	Type 1 RRS														
		Units													
m&p-Xylenes	729000	ug/kg	220	7.4 U	7.1 U	6.4 U	261 U	139 U	1900	500	710	18900	10 U	17100	19700
Methyl acetate	500	ug/kg	-	3.7 U	3.6 U	3.2 U	-	-	-	-	-	-	-	-	-
Methyl cyclohexane	500	ug/kg	-	3.7 U	3.6 U	3.2 U	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	500	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	100000	ug/kg	303 U	-	-	-	653 U	349 U	2500	325 U	5 U	4800	5 U	5200	5100
N-Butylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	370	130 U	5 U	5 U	5 U	5 U	5 U
N-Propylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	190	130 U	5 U	4700	5 U	4800	5 U
o-Xylene	854000	ug/kg	94	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	180	360	5200	5 U	7600	10700
Styrene	14000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U
tert-Butylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	1080	120100	5 U	10250	640
Toluene	100000	ug/kg	330	3.7 U	3.6 U	3.2 U	160	70 U	58 U	530	760	3680	5 U	1390	8350
trans-1,2-Dichloroethene	10000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	2220	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	780	65 U	5 U	4140	5 U	787	5 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U	5 U	5 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	7.4 U	21	6.4 U	-	-	-	-	-	-	-	-	-
Vinyl chloride	200	ug/kg	121 U	7.4 U	7.1 U	6.4 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

**TABLE 5.2  
SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>	B-23	B-24	B-25	B-32	B-33	B-34	B-35	B-37	B-38	B-39	B-42	B-43	B-45
<i>Sample Name:</i>	0310005-TBM-13	S-031405-TBM-16	S-031405-TBM-18	S-050505-TBM-005	S-050505-TBM-007	S-050505-TBM-009	S-002	S-006	S-007	S-009	S-071206-DJB-002	S-071206-DJB-004	S-071206-DJB-008
<i>Sample Date:</i>	3/10/2005	3/14/2005	3/14/2005	5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006
<i>Sample Area:</i>	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	On-site	On-site
<i>Sample Depth:</i>	5- ft BGS	7- ft BGS	7- ft BGS	6- ft BGS	5- ft BGS	6- ft BGS	5- ft BGS	11- ft BGS	6- ft BGS	7.5- ft BGS	5- ft BGS	5- ft BGS	4-5 ft BGS
<i>Parameter:</i>	Type 1 RRS												
	<i>Units</i>												
<i>Volatil Organic Compounds</i>													
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	5300	3.8 U	5 U	5 U	5 U	-	-
1,1,2,2-Tetrachloroethane	20000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	-	-
1,1,2-Trichloroethane	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	-	-
1,1-Dichloroethane	311000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	170	3.8 U	5 U	5 U	5 U	-	-
1,1-Dichloroethene	700	ug/kg	5 U	3.5 U	3.5 U	4.9 U	290	3.8 U	5 U	5 U	7	5 U	-
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
1,2,3-Trichloropropane	213	ug/kg	5 U	-	-	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,2,4-Trichlorobenzene	10800	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,2,4-Trimethylbenzene	7000	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,2-Dichlorobenzene	6000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	2900	3.8 U	5 U	5 U	5 U	5 U	-
1,2-Dichloroethane	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,2-Dichloropropane	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,3,5-Trimethylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	27	-
1,3-Dichlorobenzene	6000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	360	3.8 U	5 U	5 U	5 U	5 U	-
2,2-Dichloropropane	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	10 U	7.1 U	7.0 U	49 U	1500 U	38 U	10 U	10 U	10 U	10 U	-
2-Chlorotoluene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
2-Hexanone	197000	ug/kg	5 U	7.1 U	7.0 U	9.8 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
4-Chlorotoluene	500	ug/kg	5 U	3.5 U	3.5 U	-	-	-	5 U	5 U	5 U	5 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200000	ug/kg	50 U	7.1 U	7.0 U	9.8 U	290 U	7.5 U	50 U	50 U	50 U	50 U	-
Acetone	400000	ug/kg	-	71 U	70 U	110	2900 U	75 U	50 U	50 U	50 U	50 U	-
Benzene	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	5900	3.8 U	5 U	5 U	5 U	173	-
Bromobenzene	500	ug/kg	5 U	3.5 U	3.5 U	-	-	-	5 U	5 U	5 U	5 U	-
Bromodichloromethane	2740	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Bromoform	10000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Bromomethane (Methyl bromide)	1000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Carbon disulfide	400000	ug/kg	-	7.1 U	7.0 U	10	290 U	3.8 U	-	-	-	-	-
Carbon tetrachloride	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Chlorobenzene	10000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	160	3.8 U	5 U	5 U	19	5 U	-
Chlorobromomethane	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	1000	ug/kg	5 U	3.5 U	3.5 U	9.8 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-
Chloroform (Trichloromethane)	2870	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Chloromethane (Methyl chloride)	300	ug/kg	5 U	3.5 U	3.5 U	98 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-
cis-1,2-Dichloroethene	7000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	14000	3.8 U	5 U	5 U	5 U	5 U	-
cis-1,3-Dichloropropene	18000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Cyclohexane	20000	ug/kg	-	3.5 U	3.5 U	4.9 U	150 U	3.8 U	-	-	-	-	-
Cymene (p-Isopropyltoluene)	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-
Dibromochloromethane	7180	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-
Dibromomethane	782000	ug/kg	5 U	3.5 U	3.5 U	-	-	-	5 U	5 U	5 U	5 U	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	5 U	3.5 U	3.5 U	98 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-
Ethylbenzene	70000	ug/kg	86	3.5 U	3.5 U	4.9 U	25000	3.8 U	5 U	5 U	31	16	-
Hexachlorobutadiene	17500	ug/kg	5 U	-	-	-	-	-	44	5 U	5 U	5 U	-
Isopropyl benzene	21900	ug/kg	5 U	3.5 U	3.5 U	4.9 U	4400	3.8 U	5 U	5 U	5 U	5 U	-

TABLE 5.2

**SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

<i>Location Name:</i>			B-23	B-24	B-25	B-32	B-33	B-34	B-35	B-37	B-38	B-39	B-42	B-43	B-45	
<i>Sample Name:</i>			0310005-TBM-13	S-031405-TBM-16	S-031405-TBM-18	S-050505-TBM-005	S-050505-TBM-007	S-050505-TBM-009	S-002	S-006	S-007	S-009	S-071206-DJB-002	S-071206-DJB-004	S-071206-DJB-008	
<i>Sample Date:</i>			3/10/2005	3/14/2005	3/14/2005	5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006	
<i>Sample Area:</i>			On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	On-site	On-site	
<i>Sample Depth:</i>			5- ft BGS	7- ft BGS	7- ft BGS	6- ft BGS	5- ft BGS	6- ft BGS	5- ft BGS	11- ft BGS	6- ft BGS	7.5- ft BGS	5- ft BGS	5- ft BGS	4-5 ft BGS	
<i>Parameter:</i>	Type 1 RRS	<i>Units</i>														
m&p-Xylenes	729000	ug/kg	115	7.1 U	7.0 U	9.8 U	89000	7.5 U	10 U	10 U	10	10 U	-	-	-	
Methyl acetate	500	ug/kg	-	3.5 U	3.5 U	4.9 U	150 U	3.8 U	-	-	-	-	-	-	-	
Methyl cyclohexane	500	ug/kg	-	3.5 U	3.5 U	4.9 U	58000	3.8 U	-	-	-	-	-	-	-	
Methyl tert butyl ether (MTBE)	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Methylene chloride	500	ug/kg	10 U	7.1 U	7.0 U	4.9 U	150 U	3.8 U	10 U	10 U	10 U	10 U	-	-	-	
Naphthalene	100000	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
N-Butylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
N-Propylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	96	-	-	-	
o-Xylene	854000	ug/kg	38	3.5 U	3.5 U	4.9 U	32000	3.8 U	5 U	5 U	7	5	-	-	-	
Styrene	14000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
tert-Butylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
Tetrachloroethene	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	32000	3.8 U	5 U	5 U	5 U	93	-	-	-	
Toluene	100000	ug/kg	8	3.5 U	3.5 U	4.9 U	140000	3.8 U	5 U	5 U	139	5 U	-	-	-	
trans-1,2-Dichloroethene	10000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
trans-1,3-Dichloropropene	2220	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trichloroethene	500	ug/kg	5 U	3.5 U	5.3	4.9 U	41000	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trichlorofluoromethane (CFC-11)	200000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	430	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	3.5 U	3.5 U	4.9 U	680	3.8 U	-	-	-	-	-	-	-	
Vinyl chloride	200	ug/kg	5 U	3.5 U	3.5 U	9.8 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-	-	-	
Xylenes (total)	774000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b><i>Metals</i></b>																
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	3.68 U	5.51 U	3.91 U	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	49.1	32.1	12.3	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	1.84 U	2.75 U	1.95 U	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	12.9	7.54	1.95 U	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	22.3	17.9	5.64	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	0.140 U	0.124 U	0.130 U	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	3.68 U	5.51 U	3.91 U	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	1.84 U	2.75 U	1.95 U	
<b><i>Polychlorinated Biphenyls (PCBs)</i></b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
<b><u>Notes:</u></b>																
J - Estimated, below Quantitation Limits																
U - Non-detect at associated value																
E - Value above quantitation range																
I - Quantitation of compounds influenced by hydrocarbon interference																
X - Sample run beyond hold time results considered questionable																
Detection below RRS in blue highlight																
Detection above RRS in red highlight																
Soil Criteria - Type 1 Risk Reduction Standard																
Borehole locations are inside the 2009 and 2010 excavation limit																



TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-46	B-47	B-48	B-48	B-49	B-49	B-50	B-54	B-55	B-55	B-56	B-56	B-57
Sample Name:			S-071206-DJB-010	S-071206-DJB-012	S-071607-DJB-003	S-071607-DJB-004	S-071607-DJB-008	S-071607-DJB-009	S-071607-DJB-012	S-071607-DJB-020	S-071607-DJB-023	S-071607-DJB-025	S-071607-DJB-028	S-071607-DJB-029	S-071707-DJB-033
Sample Date:			7/12/2006	7/12/2006	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007
Sample Area:			On-site												
Sample Depth:			5-5.7 ft BGS	5-5.7 ft BGS	7.5-8.5 ft BGS	10-12 ft BGS	7-9 ft BGS	10-12 ft BGS	7-9 ft BGS	6-7 ft BGS	8- ft BGS	11- ft BGS	8- ft BGS	11-12 ft BGS	7.5-8.5 ft BGS
Parameter:	Type 1 RRS	Units													
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Methyl cyclohexane	500	ug/kg	-	-	4200	34	4 U	4.7 U	4.7 U	4.2 U	7000	6.8 U	5200	1500	26000
Methyl tert butyl ether (MTBE)	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Methylene chloride	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	610000
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	8.2	4.2 U	46	6.8 U	3.5 U	4 U	850000
Toluene	100000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	56000	6.8 U	3.5 U	37000	3200000
trans-1,2-Dichloroethene	10000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	71	6.8 U	3.5 U	17	3.5 U
trans-1,3-Dichloropropene	2220	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Trichloroethene	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	19	4.2 U	15	6.8 U	3.5 U	4 U	120000
Trichlorofluoromethane (CFC-11)	200000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	-	-	10 U	11 U	8.1 U	9.4 U	9.4 U	8.3 U	100	14 U	7.1 U	8 U	20000
Vinyl chloride	200	ug/kg	-	-	10 U	11 U	8.1 U	9.4 U	9.4 U	8.3 U	57	14 U	37	91	1700
Xylenes (total)	774000	ug/kg	-	-	420	20	4 U	4.7 U	4.7 U	4.2 U	160000	61	12000	15000	7700000
<b>Metals</b>															
Arsenic	4.26	mg/kg	4.90 U	3.91 U	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	31.4	42.3	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	2.45 U	1.95 U	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	18.8	14.6	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	15.1	24.6	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	0.130 U	0.232	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	4.90 U	3.91 U	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	2.45 U	1.95 U	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	43 U	340	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	43 U	710	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	43 U	260	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit



SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-57	B-58	B-58	B-59	B-59	B-60	B-60	B-61	B-61	B-62	B-62	B-63	B-64
Sample Name:			S-071707-DJB-034	S-071707-DJB-038	S-071707-DJB-039	S-071707-DJB-043	S-071707-DJB-044	S-071707-DJB 048	S-071707-DJB-048	S-071707-DJB-051	S-071707-DJB-052	S-071707-DJB-055	S-071707-DJB-056	S-071707-DJB-060	S-071707-DJB-067
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007
Sample Area:			On-site												
Sample Depth:			11.5-12 ft BGS	7.5-8.5 ft BGS	11-12 ft BGS	7-8 ft BGS	11-12 ft BGS	7-8 ft BGS	7-8 ft BGS	8- ft BGS	10-11 ft BGS	8- ft BGS	11-12 ft BGS	7-8 ft BGS	8- ft BGS
Type 1 RRS															
<b>Parameter:</b>															
<b>Units</b>															
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	500	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U
Methyl cyclohexane	500	ug/kg	1100 E	5.3	4.6	62000	560 E	4.8 U	5.0 U	6.9 U	8100 E	5.6 U	160	4.7 U	3.7 U
Methyl tert butyl ether (MTBE)	500	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U
Methylene chloride	500	ug/kg	27000	3.7 U	3.9 U	20000	250 E	4.8 U	5.0 U	120	15	5.6 U	4.3 U	4.7 U	3.7 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	120	4.7 U	3.7 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	10000	6.7	5.5	13000	20	4.8 U	5.0 U	40000	960 E	11	20	5100	3.7 U
Toluene	100000	ug/kg	21000	1600	320	380000	13000	8.4	32	2700000	100000	55	11000	3100	16
trans-1,2-Dichloroethene	10000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	59	86	5.6 U	4.3 U	4.7 U	3.7 U
trans-1,3-Dichloropropene	2220	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U
Trichloroethene	500	ug/kg	1700 E	3.7 U	3.9 U	220000	1200 E	2.6	9.3	520000	780 E	9.7	16	6800	9.2
Trichlorofluoromethane (CFC-11)	200000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	480 E	120	130	7.6 U	7.1 U	9.5 U	10 U	1000 E	4200 E	11 U	32	9.4 U	7.5 U
Vinyl chloride	200	ug/kg	87	48	41	970 E	30	9.5 U	10 U	26	270 E	11 U	24	9.4 U	7.5 U
Xylenes (total)	774000	ug/kg	130000	3000	1000	180000	16000	4.8 U	5.0 U	580000	50000	10	14000	2600	3.7 U
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-64	B-65	B-65	B-66	B-67	B-67	B-68	B-69	B-69	B-70	B-71	B-71	B-72
Sample Name:			S-071707-DJB-068	S-071707-DJB-063	S-071707-DJB-064	S-071807-DJB-072	S-071807-DJB-075	S-071807-DJB-076	S-071807-DJB-079	S-071807-DJB-082	S-071807-DJB-083	S-071807-DJB-087	S-071807-DJB-090	S-071807-DJB-091	S-071807-DJB-095
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site												
Sample Depth:			11-12 ft BGS	8- ft BGS	11-12 ft BGS	8- ft BGS	8- ft BGS	12- ft BGS	7-8 ft BGS	8- ft BGS	12- ft BGS	8-9 ft BGS	8- ft BGS	12- ft BGS	8- ft BGS
Type 1 RRS															
Parameter:		Units													
m&p-Xylenes	729000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	54	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
Methyl cyclohexane	500	ug/kg	4.0 U	4.3 U	4.0 U	41	500	5.2 U	10000	170	670	4.3 U	3600 E	4.9 U	230
Methyl tert butyl ether (MTBE)	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
Methylene chloride	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	57	5.2 U	4.4 U	11	5.9 U	68000	4.3 U	4.9 U	4.8 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	854000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	11	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	87	5.2 U	27	85	100	22	34000	96000	310
Toluene	100000	ug/kg	9.3	4.3 U	4.0 U	23	83000	11	12000	3800	5400	1600000	2800000	470000	2800
trans-1,2-Dichloroethene	10000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	87	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	93	4.9 U	12
trans-1,3-Dichloropropene	2220	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
Trichloroethene	500	ug/kg	5.3	4.3 U	4.0 U	14	4.4 U	5.2 U	4.4 U	200	69	4000 E	790000	1000000	1500
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	6.7	270 E
Trifluorotrichloroethane (Freon 113)	17800000	ug/kg	8.0 U	8.6 U	8.0 U	7.9 U	8.7 U	10 U	8.8 U	11 U	12 U	8.5 U	77	24	870 E
Vinyl chloride	200	ug/kg	8.0 U	8.6 U	8.0 U	7.9 U	430	10 U	8.8 U	11 U	12 U	250 E	600 E	110	240 E
Xylenes (total)	774000	ug/kg	4.0 U	4.3 U	4.0 U	8.0	250000	200	30000	2800	700	260000	490000	120000	3100
<b>Metals</b>															
Arsenic	4.26	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
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 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil Criteria - Type 1 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVÉC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-73	S-1	S-2	S-2
Sample Name:		S-071807-DJB-099	S-091106-DJB-003	S-091106-DJB-001	S-091106-DJB-002
Sample Date:		7/18/2007	9/11/2006	9/11/2006	9/11/2006
Sample Area:		On-site	Off-site	Off-site	Off-site
Sample Depth:		4-5 ft BGS	3-5 ft BGS	3-5 ft BGS	5-7 ft BGS
Parameter:	Type 1 RRS	Units			
<b>Volatile Organic Compounds</b>					
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	430	4.5 U	4.8 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	4.4 U	4.5 U	4.8 U
1,1,2-Trichloroethane	500	ug/kg	4.4 U	4.5 U	4.8 U
1,1-Dichloroethane	311000	ug/kg	25	4.5 U	4.8 U
1,1-Dichloroethene	700	ug/kg	14	4.5 U	31
1,1-Dichloropropene	500	ug/kg	-	-	-
1,2,3-Trichlorobenzene	10800	ug/kg	4.4 U	-	-
1,2,3-Trichloropropane	213	ug/kg	-	-	-
1,2,4-Trichlorobenzene	10800	ug/kg	4.4 U	4.5 U	4.8 U
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	4.4 U	4.5 U	4.8 U
1,2-Dibromoethane (Ethylene dibromide)	359	ug/kg	4.4 U	4.5 U	4.8 U
1,2-Dichlorobenzene	6000	ug/kg	110	4.5 U	4.8 U
1,2-Dichloroethane	500	ug/kg	4.4 U	4.5 U	4.8 U
1,2-Dichloropropane	500	ug/kg	4.4 U	4.5 U	4.8 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-
1,3-Dichlorobenzene	6000	ug/kg	4.4 U	4.5 U	4.8 U
1,3-Dichloropropane	NV	ug/kg	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	4.4 U	4.5 U	4.8 U
2,2-Dichloropropane	500	ug/kg	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	360 E	45 U	48 U
2-Chlorotoluene	500	ug/kg	-	-	-
2-Hexanone	197000	ug/kg	8.9 U	9.0 U	9.5 U
2-Methylnaphthalene	1000	ug/kg	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	200000	ug/kg	280	9.0 U	9.5 U
Acetone	400000	ug/kg	89 U	90 U	95 U
Benzene	500	ug/kg	82	4.5 U	4.8 U
Bromobenzene	500	ug/kg	-	-	-
Bromodichloromethane	2740	ug/kg	4.4 U	4.5 U	4.8 U
Bromoform	10000	ug/kg	4.4 U	4.5 U	4.8 U
Bromomethane (Methyl bromide)	1000	ug/kg	4.4 U	4.5 U	4.8 U
Carbon disulfide	400000	ug/kg	8.9 U	9.0 U	9.5 U
Carbon tetrachloride	500	ug/kg	4.4 U	4.5 U	4.8 U
Chlorobenzene	10000	ug/kg	11	4.5 U	4.8 U
Chlorobromomethane	500	ug/kg	4.4 U	-	-
Chloroethane	1000	ug/kg	8.9 U	9.0 U	9.5 U
Chloroform (Trichloromethane)	2870	ug/kg	4.4 U	4.5 U	4.8 U
Chloromethane (Methyl chloride)	300	ug/kg	8.9 U	9.0 U	9.5 U
cis-1,2-Dichloroethene	7000	ug/kg	530	4.5 U	19
cis-1,3-Dichloropropene	18000	ug/kg	4.4 U	4.5 U	4.8 U
Cyclohexane	20000	ug/kg	41	4.5 U	4.8 U
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-
Dibromochloromethane	7180	ug/kg	4.4 U	4.5 U	4.8 U
Dibromomethane	782000	ug/kg	-	-	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	8.9 U	9.0 U	9.5 U
Ethylbenzene	70000	ug/kg	2700	4.5 U	4.8 U
Hexachlorobutadiene	17500	ug/kg	-	-	-
Isopropyl benzene	21900	ug/kg	97	4.5 U	4.8 U

TABLE 5.2

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 1 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-73	S-1	S-2	S-2
Sample Name:			S-071807-DJB-099	S-091106-DJB-003	S-091106-DJB-001	S-091106-DJB-002
Sample Date:			7/18/2007	9/11/2006	9/11/2006	9/11/2006
Sample Area:			On-site	Off-site	Off-site	Off-site
Sample Depth:			4-5 ft BGS	3-5 ft BGS	3-5 ft BGS	5-7 ft BGS
Parameter:	Type 1 RRS	Units				
m&p-Xylenes	729000	ug/kg	-	9.0 U	9.5 U	7.8 U
Methyl acetate	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Methyl cyclohexane	500	ug/kg	7300	4.5 U	4.8 U	3.9 U
Methyl tert butyl ether (MTBE)	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Methylene chloride	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Naphthalene	100000	ug/kg	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-
o-Xylene	854000	ug/kg	-	4.5 U	4.8 U	3.9 U
Styrene	14000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
tert-Butylbenzene	500	ug/kg	-	-	-	-
Tetrachloroethene	500	ug/kg	14000	4.5 U	4.8 U	3.9 U
Toluene	100000	ug/kg	15000	4.5 U	18	28
trans-1,2-Dichloroethene	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
trans-1,3-Dichloropropene	2220	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Trichloroethene	500	ug/kg	82	4.5 U	4.8 U	3.9 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Trifluorotrchloroethane (Freon 113)	17800000	ug/kg	20	9.0 U	9.5 U	7.8 U
Vinyl chloride	200	ug/kg	15	9.0 U	23	110
Xylenes (total)	774000	ug/kg	14000	-	-	-
<b>Metals</b>						
Arsenic	4.26	mg/kg	-	5.82 U	4.71 U	10.1
Barium	1000	mg/kg	-	40.9	18.1	112
Cadmium	2	mg/kg	-	2.91 U	2.36 U	2.29
Chromium	100	mg/kg	-	3.14	7.52	12.7
Lead	75	mg/kg	-	17.0	19.6	161
Mercury	0.5	mg/kg	-	-	-	-
Selenium	2	mg/kg	-	5.82 U	4.71 U	4.44 U
Silver	2	mg/kg	-	2.91 U	2.36 U	2.22 U
<b>Polychlorinated Biphenyls (PCBs)</b>						
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-

**Notes:**

J - Estimated, below Quantitation Limits

U - Non-detect at associated value

E - Value above quatitation range

I - Quantitation of compounds influenced by hydrocarbon interference

X - Sample run beyond hold time results considered questionable

Detection below RRS in blue highlight

Detection above RRS in red highlight

Soil Criteria - Type 1 Risk Reduction Standard

Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-1	B-1A	B-1B	B-1C	B-2B	B-4	B-4A	B-8	B-8A	B-8B	B-8C	B-9	B-9
Sample Name:			S-B1 (4-8)	S-081804-TBM-002	S-081804-TBM-003	S-081804-TBM-006	S-081904-TBM-018	B-4 (4-8)	S-081904-TBM-013	B-8 (8-12)	S-081804-TBM-007	S-081804-TBM-009	S-081804-TBM-011	S B-9 (8-9.5)	S-B-9 (8-9.5)
Sample Date:			6/9/2004	8/18/2004	8/18/2004	8/18/2004	8/19/2004	6/9/2004	8/19/2004	6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:			4-8 ft BGS	7-7.5 ft BGS	9-9.5 ft BGS	7- ft BGS	10- ft BGS	4-8 ft BGS	7- ft BGS	8-12 ft BGS	7- ft BGS	8- ft BGS	5.5- ft BGS	8-9.5 ft BGS	8-9.5 ft BGS
Parameter:	Type 3 RRS	Units													
Methyl cyclohexane	500	ug/kg	-	78	25000	47000	4.1 U	-	26000	-	2500	2200	6.5 U	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Methylene chloride	500	ug/kg	300 U	4.6 U	160 U	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Naphthalene	100000	ug/kg	1300	-	-	-	-	19000	-	367 U	-	-	-	290 U	292 U
N-Butylbenzene	500	ug/kg	650	-	-	-	-	5600	-	147 U	-	-	-	140	117 U
N-Propylbenzene	500	ug/kg	270	-	-	-	-	7200	-	147 U	-	-	-	350	117 U
o-Xylene	1000000	ug/kg	130	4.6 U	4000	20000	4.1 U	2500	140000	97	9700	19000	6.5 U	58 U	58 U
Styrene	14000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
tert-Butylbenzene	500	ug/kg	120 U	-	-	-	-	3145 U	-	147 U	-	-	-	116 U	117 U
Tetrachloroethene	500	ug/kg	60 U	360	3000	2300	4.1 U	1572 U	200 U	73 U	2000	1600 U	6.5 U	58 U	310
Toluene	100000	ug/kg	180	4.6 U	33000	13000	4.1 U	1572 U	210000	420	24000	890000	6.5 U	58 U	150
trans-1,2-Dichloroethene	10000	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
trans-1,3-Dichloropropene	2220	ug/kg	60 U	4.6 U	160 U	1600 U	4.1 U	1572 U	200 U	73 U	180 U	1600 U	6.5 U	58 U	58 U
Trichloroethene	500	ug/kg	60 U	9.1	4900	1600 U	4.1 U	1572 U	200 U	87	5100	1600 U	6.5 U	110	58 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	300 U	4.6 U	36000	1600 U	4.1 U	7862 U	200 U	367 U	180 U	1600 U	6.5 U	290 U	292 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	-	9.1 U	330 U	3300 U	8.2 U	-	410 U	-	370 U	3300 U	13 U	-	-
Vinyl chloride	200	ug/kg	120 U	9.1 U	330 U	3300 U	8.2 U	3145 U	410 U	147 U	370 U	3300 U	13 U	116 U	117 U
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>															
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard for soils  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS
ARIVEC CHEMICALS SITE
DOUGLASVILLE, GEORGIA

Table with 14 columns for sample locations (B-11, B-11A, B-11B, B-11C, B-12, B-13, B-14, B-15, B-16, B-16, B-19, B-20, B-22) and multiple rows for various chemical compounds like 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, etc., listing detection limits and concentrations in ug/kg.

CRA 035029-RPT14-VRP-TBL 8.1

TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-11	B-11A	B-11B	B-11C	B-12	B-13	B-14	B-15	B-16	B-16	B-19	B-20	B-22	
Sample Name:			B-11 (4-8)	S-081904-TBM-022	S-081904-TBM-024	S-081904-TBM-026	S B-12 (4-8)	B-13 (8-12)	B-14 (4-8)	B-15 (4-8)	0310005-TBM-02	0310005-TBM-03	0310005-TBM-07	0310005-TBM-09	0310005-TBM-12	
Sample Date:			6/10/2004	8/19/2004	8/19/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	On-site	On-site	
Sample Depth:			4-8 ft BGS	9- ft BGS	10- ft BGS	7- ft BGS	4-8 ft BGS	8-12 ft BGS	4-8 ft BGS	4-8 ft BGS	8- ft BGS	12- ft BGS	6- ft BGS	6.5- ft BGS	7- ft BGS	
Type 3 RRS																
<b>Parameter:</b>		<b>Units</b>														
Methyl cyclohexane	500	ug/kg	-	3.7 U	3.6 U	3.2 U	-	-	-	-	-	-	-	-	-	
Methyl tert butyl ether (MTBE)	500	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U	5 U	5 U	
Methylene chloride	500	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	10 U	10 U	10 U	10 U	10 U	
Naphthalene	100000	ug/kg	303 U	-	-	-	653 U	349 U	2500	325 U	5 U	4800	5 U	5200	5100	
N-Butylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	370	130 U	5 U	5 U	5 U	5 U	5 U	
N-Propylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	190	130 U	5 U	4700	5 U	4800	5 U	
o-Xylene	1000000	ug/kg	94	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	180	360	5200	5 U	7600	10700	
Styrene	14000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U	
tert-Butylbenzene	500	ug/kg	121 U	-	-	-	261 U	139 U	116 U	130 U	5 U	5 U	5 U	5 U	5 U	
Tetrachloroethene	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	1080	120100	5 U	10250	640	
Toluene	100000	ug/kg	330	3.7 U	3.6 U	3.2 U	160	70 U	58 U	530	760	3680	5 U	1390	8350	
trans-1,2-Dichloroethene	10000	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U	
trans-1,3-Dichloropropene	2220	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	58 U	65 U	5 U	5 U	5 U	5 U	5 U	
Trichloroethene	500	ug/kg	61 U	3.7 U	3.6 U	3.2 U	131 U	70 U	780	65 U	5 U	4140	5 U	787	5 U	
Trichlorofluoromethane (CFC-11)	200000	ug/kg	303 U	3.7 U	3.6 U	3.2 U	653 U	349 U	290 U	325 U	5 U	5 U	5 U	5 U	5 U	
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	-	7.4 U	21	6.4 U	-	-	-	-	-	-	-	-	-	
Vinyl chloride	200	ug/kg	121 U	7.4 U	7.1 U	6.4 U	261 U	139 U	116 U	130 U	5 U	5 U	5 U	5 U	5 U	
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard for soils  
**Borehole locations are inside the 2009 and 2010 excavation limit**



TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-23	B-24	B-25	B-32	B-33	B-34	B-35	B-37	B-38	B-39	B-42	B-43	B-45	
Sample Name:			0310005-TBM-13	S-031405-TBM-16	S-031405-TBM-18	S-050505-TBM-005	S-050505-TBM-007	S-050505-TBM-009								
Sample Date:			3/10/2005	3/14/2005	3/14/2005	5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006	
Sample Area:			On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	On-site	On-site	
Sample Depth:			5- ft BGS	7- ft BGS	7- ft BGS	6- ft BGS	5- ft BGS	6- ft BGS	5- ft BGS	11- ft BGS	6- ft BGS	7.5- ft BGS	5- ft BGS	5- ft BGS	4-5 ft BGS	
Parameter:		Type 3 RRS														
		Units														
Methyl cyclohexane	500	ug/kg	-	3.5 U	3.5 U	4.9 U	58000	3.8 U	-	-	-	-	-	-	-	
Methyl tert butyl ether (MTBE)	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Methylene chloride	500	ug/kg	10 U	7.1 U	7.0 U	4.9 U	150 U	3.8 U	10 U	10 U	10 U	10 U	-	-	-	
Naphthalene	100000	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
N-Butylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
N-Propylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	96	-	-	-	
o-Xylene	1000000	ug/kg	38	3.5 U	3.5 U	4.9 U	32000	3.8 U	5 U	5 U	7	5	-	-	-	
Styrene	14000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
tert-Butylbenzene	500	ug/kg	5 U	-	-	-	-	-	5 U	5 U	5 U	5 U	-	-	-	
Tetrachloroethene	500	ug/kg	5 U	3.5 U	3.5 U	4.9 U	32000	3.8 U	5 U	5 U	5 U	93	-	-	-	
Toluene	100000	ug/kg	8	3.5 U	3.5 U	4.9 U	140000	3.8 U	5 U	5 U	139	5 U	-	-	-	
trans-1,2-Dichloroethene	10000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
trans-1,3-Dichloropropene	2220	ug/kg	5 U	3.5 U	3.5 U	4.9 U	150 U	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trichloroethene	500	ug/kg	5 U	3.5 U	5.3	4.9 U	41000	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trichlorofluoromethane (CFC-11)	200000	ug/kg	5 U	3.5 U	3.5 U	4.9 U	430	3.8 U	5 U	5 U	5 U	5 U	-	-	-	
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	-	3.5 U	3.5 U	4.9 U	680	3.8 U	-	-	-	-	-	-	-	
Vinyl chloride	200	ug/kg	5 U	3.5 U	3.5 U	9.8 U	290 U	7.5 U	5 U	5 U	5 U	5 U	-	-	-	
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	3.68 U	5.51 U	3.91 U	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	49.1	32.1	12.3	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	1.84 U	2.75 U	1.95 U	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	12.9	7.54	1.95 U	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	22.3	17.9	5.64	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	0.140 U	0.124 U	0.130 U	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	3.68 U	5.51 U	3.91 U	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	1.84 U	2.75 U	1.95 U	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	47 U	41 U	44 U	

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard for soils  
 Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-46	B-47	B-48	B-48	B-49	B-49	B-50	B-54	B-55	B-55	B-56	B-56	B-57
Sample Name:			S-071206-DJB-010	S-071206-DJB-012	S-071607-DJB-003	S-071607-DJB-004	S-071607-DJB-008	S-071607-DJB-009	S-071607-DJB-012	S-071607-DJB-020	S-071607-DJB-023	S-071607-DJB-025	S-071607-DJB-028	S-071607-DJB-029	S-071707-DJB-033
Sample Date:			7/12/2006	7/12/2006	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007
Sample Area:			On-site												
Sample Depth:			5-5.7 ft BGS	5-5.7 ft BGS	7.5-8.5 ft BGS	10-12 ft BGS	7-9 ft BGS	10-12 ft BGS	7-9 ft BGS	6-7 ft BGS	8- ft BGS	11- ft BGS	8- ft BGS	11-12 ft BGS	7.5-8.5 ft BGS
Parameter:	Type 3 RRS	Units													
Methyl cyclohexane	500	ug/kg	-	-	4200	34	4 U	4.7 U	4.7 U	4.2 U	7000	6.8 U	5200	1500	26000
Methyl tert butyl ether (MTBE)	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Methylene chloride	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	610000
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	8.2	4.2 U	46	6.8 U	3.5 U	4 U	850000
Toluene	100000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	56000	27	15000	37000	3200000
trans-1,2-Dichloroethene	10000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	71	6.8 U	3.5 U	17	3.5 U
trans-1,3-Dichloropropene	2220	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Trichloroethene	500	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	19	4.2 U	15	6.8 U	3.5 U	4 U	120000
Trichlorofluoromethane (CFC-11)	200000	ug/kg	-	-	5.1 U	5.3 U	4 U	4.7 U	4.7 U	4.2 U	4.1 U	6.8 U	3.5 U	4 U	3.5 U
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	-	-	10 U	11 U	8.1 U	9.4 U	9.4 U	8.3 U	100	14 U	7.1 U	8 U	20000
Vinyl chloride	200	ug/kg	-	-	20 U	11 U	8.1 U	9.4 U	9.4 U	8.3 U	57	14 U	37	91	1700
Xylenes (total)	1000000	ug/kg	-	-	420	20	4 U	4.7 U	4.7 U	4.2 U	160000	61	12000	15000	7700000
<b>Metals</b>															
Arsenic	20	mg/kg	4.90 U	3.91 U	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	31.4	42.3	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	2.45 U	1.95 U	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	18.8	14.6	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	15.1	24.6	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	0.130 U	0.232	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	4.90 U	3.91 U	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	2.45 U	1.95 U	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	43 U	41 U	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	43 U	340	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	43 U	710	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	43 U	260	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard for soils  
 Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-57	B-58	B-58	B-59	B-59	B-60	B-60	B-61	B-61	B-62	B-62	B-63	B-64	
Sample Name:			S-071707-DJB-034	S-071707-DJB-038	S-071707-DJB-039	S-071707-DJB-043	S-071707-DJB-044	S-071707-DJB 048	S-071707-DJB-048	S-071707-DJB-051	S-071707-DJB-052	S-071707-DJB-055	S-071707-DJB-056	S-071707-DJB-060	S-071707-DJB-067	
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	
Sample Area:			On-site													
Sample Depth:			11.5-12 ft BGS	7.5-8.5 ft BGS	11-12 ft BGS	7-8 ft BGS	11-12 ft BGS	7-8 ft BGS	7-8 ft BGS	8- ft BGS	10-11 ft BGS	8- ft BGS	11-12 ft BGS	7-8 ft BGS	8- ft BGS	
Parameter:	Type 3 RRS	Units														
Methyl cyclohexane	500	ug/kg	1100 E	5.3	4.6	62000	560 E	4.8 U	5.0 U	6.9 U	8100 E	5.6 U	160	4.7 U	3.7 U	
Methyl tert butyl ether (MTBE)	500	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U	
Methylene chloride	500	ug/kg	27000	3.7 U	3.9 U	20000	250 E	4.8 U	5.0 U	120	15	5.6 U	4.3 U	4.7 U	3.7 U	
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Styrene	14000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	120	4.7 U	3.7 U	
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	500	ug/kg	10000	6.7	5.5	13000	20	4.8 U	5.0 U	40000	960 E	11	20	5100	3.7 U	
Toluene	100000	ug/kg	21000	1600	320	3800000	13000	8.4	32	2700000	100000	55	11000	3100	16	
trans-1,2-Dichloroethene	10000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	59	86	5.6 U	4.3 U	4.7 U	3.7 U	
trans-1,3-Dichloropropene	2220	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U	
Trichloroethene	500	ug/kg	1700 E	3.7 U	3.9 U	220000	1200 E	2.6	9.3	520000	780 E	9.7	16	6800	9.2	
Trichlorofluoromethane (CFC-11)	200000	ug/kg	3.1 U	3.7 U	3.9 U	3.8 U	3.6 U	4.8 U	5.0 U	6.9 U	4.7 U	5.6 U	4.3 U	4.7 U	3.7 U	
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	480 E	120	130	7.6 U	7.1 U	9.5 U	10 U	1000 E	4200 E	11 U	32	9.4 U	7.5 U	
Vinyl chloride	200	ug/kg	87	48	41	970 E	30	9.5 U	10 U	26	270 E	11 U	24	9.4 U	7.5 U	
Xylenes (total)	1000000	ug/kg	130000	3000	1000	1800000	16000	4.8 U	5.0 U	580000	50000	10	14000	2600	3.7 U	
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
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TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-64	B-65	B-65	B-66	B-67	B-67	B-68	B-69	B-69	B-70	B-71	B-71	B-72
Sample Name:			S-071707-DJB-068	S-071707-DJB-063	S-071707-DJB-064	S-071807-DJB-072	S-071807-DJB-075	S-071807-DJB-076	S-071807-DJB-079	S-071807-DJB-082	S-071807-DJB-083	S-071807-DJB-087	S-071807-DJB-090	S-071807-DJB-091	S-071807-DJB-095
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site												
Sample Depth:			11-12 ft BGS	8- ft BGS	11-12 ft BGS	8- ft BGS	8- ft BGS	12- ft BGS	7-8 ft BGS	8- ft BGS	12- ft BGS	8-9 ft BGS	8- ft BGS	12- ft BGS	8- ft BGS
Parameter:	Type 3 RRS	Units													
Methyl cyclohexane	500	ug/kg	4.0 U	4.3 U	4.0 U	41	500	5.2 U	10000	170	670	4.3 U	3600 E	4.9 U	230
Methyl tert butyl ether (MTBE)	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
Methylene chloride	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	57	5.2 U	4.4 U	11	5.9 U	68000	4.3 U	4.9 U	4.8 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	11	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	87	5.2 U	27	85	100	22	34000	96000	310
Toluene	100000	ug/kg	9.3	4.3 U	4.0 U	23	83000	11	12000	3800	5400	1600000	2800000	470000	2800
trans-1,2-Dichloroethene	10000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	87	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	93	4.9 U	12
trans-1,3-Dichloropropene	2220	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	4.9 U	4.8 U
Trichloroethene	500	ug/kg	5.3	4.3 U	4.0 U	14	4.4 U	5.2 U	4.4 U	200	69	4000 E	790000	1000000	1500
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.0 U	4.3 U	4.0 U	4.0 U	4.4 U	5.2 U	4.4 U	5.6 U	5.9 U	4.3 U	4.3 U	6.7	270 E
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	8.0 U	8.6 U	8.0 U	7.9 U	8.7 U	10 U	8.8 U	11 U	12 U	8.5 U	77	24	870 E
Vinyl chloride	200	ug/kg	8.0 U	8.6 U	8.0 U	7.9 U	430	10 U	8.8 U	11 U	12 U	250 E	600 E	110	240 E
Xylenes (total)	1000000	ug/kg	4.0 U	4.3 U	4.0 U	8.0	250000	200	30000	2800	700	260000	490000	120000	3100
<b>Metals</b>															
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>															
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard for soils  
**Borehole locations are inside the 2009 and 2010 excavation limit**

TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

<i>Location Name:</i>			B-73	S-1	S-2	S-2
<i>Sample Name:</i>			S-071807-DJB-099	S-091106-DJB-003	S-091106- DJB-001	S-091106-DJB-002
<i>Sample Date:</i>			7/18/2007	9/11/2006	9/11/2006	9/11/2006
<i>Sample Area:</i>			On-site	Off-site	Off-site	Off-site
<i>Sample Depth:</i>			4-5 ft BGS	3-5 ft BGS	3-5 ft BGS	5-7 ft BGS
<i>Parameter:</i>	Type 3 RRS	Units				
<i>Volatile Organic Compounds</i>						
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-
1,1,1-Trichloroethane	20000	ug/kg	430	4.5 U	4.8 U	3.9 U
1,1,2,2-Tetrachloroethane	20000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,1,2-Trichloroethane	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,1-Dichloroethane	400000	ug/kg	25	4.5 U	4.8 U	3.9 U
1,1-Dichloroethene	700	ug/kg	14	4.5 U	31	100
1,1-Dichloropropene	500	ug/kg	-	-	-	-
1,2,3-Trichlorobenzene	10830	ug/kg	4.4 U	-	-	-
1,2,3-Trichloropropane	4000	ug/kg	-	-	-	-
1,2,4-Trichlorobenzene	10830	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,2-Dibromoethane (Ethylene dibromide)	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,2-Dichlorobenzene	60000	ug/kg	110	4.5 U	4.8 U	3.9 U
1,2-Dichloroethane	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,2-Dichloropropane	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	-
1,3-Dichlorobenzene	60000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
1,3-Dichloropropane	NV	ug/kg	-	-	-	-
1,4-Dichlorobenzene	7500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
2,2-Dichloropropane	500	ug/kg	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	360 E	45 U	48 U	39 U
2-Chlorotoluene	500	ug/kg	-	-	-	-
2-Hexanone	200000	ug/kg	8.9 U	9.0 U	9.5 U	7.8 U
2-Methylnaphthalene	1000	ug/kg	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	-
4-Chlorotoluene	500	ug/kg	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	280	9.0 U	9.5 U	7.8 U
Acetone	400000	ug/kg	89 U	90 U	95 U	78 U
Benzene	500	ug/kg	82	4.5 U	4.8 U	3.9 U
Bromobenzene	500	ug/kg	-	-	-	-
Bromodichloromethane	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Bromoform	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Bromomethane (Methyl bromide)	1000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Carbon disulfide	400000	ug/kg	8.9 U	9.0 U	9.5 U	7.8 U
Carbon tetrachloride	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Chlorobenzene	10000	ug/kg	11	4.5 U	4.8 U	3.9 U
Chlorobromomethane	500	ug/kg	4.4 U	-	-	-
Chloroethane	1000	ug/kg	8.9 U	9.0 U	9.5 U	14
Chloroform (Trichloromethane)	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Chloromethane (Methyl chloride)	300	ug/kg	8.9 U	9.0 U	9.5 U	7.8 U
cis-1,2-Dichloroethene	7000	ug/kg	530	4.5 U	19	46
cis-1,3-Dichloropropene	1000000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Cyclohexane	20000	ug/kg	41	4.5 U	4.8 U	3.9 U
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	-
Dibromochloromethane	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Dibromomethane	1000000	ug/kg	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	8.9 U	9.0 U	9.5 U	7.8 U
Ethylbenzene	70000	ug/kg	2700	4.5 U	4.8 U	3.9 U
Hexachlorobutadiene	17500	ug/kg	-	-	-	-
Isopropyl benzene	21880	ug/kg	97	4.5 U	4.8 U	3.9 U
m&p-Xylenes	NV	ug/kg	-	9.0 U	9.5 U	7.8 U
Methyl acetate	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U

TABLE 8.1

SUMMARY OF DEEP SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-73	S-1	S-2	S-2
Sample Name:			S-071807-DJB-099	S-091106-DJB-003	S-091106- DJB-001	S-091106-DJB-002
Sample Date:			7/18/2007	9/11/2006	9/11/2006	9/11/2006
Sample Area:			On-site	Off-site	Off-site	Off-site
Sample Depth:			4-5 ft BGS	3-5 ft BGS	3-5 ft BGS	5-7 ft BGS
Type 3 RRS						
Parameter:		Units				
Methyl cyclohexane	500	ug/kg	7300	4.5 U	4.8 U	3.9 U
Methyl tert butyl ether (MTBE)	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Methylene chloride	500	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Naphthalene	100000	ug/kg	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-
o-Xylene	1000000	ug/kg	-	4.5 U	4.8 U	3.9 U
Styrene	14000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
tert-Butylbenzene	500	ug/kg	-	-	-	-
Tetrachloroethene	500	ug/kg	14000	4.5 U	4.8 U	3.9 U
Toluene	100000	ug/kg	15000	4.5 U	18	28
trans-1,2-Dichloroethene	10000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
trans-1,3-Dichloropropene	2220	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Trichloroethene	500	ug/kg	82	4.5 U	4.8 U	3.9 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.4 U	4.5 U	4.8 U	3.9 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	20	9.0 U	9.5 U	7.8 U
Vinyl chloride	200	ug/kg	15	9.0 U	23	110
Xylenes (total)	1000000	ug/kg	14000	-	-	-
<b>Metals</b>						
Arsenic	20	mg/kg	-	5.82 U	4.71 U	10.1
Barium	1000	mg/kg	-	40.9	18.1	112
Cadmium	2	mg/kg	-	2.91 U	2.36 U	2.29
Chromium	100	mg/kg	-	3.14	7.52	12.7
Lead	75	mg/kg	-	17.0	19.6	161
Mercury	0.5	mg/kg	-	-	-	-
Selenium	2	mg/kg	-	5.82 U	4.71 U	4.44 U
Silver	2	mg/kg	-	2.91 U	2.36 U	2.22 U
<b>Polychlorinated Biphenyls (PCBs)</b>						
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-

**Notes:**

J - Estimated, below Quantitation Limits

U - Non-detect at associated value

E - Value above quantitation range

I - Quantitation of compounds influenced by hydrocarbon interference

X - Sample run beyond hold time results considered questionable

Detection below RRS in blue highlight

Detection above RRS in red highlight

Soil criteria - Type 3 Risk Reduction Standard for soils

Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-1	B-1A	B-1B	B-1C	B-2	B-2A	B-2B	B-2C	B-3	B-4A	B-4B	B-5	B-6	B-7
Sample Name:			S-B-1 (0-4)	S-081804-TBM-001	S-081804-TBM-004	S-081804-TBM-005	S-B 2 (0-4)	S-081904-TBM-016	S-081904-TBM-017	S-081904-TBM-019	S-B 3 (0-4)	S-081904-TBM-012	S-081904-TBM-014	B-5 (0-3)	B-6 (0-4)	B-7 (0-4)
Sample Date:			6/9/2004	8/18/2004	8/18/2004	8/18/2004	6/9/2004	8/19/2004	8/19/2004	8/19/2004	6/9/2004	8/19/2004	8/19/2004	6/9/2004	6/9/2004	6/30/2004
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:			0-4 ft BGS	0-2 ft BGS	4- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	0-3 ft BGS	0-4 ft BGS	0-4 ft BGS
Parameter:	Type 3 RRS	Units														
Methyl cyclohexane	500	ug/kg	-	4.6 U	830	21	-	4.2 U	3.8 U	4.0 U	-	230 U	33	-	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
Methylene chloride	500	ug/kg	325 U	4.6 U	190 U	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
Naphthalene	100000	ug/kg	2500 I	-	-	-	690 I	-	-	-	260 U	-	-	2100	450	8 U
N-Butylbenzene	500	ug/kg	7600 I	-	-	-	340 I	-	-	-	104 U	-	-	410	120 U	3 U
N-Propylbenzene	500	ug/kg	7600 I	-	-	-	139 U	-	-	-	104 U	-	-	67	120 U	3 U
o-Xylene	1000000	ug/kg	26000	4.6 U	260	31	170 I	4.2 U	3.8 U	4.0 U	52 U	1400	13	63 U	60 U	2 U
Styrene	14000	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
tert-Butylbenzene	500	ug/kg	1100 I	-	-	-	139 U	-	-	-	104 U	-	-	126 U	120 U	3 U
Tetrachloroethene	500	ug/kg	8000	4.6 U	390	240	70 U	4.2 U	10	4.0 U	130	230 U	4.2 U	63 U	61	3 X
Toluene	100000	ug/kg	190000	4.6 U	190 U	38	100 I	4.2 U	3.8 U	4.0 U	74	1600	21	63 U	60 U	6 X
trans-1,2-Dichloroethene	10000	ug/kg	65 U	4.6 U	190 U	21	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
trans-1,3-Dichloropropene	2220	ug/kg	65 U	4.6 U	190 U	3.6 U	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Trichloroethene	500	ug/kg	32000	4.6 U	370	140	70 U	4.2 U	3.8 U	4.0 U	52 U	230 U	4.2 U	63 U	60 U	2 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	325 U	4.6 U	440	3.6 U	348 U	4.2 U	3.8 U	4.0 U	260 U	230 U	4.2 U	315 U	300 U	8 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	-	9.3 U	380 U	7.1 U	-	8.4 U	7.7 U	8.0 U	-	460 U	8.5 U	-	-	-
Vinyl chloride	200	ug/kg	130 U	9.3 U	380 U	24	139 U	8.4 U	7.7 U	8.0 U	104 U	460 U	8.5 U	126 U	120 U	3 U
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard  
 Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS
ARIVEC CHEMICALS SITE
DOUGLASVILLE, GEORGIA

Table with 15 columns for locations (B-8 to B-16), rows for various chemical compounds (e.g., Tetrachloroethane, Trichloroethane, Benzene), and columns for parameters like Location Name, Sample Name, Date, Area, Depth, and Units.

TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-8	B-8A	B-8C	B-9	B-10	B-11	B-11A	B-11B	B-11C	B-12	B-13	B-14	B-15	B-16
Sample Name:			B-8 (0-4)	S-081804-TBM-008	S-081804-TBM-010	S B-9 (0-4)	SB-10 (0-4)	S B-11 (0-4)	S-081904-TBM-021	S-081904-TBM-023	S-081904-TBM-025	S B-12 (0-4)	S B-13 (0-4)	B-14 (0-4)	B-15 (0-4)	0310005-TBM-01
Sample Date:			6/9/2004	8/18/2004	8/18/2004	6/10/2004	6/10/2004	6/10/2004	8/19/2004	8/19/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005
Sample Area:			On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Sample Depth:			0-4 ft BGS	3- ft BGS	1.5- ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	3- ft BGS	3- ft BGS	3- ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	0-4 ft BGS	3- ft BGS
Parameter:	Type 3 RRS	Units														
Methyl cyclohexane	500	ug/kg	-	10	3.7 U	-	-	-	4.0 UJ	4.1 U	3.3 U	-	-	-	-	-
Methyl tert butyl ether (MTBE)	500	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	5 U
Methylene chloride	500	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	10 U
Naphthalene	100000	ug/kg	303 U	-	-	293 U	290 U	1700 I	-	-	-	318 U	332 U	353 U	308 U	5 U
N-Butylbenzene	500	ug/kg	121 U	-	-	117 U	140	1400 I	-	-	-	127 U	133 U	141 U	123 U	5 U
N-Propylbenzene	500	ug/kg	121 U	-	-	440	350	560 I	-	-	-	127 U	133 U	141 U	123 U	5 U
o-Xylene	1000000	ug/kg	110	4.5 U	3.7 U	59 U	58 U	4900 I	4.0 UJ	4.1 U	24	64 U	66 U	71 U	62 U	5 U
Styrene	14000	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	63 U	4.0 UJ	4.1 U	3.3 U	64 U	66 U	71 U	62 U	5 U
tert-Butylbenzene	500	ug/kg	121 U	-	-	360	116 U	360 I	-	-	-	127 U	133 U	141 U	123 U	5 U
Tetrachloroethene	500	ug/kg	62	4.5 U	130	63	58 U	740	650	4.1 U	8.2	64 U	66 U	71 U	62 U	5 U
Toluene	100000	ug/kg	350	4.5 U	6.3	59 U	58 U	44000 J	4.0 UJ	4.1 U	5900	64 U	66 U	71 U	62 U	5 U
trans-1,2-Dichloroethene	10000	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	110	4.0 UJ	4.1 U	7.0	64 U	66 U	71 U	62 U	5 U
trans-1,3-Dichloropropene	2220	ug/kg	61 U	4.5 U	3.7 U	59 U	58 U	63 U	4.0 UJ	4.1 U	3.3 U	64 U	66 U	71 U	62 U	5 U
Trichloroethene	500	ug/kg	110	4.5 U	3.7 U	59 U	110	190	53 J	4.1 U	19	64 U	66 U	71 U	62 U	5 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	303 U	4.5 U	3.7 U	293 U	290 U	314 U	4.0 UJ	4.1 U	3.3 U	318 U	332 U	353 U	308 U	5 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	-	9.1 U	7.5 U	-	-	-	13 J	8.2 U	21	-	-	-	-	-
Vinyl chloride	200	ug/kg	121 U	9.1 U	7.5 U	117 U	116 U	126 U	8.0 UJ	8.2 U	130	127 U	133 U	141 U	123 U	5 U
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

- J - Estimated, below Quantitation Limits
- U - Non-detect at associated value
- E - Value above quatitation range
- I - Quantitation of compounds influenced by hydrocarbon interference
- X - Sample run beyond hold time results considered questionable
- Detection below RRS in blue highlight
- Detection above RRS in red highlight
- Soil criteria - Type 3 Risk Reduction Standard

Borehole locations are inside the 2009 and 2010 excavation limit



TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-17	B-18	B-19	B-20	B-21	B-22	B-24	B-25	B-26	B-27	B-28	B-29	B-30	B-31
Sample Name:			0310005-TBM-04	0310005-TBM-05	0310005-TBM-06	0310005-TBM-08	0310005-TBM-10	0310005-TBM-11	S-031405-TBM-15	S-031405-TBM-17	S-032805-TBM-100	S-032805-TBM-101	S-032805-TBM-102	S-050505-TBM-001	S-050505-TBM-002	S-050505-TBM-003
Sample Date:			3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/10/2005	3/14/2005	3/14/2005	3/28/2005	3/28/2005	3/28/2005	5/5/2005	5/5/2005	5/5/2005
Sample Area:			Off-site	Off-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site
Sample Depth:			3- ft BGS	3- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS	3.5- ft BGS						
Parameter:		Type 3 RRS														
		Units														
Methyl cyclohexane	500	ug/kg	-	-	-	-	-	-	3.3 U	3.3 U	7200	6100	240	3.5 U	3.2 U	3.3 U
Methyl tert butyl ether (MTBE)	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Methylene chloride	500	ug/kg	10 U	6.6 U	6.6 U	360 U	340 U	360 U	3.5 U	3.2 U	3.3 U					
Naphthalene	100000	ug/kg	5 U	5 U	5 U	5 U	445	5 U	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	5 U	5 U	5 U	5 U	590	5 U	3.3 U	3.3 U	23000	7000	5400	3.5 U	3.2 U	3.3 U
Styrene	14000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
tert-Butylbenzene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	5	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	6400	2900	180000	3.5 U	3.2 U	3.3 U
Toluene	100000	ug/kg	5 U	5	5 U	5 U	900	5 U	3.3 U	3.3 U	65000	32000	3000	3.5 U	3.2 U	3.3 U
trans-1,2-Dichloroethene	10000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
trans-1,3-Dichloropropene	2220	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Trichloroethene	500	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	260	170 U	6000	3.5 U	3.2 U	3.3 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	-	-	-	-	-	-	7.8	3.3 U	180 U	170 U	150 U	3.5 U	3.2 U	3.3 U
Vinyl chloride	200	ug/kg	5 U	5 U	5 U	5 U	5 U	5 U	3.3 U	3.3 U	370	170 U	150 U	7 U	6.4 U	6.7 U
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard  
**Borehole locations are inside the 2009 and 2010 excavation limit**



TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-32	B-33	B-34	B-35	B-36	B-37	B-39	B-42	B-43	B-44	B-45	B-46	B-47	B-48
Sample Name:			S-050505-TBM-004	S-050505-TBM-006	S-050505-TBM-008	S-001	S-003	S-005	S-008	S-071206-DJB-001	S-071206-DJB-003	S-071206-DJB-006	S-071206-DJB-007	S-071206-DJB-009	S-071206-DJB-011	S-071607-DJB-002
Sample Date:			5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/12/2006	7/16/2007
Sample Area:			On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site						
Sample Depth:			3.5- ft BGS	3- ft BGS	3- ft BGS	1.5- ft BGS	1- ft BGS	1.5- ft BGS	1- ft BGS	2- ft BGS	2-3 ft BGS	2-3 ft BGS	2-2.8 ft BGS	2-2.7 ft BGS	2-3 ft BGS	3-4 ft BGS
Parameter:	Type 3 RRS	Units														
Methyl cyclohexane	500	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	-	4.2 U	-	-	-	3.7 U
Methyl tert butyl ether (MTBE)	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Methylene chloride	500	ug/kg	3.7 U	3.3 U	3.3 U	10 U	10 U	10 U	10 U	-	-	4.2 U	-	-	-	3.7 U
Naphthalene	100000	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	-
Styrene	14000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
tert-Butylbenzene	500	ug/kg	-	-	-	5 U	5 U	5 U	5 U	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Toluene	100000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	37	-	-	-	3.7 U
trans-1,2-Dichloroethene	10000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
trans-1,3-Dichloropropene	2220	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Trichloroethene	500	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.5	-	-	-	3.7 U
Trichlorofluoromethane (CFC-11)	200000	ug/kg	3.7 U	3.3 U	3.3 U	5 U	5 U	5 U	5 U	-	-	4.2 U	-	-	-	3.7 U
Trifluorotrchloroethane (Freon 113)	10000000	ug/kg	3.7 U	3.3 U	3.3 U	-	-	-	-	-	-	8.4 U	-	-	-	7.5 U
Vinyl chloride	200	ug/kg	7.4 U	6.5 U	6.6 U	5 U	5 U	5 U	5 U	-	-	8.4 U	-	-	-	7.5 U
Xylenes (total)	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7 U
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	5.32 U	5.00 U	4.83 U	4.67 U	2.87 U	3.60 U	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	54.1	38.2	25.2	38.7	23.6	52.7	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	2.66 U	2.50 U	2.42 U	2.33 U	1.43 U	1.80 U	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	20.2	10.7	4.81	20.9	5.69	92.8	-
Lead	75	mg/kg	-	-	-	-	-	-	-	11.6	12.9	7.61	10.8	11.3	257	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	0.144 U	0.116 U	0.120 U	0.139 U	0.106 U	0.230	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	5.32 U	5.00 U	4.83 U	4.67 U	2.87 U	3.60 U	-
Silver	2	mg/kg	-	-	-	-	-	-	-	2.66 U	2.50 U	2.42 U	2.33 U	1.43 U	1.80 U	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	140	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	48 U	39 U	40 U	46 U	35 U	35 U	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quatitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard  
**Borehole locations are inside the 2009 and 2010 excavation limit**



TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-49	B-50	B-51	B-52	B-54	B-55	B-56	B-57	B-57	B-58	B-59	B-59	B-60	B-61
Sample Name:			S-071607-DJB-007	S-071607-DJB-011	S-071607-DJB-014	S-071607-DJB-017	S-071607-DJB-019	S-071607-DJB-022	S-071607-DJB-027	S-071707-DJB 031	S-071707-DJB-032	S-071707-DJB-037	S-071707-DJB 041	S-071707-DJB-042	S-071707-DJB-047	S-071707-DJB 049
Sample Date:			7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/16/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007
Sample Area:			On-site													
Sample Depth:			2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS						
Parameter:	Type 3 RRS	Units														
Methyl cyclohexane	500	ug/kg	4.8 U	4.6 U	18	4.2 U	5 U	2500	7.3 U	5.5 U	76	22	4.4 U	5000 E	6.1 U	4.3 U
Methyl tert butyl ether (MTBE)	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Methylene chloride	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	6100	4.0 U	6.3	1600	13	11
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	4.8 U	4.6 U	7.6 U	9.3	5 U	5.8 U	7.3 U	3.6	62000	22	12	400 E	6.1 U	4.3 U
Toluene	100000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	760	7.3 U	32	100000	1500	140	7000	110	100
trans-1,2-Dichloroethene	10000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.5	4.4 U	3.9 U	6.1 U	4.3 U
trans-1,3-Dichloropropene	2220	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Trichloroethene	500	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	14	7.3 U	5.5 U	3000	4.0 U	3.8	9900 E	29	14
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.8 U	4.6 U	7.6 U	4.2 U	5 U	5.8 U	7.3 U	5.5 U	5.3 U	4.0 U	4.4 U	3.9 U	6.1 U	4.3 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	2900	91	8.7 U	7.8 U	12 U	8.6 U
Vinyl chloride	200	ug/kg	9.6 U	9.3 U	15 U	8.4 U	10 U	12 U	15 U	11 U	52	43	8.7 U	120	12 U	8.6 U
Xylenes (total)	1000000	ug/kg	4.8 U	4.6 U	19	4.2 U	5 U	34000	17	74	340000	450	340	26000	6.1 U	19
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
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TABLE 10.1

**SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA**

Location Name:			B-61	B-62	B-63	B-63	B-64	B-65	B-66	B-66	B-67	B-67	B-68	B-68	B-69	B-69
Sample Name:			S-071707-DJB-050	S-071707-DJB-054	S-071707-DJB 058	S-071707-DJB-059	S-071707-DJB-066	S-071707-DJB-062	S-071807-DJB-070	S-071807-DJB-071	S-071807-DJB-073	S-071807-DJB-074	S-071807-DJB-077	S-071807-DJB-078	S-071807-DJB-080	S-071807-DJB-081
Sample Date:			7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/17/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site													
Sample Depth:			2.5-3.5 ft BGS	2.5-3 ft BGS	1-2 ft BGS	3- ft BGS	2.5-3.5 ft BGS	2.5-3.5 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS
Parameter:		Type 3 RRS														
		Units														
Methyl cyclohexane	500	ug/kg	8.6	5.9 U	79	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	3300	17000	4.2 U	2900
Methyl tert butyl ether (MTBE)	500	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Methylene chloride	500	ug/kg	11	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	460	230	40	960	3.2 U	45	4.2 U	4.5 U	3.9 U	11	430	1300	4.2 U	3.8 U
Toluene	100000	ug/kg	21000	100	1300	9.8	22	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	2800	49000	4.2 U	13
trans-1,2-Dichloroethene	10000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	6.0	4.2 U	3.8 U
trans-1,3-Dichloropropene	2220	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Trichloroethene	500	ug/kg	9600	15	180 U	40	8.5	3.9 U	4.2 U	4.5 U	3.9 U	8.4	190 U	7.8	4.2 U	5.6
Trichlorofluoromethane (CFC-11)	200000	ug/kg	6.7 U	5.9 U	180 U	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	190 U	3.9 U	4.2 U	3.8 U
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	48	8.4 U	7.5 U
Vinyl chloride	200	ug/kg	13 U	12 U	360 U	6.5 U	6.4 U	7.8 U	8.4 U	8.9 U	7.9 U	7.0 U	380 U	7.8 U	8.4 U	7.5 U
Xylenes (total)	1000000	ug/kg	3700	40	3200	3.2 U	3.2 U	3.9 U	4.2 U	4.5 U	3.9 U	3.5 U	13000	59000	4.2 U	650
<b>Metals</b>																
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>																
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes:**

J - Estimated, below Quantitation Limits

U - Non-detect at associated value

E - Value above quantitation range

I - Quantitation of compounds influenced by hydrocarbon interference

X - Sample run beyond hold time results considered questionable

Detection below RRS in blue highlight

Detection above RRS in red highlight

Soil criteria - Type 3 Risk Reduction Standard

Borehole locations are inside the 2009 and 2010 excavation limit

TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:		B-70	B-70	B-71	B-71	B-72	B-72	B-73	B-73		
Sample Name:		S-071807-DJB-085	S-071807-DJB-086	S-071807-DJB-088	S-071807-DJB-089	S-071807-DJB-093	S-071807-DJB-094	S-071807-DJB-097	S-071807-DJB-098		
Sample Date:		7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007		
Sample Area:		On-site									
Sample Depth:		0-2 ft BGS	3-4 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS		
Parameter:		Type 3 RRS									
Units											
<b>Volatile Organic Compounds</b>											
1,1,1,2-Tetrachloroethane	NV	ug/kg	-	-	-	-	-	-	-		
1,1,1-Trichloroethane	20000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	6300	
1,1,2,2-Tetrachloroethane	20000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,1,2-Trichloroethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,1-Dichloroethane	400000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	2100	
1,1-Dichloroethene	700	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	7.6	
1,1-Dichloropropene	500	ug/kg	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene	10830	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,2,3-Trichloropropane	4000	ug/kg	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	10830	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,2,4-Trimethylbenzene	7000	ug/kg	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane (DBCP)	20	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,2-Dibromoethane (Ethylene dibromide)	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,2-Dichlorobenzene	60000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	7.4	
1,2-Dichloroethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,2-Dichloropropane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,3,5-Trimethylbenzene	500	ug/kg	-	-	-	-	-	-	-	-	
1,3-Dichlorobenzene	60000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
1,3-Dichloropropane	NV	ug/kg	-	-	-	-	-	-	-	-	
1,4-Dichlorobenzene	7500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
2,2-Dichloropropane	500	ug/kg	-	-	-	-	-	-	-	-	
2-Butanone (Methyl ethyl ketone) (MEK)	200000	ug/kg	41 U	38 U	46 U	49 U	42 U	40 U	37 U	75	
2-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	
2-Hexanone	200000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	9.8 U	
2-Methylnaphthalene	1000	ug/kg	-	-	-	-	-	-	-	-	
2-Phenylbutane (sec-Butylbenzene)	500	ug/kg	-	-	-	-	-	-	-	-	
4-Chlorotoluene	500	ug/kg	-	-	-	-	-	-	-	-	
4-Methyl-2-pentanone (Methyl isobutyl ketone)	200000	ug/kg	8.1 U	7.5 U	79	9.7 U	8.4 U	8.0 U	7.4 U	98	
Acetone	400000	ug/kg	81 U	75 U	91 U	97 U	84 U	80 U	74 U	98 U	
Benzene	500	ug/kg	4.1 U	7.3	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	5000	
Bromobenzene	500	ug/kg	-	-	-	-	-	-	-	-	
Bromodichloromethane	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Bromoform	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Bromomethane (Methyl bromide)	1000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Carbon disulfide	400000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	9.8 U	
Carbon tetrachloride	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Chlorobenzene	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	9.3	
Chlorobromomethane	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Chloroethane	1000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	9.8 U	
Chloroform (Trichloromethane)	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Chloromethane (Methyl chloride)	300	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	9.8 U	
cis-1,2-Dichloroethene	7000	ug/kg	4.1 U	30	68	340	4.2 U	4.0 U	3.7 U	5.4	12000
cis-1,3-Dichloropropene	1000000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Cyclohexane	20000	ug/kg	4.1 U	260	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	8500	
Cymene (p-Isopropyltoluene)	500	ug/kg	-	-	-	-	-	-	-	-	
Dibromochloromethane	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	
Dibromomethane	1000000	ug/kg	-	-	-	-	-	-	-	-	
Dichlorodifluoromethane (CFC-12)	100000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	9.8 U	
Ethylbenzene	70000	ug/kg	4.1 U	1200	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	130	
Hexachlorobutadiene	17500	ug/kg	-	-	-	-	-	-	-	-	
Isopropyl benzene	21880	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	9.2	
m&p-Xylenes	NV	ug/kg	-	-	-	-	-	-	-	-	
Methyl acetate	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U	

TABLE 10.1

SUMMARY OF SHALLOW SOIL ANALYTICAL RESULTS - TYPE 3 RRS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Location Name:			B-70	B-70	B-71	B-71	B-72	B-72	B-73	B-73
Sample Name:			S-071807-DJB-085	S-071807-DJB-086	S-071807-DJB-088	S-071807-DJB-089	S-071807-DJB-093	S-071807-DJB-094	S-071807-DJB-097	S-071807-DJB-098
Sample Date:			7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007	7/18/2007
Sample Area:			On-site							
Sample Depth:			0-2 ft BGS	3-4 ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS	0-2 ft BGS	3- ft BGS
Type 3 RRS										
<b>Parameter:</b>		<b>Units</b>								
Methyl cyclohexane	500	ug/kg	4.1 U	2000	4.6 U	4.9 U	4.2 U	9.8	3.7 U	18000
Methyl tert butyl ether (MTBE)	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Methylene chloride	500	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Naphthalene	100000	ug/kg	-	-	-	-	-	-	-	-
N-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
N-Propylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
o-Xylene	1000000	ug/kg	-	-	-	-	-	-	-	-
Styrene	14000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
tert-Butylbenzene	500	ug/kg	-	-	-	-	-	-	-	-
Tetrachloroethene	500	ug/kg	4.1 U	3.8 U	4.6 U	7.7	4.2 U	4.0 U	8.4	27000
Toluene	100000	ug/kg	4.1 U	3800	27	22	4.2 U	6.1	5.6	200000
trans-1,2-Dichloroethene	10000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
trans-1,3-Dichloropropene	2220	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	4.9 U
Trichloroethene	500	ug/kg	4.1 U	16	37	280	4.2 U	4.0 U	3.7 U	8.9
Trichlorofluoromethane (CFC-11)	200000	ug/kg	4.1 U	3.8 U	4.6 U	4.9 U	4.2 U	4.0 U	3.7 U	6.9
Trifluorotrchloroethane (Freon 113)	100000000	ug/kg	8.1 U	7.5 U	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	120
Vinyl chloride	200	ug/kg	8.1 U	7.5	9.1 U	9.7 U	8.4 U	8.0 U	7.4 U	3100
Xylenes (total)	1000000	ug/kg	4.1 U	5400	4.6 U	16	4.2 U	8.3	3.7 U	50000
<b>Metals</b>										
Arsenic	20	mg/kg	-	-	-	-	-	-	-	-
Barium	1000	mg/kg	-	-	-	-	-	-	-	-
Cadmium	2	mg/kg	-	-	-	-	-	-	-	-
Chromium	100	mg/kg	-	-	-	-	-	-	-	-
Lead	75	mg/kg	-	-	-	-	-	-	-	-
Mercury	0.5	mg/kg	-	-	-	-	-	-	-	-
Selenium	2	mg/kg	-	-	-	-	-	-	-	-
Silver	2	mg/kg	-	-	-	-	-	-	-	-
<b>Polychlorinated Biphenyls (PCBs)</b>										
Aroclor-1016 (PCB-1016)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	1550	ug/kg	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	1550	ug/kg	-	-	-	-	-	-	-	-

**Notes:**  
 J - Estimated, below Quantitation Limits  
 U - Non-detect at associated value  
 E - Value above quantitation range  
 I - Quantitation of compounds influenced by hydrocarbon interference  
 X - Sample run beyond hold time results considered questionable  
 Detection below RRS in blue highlight  
 Detection above RRS in red highlight  
 Soil criteria - Type 3 Risk Reduction Standard

Borehole locations are inside the 2009 and 2010 excavation limit

MILESTONE SCHEDULE  
 ARIVEC CHEMICALS SITE  
 DOUGLASVILLE, GEORGIA

MILESTONE SCHEDULE	STATUS
<u>ACTIVITIES DESCRIPTIONS</u>	
Supplemental On-Site Horizontal Delineation (soil and groundwater)	Due 12 months after enrollment in VRP - Date to be determined
Off-Site Horizontal Delineation (soil and groundwater)	Due 24 month after enrollment in VRP
CSM Update including vertical delineation, final remediation plan, preliminary cost estimate, etc.	Due 30 months after enrollment in VRP
Execute Environmental Covenant	To be included with CSM update and Final Remediation Plan (30 months after enrollment in VRP)
Submittal of CSR and Certifications	Due 60 months after enrollment in VRP

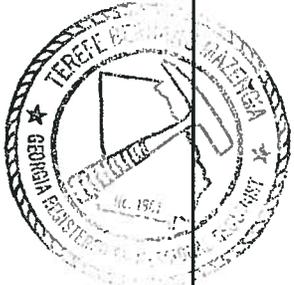
APPENDIX A

VOLUNTARY REMEDIATION PLAN  
APPLICATION FORM AND CHECKLIST

# Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	Arivec Chemicals Site PRP Group				
CONTACT PERSON/TITLE	C/o C. Tisdale, King & Spalding				
ADDRESS	1180 Peachtree St. NE, Atlanta, Georgia				
PHONE	404-572-4820	FAX	404-572-5135	E-MAIL	ctisdale@kslaw.com
GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Terefe B Mazengia		GA PE/PG NUMBER	PG 1981	
COMPANY	Conestoga-Rovers & Associates, Inc. (CRA)				
ADDRESS	3075 Breckinridge Blvd, Suite 470, Duluth, Georgia				
PHONE	(770) 441 0027	FAX	(770) 441 2050	E-MAIL	tmazengia@CRAworld.com
APPLICANT'S CERTIFICATION					
<p>In order to be considered a qualifying property for the VRP:</p> <p>(1) The property must have a release of regulated substances into the environment;</p> <p>(2) The property shall not be:</p> <p style="margin-left: 20px;">(A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.</p> <p style="margin-left: 20px;">(B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or</p> <p style="margin-left: 20px;">(C) A facility required to have a permit under Code Section 12-8-66.</p> <p>(3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.</p> <p>(4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.</p> <p>In order to be considered a participant under the VRP:</p> <p>(1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.</p> <p>(2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.</p> <p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p> <p>I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.</p>					
APPLICANT'S SIGNATURE					
APPLICANT'S NAME/TITLE (PRINT)	Charles H Tisdale Chair Arivec Chemicals Site PRP			DATE	7/25/11
	<i>Group</i>				

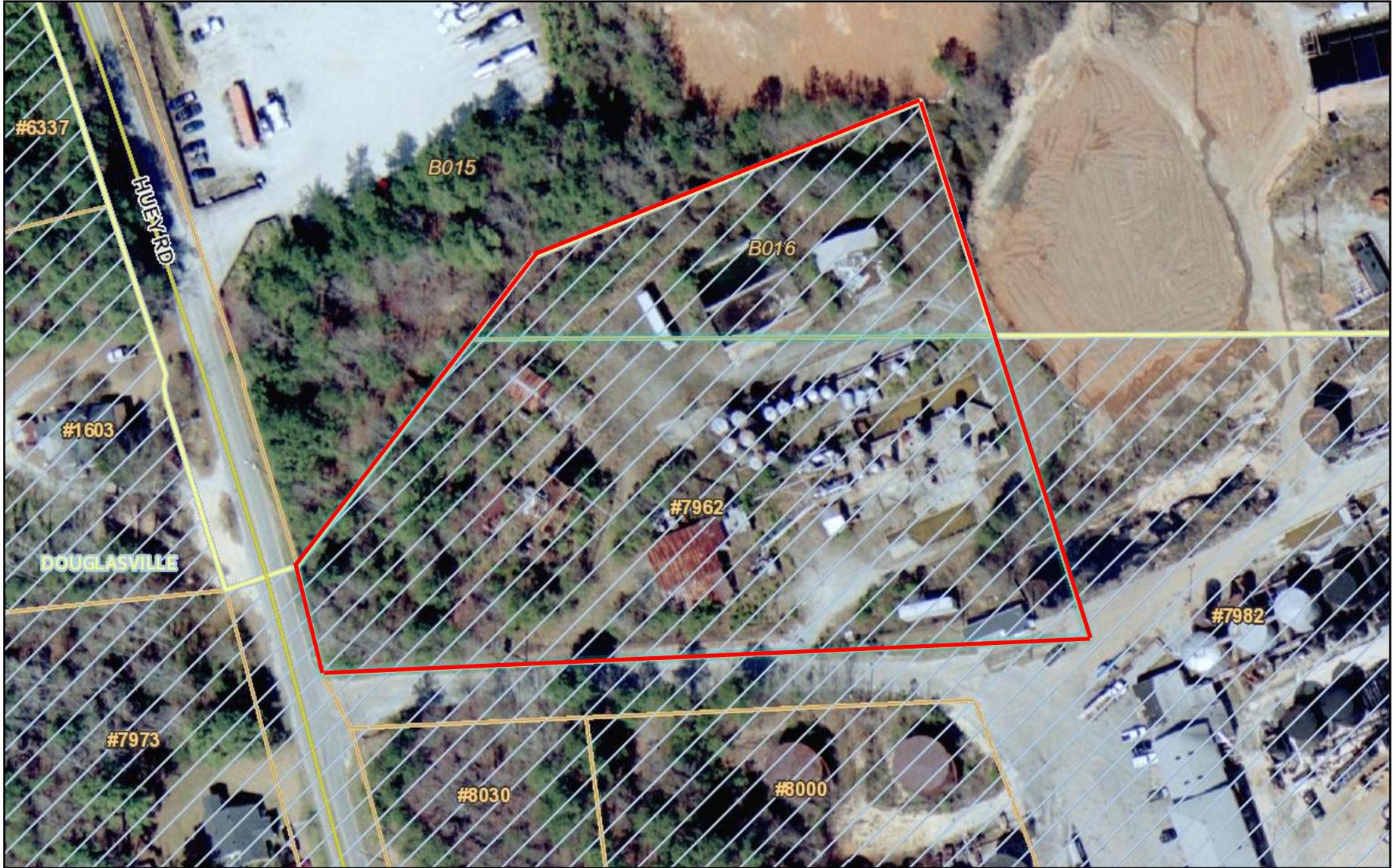
QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10123	Date HSI Site listed	June 29, 1994
HSI Facility Name	Arivec Chemicals Site	NAICS CODE	
PROPERTY INFORMATION			
TAX PARCEL ID	0825182B001 and 0825182B016	PROPERTY SIZE (ACRES)	3.26
PROPERTY ADDRESS	7962 Huey Road		
CITY	Douglasville	COUNTY	Douglas
STATE	Georgia	ZIPCODE	30549
LATITUDE (decimal format)	33.762	LONGITUDE (decimal format)	84.733
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	James Paravechio	PHONE #	Contact Chet Tisdale @ 404-572-4820
MAILING ADDRESS	554 Washington Blvd.		
CITY	Dallas	STATE/ZIPCODE	Georgia /30132
ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	<b>\$5,000 APPLICATION FEE</b> IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	7/22/11 Check # 6501	
2.	<b>WARRANTY DEED(S)</b> FOR QUALIFYING PROPERTY.	Appendix B	
3.	<b>TAX PLAT</b> OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	Appendix B	
4.	<b>ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES</b> OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	Enclosed	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a <b>PROJECTED MILESTONE SCHEDULE</b> for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan	Sections 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11 of VRP Application	

	<p>during the preceding period. A Gantt chart format is preferred for the milestone schedule.</p> <p>The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:</p>		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;		
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;		
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and		
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.		
6.	<p><b>SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION:</b></p> <p>"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.</p> <p>Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.</p> <p>The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p> <p><i>Terefe Matenzia</i> PG.#1981  Printed Name and GA PE/PG Number</p> <p><i>7/25/11</i>  Date</p> <p><i>Terefe</i>  Signature and Stamp</p>		

APPENDIX B

TAX MAP AND WARRANTY DEED INFORMATION

# Arivec Property Tax Map

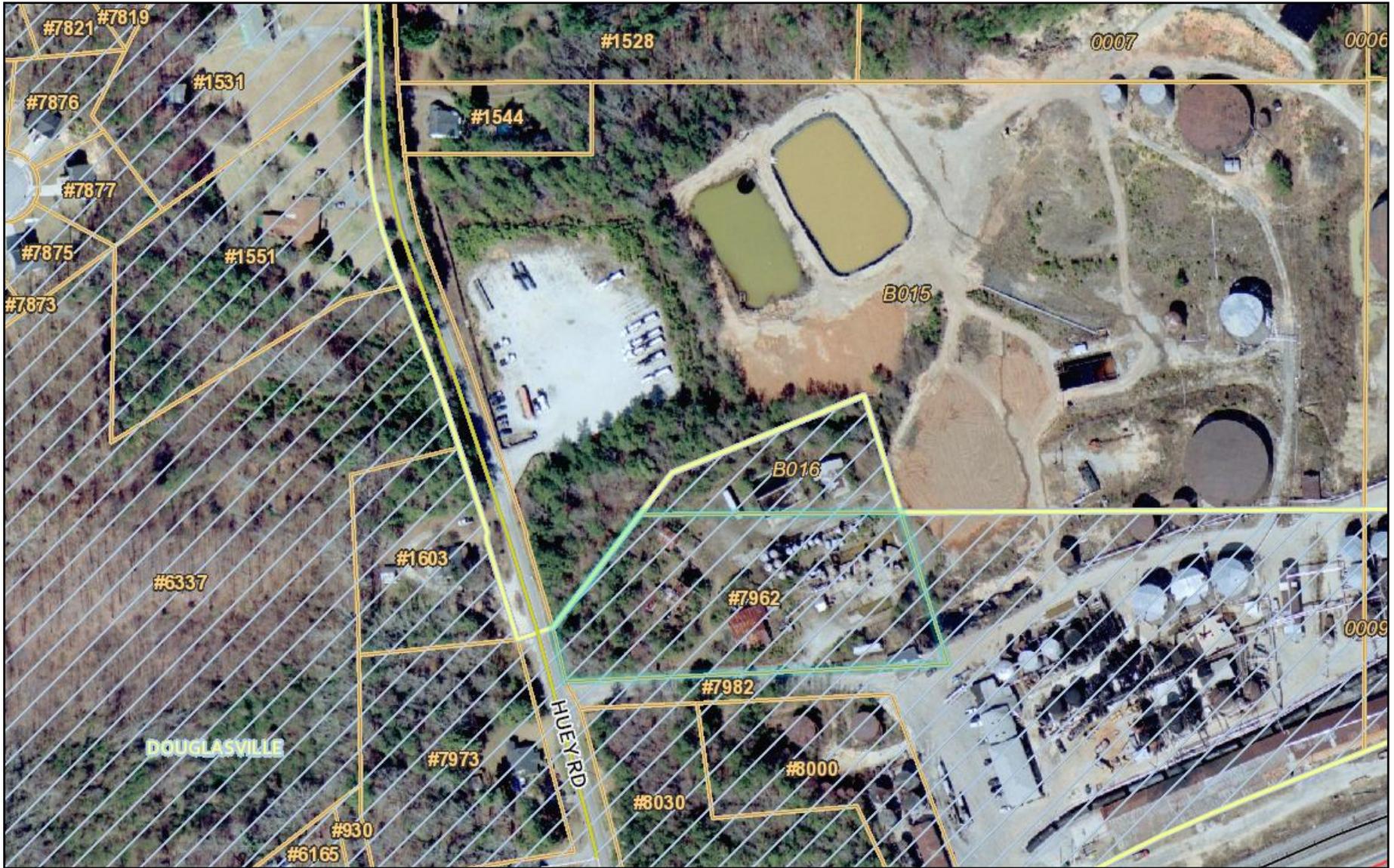


*\*Douglas County makes no warranties with respect to the accuracy and completeness of this information*

Map Scale  
1 inch = 100 feet

7/8/2011

# Arivec Property Tax Map



\*Douglas County makes no warranties with respect to the accuracy and completeness of this information

Map Scale  
1 inch = 200 feet

7/8/2011

**Assessor Report**Parcel Number **0825182B001****Owner Information**

Current Owner ARIVEC CHEMICALS  
 Mailing Address 1  
 Mailing Address 2 P O BOX 549  
 Mailing Address 3  
 City DOUGLASVILLE  
 State GA  
 Zip Code 301330549

\*Please note: Questions regarding this information should be directed to the Douglas County Appraisal Department at (770)920-7228

**Property Information**

Property Address	7962 HUEY RD	Acres	2.12
Legal Description	BLDGS/2.12 ACRES, HUEY ROAD	Landlot/District	825 /18
Class Code (Not Zoning)	Industrial	Special	5
Neighborhood	DOUGLAS COUNTY INDUSTRIAL	Tax District	DOUGLASVILLE
Homestead Exemption	S0	Water	Public
Topography	Level	Sewer	Septic Tank
Drainage	Fair	Electric	Electricity
Road Class	County	Gas	Pipe Gas
Parcel Road Access	Paved		

**2011 Values**

Land	Improvements	Accessories	Total Value	Previous Value
\$3	\$0	\$0	\$3	\$3

**Land Information**

Type	Description	Acres	Soil Productivity
RES	0	2.12	NA

**Tax Information - Parcel Number: 0825182B001**

Tue Jul 19 07:25:05 EDT 2011

<p><b>Property Tax Statement - Web Version</b></p> <p>Questions regarding this information should be directed to the Douglas County Tax Commissioner's Office at 770-920-7272 or visit:</p> <p><a href="http://www.douglastaxcommissioner.com">http://www.douglastaxcommissioner.com</a></p> <p>Todd Cowan Douglas County Tax Commissioner PO Box 1177 Douglasville, Ga. 30133</p> <p>tcowan@co.douglas.ga.us</p>	<p><b>Tax Year / Bill Number</b> 2010 / 8001690</p> <p><b>Due Date</b> 11/15/2010</p> <p><b>Total Due</b> \$0</p> <p>Current Owner ARIVEC CHEMICALS</p> <p>Owner (as of Jan 1st) ARIVEC CHEMICALS</p> <p>Parcel Number/Property ID 0825182B001</p> <p>Location Address 7962 HUEY RD</p> <p>Mailing Address P O BOX 549, DOUGLASVILLE, GA 301330549</p> <p>Property Type REAL</p> <p>Property Description BLDGS/2.12 ACRES, HUEY ROAD</p> <p>Acres 2.12</p> <p>Tax District City of Douglasville</p> <p>Land Value \$3</p> <p>Improvement Value \$0</p> <p>Total Value (Fair Market Value) \$3</p> <p>Exemptions</p> <p>Mortgage Company</p>
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Entity	Adjusted FMV	Net Assessment	Exemptions	Taxable Value	Millage Rate	Gross Tax	Credit	Net Tax
STATE TAX	3.00	1.00	0.00	1.00	0.25	0.00	0.00	0.00
COUNTY M&O	3.00	1.00	0.00	1.00	14.47	0.01	0.00	0.01
COUNTY SALES TAX CREDIT	3.00	1.00	0.00	1.00	-4.57	0.00	0.00	0.00
COUNTY SCHOOL M&O	3.00	1.00	0.00	1.00	20.00	0.02	0.00	0.02
COUNTY SCHOOL BOND	3.00	1.00	0.00	1.00	4.10	0.00	0.00	0.00
CITY OF DOUGLASVILLE	3.00	1.00	0.00	1.00	7.70	0.01	0.00	0.01
DOUGLASVILLE SALES TAX CREDIT	3.00	1.00	0.00	1.00	-3.85	0.00	0.00	0.00
DOUGLASVILLE BOND	3.00	1.00	0.00	1.00	1.22	0.00	0.00	0.00
<b>Totals</b>					<b>39.32</b>	<b>0.04</b>	<b>0.00</b>	<b>0.04</b>

Billing Date	
Paid Amount	0.00
Status/Last Payment	Paid
Paid Date	
Payment Good Through	11/15/2010
Back Taxes	None

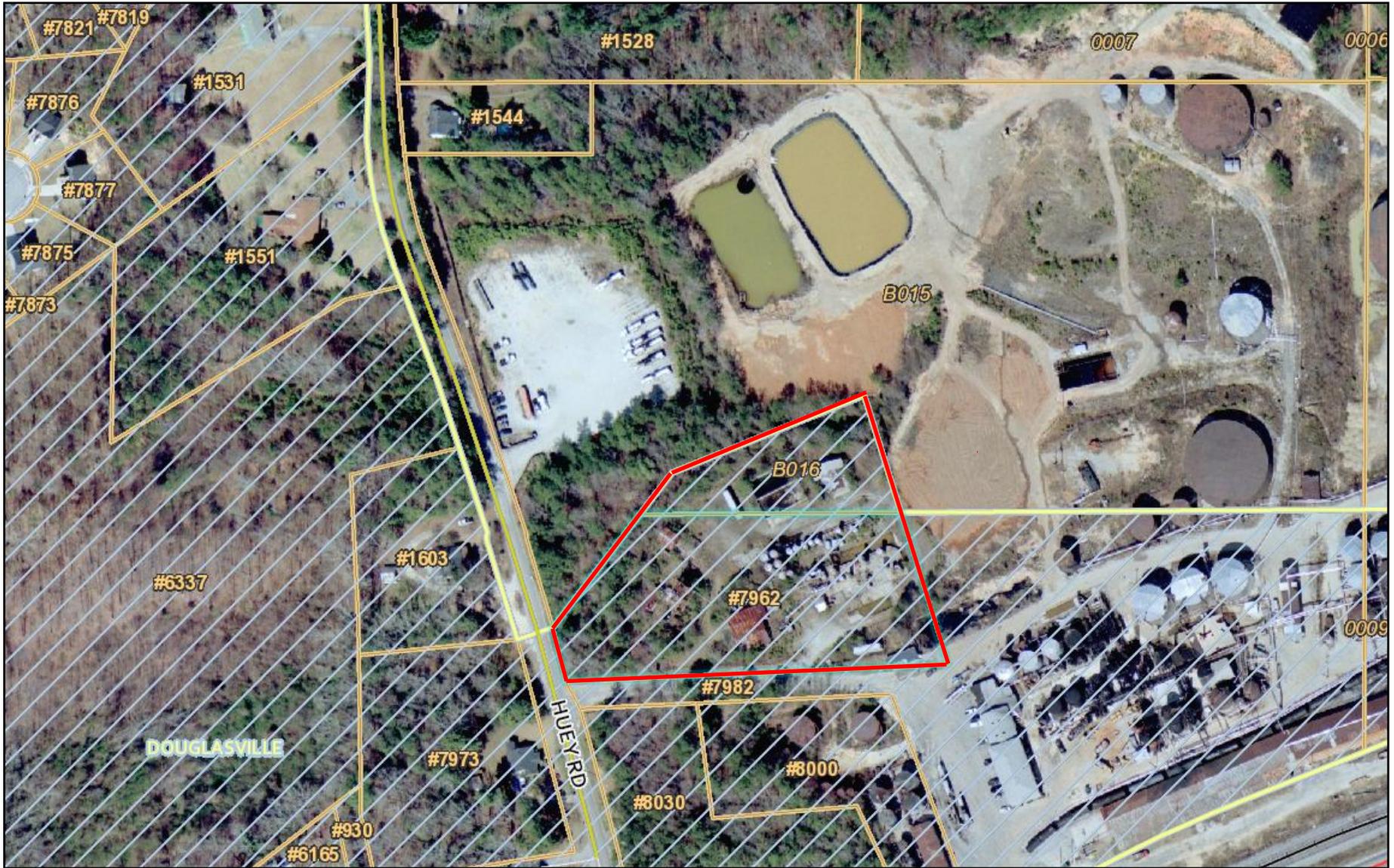
<b>Total Net Tax</b>	<b>\$0.04</b>
<b>Total Due</b>	<b>\$0</b>

- \*Appraisal Department (770)920-7228 - County employees directed by Assessors;determines property ownership/value
- \*Board of Assessors (770)920-7228 - Appointed;carries out State Law governing property values
- \*County Commissioners (770) 920-7266 - Elected;sets COUNTY tax rates
- \*Board of Education (770) 651-2000 - Elected;sets SCHOOL tax rates
- \*City Councils: Douglasville (770)920-3000, Villa Rica (770) 459-3656 - Elected;sets CITY tax rates
- \*Tax Commissioner (770)920-7272 - Elected;bills for authorities above;disburses/maintains records

Residents of Douglas County who own and occupy their permanent residence as of January 1 of the taxable year are entitled to a HOMESTEAD EXEMPTION. This can be filed online or in person at the Tax Office. Applications may be filed any time after purchase and before April 1 of the qualifying year. There are ADDITIONAL EXEMPTIONS for homeowners 62 or older and for 100% disabled persons, WHICH MUST BE MADE IN PERSON in the TAX OFFICE with proof of age/disability by APRIL 1.



# Arivec Property Tax Map



*\*Douglas County makes no warranties with respect to the accuracy and completeness of this information*

Map Scale  
1 inch = 200 feet

7/8/2011

**Assessor Report**Parcel Number **0825182B016****Owner Information**

Current Owner ARIVEC CHEMICALS, INC.  
 Mailing Address 1  
 Mailing Address 2 P.O. BOX 549  
 Mailing Address 3  
 City DOUGLASVILLE  
 State GA  
 Zip Code 301330549

\*Please note: Questions regarding this information should be directed to the Douglas County Appraisal Department at (770)920-7228

**Property Information**

Property Address	0 HUEY RD OFF	Acres	1.14
Legal Description	V/1.14 ACRES, OFF HUEY ROAD	Landlot/District	825 /18
Class Code (Not Zoning)	Industrial	Special	5
Neighborhood	DOUGLAS COUNTY INDUSTRIAL	Tax District	DOUGLASVILLE
Homestead Exemption	S0	Water	Public
Topography	Rolling	Sewer	No Sewer
Drainage	Fair	Electric	Electricity
Road Class	County	Gas	Pipe Gas
Parcel Road Access	Paved		

**2011 Values**

Land	Improvements	Accessories	Total Value	Previous Value
\$1	\$0	\$0	\$1	\$1

**Land Information**

Type	Description	Acres	Soil Productivity
RES	0	1.14	NA

**Tax Information - Parcel Number: 0825182B016**

Tue Jul 19 07:34:26 EDT 2011

<p>Property Tax Statement - Web Version</p> <p>Questions regarding this information should be directed to the Douglas County Tax Commissioner's Office at 770-920-7272 or visit:</p> <p><a href="http://www.douglastaxcommissioner.com">http://www.douglastaxcommissioner.com</a></p> <p>Todd Cowan Douglas County Tax Commissioner PO Box 1177 Douglasville, Ga. 30133 <a href="mailto:tcowan@co.douglas.ga.us">tcowan@co.douglas.ga.us</a></p>	<p><b>Tax Year / Bill Number</b> 2010 / 8001691</p> <p><b>Due Date</b></p> <p><b>Total Due</b> \$0</p> <p>Current Owner ARIVEC CHEMICALS, INC.</p> <p>Owner (as of Jan 1st) ARIVEC CHEMICALS, INC.</p> <p>Parcel Number/Property ID 0825182B016</p> <p>Location Address 0 HUEY RD OFF</p> <p>Mailing Address P.O. BOX 549 , DOUGLASVILLE, GA 301330549</p> <p>Property Type REAL</p> <p>Property Description V/1.14 ACRES, OFF HUEY ROAD</p> <p>Acres 1.14</p> <p>Tax District City of Douglasville</p> <p>Land Value \$1</p> <p>Improvement Value \$0</p> <p>Total Value (Fair Market Value) \$1</p> <p>Exemptions</p> <p>Mortgage Company</p>
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Entity	Adjusted FMV	Net Assessment	Exemptions	Taxable Value	Millage Rate	Gross Tax	Credit	Net Tax
STATE TAX	1.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00
COUNTY M&O	1.00	0.00	0.00	0.00	14.47	0.00	0.00	0.00
COUNTY SALES TAX CREDIT	1.00	0.00	0.00	0.00	-4.57	0.00	0.00	0.00
COUNTY SCHOOL M&O	1.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00
COUNTY SCHOOL BOND	1.00	0.00	0.00	0.00	4.10	0.00	0.00	0.00
CITY OF DOUGLASVILLE	1.00	0.00	0.00	0.00	7.70	0.00	0.00	0.00
DOUGLASVILLE SALES TAX CREDIT	1.00	0.00	0.00	0.00	-3.85	0.00	0.00	0.00
DOUGLASVILLE BOND	1.00	0.00	0.00	0.00	1.22	0.00	0.00	0.00
<b>Totals</b>					<b>39.32</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

<b>Billing Date</b>	
<b>Paid Amount</b>	0.00
<b>Status/Last Payment</b>	Paid
<b>Paid Date</b>	
<b>Payment Good Through</b>	09/03/2010
<b>Back Taxes</b>	None

<b>Total Net Tax</b>	\$0
<b>Total Due</b>	\$0

- \*Appraisal Department (770)920-7228 - County employees directed by Assessors;determines property ownership/value
- \*Board of Assessors (770)920-7228 - Appointed;carries out State Law governing property values
- \*County Commissioners (770) 920-7266 - Elected;sets COUNTY tax rates
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Residents of Douglas County who own and occupy their permanent residence as of January 1 of the taxable year are entitled to a HOMESTEAD EXEMPTION. This can be filed online or in person at the Tax Office. Applications may be filed any time after purchase and before April 1 of the qualifying year. There are ADDITIONAL EXEMPTIONS for homeowners 62 or older and for 100% disabled persons, WHICH MUST BE MADE IN PERSON in the TAX OFFICE with proof of age/disability by APRIL 1.



STANDARD WARRANTY DEED



STATE OF GEORGIA,

DOUGLAS County.

THIS INDENTURE, made this 1st day of June in the year of our Lord One Thousand Nine Hundred and Sixty JAMES V. PARIVECHIO

between of the State of GEORGIA and County of COBB of the first part and ARIVEC CHEMICALS, INC.

of the State of GEORGIA and County of DOUGLAS of the second part

WITNESSETH; That the said part Y of the first part, for and in consideration of the sum of Ten Dollars and other good and valuable considerations-----DOLLARS

in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged has granted, bargained, sold and conveyed and by these presents do es grant, bargain, sell and convey unto the said part Y of the second part, its heirs and assigns, all that tract or parcel of

land lying and being in Land Lots 742 and 825, 18th District, 2nd Section, Douglas County, Georgia, as shown on plat by John Duard Hutcheson, dated April 16, 1955, recorded in Plat Book 1, Page 395, records of Douglas County, Georgia, and being more particularly described as follows:

BEGINNING at an iron pin located at the intersection formed by the easterly right-of-way line of Winn Road (also known as Huey Road) and the north side of Cracker Asphalt Driveway; thence running easterly along the north side of said driveway 498 feet to an iron pin, thence running northerly, forming an exterior angle of 91 degrees 11 minutes with the preceding course, for a distance of 359.4 feet; thence running south westerly, forming an interior angle of 85 degrees 40 minutes with the preceding course, for a distance of 280.4 feet; thence running south westerly for a distance of 270.5 feet to an iron pin located on the easterly right-of-way line of Winn Road (also known as Huey Road), thence running southerly along the easterly right-of-way line of said Winn Road for a distance of 108.8 feet to the point of beginning.

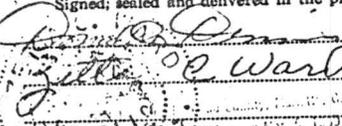
TO HAVE AND TO HOLD the said bargained premises, together with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in any wise appertaining, to the only proper use, benefit and behoof of \_\_\_\_\_ the said part y of the second part, its heirs and assigns, forever, IN FEE SIMPLE.

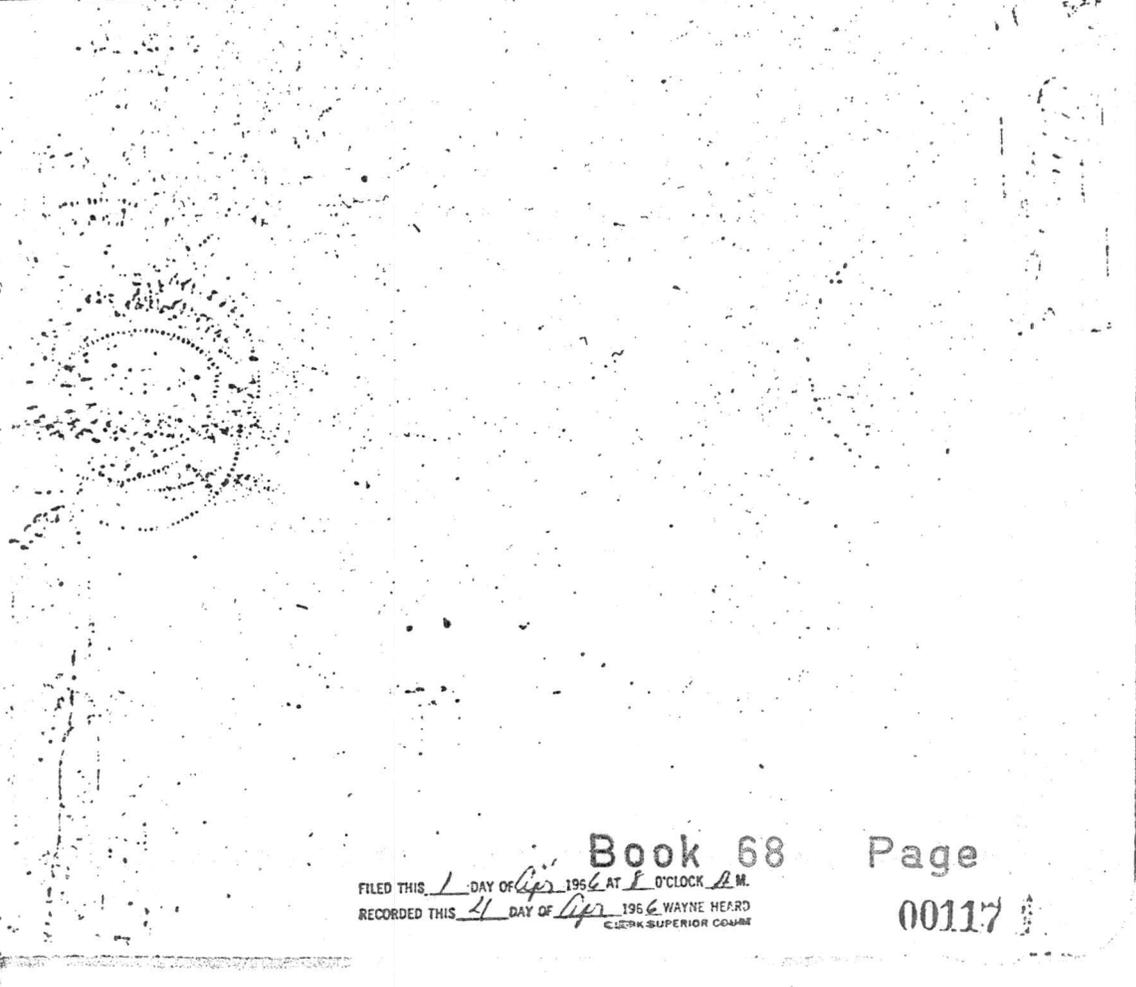
And the said part y of the first part, for his \_\_\_\_\_ heirs, executors and administrators will warrant and forever defend the right and title to the above described property unto the said part y of the second part, its heirs and assigns, against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said part y of the first part ha s hereunto set his hand and affixed his seal \_\_\_\_\_ the day and year above written.

Signed, sealed and delivered in the presence of

  
 \_\_\_\_\_ (Seal)  
 James V. Parivechio  
 \_\_\_\_\_ (Seal)  
 \_\_\_\_\_ (Seal)  
 \_\_\_\_\_ (Seal)

  
 \_\_\_\_\_  
 \_\_\_\_\_  

FILED THIS 1 DAY OF Apr 1966 AT 1 O'CLOCK A.M.  
 RECORDED THIS 4 DAY OF Apr 1966 WAYNE HEARD  
 CLERK SUPERIOR COURT

Book 68

Page

00117

APPENDIX C  
GENERATION OF HSRA RRS CALCULATIONS

**TABLE 1**  
**GENERIC HSRA RISK REDUCTION STANDARDS (RRS)**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater (mg/L)</i>	<i>Type 4 RRS Groundwater (mg/L)</i>	<i>Type 1 RRS for Soil (mg/kg)</i>	<i>Type 4 RRS for Soil (mg/kg)</i>
<b>VOCS</b>				
1,1,1-Trichloroethane	2.00E-01	1.36E+01	2.00E+01	2.00E+01
1,1,2-Trichloroethane	5.00E-03	4.64E-02	5.00E-01	5.00E-01
1,1-Dichloroethane	4.00E+00	4.00E+00	3.11E+02	4.00E+02
1,1-Dichloroethene	7.00E-03	5.24E-01	7.00E-01	7.00E-01
1,2-Dibromo-3-Chloropropane	2.00E-04	5.00E-03	2.00E-02	2.00E-02
1,2-Dichloroethane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Butanone	2.00E+00	1.18E+01	2.00E+02	2.00E+02
4-Methyl-2-pentanone (=MIBK)	2.00E+00	4.23E+00	2.00E+02	2.00E+02
Acetone	4.00E+00	4.56E+01	4.00E+02	4.00E+02
Benzene	5.00E-03	8.72E-03	5.00E-01	5.00E-01
Carbon disulfide	4.00E+00	4.00E+00	4.00E+02	4.00E+02
Carbon tetrachloride	5.00E-03	1.02E-02	5.00E-01	5.00E-01
Chlorobenzene	1.00E-01	1.36E-01	1.00E+01	1.00E+01
Chloroethane	1.00E-02	2.92E+01	1.00E+00	8.31E+00
Chloroform	1.00E-01	1.00E-01	2.87E+00	1.00E+01
Chloromethane (methyl chloride)	3.00E-03	2.63E-01	3.00E-01	3.00E-01
cis-1,2-Dichloroethene	7.00E-02	2.04E-01	7.00E+00	7.00E+00
Cyclohexane	5.00E-03	1.75E+01	2.00E+01	2.00E+01
Ethylbenzene	7.00E-01	7.00E-01	7.00E+01	7.00E+01
Freon 113 (trichlorotrifluoroethane)	1.00E+03	1.00E+03	1.78E+04	1.00E+05
Isopropylbenzene (cumene)	5.00E-03	1.05E+00	2.19E+01	2.19E+01
m-Xylenes	1.00E+01	1.00E+01	7.29E+02	1.00E+03
Methylene chloride	5.00E-03	1.19E-01	5.00E-01	5.00E-01
o-Xylene	1.00E+01	1.00E+01	8.54E+02	1.00E+03
p-Xylenes	1.00E+01	1.00E+01	7.43E+02	1.00E+03
Tetrachloroethene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Toluene	1.00E+00	5.24E+00	1.00E+02	1.00E+02
trans-1,2-Dichloroethene	1.00E-01	1.61E-01	1.00E+01	1.00E+01
Trichloroethene	5.00E-03	3.77E-02	5.00E-01	5.00E-01
Vinyl chloride	2.00E-03	3.27E-03	2.00E-01	2.00E-01
Xylenes (Total)	1.00E+01	1.00E+01	7.74E+02	1.00E+03

**TABLE 1**  
**GENERIC HSRA RISK REDUCTION STANDARDS (RRS)**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater (mg/L)</i>	<i>Type 4 RRS Groundwater (mg/L)</i>	<i>Type 1 RRS for Soil (mg/kg)</i>	<i>Type 4 RRS for Soil (mg/kg)</i>
<u>Additional VOCS</u>				
1,2,3-Trichloropropane	4.00E-02	4.00E-02	2.13E-01	4.00E+00
1,2,4-Trimethylbenzene	7.00E-02	7.00E-02	7.00E+00	7.00E+00
1,3,5-Trimethylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Hexanone	2.00E+00	2.00E+00	1.97E+02	2.00E+02
2-Phenylbutane (sec-Butylbenzene)	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Bromomethane (Methyl bromide)	1.00E-02	1.32E-02	1.00E+00	1.00E+00
Chlorobromomethane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
cis-1,3-Dichloropropene	5.00E-03	1.19E-02	1.80E+01	1.00E+03
Cymene (p-Isopropyltoluene)	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Dichlorodifluoromethane (CFC-12)	1.00E+00	2.04E+01	1.00E+02	1.00E+02
Methyl acetate	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Methyl cyclohexane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
N-Butylbenzene	5.00E-03	5.11E+00	5.00E-01	1.64E+01
N-Propylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Styrene	1.00E-01	2.56E+00	1.40E+01	1.40E+01
tert-Butylbenzene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Trichlorofluoromethane (CFC-11)	2.00E+00	2.00E+00	2.00E+02	2.00E+02
1,1,2,2-Tetrachloroethane	2.00E-01	2.00E-01	2.00E+01	2.00E+01
1,1-Dichloropropene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
1,2,3-Trichlorobenzene	5.00E-03	5.00E-03	1.08E+01	1.08E+01
1,2-Dibromoethane (EDB)	5.00E-03	5.00E-03	3.59E-01	5.00E-01
1,2-Dichloropropane	5.00E-03	7.41E-03	5.00E-01	5.00E-01
2,2-Dichloropropane	5.00E-03	5.00E-03	5.00E-01	5.00E-01
2-Chlorotoluene	5.00E-03	2.04E+00	5.00E-01	6.15E-01
2-Methylnaphthalene	1.00E-02	4.09E-01	1.00E+00	1.00E+00
4-Chlorotoluene	5.00E-03	5.00E-03	5.00E-01	5.00E-01
Bromobenzene	5.00E-03	1.44E-01	5.00E-01	5.00E-01
Bromodichloromethane	1.00E-01	1.00E-01	2.74E+00	1.00E+01
Bromoform	1.00E-01	1.00E-01	1.00E+01	1.00E+01
Dibromochloromethane	1.00E-01	1.00E-01	7.18E+00	1.00E+01
Dibromomethane	5.00E-03	1.02E+00	7.82E+02	1.00E+03
Methyl tert-butyl ether (MTBE)	5.00E-03	2.63E-01	5.00E-01	5.00E-01
trans-1,3-Dichloropropene	5.00E-03	1.19E-02	2.22E+00	2.22E+00
<u>SVOCs</u>				
1,2,4-Trichlorobenzene	7.00E-02	7.00E-02	1.08E+01	1.08E+01
1,2-Dichlorobenzene	6.00E-01	6.00E-01	6.00E+01	6.00E+01
1,3-Dichlorobenzene	6.00E-01	6.00E-01	6.00E+01	6.00E+01
1,4-Dichlorobenzene	7.50E-02	7.50E-02	7.50E+00	7.50E+00
Hexachlorobutadiene	1.00E-02	3.37E-02	1.75E+01	1.75E+01
Naphthalene	2.00E-02	2.00E-02	1.00E+02	1.00E+02

**TABLE 1**  
**GENERIC HSRA RISK REDUCTION STANDARDS (RRS)**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

<i>Regulated Substances</i>	<i>Type 1 RRS Groundwater (mg/L)</i>	<i>Type 4 RRS Groundwater (mg/L)</i>	<i>Type 1 RRS for Soil (mg/kg)</i>	<i>Type 4 RRS for Soil (mg/kg)</i>
<b><u>PCBs</u></b>				
Aroclor-1016	5.00E-04	7.15E-03	1.55E+00	1.55E+00
Aroclor-1221	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1232	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1242	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1248	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1254	5.00E-04	1.43E-03	1.55E+00	1.55E+00
Aroclor-1260	5.00E-04	1.43E-03	1.55E+00	1.55E+00
<b><u>Pesticides</u></b>				
4,4'-DDD	1.00E-04	1.19E-02	6.60E-01	2.80E+00
4,4'-DDE	1.00E-04	8.42E-03	6.60E-01	1.98E+00
4,4'-DDT	1.00E-04	8.42E-03	6.60E-01	2.84E+00
Aldrin	5.00E-05	1.68E-04	3.67E-01	6.60E-01
alpha-BHC	5.00E-05	4.54E-04	6.60E-01	6.60E-01
alpha-Chlordane	5.00E-05	8.18E-03	9.20E+00	9.20E+00
beta-BHC	5.00E-05	1.59E-02	6.60E-01	6.60E-01
delta-BHC	5.00E-05	5.00E-05	2.50E+01	2.50E+01
Dieldrin	1.00E-04	1.79E-04	3.90E-01	6.60E-01
Endosulfan I	5.00E-04	5.00E-04	1.00E+01	1.00E+01
Endosulfan II	1.00E-04	1.00E-04	1.00E+01	1.00E+01
Endosulfan sulfate	1.00E-04	1.00E-04	1.65E+00	1.65E+00
Endrin	2.00E-03	3.07E-02	1.00E+01	1.00E+01
Endrin Aldehyde	1.00E-04	1.00E-04	1.00E+01	1.00E+01
Endrin ketone	1.00E-04	1.00E-04	1.00E+01	1.00E+01
gamma-BHC (Lindane)	2.00E-04	2.60E-02	9.20E+00	9.20E+00
gamma-Chlordane	5.00E-05	8.18E-03	6.60E-01	6.60E-01
Heptachlor	4.00E-04	6.36E-04	6.60E-01	6.60E-01
Heptachlor epoxide	2.00E-04	3.14E-04	6.71E-01	1.65E+00
Methoxychlor	4.00E-02	5.11E-01	1.00E+01	2.76E+01
Toxaphene	3.00E-03	5.00E-03	5.76E+00	1.09E+01
<b><u>Metals</u></b>				
Arsenic	1.00E-02	1.00E-02	4.26E+00	2.00E+01
Barium	2.00E+00	2.04E+01	1.00E+03	1.00E+03
Cadmium	5.00E-03	5.11E-02	2.00E+00	3.84E+00
Chromium	1.00E-01	1.53E+02	1.00E+02	3.07E+06
Lead	1.50E-02	1.50E-02	7.50E+01	9.93E+02
Mercury	2.00E-03	1.02E-02	5.00E-01	5.33E-01

TABLE 2  
DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR GROUNDWATER  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Regulated Substances	Toxicity Class	Toxicity Indices				PRGs calculated from RAGS			Type 4 will not be less than:		Type 4
		CSF	URF	RfD	RfC	Carcinogenic	Non-Carcinogenic	Lesser of C or NC	Type 1	Detection Limits	RRS Target Concentrations
		(Oral) (mg/kg-day) <sup>-1</sup>	(Inhalation) (mg/m <sup>3</sup> ) <sup>-1</sup>	(Oral) (mg/kg-day)	(Inhalation) (mg/m <sup>3</sup> )	(C) (mg/L)	(NC) (mg/L)	(mg/L)	Type 1 RRS (mg/L)	Detection Limits (mg/L)	RRS Target Concentrations (mg/L)
<b>VOCS</b>											
1,1,1-Trichloroethane	D	--	--	2.00E+00	5.00E+00	NV	1.36E+01	1.36E+01	2.00E-01	5.00E-03	1.36E+01
1,1,2-Trichloroethane	C	5.70E-02	1.60E-02	4.00E-03	--	4.64E-02	4.09E-01	4.64E-02	5.00E-03	5.00E-03	4.64E-02
1,1-Dichloroethane	C	5.70E-03	1.60E-03	2.00E-01	--	4.64E-01	2.04E+01	4.64E-01	4.00E+00	5.00E-03	4.00E+00
1,1-Dichloroethene	C	--	--	5.00E-02	2.00E-01	NV	5.24E-01	5.24E-01	7.00E-03	5.00E-03	5.24E-01
1,2-Dibromo-3-Chloropropane	--	8.00E-01	6.00E+00	2.00E-04	2.00E-04	1.36E-05	5.68E-04	1.36E-05	2.00E-04	5.00E-03	5.00E-03
1,2-Dichloroethane	B2	9.10E-02	2.60E-02	--	7.00E-03	2.86E-03	2.04E-02	2.86E-03	5.00E-03	5.00E-03	5.00E-03
2-Butanone (MEK)	D	--	--	6.00E-01	5.00E+00	NV	1.18E+01	1.18E+01	2.00E+00	5.00E-02	1.18E+01
4-Methyl-2-pentanone (MIBK)	D	--	--	8.00E-02	3.00E+00	NV	4.23E+00	4.23E+00	2.00E+00	1.00E-02	4.23E+00
Acetone	D	--	--	9.00E-01	3.10E+01	NV	4.56E+01	4.56E+01	4.00E+00	5.00E-02	4.56E+01
Benzene	A	5.50E-02	7.80E-03	4.00E-03	3.00E-02	8.72E-03	7.21E-02	8.72E-03	5.00E-03	5.00E-03	8.72E-03
Carbon disulfide	--	--	--	1.00E-01	7.00E-01	NV	1.70E+00	1.70E+00	4.00E+00	5.00E-03	4.00E+00
Carbon tetrachloride	B2	7.00E-02	6.00E-03	4.00E-03	1.00E-01	1.02E-02	1.70E-01	1.02E-02	5.00E-03	5.00E-03	1.02E-02
Chlorobenzene	D	--	--	2.00E-02	5.00E-02	NV	1.36E-01	1.36E-01	1.00E-01	5.00E-03	1.36E-01
Chloroethane	--	--	--	--	1.00E+01	NV	2.92E+01	2.92E+01	1.00E-02	1.00E-02	2.92E+01
Chloroform	B2	3.10E-02	2.30E-02	1.00E-02	9.80E-02	3.42E-03	2.24E-01	3.42E-03	1.00E-01	5.00E-03	1.00E-01
Chloromethane (methyl chloride)	D	--	--	--	9.00E-02	NV	2.63E-01	2.63E-01	3.00E-03	1.00E-02	2.63E-01
cis-1,2-Dichloroethene	--	--	--	2.00E-03	--	NV	2.04E-01	2.04E-01	7.00E-02	5.00E-03	2.04E-01
Cyclohexane	--	--	--	--	6.00E+00	NV	1.75E+01	1.75E+01	5.00E-03	5.00E-03	1.75E+01
Ethylbenzene	D	1.10E-02	2.50E-03	1.00E-01	1.00E+00	2.91E-01	2.27E+00	2.91E-01	7.00E-01	5.00E-03	7.00E-01
Freon 113 (trichlorotrifluoroethane)	--	--	--	3.00E+01	3.00E+01	NV	8.52E+01	8.52E+01	1.00E+03	1.00E-02	1.00E+03
Isopropylbenzene (cumene)	D	--	--	1.00E-01	4.00E-01	NV	1.05E+00	1.05E+00	5.00E-03	5.00E-03	1.05E+00
m-Xylenes	D	--	--	2.00E-01	1.00E-01	NV	2.88E-01	2.88E-01	1.00E+01	1.00E-02	1.00E+01
Methylene chloride	B2	7.50E-03	4.70E-04	6.00E-02	1.00E+00	1.19E-01	1.98E+00	1.19E-01	5.00E-03	5.00E-03	1.19E-01
o-Xylene	D	--	--	2.00E-01	1.00E-01	NV	2.88E-01	2.88E-01	1.00E+01	5.00E-03	1.00E+01
p-Xylenes	D	--	--	2.00E-01	1.00E-01	NV	2.88E-01	2.88E-01	1.00E+01	1.00E-02	1.00E+01
Tetrachloroethene	--	5.40E-01	5.90E-03	1.00E-02	2.70E-01	3.83E-03	4.45E-01	3.83E-03	5.00E-03	5.00E-03	5.00E-03
Toluene	D	--	--	8.00E-02	5.00E+00	NV	5.24E+00	5.24E+00	1.00E+00	5.00E-03	5.24E+00
trans-1,2-Dichloroethene	D	--	--	2.00E-02	6.00E-02	NV	1.61E-01	1.61E-01	1.00E-01	5.00E-03	1.61E-01
Trichloroethene	--	5.90E-03	2.00E-03	--	--	3.77E-02	NV	3.77E-02	5.00E-03	5.00E-03	3.77E-02
Vinyl chloride	A	7.20E-01	4.40E-03	3.00E-03	1.00E-01	3.27E-03	1.50E-01	3.27E-03	2.00E-03	2.00E-03	3.27E-03
Xylenes (Total)	D	--	--	2.00E-01	1.00E-01	NV	2.88E-01	2.88E-01	1.00E+01	5.00E-03	1.00E+01
<b>Additional VOCS</b>											
1,2,3-Trichloropropane	--	3.00E+01	--	4.00E-03	3.00E-04	9.54E-05	8.74E-04	9.54E-05	4.00E-02	5.00E-03	4.00E-02
1,2,4-Trimethylbenzene	--	--	--	--	7.00E-03	NV	2.04E-02	2.04E-02	7.00E-02	5.00E-03	7.00E-02
1,3,5-Trimethylbenzene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
2-Hexanone	--	--	--	5.00E-03	3.00E-02	NV	7.48E-02	7.48E-02	2.00E+00	(1)	2.00E+00
2-Phenylbutane (sec-Butylbenzene)	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Bromomethane (Methyl bromide)	D	--	--	1.40E-03	5.00E-03	NV	1.32E-02	1.32E-02	1.00E-02	5.00E-03	1.32E-02
Chlorobromomethane	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
cis-1,3-Dichloropropene	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	1.19E-02	5.73E-02	1.19E-02	5.00E-03	(1)	5.00E-03
Cymene (p-Isopropyltoluene)	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Dichlorodifluoromethane (CFC-12)	--	--	--	2.00E-01	--	NV	2.04E+01	2.04E+01	1.00E+00	1.00E-02	2.04E+01
Methyl acetate	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Methyl cyclohexane	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
N-Butylbenzene	--	--	--	5.00E-02	--	NV	5.11E+00	5.11E+00	5.00E-03	(1)	5.00E-03
N-Propylbenzene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Styrene	--	--	--	2.00E-01	1.00E+00	NV	2.56E+00	2.56E+00	1.00E-01	5.00E-03	2.56E+00
tert-Butylbenzene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Trichlorofluoromethane (CFC-11)	--	--	--	3.00E-01	7.00E-01	NV	1.92E+00	1.92E+00	2.00E+00	5.00E-03	2.00E+00
1,1,2,2-Tetrachloroethane	C	2.00E-01	5.80E-02	2.00E-02	--	1.28E-03	2.04E+00	1.28E-03	2.00E-01	5.00E-03	2.00E-01
1,1-Dichloropropene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
1,2,3-Trichlorobenzene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
1,2-Dibromoethane (EDB)	B2	2.00E+00	6.00E-01	9.00E-03	9.00E-03	1.24E-04	2.56E-02	1.24E-04	5.00E-03	(1)	5.00E-03
1,2-Dichloropropane	--	3.60E-02	1.00E-02	9.00E-02	4.00E-03	7.41E-03	1.17E-02	7.41E-03	5.00E-03	5.00E-03	7.41E-03
2,2-Dichloropropane	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
2-Chlorotoluene	--	--	--	2.00E-02	--	NV	2.04E+00	2.04E+00	5.00E-03	(1)	5.00E-03
2-Methylnaphthalene	--	--	--	4.00E-03	--	NV	4.09E-01	4.09E-01	1.00E-02	(1)	1.00E-02
4-Chlorotoluene	--	--	--	--	--	NV	NV	NV	5.00E-03	(1)	5.00E-03
Bromobenzene	--	--	--	8.00E-03	6.00E-02	NV	1.44E-01	1.44E-01	5.00E-03	(1)	5.00E-03
Bromodichloromethane	--	6.20E-02	3.70E-02	2.00E-02	--	2.11E-03	2.04E+00	2.11E-03	1.00E-01	5.00E-03	1.00E-01
Bromoform	--	7.90E-03	1.10E-03	2.00E-02	--	6.17E-02	2.04E+00	6.17E-02	1.00E-01	5.00E-03	1.00E-01
Dibromochloromethane	--	8.40E-02	2.70E-02	2.00E-02	--	2.78E-03	2.04E+00	2.78E-03	1.00E-01	5.00E-03	1.00E-01
Dibromomethane	--	--	--	1.00E-02	--	NV	1.02E+00	1.02E+00	5.00E-03	(1)	5.00E-03
Methyl tert-butyl ether (MTBE)	--	1.80E-03	2.60E-04	--	3.00E+00	2.63E-01	8.76E+00	2.63E-01	5.00E-03	(1)	5.00E-03
trans-1,3-Dichloropropene	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	1.19E-02	5.73E-02	1.19E-02	5.00E-03	(1)	5.00E-03

TABLE 2  
DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR GROUNDWATER  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Regulated Substances	Toxicity Class	Toxicity Indices				PRGs calculated from RAGS			Type 4 will not be less than:		Type 4
		CSF	URF	RfD	RfC	Carcinogenic	Non-Carcinogenic	Lesser of C or NC	Type 1	Detection	RRS Target
		(Oral)	(Inhalation)	(Oral)	(Inhalation)	(C)	(NC)	(mg/L)	RRS	Limits	Concentrations
	(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	
<b>SVOCs</b>											
1,2,4-Trichlorobenzene	D	2.90E-02	--	1.00E-02	2.00E-03	9.87E-01	5.81E-03	5.81E-03	7.00E-02	5.00E-03	7.00E-02
1,2-Dichlorobenzene	D	--	--	9.00E-02	2.00E-01	NV	5.49E-01	5.49E-01	6.00E-01	5.00E-03	6.00E-01
1,3-Dichlorobenzene	D	--	--	--	--	NV	NV	NV	6.00E-01	5.00E-03	6.00E-01
1,4-Dichlorobenzene	--	5.40E-03	1.10E-02	7.00E-02	8.00E-01	7.33E-03	1.76E+00	7.33E-03	7.50E-02	5.00E-03	7.50E-02
Hexachlorobutadiene	C	7.80E-02	2.20E-02	1.00E-03	--	3.37E-02	1.02E-01	3.37E-02	1.00E-02	(2)	1.00E-02
Naphthalene	C	--	3.40E-02	2.00E-02	3.00E-03	2.40E-02	8.72E-03	8.72E-03	2.00E-02	1.00E-02	2.00E-02
<b>PCBs*</b>											
Aroclor-1016	B2	7.00E-02	2.00E-02	7.00E-05	--	4.09E-02	7.15E-03	7.15E-03	5.00E-04	5.00E-04	7.15E-03
Aroclor-1221	B2	2.00E+00	5.70E-01	--	--	1.43E-03	NV	1.43E-03	5.00E-04	5.00E-04	1.43E-03
Aroclor-1232	B2	2.00E+00	5.70E-01	--	--	1.43E-03	NV	1.43E-03	5.00E-04	5.00E-04	1.43E-03
Aroclor-1242	B2	2.00E+00	5.70E-01	--	--	1.43E-03	NV	1.43E-03	5.00E-04	5.00E-04	1.43E-03
Aroclor-1248	B2	2.00E+00	5.70E-01	--	--	1.43E-03	NV	1.43E-03	5.00E-04	5.00E-04	1.43E-03
Aroclor-1254	B2	2.00E+00	5.70E-01	2.00E-05	--	1.43E-03	2.04E-03	1.43E-03	5.00E-04	5.00E-04	1.43E-03
Aroclor-1260	B2	2.00E+00	5.70E-01	--	--	1.43E-03	NV	1.43E-03	5.00E-04	5.00E-04	1.43E-03
<b>Pesticides *</b>											
4,4'-DDD	B2	2.40E-01	6.90E-02	--	--	1.19E-02	NV	1.19E-02	1.00E-04	1.00E-04	1.19E-02
4,4'-DDE	B2	3.40E-01	9.70E-02	--	--	8.42E-03	NV	8.42E-03	1.00E-04	1.00E-04	8.42E-03
4,4'-DDT	B2	3.40E-01	9.70E-02	5.00E-04	--	8.42E-03	5.11E-02	8.42E-03	1.00E-04	1.00E-04	8.42E-03
Aldrin	B2	1.70E+01	4.90E+00	3.00E-05	--	1.68E-04	3.07E-03	1.68E-04	5.00E-05	(2)	5.00E-05
alpha-BHC	B2	6.30E+00	1.80E+00	8.00E-03	--	4.54E-04	8.18E-01	4.54E-04	5.00E-05	(2)	5.00E-05
alpha-Chlordane	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	8.18E-03	5.11E-02	8.18E-03	5.00E-05		5.00E-05
beta-BHC	C	1.80E+00	5.30E-01	--	--	1.59E-02	NV	1.59E-02	5.00E-05	(2)	5.00E-05
delta-BHC	D	--	--	--	--	NV	NV	NV	5.00E-05	(1)	5.00E-05
Dieldrin	B2	1.60E+01	4.60E+00	5.00E-05	--	1.79E-04	5.11E-03	1.79E-04	1.00E-04	(2)	1.00E-04
Endosulfan I	--	--	--	--	--	NV	NV	NV	5.00E-04	(1)	5.00E-05
Endosulfan II	--	--	--	--	--	NV	NV	NV	1.00E-04	(1)	1.00E-04
Endosulfan sulfate	--	--	--	--	--	NV	NV	NV	1.00E-04		1.00E-04
Endrin	D	--	--	3.00E-04	--	NV	3.07E-02	3.07E-02	2.00E-03		1.00E-04
Endrin Aldehyde	D	--	--	--	--	NV	NV	NV	1.00E-04		1.00E-04
Endrin ketone	D	--	--	--	--	NV	NV	NV	1.00E-04		1.00E-04
gamma-BHC (Lindane)	C	1.10E+00	3.10E-01	3.00E-04	--	2.60E-02	3.07E-02	2.60E-02	2.00E-04		5.00E-05
gamma-Chlordane	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	8.18E-03	5.11E-02	8.18E-03	5.00E-05		5.00E-05
Heptachlor	B2	4.50E+00	1.30E+00	5.00E-04	--	6.36E-04	5.11E-02	6.36E-04	4.00E-04		5.00E-05
Heptachlor epoxide	B2	9.10E+00	2.60E+00	1.30E-05	--	3.14E-04	1.33E-03	3.14E-04	2.00E-04		5.00E-05
Methoxychlor	D	--	--	5.00E-03	--	NV	5.11E-01	5.11E-01	4.00E-02		5.00E-04
Toxaphene	B2	1.10E+00	3.20E-01	--	--	2.60E-03	NV	2.60E-03	3.00E-03		5.00E-03

**TABLE 2**  
**DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR GROUNDWATER**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Regulated Substances	Toxicity Class	Toxicity Indices				PRGs calculated from RAGS			Type 4 will not be less than:		Type 4
		CSF	URF	RfD	RfC	Carcinogenic	Non-Carcinogenic	Lesser of	Type 1	Detection	RRS Target
		(Oral)	(Inhalation)	(Oral)	(Inhalation)	(C)	(NC)	C or NC	RRS	Limits	Concentrations
		(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
<b>Metals *</b>											
Arsenic	A	1.50E+00	4.30E+00	3.00E-04	1.50E-05	1.91E-03	3.07E-02	1.91E-03	1.00E-02	1.00E-02	1.00E-02
Barium	D	--	--	2.00E-01	5.00E-04	NV	2.04E+01	2.04E+01	2.00E+00	2.00E-02	2.04E+01
Cadmium	B	--	1.80E+00	5.00E-04	2.00E-05	NV	5.11E-02	5.11E-02	5.00E-03	5.00E-03	5.11E-02
Chromium	D	--	--	1.50E+00	--	NV	1.53E+02	1.53E+02	1.00E-01	1.00E-02	1.53E+02
Lead	B2	--	--	--	--	NV	NV	NV	1.50E-02	1.00E-02	1.50E-02
Mercury	D	--	--	1.00E-04	3.00E-04	NV	1.02E-02	1.02E-02	2.00E-03	2.00E-04	1.02E-02
Selenium	D	--	--	5.00E-03	2.00E-02	NV	5.11E-01	5.11E-01	5.00E-02	2.00E-02	5.11E-01
Silver	D	--	--	5.00E-03	--	NV	5.11E-01	5.11E-01	1.00E-01	1.00E-02	5.11E-01

**Notes:**

-- No value available.

\* Although an inhalation RfC and/or URF is available, the inhalation toxicity factor(s) was not applied in the derivation of the RRSs due to the non-volatile nature of the parameters.

NV No value established.

RAGS Risk Assessment Guidance for Superfund, Volume 1, Part B [EPA/540/R-92/003], December, 1991.

(1) The Type 1 RRS defaults to the detection limit since the analyte is not listed in Appendix III Table 1.

(2) The Type 1 RRS defaults to the detection limit since the health-based drinking water criterion from Appendix III Table 1, Groundwater Criteria is lower than the current detection limit.

**Exposure Equations:**

$$\text{Carcinogenic Endpoints: PRG} = \frac{\text{TR} \times \text{ATc}}{\text{EF} \times \text{ED} \times [(\text{CSF} \times \text{IR})/\text{BW} + (\text{URF} \times \text{K})]}$$

$$\text{Non-Carcinogenic Endpoints: PRG} = \frac{\text{THQ} \times \text{ATnc}}{\text{EF} \times \text{ED} \times [(1/\text{RfD}) \times \text{IR})/\text{BW} + (1/\text{RfC}) \times \text{K}]}$$

**where:**

Preliminary Risk Goal (mg/L)	PRG	calculated	
Target Risk Level (unitless)	TR	1.00E-05	GEPD, 2003 (Class A/B carcinogens)
Target Risk Level (unitless)	TR	1.00E-04	GEPD, 2003 (Class C carcinogens)
Target Hazard Level (unitless)	THQ	1.00E+00	GEPD, 2003
Cancer Slope Factor (per mg/kg-day)	CSF	chemical-specific	RSL, 2011
Reference Dose Factor (mg/kg-day)	RfD	chemical-specific	RSL, 2011
Unit Risk Factor (1/(mg/m <sup>3</sup> ))	URF	chemical-specific	RSL, 2011
Reference Concentration (mg/m <sup>3</sup> )	RfC	chemical-specific	RSL, 2011
Ingestion Rate (L/day)	IR	1	GEPD, 2003
Exposure Frequency (days/year)	EF	250	GEPD, 2003
Exposure Duration (years)	ED	25	GEPD, 2003
Body Weight (kg)	BW	70	GEPD, 2003
Averaging Time - carc. (days)	ATc	25,550	GEPD, 2003
Averaging Time - noncarc. (days)	ATnc	9,125	GEPD, 2003
Volatilization Factor (L/m <sup>3</sup> )	K	0.5	GEPD, 2003

**References:**

GEPD, 2003: Rule 391-3-19-.07, Risk Reduction Standards, July 23, 2003.

RSL, 2011: Regional Screening Level Table Master, June 2011.

TABLE 3  
DERIVATION OF GENERIC TYPE 1 TARGET CONCENTRATIONS FOR SOIL  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Regulated Substances	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) <sup>(2)</sup>	PRGs calculated from RAGS				Notification Concentrations (mg/kg)	App III Table 2 (mg/kg)	Type 1 GW		RRS Target Concentrations (mg/kg)
		CSF (Oral)	URF (Inhalation)	RfD (Oral)	RfC (Inhalation)		Carcinogenic (C) Child & Adult (mg/kg)	Non-Carcinogenic (NC) Child (mg/kg)	Non-Carcinogenic (NC) Adult (mg/kg)	Least of C or NC (mg/kg)			x 100 Maximum (mg/kg)		
		(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )		(m <sup>3</sup> /kg)	(mg/kg)	(mg/kg)	(mg/kg)			(mg/kg)		
<b>VOCS</b>															
1,1,1-Trichloroethane	D	--	--	2.00E+00	5.00E+00	1.54E+03	NV	7.65E+03	8.00E+03	7.65E+03	5.44E+00	--	2.00E+01	2.00E+01	2.00E+01
1,1,2-Trichloroethane	C	5.70E-02	1.60E-02	4.00E-03	--	8.78E+03	1.19E+02	3.13E+02	2.92E+03	1.19E+02	5.00E-01	--	5.00E-01	5.00E-01	5.00E-01
1,1-Dichloroethane	C	5.70E-03	1.60E-03	2.00E-01	--	2.10E+03	3.11E+02	1.56E+04	1.46E+05	3.11E+02	3.00E-02	--	4.00E+02	4.00E+02	3.11E+02
1,1-Dichloroethene	C	--	--	5.00E-02	2.00E-01	8.63E+02	NV	1.72E+02	1.79E+02	1.72E+02	3.60E-01	--	7.00E-01	7.00E-01	7.00E-01
1,2-Dibromo-3-Chloropropane	--	8.00E-01	6.00E+00	2.00E-04	2.00E-04	4.16E+04	1.65E-01	5.58E+00	8.20E+00	1.65E-01	3.00E-03	--	2.00E-02	2.00E-02	2.00E-02
1,2-Dichloroethane	B2	9.10E-02	2.60E-02	--	7.00E-03	5.21E+03	4.56E+00	3.80E+01	3.80E+01	4.56E+00	2.00E-02	--	5.00E-01	5.00E-01	5.00E-01
2-Butanone	D	--	--	6.00E-01	5.00E+00	7.81E+03	NV	2.18E+04	3.73E+04	2.18E+04	7.90E-01	--	2.00E+02	2.00E+02	2.00E+02
4-Methyl-2-pentanone (=MIBK)	D	--	--	8.00E-02	3.00E+00	9.56E+03	NV	5.18E+03	1.98E+04	5.18E+03	3.30E+00	--	2.00E+02	2.00E+02	2.00E+02
Acetone	D	--	--	9.00E-01	3.10E+01	6.56E+03	NV	5.28E+04	1.60E+05	5.28E+04	2.74E+00	--	4.00E+02	4.00E+02	4.00E+02
Benzene	A	5.50E-02	7.80E-03	4.00E-03	3.00E-02	4.50E+03	1.25E+01	9.71E+01	1.34E+02	1.25E+01	2.00E-02	--	5.00E-01	5.00E-01	5.00E-01
Carbon disulfide	D	--	--	1.00E-01	7.00E-01	8.75E+02	NV	5.91E+02	6.33E+02	5.91E+02	4.00E-02	--	4.00E+02	4.00E+02	4.00E+02
Carbon tetrachloride	B2	7.00E-02	6.00E-03	4.00E-03	1.00E-01	1.25E+03	4.80E+00	9.19E+01	1.25E+02	4.80E+00	1.70E-01	--	5.00E-01	5.00E-01	5.00E-01
Chlorobenzene	D	--	--	2.00E-02	5.00E-02	8.56E+03	NV	3.47E+02	4.33E+02	3.47E+02	4.18E+00	--	1.00E+01	1.00E+01	1.00E+01
Chloroethane	--	--	--	1.00E+01	1.07E+03	1.00E+01	NV	1.12E+04	1.12E+04	1.12E+04	1.00E+01	--	1.00E+00	1.00E+00	1.00E+00
Chloroform	B2	3.10E-02	2.30E-02	1.00E-02	9.80E-02	2.75E+03	2.87E+00	2.07E+02	2.71E+02	2.87E+00	6.80E-01	--	1.00E+01	1.00E+01	2.87E+00
Chloromethane (methyl chloride)	D	--	--	--	9.00E-02	8.30E+02	NV	7.79E+01	7.79E+01	7.79E+01	4.00E-02	--	3.00E-01	3.00E-01	3.00E-01
cis-1,2-Dichloroethene	--	--	--	2.00E-03	--	2.73E+03	NV	1.46E+03	1.46E+03	1.46E+03	1.56E+02	--	7.00E+00	7.00E+00	7.00E+00
Cyclohexane	--	--	--	--	6.00E+00	7.74E+02	NV	4.84E+03	4.84E+03	4.84E+03	2.00E+01	--	5.00E-01	2.00E+01	2.00E+01
Ethylbenzene	D	1.10E-02	2.50E-03	1.00E-01	1.00E+00	7.63E+03	6.59E+02	3.94E+03	7.18E+03	6.59E+02	2.00E+01	--	7.00E+01	7.00E+01	7.00E+01
Freon 113 (trichlorotrifluoroethane)	--	--	--	3.00E+01	3.00E+01	5.73E+02	NV	1.78E+04	1.79E+04	1.78E+04	6.92E+00	--	1.00E+05	1.00E+05	1.78E+04
Isopropylbenzene (cumene)	D	--	--	1.00E-01	4.00E-01	8.41E+03	NV	2.42E+03	3.35E+03	2.42E+03	2.19E+01	--	5.00E-01	2.19E+01	2.19E+01
m-Xylenes	D	--	--	2.00E-01	1.00E-01	7.33E+03	NV	7.29E+02	7.60E+02	7.29E+02	2.00E+01	--	1.00E+03	1.00E+03	7.29E+02
Methylene chloride	B2	7.50E-03	4.70E-04	6.00E-02	1.00E+00	2.12E+03	9.71E+01	1.50E+03	2.10E+03	9.71E+01	8.00E-02	--	5.00E-01	5.00E-01	5.00E-01
o-Xylene	D	--	--	2.00E-01	1.00E-01	8.66E+03	NV	8.54E+02	8.98E+02	8.54E+02	2.00E+01	--	1.00E+03	1.00E+03	8.54E+02
p-Xylenes	D	--	--	2.00E-01	1.00E-01	7.48E+03	NV	7.43E+02	7.76E+02	7.43E+02	2.00E+01	--	1.00E+03	1.00E+03	7.43E+02
Tetrachloroethene	--	5.40E-01	5.90E-03	1.00E-02	2.70E-01	2.65E+03	5.68E+00	3.82E+02	6.77E+02	5.68E+00	1.80E+01	--	5.00E-01	5.00E-01	5.00E-01
Toluene	D	--	--	8.00E-02	5.00E+00	5.61E+03	NV	5.15E+03	1.95E+04	5.15E+03	1.44E+01	--	1.00E+02	1.00E+02	1.00E+02
trans-1,2-Dichloroethene	D	--	--	2.00E-02	6.00E-02	2.73E+03	NV	1.54E+02	1.69E+02	1.54E+02	5.30E-01	--	1.00E+01	1.00E+01	1.00E+01
Trichloroethene	--	5.90E-03	2.00E-03	--	--	2.43E+03	2.88E+01	NV	NV	2.88E+01	1.30E-01	--	5.00E-01	5.00E-01	5.00E-01
Vinyl chloride	A	7.20E-01	4.40E-03	3.00E-03	1.00E-01	5.72E+02	2.33E+00	4.75E+01	5.80E+01	2.33E+00	4.00E-02	--	2.00E-01	2.00E-01	2.00E-01
Xylenes (Total)	D	--	--	2.00E-01	1.00E-01	7.81E+03	NV	7.74E+02	8.10E+02	7.74E+02	2.00E+01	--	1.00E+03	1.00E+03	7.74E+02
<b>Additional VOCS</b>															
1,2,3-Trichloropropane	--	3.00E+01	--	4.00E-03	3.00E-04	2.72E+03	2.13E-01	8.48E-01	8.50E-01	2.13E-01	5.40E-01	--	4.00E+00	4.00E+00	2.13E-01
1,2,4-Trimethylbenzene	--	--	--	--	7.00E-03	1.07E+04	NV	7.84E+01	7.84E+01	7.84E+01	NR	--	7.00E+00	7.00E+00	7.00E+00
1,3,5-Trimethylbenzene	--	--	--	--	--	8.94E+03	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
2-Hexanone	--	--	--	5.00E-03	3.00E-02	1.27E+04	NV	1.97E+02	3.58E+02	1.97E+02	NR	--	2.00E+02	2.00E+02	1.97E+02
2-Phenylbutane (sec-Butylbenzene)	--	--	--	--	--	1.00E+04	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Bromomethane (Methyl bromide)	D	--	--	1.40E-03	5.00E-03	1.01E+03	NV	5.05E+00	5.26E+00	5.05E+00	8.00E-01	--	1.00E+00	1.00E+00	1.00E+00
Chlorobromomethane	--	--	--	--	--	3.60E+03	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
cis-1,3-Dichloropropene	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	4.13E+03	1.80E+01	8.31E+01	8.58E+01	1.80E+01	1.00E+03	--	5.00E-01	1.00E+03	1.80E+01
Cymene (p-Isopropyltoluene)	--	--	--	--	--	1.17E+04	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Dichlorodifluoromethane (CFC-12)	--	--	--	2.00E-01	--	1.65E+02	NV	1.56E+04	1.46E+05	1.56E+04	1.49E+00	--	1.00E+02	1.00E+02	1.00E+02
Methyl acetate	--	--	--	--	--	4.39E+03	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Methyl cyclohexane	--	--	--	--	--	5.58E+02	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
N-Butylbenzene	--	--	--	5.00E-02	--	1.11E+04	NV	3.91E+03	3.65E+04	3.91E+03	NR	--	5.00E-01	5.00E-01	5.00E-01
N-Propylbenzene	--	--	--	--	--	9.49E+03	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Styrene	--	--	--	2.00E-01	1.00E+00	1.27E+04	NV	7.16E+03	1.21E+04	7.16E+03	1.40E+01	--	1.00E+01	1.40E+01	1.40E+01
tert-Butylbenzene	--	--	--	--	--	1.00E+04	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Trichlorofluoromethane (CFC-11)	--	--	--	3.00E-01	7.00E-01	5.04E+02	NV	3.62E+02	3.67E+02	3.62E+02	7.00E-01	--	2.00E+02	2.00E+02	2.00E+02
1,1,2,2-Tetrachloroethane	C	2.00E-01	5.80E-02	2.00E-02	--	1.93E+04	6.46E+01	1.56E+03	1.46E+04	6.46E+01	1.30E-01	--	2.00E+01	2.00E+01	2.00E+01
1,1-Dichloropropene	--	--	--	--	--	NV	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
1,2,3-Trichlorobenzene	--	--	--	--	--	4.44E+04	NV	NV	NV	NV	1.08E+01	--	5.00E-01	1.08E+01	1.08E+01
1,2-Dibromoethane (EDB)	B2	2.00E+00	6.00E-01	9.00E-03	9.00E-03	9.96E+03	3.59E-01	8.25E+01	9.21E+01	3.59E-01	1.00E-02	--	5.00E-01	5.00E-01	3.59E-01
1,2-Dichloropropane	--	3.60E-02	1.00E-02	9.00E-02	4.00E-03	4.28E+03	9.83E+00	1.78E+01	1.78E+01	9.83E+00	2.00E-02	--	5.00E-01	5.00E-01	5.00E-01
2,2-Dichloropropane	--	--	--	--	--	NV	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
2-Chlorotoluene	--	--	--	2.00E-02	--	1.09E+04	NV	1.56E+03	1.46E+04	1.56E+03	NR	--	5.00E-01	5.00E-01	5.00E-01
2-Methylnaphthalene	--	--	--	4.00E-03	--	8.02E+04	NV	3.13E+02	2.92E+03	3.13E+02	NR	--	1.00E+00	1.00E+00	1.00E+00
4-Chlorotoluene	--	--	--	--	--	9.79E+03	NV	NV	NV	NV	NR	--	5.00E-01	5.00E-01	5.00E-01
Bromobenzene	--	--	--	8.00E-03	6.00E-02	1.11E+04	NV	3.30E+02	6.22E+02	3.30E+02	NR	--	5.00E-01	5.00E-01	5.00E-01
Bromodichloromethane	--	6.20E-02	3.70E-02	2.00E-02	--	4.27E+03	2.74E+00	1.56E+03	1.46E+04	2.74E+00	1.18E+00	--	1.00E+01	1.00E+01	2.74E+00
Bromoform	--	7.90E-03	1.10E-03	2.00E-02	--	1.67E+04	2.54E+02	1.56E+03	1.46E+04	2.54E+02	1.00E+00	--	1.00E+01	1.00E+01	1.00E+01
Dibromochloromethane	--	8.40E-02	2.70E-02	2.00E-02	--	8.80E+03	7.18E+00	1.56E+03	1.46E+04	7.18E+00	1.63E+00	--	1.00E+01	1.00E+01	7.18E+00
Dibromomethane	--	--	--	1.00E-02	--	5.76E+03	NV	7.82E+02	7.30E+03	7.82E+02	1.00E+03	--	5.00E-01	1.00E+03	7.82E+02
Methyl tert-butyl ether (MTBE)	--	1.80E-03	2.60E-04	--	3.00E+00	4.26E+03	3.58E+02	1.33E+04	1.33E+04	3.58E+02	NR	--	5.00E-01	5.00E-01	5.00E-01
trans-1,3-Dichloropropene	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	4.13E+03	1.80E+01	8.31E+01	8.58E+01	1.80E+01	2.22E+00	--	5.00E-01	2.22E+00	2.22E+00

TABLE 3  
 DERIVATION OF GENERIC TYPE 1 TARGET CONCENTRATIONS FOR SOIL  
 ARIVEC CHEMICALS SITE  
 DOUGLASVILLE, GEORGIA

Regulated Substances	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) <sup>(2)</sup>	PRGs calculated from RAGS				Notification Concentrations	App III Table 2	Type 1 GW x 100	Maximum	Type 1 RRS Target Concentrations	
		CSF	URF	RfD	RfC		Carcinogenic (C)		Non-Carcinogenic (NC)							Least of C or NC
		(Oral)	(Inhalation)	(Oral)	(Inhalation)		Child & Adult	Child	Adult	(mg/kg)						
		(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )	(m <sup>3</sup> /kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		
<b>SVOCs</b>																
1,2,4-Trichlorobenzene	D	2.90E-02	--	1.00E-02	2.00E-03	4.10E+04	2.20E+03	7.71E+01	8.45E+01	7.71E+01	1.08E+01	--	7.00E+00	1.08E+01	1.08E+01	
1,2-Dichlorobenzene	D	--	--	9.00E-02	2.00E-01	1.58E+04	NV	2.25E+03	3.14E+03	2.25E+03	2.50E+01	--	6.00E+01	6.00E+01	6.00E+01	
1,3-Dichlorobenzene	D	--	--	--	--	1.34E+04	NV	NV	NV	NV	2.22E+00	--	6.00E+01	6.00E+01	6.00E+01	
1,4-Dichlorobenzene	--	5.40E-03	1.10E-02	7.00E-02	8.00E-01	1.41E+04	3.04E+01	3.74E+03	9.57E+03	3.04E+01	6.84E+00	--	7.50E+00	7.50E+00	7.50E+00	
Hexachlorobutadiene	C	7.80E-02	2.20E-02	1.00E-03	--	1.01E+04	9.85E+01	7.82E+01	7.30E+02	1.00E+00	1.75E+01	--	1.00E+00	1.75E+01	1.75E+01	
Naphthalene	C	--	3.40E-02	2.00E-02	3.00E-03	6.42E+04	4.59E+02	1.78E+02	1.98E+02	1.78E+02	1.00E+02	--	2.00E+00	1.00E+02	1.00E+02	
<b>PCBs</b>																
Aroclor-1016	B2	7.00E-02	2.00E-02	7.00E-05	--	NV	9.12E+01	5.48E+00	5.11E+01	5.48E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1221	B2	2.00E+00	5.70E-01	--	--	NV	3.19E+00	NV	NV	3.19E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1232	B2	2.00E+00	5.70E-01	--	--	NV	3.19E+00	NV	NV	3.19E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1242	B2	2.00E+00	5.70E-01	--	--	NV	3.19E+00	NV	NV	3.19E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1248	B2	2.00E+00	5.70E-01	--	--	NV	3.19E+00	NV	NV	3.19E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1254	B2	2.00E+00	5.70E-01	2.00E-05	--	NV	3.19E+00	1.56E+00	1.46E+01	1.56E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
Aroclor-1260	B2	2.00E+00	5.70E-01	--	--	NV	3.19E+00	NV	NV	3.19E+00	1.55E+00	--	5.00E-02	1.55E+00	1.55E+00	
<b>Pesticides</b>																
4,4'-DDD	B2	2.40E-01	6.90E-02	--	--	8.62E+06	2.64E+01	NV	NV	2.64E+01	6.60E-01	--	1.00E-02	6.60E-01	6.60E-01	
4,4'-DDE	B2	3.40E-01	9.70E-02	--	--	3.72E+06	1.84E+01	NV	NV	1.84E+01	6.60E-01	--	1.00E-02	6.60E-01	6.60E-01	
4,4'-DDT	B2	3.40E-01	9.70E-02	5.00E-04	--	1.02E+07	1.86E+01	3.91E+01	3.65E+02	1.86E+01	6.60E-01	--	1.00E-02	6.60E-01	6.60E-01	
Aldrin	B2	1.70E+01	4.90E+00	3.00E-05	--	3.15E+06	3.67E-01	2.35E+00	2.19E+01	3.67E-01	6.60E-01	--	5.00E-03	6.60E-01	3.67E-01	
alpha-BHC	B2	6.30E+00	1.80E+00	8.00E-03	--	1.65E+06	9.70E-01	6.26E+02	5.84E+03	9.70E-01	6.60E-01	--	5.00E-03	6.60E-01	6.60E-01	
alpha-Chlordane	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	2.04E+06	1.76E+01	3.81E+01	2.93E+02	1.76E+01	9.20E+00	--	5.00E-03	9.20E+00	9.20E+00	
beta-BHC	C	1.80E+00	5.30E-01	--	--	1.65E+06	3.39E+01	NV	NV	3.39E+01	6.60E-01	--	5.00E-03	6.60E-01	6.60E-01	
delta-BHC	D	--	--	--	--	1.65E+06	NV	NV	NV	NV	2.50E+01	--	5.00E-03	2.50E+01	2.50E+01	
Dieldrin	B2	1.60E+01	4.60E+00	5.00E-05	--	3.37E+06	3.90E-01	3.91E+00	3.65E+01	3.90E-01	6.60E-01	--	1.00E-02	6.60E-01	3.90E-01	
Endosulfan I	--	--	--	--	--	7.98E+05	NV	NV	NV	NV	1.00E+01	--	5.00E-02	1.00E+01	1.00E+01	
Endosulfan II	--	--	--	--	--	7.98E+05	NV	NV	NV	NV	1.00E+01	--	1.00E-02	1.00E+01	1.00E+01	
Endosulfan sulfate	--	--	--	--	--	7.98E+05	NV	NV	NV	NV	1.65E+00	--	1.00E-02	1.65E+00	1.65E+00	
Endrin	D	--	--	3.00E-04	--	3.37E+06	NV	2.35E+01	2.19E+02	2.35E+01	1.00E+01	--	2.00E-01	1.00E+01	1.00E+01	
Endrin Aldehyde	D	--	--	--	--	3.37E+06	NV	NV	NV	NV	1.00E+01	--	1.00E-02	1.00E+01	1.00E+01	
Endrin ketone	D	--	--	--	--	3.37E+06	NV	NV	NV	NV	1.00E+01	--	1.00E-02	1.00E+01	1.00E+01	
gamma-BHC (Lindane)	C	1.10E+00	3.10E-01	3.00E-04	--	1.65E+06	5.56E+01	2.35E+01	2.19E+02	2.35E+01	9.20E+00	--	2.00E-02	9.20E+00	9.20E+00	
gamma-Chlordane	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	2.04E+06	1.76E+01	3.81E+01	2.93E+02	1.76E+01	6.60E-01	--	5.00E-03	6.60E-01	6.60E-01	
Heptachlor	B2	4.50E+00	1.30E+00	5.00E-04	--	9.40E+05	1.31E+00	3.91E+01	3.65E+02	1.31E+00	6.60E-01	--	4.00E-02	6.60E-01	6.60E-01	
Heptachlor epoxide	B2	9.10E+00	2.60E+00	1.30E-05	--	1.60E+06	6.71E-01	1.02E+00	9.49E+00	6.71E-01	1.65E+00	--	2.00E-02	1.65E+00	6.71E-01	
Methoxychlor	D	--	--	5.00E-03	--	2.45E+07	NV	3.91E+02	3.65E+03	3.91E+02	1.00E+01	--	4.00E+00	1.00E+01	1.00E+01	
Toxaphene	B2	1.10E+00	3.20E-01	--	--	8.84E+06	5.76E+00	NV	NV	5.76E+00	1.09E+01	--	3.00E-01	1.09E+01	5.76E+00	

TABLE 3  
DERIVATION OF GENERIC TYPE 1 TARGET CONCENTRATIONS FOR SOIL  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Regulated Substances	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) <sup>(3)</sup>	PRGs calculated from RAGS				Type 1 RRS Target Concentrations				
		CSF	URF	RfD	RfC		Carcinogenic (C)		Non-Carcinogenic (NC)	Least of	Notification Concentrations	App III Table 2	Type 1 GW x 100	Maximum	Concentrations
		(Oral)	(Inhalation)	(Oral)	(Inhalation)		Child & Adult	Child	Adult	C or NC	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<b>Metals</b>															
Arsenic	A	1.50E+00	4.30E+00	3.00E-04	1.50E-05	NV	4.26E+00	2.35E+01	2.18E+02	4.26E+00	--	2.00E+01	--	2.00E+01	4.26E+00
Barium	D	--	--	2.00E-01	5.00E-04	NV	NV	1.55E+04	1.38E+05	1.55E+04	--	1.00E+03	--	1.00E+03	1.00E+03
Cadmium	B	--	1.80E+00	5.00E-04	2.00E-05	NV	6.26E+04	3.91E+01	3.64E+02	3.91E+01	--	2.00E+00	--	2.00E+00	2.00E+00
Chromium	D	--	--	1.50E+00	--	NV	NV	1.17E+05	1.10E+06	1.17E+05	--	1.00E+02	--	1.00E+02	1.00E+02
Lead <sup>(3)</sup>	B2	--	--	--	--	NV	NV	NV	NV	NV	--	7.50E+01	--	7.50E+01	7.50E+01
Mercury	D	--	--	1.00E-04	3.00E-04	2.27E+04	NV	3.72E+00	6.47E+00	3.72E+00	--	5.00E-01	--	5.00E-01	5.00E-01
Selenium	D	--	--	5.00E-03	2.00E-02	NV	NV	3.91E+02	3.65E+03	3.91E+02	--	2.00E+00	--	2.00E+00	2.00E+00
Silver	D	--	--	5.00E-03	--	NV	NV	3.91E+02	3.65E+03	3.91E+02	--	2.00E+00	--	2.00E+00	2.00E+00

Notes:

-- No value available.

NV No value established.

NR Not regulated.

RAGS Risk Assessment Guidance for Superfund, Volume 1, Part B [EPA/540/R-92/003], December, 1991.

(1) See Table 5 in derivation of leaching potential (criterion d.1).

(2) See Table 6 for derivation of volatilization factors.

(3) Lead concentration is generated by Adult Lead Model. See Table 7 for derivation of PRG.

Exposure Equations:

$$\text{Carcinogenic Endpoints: } \frac{\text{TR} \times \text{ATc}}{\text{EF} \times \left[ \left( \text{CSF} \times \text{IRc} \times \text{EDc} \times \text{CF} \right) / \text{BWc} + \left( \text{URF} \times \text{EDc} \times \left( 1 / \text{PEF} \text{ or } \text{VF} \right) \right) \right] + \left[ \left( \text{CSF} \times \text{IRa} \times \text{EDa} \times \text{DF} \right) / \text{BWa} + \left( \text{URF} \times \text{EDa} \times \left( 1 / \text{PEF} \text{ or } \text{VF} \right) \right) \right]}$$

$$\text{Non-Carcinogenic Endpoints: } \frac{\text{THQ} \times \text{ATnc}}{\text{EF} \times \text{ED} \times \left[ \left( 1 / \text{RfD} \right) \times \text{IR} \times \text{CF} \right] / \text{BW} + \left[ \left( 1 / \text{RfC} \right) \times \left( 1 / \text{PEF} \text{ or } \text{VF} \right) \right]}$$

Preliminary Risk Goal (mg/kg)	PRG	calculated	
Target Risk Level (unitless)	TR	1.0E-05	GEPD, 2003 (Class A/B carcinogens)
Target Hazard Level (unitless)	TR	1.0E-04	GEPD, 2003 (Class C carcinogens)
Target Hazard Level (unitless)	THQ	1	GEPD, 2003
Cancer Slope Factor (per mg/kg-day)	CSF	chemical-specific	RSL, 2011
Reference Dose Factor (mg/kg-day)	RfD	chemical-specific	RSL, 2011
Unit Risk Factor (1/(mg/m <sup>3</sup> ))	URF	chemical-specific	RSL, 2011
Reference Concentration (mg/m <sup>3</sup> )	RfC	chemical-specific	RSL, 2011
Ingestion Rate (mg/day) - Child	IRc	200	GEPD, 2003
Ingestion Rate (mg/day) - Adult	IRa	100	GEPD, 2003
Exposure Frequency (days/year)	EF	350	GEPD, 2003
Exposure Duration (years) - Child	EDc	6	GEPD, 2003
Exposure Duration (years) - Adult	EDa	24	GEPD, 2003
Body Weight (kg) - Child	BWc	15	GEPD, 2003
Body Weight (kg) - Adult	BWa	70	GEPD, 2003
Conversion Factor (kg/mg)	CF	1.0E-06	--
Averaging Time - carc. (days)	ATc	25,550	GEPD, 2003
Averaging Time - noncarc. (days) - Child	ATnc	2,190	GEPD, 2003
Averaging Time - noncarc. (days) - Adult	ATnc	8,760	GEPD, 2003
Particulate Emission Factor (m <sup>3</sup> /kg)	PEF	4.63E+09	GEPD, 2003
Volatilization Factor (m <sup>3</sup> /kg)	VF	chemical-specific	Refer to Table 6

References:

GEPD, 2003: Rule 391-3-19-.07, Risk Reduction Standards, July 23, 2003.

RSL, 2011: Regional Screening Level Table Master, June 2011.

TABLE 4  
DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR SOIL  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Regulated Substances	Leaching Potential criterion d.1 (1)	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) (2)	PRGs calculated from RAGS			Type 4 will not be less than:			Type 4
			CSF (Oral)	URF (Inhalation)	RfD (Oral)	RfC (Inhalation)		Carcinogenic criterion d.2	Non-Carcinogenic criterion d.3	Least of d.1 thru d.3	Table 2 App III	Background Conc.	Type 3 RRS	RRS Target Concentrations
			(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<b>VOCS</b>														
1,1,1-Trichloroethane	4.78E+00	D	--	--	2.00E+00	5.00E+00	1.54E+03	NV	1.12E+04	4.78E+00	NV	NV	2.00E+01	2.00E+01
1,1,2-Trichloroethane	1.50E+02	C	5.70E-02	1.60E-02	4.00E-03	--	8.78E+03	2.19E+02	8.18E+03	1.50E+02	NV	NV	5.00E-01	5.00E-01
1,1-Dichloroethane	1.14E+00	C	5.70E-03	1.60E-03	2.00E-01	--	2.10E+03	5.35E+02	4.09E+05	1.14E+00	NV	NV	4.00E+02	4.00E+02
1,1-Dichloroethene	1.88E-01	C	--	--	5.00E-02	2.00E-01	8.63E+02	NV	2.51E+02	1.88E-01	NV	NV	7.00E-01	7.00E-01
1,2-Dibromo-3-Chloropropane	2.16E-03	--	8.00E-01	6.00E+00	2.00E-04	2.00E-04	4.16E+04	2.83E+01	1.18E+01	2.16E-03	NV	NV	2.00E-02	2.00E-02
1,2-Dichloroethane	1.42E-03	B2	9.10E-02	2.60E-02	--	7.00E-03	5.21E+03	8.09E+00	5.33E+01	1.42E-03	NV	NV	5.00E-01	5.00E-01
2-Butanone	2.47E+00	D	--	--	6.00E-01	5.00E+00	7.81E+03	NV	5.45E+04	2.47E+00	NV	NV	2.00E+02	2.00E+02
4-Methyl-2-pentanone (=MIBK)	9.54E-01	D	--	--	8.00E-02	3.00E+00	9.56E+03	NV	3.34E+04	9.54E-01	NV	NV	2.00E+02	2.00E+02
Acetone	9.35E+00	D	--	--	9.00E-01	3.10E+01	6.56E+03	NV	2.56E+05	9.35E+00	NV	NV	4.00E+02	4.00E+02
Benzene	4.47E-03	A	5.50E-02	7.80E-03	4.00E-03	3.00E-02	4.50E+03	2.31E+01	1.92E+02	4.47E-03	NV	NV	5.00E-01	5.00E-01
Carbon disulfide	1.19E+00	--	--	--	1.00E-01	7.00E-01	8.75E+02	NV	8.91E+02	1.19E+00	NV	NV	4.00E+02	4.00E+02
Carbon tetrachloride	3.97E-03	B2	7.00E-02	6.00E-03	4.00E-03	1.00E-01	1.25E+03	8.42E+00	1.78E+02	3.97E-03	NV	NV	5.00E-01	5.00E-01
Chlorobenzene	9.26E-02	D	--	--	2.00E-02	5.00E-02	8.56E+03	NV	6.15E+02	9.26E-02	NV	NV	1.00E+01	1.00E+01
Chloroethane	8.31E+00	--	--	--	--	1.00E+01	1.07E+03	NV	1.57E+04	8.31E+00	NV	NV	1.00E+00	8.31E+00
Chloroform	2.77E-02	B2	3.10E-02	2.30E-02	1.00E-02	9.80E-02	2.75E+03	4.88E+00	3.86E+02	2.77E-02	NV	NV	1.00E+01	1.00E+01
Chloromethane (methyl chloride)	6.80E-02	D	--	--	--	9.00E-02	8.30E+02	NV	1.09E+02	6.80E-02	NV	NV	3.00E-01	3.00E-01
cis-1,2-Dichloroethene	6.01E-02	--	--	--	2.00E-03	--	2.73E+03	NV	4.09E+03	6.01E-02	NV	NV	7.00E+00	7.00E+00
Cyclohexane	1.82E+01	--	--	--	--	6.00E+00	7.74E+02	NV	6.78E+03	1.82E+01	NV	NV	2.00E+01	2.00E+01
Ethylbenzene	7.85E-01	D	1.10E-02	2.50E-03	1.00E-01	1.00E+00	7.63E+03	1.22E+03	1.06E+04	7.85E-01	NV	NV	7.00E+01	7.00E+01
Freon 113 (trichlorotrifluoroethane)	2.52E+03	--	--	--	3.00E+01	3.00E+01	5.73E+02	NV	2.51E+04	2.52E+03	NV	NV	1.00E+05	1.00E+05
Isopropylbenzene (cumene)	1.72E+00	D	--	--	1.00E-01	4.00E-01	8.41E+03	NV	4.80E+03	1.72E+00	NV	NV	2.19E+01	2.19E+01
m-Xylenes	9.77E+00	D	--	--	2.00E-01	1.00E-01	7.33E+03	NV	1.07E+03	9.77E+00	NV	NV	1.00E+03	1.00E+03
Methylene chloride	3.06E-02	B2	7.50E-03	4.70E-04	6.00E-02	1.00E+00	2.12E+03	1.80E+02	3.01E+03	3.06E-02	NV	NV	5.00E-01	5.00E-01
o-Xylenes	9.85E+00	D	--	--	2.00E-01	1.00E-01	8.66E+03	NV	1.26E+03	9.85E+00	NV	NV	1.00E+03	1.00E+03
p-Xylenes	9.76E+00	D	--	--	2.00E-01	1.00E-01	7.48E+03	NV	1.09E+03	9.76E+00	NV	NV	1.00E+03	1.00E+03
Tetrachloroethene	2.27E-03	--	5.40E-01	5.90E-03	1.00E-02	2.70E-01	2.65E+03	1.56E+01	9.93E+02	2.27E-03	NV	NV	5.00E-01	5.00E-01
Toluene	3.63E+00	D	--	--	8.00E-02	5.00E+00	5.61E+03	NV	3.27E+04	3.63E+00	NV	NV	1.00E+02	1.00E+02
trans-1,2-Dichloroethene	4.75E-02	D	--	--	2.00E-02	6.00E-02	2.73E+03	NV	2.38E+02	4.75E-02	NV	NV	1.00E+01	1.00E+01
Trichloroethene	1.35E-02	--	5.90E-03	2.00E-03	--	--	2.43E+03	4.94E+01	NV	1.35E-02	NV	NV	5.00E-01	5.00E-01
Vinyl chloride	1.13E-03	A	7.20E-01	4.40E-03	3.00E-03	1.00E-01	5.72E+02	4.98E+00	8.23E+01	1.13E-03	NV	NV	2.00E-01	2.00E-01
Xylenes (Total)	9.85E+00	D	--	--	2.00E-01	1.00E-01	7.81E+03	NV	1.14E+03	9.85E+00	NV	NV	1.00E+03	1.00E+03
<b>Additional VOCS</b>														
1,2,3-Trichloropropane	1.99E-02	--	3.00E+01	--	4.00E-03	3.00E-04	2.72E+03	1.91E+01	1.19E+00	1.99E-02	NV	NV	4.00E+00	4.00E+00
1,2,4-Trimethylbenzene	1.02E-01	--	--	--	--	7.00E-03	1.07E+04	NV	1.10E+02	1.02E-01	NV	NV	7.00E+00	7.00E+00
1,3,5-Trimethylbenzene	7.18E-03	--	--	--	--	--	8.94E+03	NV	NV	7.18E-03	NV	NV	5.00E-01	5.00E-01
2-Hexanone	4.61E-01	--	--	--	5.00E-03	3.00E-02	1.27E+04	NV	5.27E+02	4.61E-01	NV	NV	2.00E+02	2.00E+02
2-Phenylbutane (sec-Butylbenzene)	1.46E-02	--	--	--	--	--	1.00E+04	NV	NV	1.46E-02	NV	NV	5.00E-01	5.00E-01
Bromomethane (Methyl bromide)	3.36E-03	D	--	--	1.40E-03	5.00E-03	1.01E+03	NV	7.39E+00	3.36E-03	NV	NV	1.00E+00	1.00E+00
Chlorobromomethane	1.24E-03	--	--	--	--	--	3.60E+03	NV	NV	1.24E-03	NV	NV	5.00E-01	5.00E-01
cis-1,3-Dichloropropene	4.26E-03	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	4.13E+03	3.93E+02	1.20E+02	4.26E-03	NV	NV	1.00E+03	1.00E+03
Cymene (p-Isopropyltoluene)	1.24E-02	--	--	--	--	--	1.17E+04	NV	NV	1.24E-02	NV	NV	5.00E-01	5.00E-01
Dichlorodifluoromethane (CFC-12)	3.16E+01	--	--	--	2.00E-01	--	1.65E+02	NV	4.09E+05	3.16E+01	NV	NV	1.00E+02	1.00E+02
Methyl acetate	1.03E-03	--	--	--	--	--	4.39E+03	NV	NV	1.03E-03	NV	NV	5.00E-01	5.00E-01
Methyl cyclohexane	1.12E-02	--	--	--	--	--	5.58E+02	NV	NV	1.12E-02	NV	NV	5.00E-01	5.00E-01
N-Butylbenzene	1.64E+01	--	--	--	5.00E-02	--	1.11E+04	NV	1.02E+05	1.64E+01	NV	NV	5.00E-01	1.64E+01
N-Propylbenzene	9.32E-03	--	--	--	--	--	9.49E+03	NV	NV	9.32E-03	NV	NV	5.00E-01	5.00E-01
Styrene	2.82E+00	--	--	--	2.00E-01	1.00E+00	1.27E+04	NV	1.77E+04	2.82E+00	NV	NV	1.40E+01	1.40E+01
tert-Butylbenzene	1.12E-02	--	--	--	--	--	1.00E+04	NV	NV	1.12E-02	NV	NV	5.00E-01	5.00E-01
Trichlorofluoromethane (CFC-11)	1.29E+00	--	--	--	3.00E-01	7.00E-01	5.04E+02	NV	5.15E+02	1.29E+00	NV	NV	2.00E+02	2.00E+02
1,1,2,2-Tetrachloroethane	5.78E-02	C	2.00E-01	5.80E-02	2.00E-02	--	1.93E+04	1.30E+02	4.09E+04	5.78E-02	NV	NV	2.00E+01	2.00E+01
1,1-Dichloropropene	NV	--	--	--	--	--	NV	NV	NV	NV	NV	NV	5.00E-01	5.00E-01
1,2,3-Trichlorobenzene	1.46E-03	--	--	--	--	--	4.44E+04	NV	NV	1.46E-03	NV	NV	1.08E+01	1.08E+01
1,2-Dibromoethane (EDB)	1.45E-03	B2	2.00E+00	6.00E-01	9.00E-03	9.00E-03	9.96E+03	6.63E+00	1.30E+02	1.45E-03	NV	NV	5.00E-01	5.00E-01
1,2-Dichloropropane	2.21E-03	--	3.60E-02	1.00E-02	9.00E-02	4.00E-03	4.28E+03	1.73E+02	2.50E+01	2.21E-03	NV	NV	5.00E-01	5.00E-01
2,2-Dichloropropane	NV	--	--	--	--	--	NV	NV	NV	NV	NV	NV	5.00E-01	5.00E-01
2-Chlorotoluene	6.15E-01	--	--	--	2.00E-02	--	1.09E+04	NV	4.09E+04	6.15E-01	NV	NV	5.00E-01	6.15E-01
2-Methylnaphthalene	1.18E-01	--	--	--	4.00E-03	--	8.02E+04	NV	8.18E+03	1.18E-01	NV	NV	1.00E+00	1.00E+00
4-Chlorotoluene	1.52E-03	--	--	--	--	--	9.79E+03	NV	NV	1.52E-03	NV	NV	5.00E-01	5.00E-01
Bromobenzene	4.28E-02	--	--	--	8.00E-03	6.00E-02	1.11E+04	NV	9.20E+02	4.28E-02	NV	NV	5.00E-01	5.00E-01
Bromodichloromethane	2.96E-02	--	6.20E-02	3.70E-02	2.00E-02	--	4.27E+03	4.70E+01	4.09E+04	2.96E-02	NV	NV	1.00E+01	1.00E+01
Bromoform	2.90E-02	--	7.90E-03	1.10E-03	2.00E-02	--	1.67E+04	5.72E+03	4.09E+04	2.90E-02	NV	NV	1.00E+01	1.00E+01
Dibromochloromethane	2.91E-02	--	8.40E-02	2.70E-02	2.00E-02	--	8.80E+03	1.31E+02	4.09E+04	2.91E-02	NV	NV	1.00E+01	1.00E+01
Dibromomethane	2.97E-01	--	--	--	1.00E-02	--	5.76E+03	NV	2.04E+04	2.97E-01	NV	NV	1.00E+03	1.00E+03
Methyl tert-butyl ether (MTBE)	7.61E-02	--	1.80E-03	2.60E-04	--	3.00E+00	4.26E+03	6.55E+03	1.86E+04	7.61E-02	NV	NV	5.00E-01	5.00E-01
trans-1,3-Dichloropropene	3.59E-03	B2	1.00E-01	4.00E-03	3.00E-02	2.00E-02	4.13E+03	3.93E+02	1.20E+02	3.59E-03	NV	NV	2.22E+00	2.22E+00

TABLE 4  
 DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR SOIL  
 ARIVEC CHEMICALS SITE  
 DOUGLASVILLE, GEORGIA

Regulated Substances	Leaching Potential criterion d.1 <sup>(1)</sup> (mg/kg)	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) <sup>(2)</sup> (m <sup>3</sup> /kg)	PRGs calculated from RAGS			Type 4 will not be less than:			Type 4 RRS Target Concentrations (mg/kg)
			CSF (Oral)	URF (Inhalation)	RfD (Oral)	RfC (Inhalation)		Carcinogenic criterion d.2 (mg/kg)	Non-Carcinogenic criterion d.3 (mg/kg)	Least of d.1 thru d.3 (mg/kg)	Table 2 App III (mg/kg)	Background Conc. (mg/kg)	Type 3 RRS (mg/kg)	
			(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )								
<b>SVOCS</b>														
1,2,4-Trichlorobenzene	2.04E-01	D	2.90E-02	--	1.00E-02	2.00E-03	4.10E+04	1.97E+04	1.19E+02	2.04E-01	NV	NV	1.08E+01	1.08E+01
1,2-Dichlorobenzene	5.84E-01	D	--	--	9.00E-02	2.00E-01	1.58E+04	NV	4.51E+03	5.84E-01	NV	NV	6.00E+01	6.00E+01
1,3-Dichlorobenzene	5.76E-01	D	--	--	--	--	1.34E+04	NV	NV	5.76E-01	NV	NV	6.00E+01	6.00E+01
1,4-Dichlorobenzene	7.20E-02	--	5.40E-03	1.10E-02	7.00E-02	8.00E-01	1.41E+04	5.22E+01	1.48E+04	7.20E-02	NV	NV	7.50E+00	7.50E+00
Hexachlorobutadiene	7.51E-02	C	7.80E-02	2.20E-02	1.00E-03	--	1.01E+04	1.83E+02	2.04E+03	7.51E-02	NV	NV	1.75E+01	1.75E+01
Naphthalene	6.58E-02	C	--	3.40E-02	2.00E-02	3.00E-03	6.42E+04	7.72E+02	2.79E+02	6.58E-02	NV	NV	1.00E+02	1.00E+02
<b>PCBs</b>														
Aroclor-1016	6.84E-01	B2	7.00E-02	2.00E-02	7.00E-05	--	NV	8.18E+02	1.43E+02	6.84E-01	NV	NV	1.55E+00	1.55E+00
Aroclor-1221	2.43E-02	B2	2.00E+00	5.70E-01	--	--	NV	2.86E+01	NV	2.43E-02	NV	NV	1.55E+00	1.55E+00
Aroclor-1232	2.43E-02	B2	2.00E+00	5.70E-01	--	--	NV	2.86E+01	NV	2.43E-02	NV	NV	1.55E+00	1.55E+00
Aroclor-1242	2.24E-01	B2	2.00E+00	5.70E-01	--	--	NV	2.86E+01	NV	2.24E-01	NV	NV	1.55E+00	1.55E+00
Aroclor-1248	2.19E-01	B2	2.00E+00	5.70E-01	--	--	NV	2.86E+01	NV	2.19E-01	NV	NV	1.55E+00	1.55E+00
Aroclor-1254	3.74E-01	B2	2.00E+00	5.70E-01	2.00E-05	--	NV	2.86E+01	4.09E+01	3.74E-01	NV	NV	1.55E+00	1.55E+00
Aroclor-1260	1.00E+00	B2	2.00E+00	5.70E-01	--	--	NV	2.86E+01	NV	1.00E+00	NV	NV	1.55E+00	1.55E+00
<b>Pesticides</b>														
4,4'-DDD	2.80E+00	B2	2.40E-01	6.90E-02	--	--	8.62E+06	2.28E+02	NV	2.80E+00	NV	NV	6.60E-01	2.80E+00
4,4'-DDE	1.98E+00	B2	3.40E-01	9.70E-02	--	--	3.72E+06	1.52E+02	NV	1.98E+00	NV	NV	6.60E-01	1.98E+00
4,4'-DDT	2.84E+00	B2	3.40E-01	9.70E-02	5.00E-04	--	1.02E+07	1.62E+02	1.02E+03	2.84E+00	NV	NV	6.60E-01	2.84E+00
Aldrin	2.76E-02	B2	1.70E+01	4.90E+00	3.00E-05	--	3.15E+06	2.98E+00	6.13E+01	2.76E-02	NV	NV	6.60E-01	6.60E-01
alpha-BHC	2.64E-03	B2	6.30E+00	1.80E+00	8.00E-03	--	1.65E+06	7.31E+00	1.64E+04	2.64E-03	NV	NV	6.60E-01	6.60E-01
alpha-Chlordane	5.54E-01	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	2.04E+06	1.37E+02	6.86E+02	5.54E-01	NV	NV	9.20E+00	9.20E+00
beta-BHC	9.24E-02	C	1.80E+00	5.30E-01	--	--	1.65E+06	2.54E+02	NV	9.24E-02	NV	NV	6.60E-01	6.60E-01
delta-BHC	2.91E-04	D	--	--	--	--	1.65E+06	NV	NV	2.91E-04	NV	NV	2.50E+01	2.50E+01
Dieldrin	7.22E-03	B2	1.60E+01	4.60E+00	5.00E-05	--	3.37E+06	3.19E+00	1.02E+02	7.22E-03	NV	NV	6.60E-01	6.60E-01
Endosulfan I	6.86E-03	--	--	--	--	--	7.98E+05	NV	NV	6.86E-03	NV	NV	1.00E+01	1.00E+01
Endosulfan II	1.37E-03	--	--	--	--	--	7.98E+05	NV	NV	1.37E-03	NV	NV	1.00E+01	1.00E+01
Endosulfan sulfate	1.37E-03	--	--	--	--	--	7.98E+05	NV	NV	1.37E-03	NV	NV	1.65E+00	1.65E+00
Endrin	1.24E+00	D	--	--	3.00E-04	--	3.37E+06	NV	6.13E+02	1.24E+00	NV	NV	1.00E+01	1.00E+01
Endrin Aldehyde	4.04E-03	D	--	--	--	--	3.37E+06	NV	NV	4.04E-03	NV	NV	1.00E+01	1.00E+01
Endrin ketone	4.04E-03	D	--	--	--	--	3.37E+06	NV	NV	4.04E-03	NV	NV	1.00E+01	1.00E+01
gamma-BHC (Lindane)	1.51E-01	C	1.10E+00	3.10E-01	3.00E-04	--	1.65E+06	4.20E+02	6.13E+02	1.51E-01	NV	NV	9.20E+00	9.20E+00
gamma-Chlordane	5.54E-01	B2	3.50E-01	1.00E-01	5.00E-04	7.00E-04	2.04E+06	1.37E+02	6.86E+02	5.54E-01	NV	NV	6.60E-01	6.60E-01
Heptachlor	5.26E-02	B2	4.50E+00	1.30E+00	5.00E-04	--	9.40E+05	8.89E+00	1.02E+03	5.26E-02	NV	NV	6.60E-01	6.60E-01
Heptachlor epoxide	6.42E-03	B2	9.10E+00	2.60E+00	1.30E-05	--	1.60E+06	5.03E+00	2.66E+01	6.42E-03	NV	NV	1.65E+00	1.65E+00
Methoxychlor	2.76E+01	D	--	--	5.00E-03	--	2.45E+07	NV	1.02E+04	2.76E+01	NV	NV	1.00E+01	2.76E+01
Toxaphene	7.73E-01	B2	1.10E+00	3.20E-01	--	--	8.84E+06	4.97E+01	NV	7.73E-01	NV	NV	1.09E+01	1.09E+01

**TABLE 4**  
**DERIVATION OF GENERIC TYPE 4 TARGET CONCENTRATIONS FOR SOIL**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Regulated Substances	Leaching Potential criterion d.1 (1)	Toxicity Class	Toxicity Indices				Volatilization Factor (VF) (2)	PRGs calculated from RAGS			Type 4 will not be less than:			Type 4 RRS Target Concentrations
			CSF	URF	RfD	RfC		Carcinogenic	Non-Carcinogenic	Least of	Table 2	Background	Type 3	
			(Oral)	(Inhalation)	(Oral)	(Inhalation)		criterion d.2	criterion d.3	d.1 thru d.3	App III	Conc.	RRS	
	(mg/kg)		(mg/kg-day) <sup>-1</sup>	(mg/m <sup>3</sup> ) <sup>-1</sup>	(mg/kg-day)	(mg/m <sup>3</sup> )	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
<b>Metals</b>														
Arsenic	2.92E+01	A	1.50E+00	4.30E+00	3.00E-04	1.50E-05	NV	3.81E+01	6.10E+02	2.92E-01	2.00E+01	NV	2.00E+01	2.00E+01
Barium	8.42E+02	D	--	--	2.00E-01	5.00E-04	NV	NV	3.65E+05	8.42E+02	1.00E+03	NV	1.00E+03	1.00E+03
Cadmium	3.84E+00	B	--	1.80E+00	5.00E-04	2.00E-05	NV	1.05E+05	1.01E+03	3.84E+00	2.00E+00	NV	2.00E+00	3.84E+00
Chromium	2.76E+08	D	--	--	1.50E+00	--	NV	NV	3.07E+06	3.07E+06	1.00E+02	NV	1.00E+02	3.07E+06
Lead (3)	1.35E+01	B2	--	--	--	--	NV	NV	NV	9.93E+02	7.50E+01	NV	7.50E+01	9.93E+02
Mercury	5.33E-01	D	--	--	1.00E-04	3.00E-04	2.27E+04	NV	9.48E+00	5.33E-01	5.00E-01	NV	5.00E-01	5.33E-01
Selenium	2.66E+00	D	--	--	5.00E-03	2.00E-02	NV	NV	1.02E+04	2.66E+00	2.00E+00	NV	2.00E+00	2.66E+00
Silver	4.34E+00	D	--	--	5.00E-03	--	NV	NV	1.02E+04	4.34E+00	2.00E+00	NV	2.00E+00	4.34E+00

**Notes:**

- No value available.
- NV No value established.
- NR Not regulated.
- RAGS Risk Assessment Guidance for Superfund, Volume 1, Part B [EPA/540/R-92/003], December, 1991.
- (1) See Table 5 in derivation of leaching potential (criterion d.1).
- (2) See Table 6 for derivation of volatilization factors.
- (3) Lead concentration is generated by Adult Lead Model. See Table 7 for derivation of PRG.

**Exposure Equations:**

Carcinogenic Endpoints:  $PRG = \frac{TR \times ATc}{EF \times ED \times [(CSF \times IR \times CF)/BW + (URF \times (1/PEF \text{ or } VF))]}$

Non-Carcinogenic Endpoints:  $PRG = \frac{THQ \times ATnc}{EF \times ED \times [(1/RfD) \times IR \times CF)/BW + ((1/RfC) \times (1/PEF \text{ or } VF))]}$

where:

Preliminary Risk Goal (mg/kg)	PRG	calculated	
Target Risk Level (unitless)	TR	1.0E-05	GEPD, 2003 (Class A/B carcinogens)
Target Hazard Level (unitless)	TR	1.0E-04	GEPD, 2003 (Class C carcinogens)
Target Hazard Level (unitless)	THQ	1	GEPD, 2003
Cancer Slope Factor (per mg/kg-day)	CSF	chemical-specific	RSL, 2011
Reference Dose Factor (mg/kg-day)	RfD	chemical-specific	RSL, 2011
Unit Risk Factor (1/(mg/m <sup>3</sup> ))	URF	chemical-specific	RSL, 2011
Reference Concentration (mg/m <sup>3</sup> )	RfC	chemical-specific	RSL, 2011
Ingestion Rate (mg/day) - adult	IR	50	GEPD, 2003
Exposure Frequency (days/year)	EF	250	GEPD, 2003
Exposure Duration (years) - adult	ED	25	GEPD, 2003
Body Weight (kg) - adult	BW	70	GEPD, 2003
Conversion Factor (kg/mg)	CF	1.0E-06	--
Averaging Time - carc. (days)	ATc	25,550	GEPD, 2003
Averaging Time - noncarc. (days)	ATnc	9,125	GEPD, 2003
Particulate Emission Factor (m <sup>3</sup> /kg)	PEF	4.63E+09	GEPD, 2003
Volatilization Factor (m <sup>3</sup> /kg)	VF	chemical-specific	Refer to Table 6

**References:**

- GEPD, 2003: Rule 391-3-19-.07, Risk Reduction Standards, July 23, 2003.
- RSL, 2011: Regional Screening Level Table Master, June 2011.

**TABLE 5**  
**CALCULATION OF SOIL LEACHING CRITERION (CRITERION d.1) FOR HSRA SOIL TARGET CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

Soil Leaching Criterion (Criterion d.1); USEPA, 1996 =  $C_w \times [K_d + (O_w + O_a \times H)/P_b]$

*where:*

Cw	chemical specific	
Kd	chemical specific	= Koc x Foc; where Foc = 0.002 (0.2%)
Ow	0.3	
Oa	n-Ow	0.13
n	1-(Pb/Ps)	0.43
Pb	1.5	
Ps	2.65	
H	chemical specific	

USEPA, 1996: Soil Screening Level Partitioning Equation for Migration to Ground Water, Equation 10, Soil Screening Guidance, 9355.4-23, July 1996.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **Koc or Kd** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **Koc or Kd** were taken from RAIS Website (<http://rais.ornl.gov/>)

	<i>Soil Leaching</i> <i>Criterion d.1</i> <i>mg/kg</i>	<i>GWRRSs</i> <i>(default Type 2)</i> <i>mg/L</i>	<i>Partition</i> <i>Coefficient (1)</i> <i>l/kg</i>	<i>Koc</i> <i>(1)</i> <i>l/kg</i>	<i>Henry Law's</i> <i>Constant</i> <i>dimensionless</i>
<b>VOCS</b>					
1,1,1-Trichloroethane	4.78E+00	1.36E+01	8.78E-02	4.39E+01	7.05E-01
1,1,2-Trichloroethane	1.50E-02	4.64E-02	1.21E-01	6.07E+01	3.38E-02
1,1-Dichloroethane	1.14E+00	4.00E+00	6.36E-02	3.18E+01	2.30E-01
1,1-Dichloroethene	1.88E-01	5.24E-01	6.36E-02	3.18E+01	1.07E+00
1,2-Dibromo-3-Chloropropane	2.16E-03	5.00E-03	2.32E-01	1.16E+02	6.03E-03
1,2-Dichloroethane	1.42E-03	5.00E-03	7.92E-02	3.96E+01	4.84E-02
2-Butanone	2.47E+00	1.18E+01	9.02E-03	4.51E+00	2.33E-03
4-Methyl-2-pentanone (=MIBK)	9.54E-01	4.23E+00	2.52E-02	1.26E+01	5.66E-03
Acetone	9.35E+00	4.56E+01	4.73E-03	2.36E+00	1.44E-03
Benzene	4.47E-03	8.72E-03	2.92E-01	1.46E+02	2.28E-01
Carbon disulfide	1.19E+00	4.00E+00	4.39E-02	2.19E+01	5.90E-01
Carbon tetrachloride	3.97E-03	1.02E-02	8.78E-02	4.39E+01	1.13E+00
Chlorobenzene	9.26E-02	1.36E-01	4.68E-01	2.34E+02	1.28E-01
Chloroethane	8.31E+00	2.92E+01	4.39E-02	2.19E+01	4.55E-01
Chloroform	2.77E-02	1.00E-01	6.36E-02	3.18E+01	1.50E-01
Chloromethane (methyl chloride)	6.80E-02	2.63E-01	2.64E-02	1.32E+01	3.62E-01
cis-1,2-Dichloroethene	6.01E-02	2.04E-01	7.92E-02	3.96E+01	1.67E-01
Cyclohexane	1.82E+01	1.75E+01	2.92E-01	1.46E+02	6.15E+00
Ethylbenzene	7.85E-01	7.00E-01	8.92E-01	4.46E+02	3.23E-01
Freon 113 (trichlorotrifluoroethane)	2.52E+03	1.00E+03	3.94E-01	1.97E+02	2.16E+01
Isopropylbenzene (cumene)	1.72E+00	1.05E+00	1.40E+00	6.98E+02	4.72E-01
m-Xylenes	9.77E+00	1.00E+01	7.51E-01	3.75E+02	2.94E-01
Methylene chloride	3.06E-02	1.19E-01	4.39E-02	2.19E+01	1.33E-01
o-Xylene	9.85E+00	1.00E+01	7.66E-01	3.83E+02	2.12E-01
p-Xylenes	9.76E+00	1.00E+01	7.51E-01	3.75E+02	2.83E-01
Tetrachloroethene	2.27E-03	5.00E-03	1.90E-01	9.49E+01	7.26E-01
Toluene	3.63E+00	5.24E+00	4.68E-01	2.34E+02	2.72E-01
trans-1,2-Dichloroethene	4.75E-02	1.61E-01	7.92E-02	3.96E+01	1.67E-01
Trichloroethene	1.35E-02	3.77E-02	1.21E-01	6.07E+01	4.04E-01
Vinyl chloride	1.13E-03	3.27E-03	4.35E-02	2.17E+01	1.14E+00
Xylenes (Total)	9.85E+00	1.00E+01	7.66E-01	3.83E+02	2.12E-01

TABLE 5  
CALCULATION OF SOIL LEACHING CRITERION (CRITERION d.1) FOR HSRA SOIL TARGET CONCENTRATIONS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Soil Leaching Criterion (Criterion d.1); USEPA, 1996 =  $C_w \times [K_d + (O_w + O_a \times H)/P_b]$

*where:*

Cw	chemical specific	
Kd	chemical specific	= Koc x Foc; where Foc = 0.002 (0.2%)
Ow	0.3	
Oa	n-Ow	0.13
n	1-(Pb/Ps)	0.43
Pb	1.5	
Ps	2.65	
H	chemical specific	

USEPA, 1996: Soil Screening Level Partitioning Equation for Migration to Ground Water, Equation 10, Soil Screening Guidance, 9355.4-23, July 1996.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **Koc or Kd** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **Koc or Kd** were taken from RAIS Website (<http://rais.ornl.gov/>)

<i>Soil Leaching</i>	<i>GWRRSs</i>	<i>Partition</i>	<i>Koc</i>	<i>Henry Law's</i>
<i>Criterion d.1</i>	<i>(default Type 2)</i>	<i>Coefficient (1)</i>	<i>(1)</i>	<i>Constant</i>
<i>mg/kg</i>	<i>mg/L</i>	<i>l/kg</i>	<i>l/kg</i>	<i>dimensionless</i>
<b>Additional VOCS</b>				
1,2,3-Trichloropropane	1.99E-02	4.00E-02	2.32E-01	7.22E-01
1,2,4-Trimethylbenzene	1.02E-01	7.00E-02	1.23E+00	2.53E-01
1,3,5-Trimethylbenzene	7.18E-03	5.00E-03	1.20E+00	3.60E-01
2-Hexanone	4.61E-01	2.00E+00	3.00E-02	3.82E-03
2-Phenylbutane (sec-Butylbenzene)	1.46E-02	5.00E-03	2.66E+00	<b>1.33E+03</b>
Bromomethane (Methyl bromide)	3.36E-03	1.32E-02	2.64E-02	3.01E-01
Chlorobromomethane	1.24E-03	5.00E-03	4.34E-02	<b>2.17E+01</b>
cis-1,3-Dichloropropene	4.26E-03	1.19E-02	1.44E-01	7.22E+01
Cymene (p-Isopropyltoluene)	1.24E-02	5.00E-03	2.24E+00	<b>1.12E+03</b>
Dichlorodifluoromethane (CFC-12)	3.16E+01	2.04E+01	8.78E-02	4.39E+01
Methyl acetate	1.03E-03	5.00E-03	6.12E-03	3.06E+00
Methyl cyclohexane	1.12E-02	5.00E-03	4.68E-01	<b>2.34E+02</b>
N-Butylbenzene	1.64E+01	5.11E+00	2.96E+00	<b>1.48E+03</b>
N-Propylbenzene	9.32E-03	5.00E-03	1.63E+00	8.13E+02
Styrene	2.82E+00	2.56E+00	8.92E-01	4.46E+02
tert-Butylbenzene	1.12E-02	5.00E-03	2.00E+00	<b>1.00E+03</b>
Trichlorofluoromethane (CFC-11)	1.29E+00	2.00E+00	8.78E-02	4.39E+01
1,1,2,2-Tetrachloroethane	5.78E-02	2.00E-01	8.78E-02	4.39E+01
1,1-Dichloropropene	NV	5.00E-03	8.78E-02	4.39E+01
1,2,3-Trichlorobenzene	1.46E-03	5.00E-03	8.78E-02	4.39E+01
1,2-Dibromoethane (EDB)	1.45E-03	5.00E-03	8.78E-02	4.39E+01
1,2-Dichloropropane	2.21E-03	7.41E-03	8.78E-02	4.39E+01
2,2-Dichloropropane	NV	5.00E-03	8.78E-02	4.39E+01
2-Chlorotoluene	6.15E-01	2.04E+00	8.78E-02	4.39E+01
2-Methylnaphthalene	1.18E-01	4.09E-01	8.78E-02	4.39E+01
4-Chlorotoluene	1.52E-03	5.00E-03	8.78E-02	4.39E+01
Bromobenzene	4.28E-02	1.44E-01	8.78E-02	4.39E+01
Bromodichloromethane	2.96E-02	1.00E-01	8.78E-02	4.39E+01
Bromoform	2.90E-02	1.00E-01	8.78E-02	4.39E+01
Dibromochloromethane	2.91E-02	1.00E-01	8.78E-02	4.39E+01
Dibromomethane	2.97E-01	1.02E+00	8.78E-02	4.39E+01
Methyl tert-butyl ether (MTBE)	7.61E-02	2.63E-01	8.78E-02	4.39E+01
trans-1,3-Dichloropropene	3.59E-03	1.19E-02	8.78E-02	4.39E+01
<b>SVOCs</b>				
1,2,4-Trichlorobenzene	2.04E-01	7.00E-02	2.71E+00	1.36E+03
1,2-Dichlorobenzene	5.84E-01	6.00E-01	7.66E-01	3.83E+02
1,3-Dichlorobenzene	5.76E-01	6.00E-01	7.50E-01	<b>3.75E+02</b>
1,4-Dichlorobenzene	7.20E-02	7.50E-02	7.51E-01	3.75E+02
Hexachlorobutadiene	7.51E-02	3.37E-02	1.99E+00	9.94E+02
Naphthalene	6.58E-02	2.00E-02	3.09E+00	1.54E+03

TABLE 5  
CALCULATION OF SOIL LEACHING CRITERION (CRITERION d.1) FOR HSRA SOIL TARGET CONCENTRATIONS  
ARIVEC CHEMICALS SITE  
DOUGLASVILLE, GEORGIA

Soil Leaching Criterion (Criterion d.1); USEPA, 1996 =  $C_w \times [K_d + (O_w + O_a \times H)/P_b]$

*where:*

Cw	chemical specific	
Kd	chemical specific	= Koc x Foc; where Foc = 0.002 (0.2%)
Ow	0.3	
Oa	n-Ow	0.13
n	1-(Pb/Ps)	0.43
Pb	1.5	
Ps	2.65	
H	chemical specific	

USEPA, 1996: Soil Screening Level Partitioning Equation for Migration to Ground Water, Equation 10, Soil Screening Guidance, 9355.4-23, July 1996.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **Koc** or **Kd** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **Koc or Kd** were taken from RAIS Website (<http://rais.ornl.gov/>)

	<i>Soil Leaching Criterion d.1 mg/kg</i>	<i>GWRRSs (default Type 2) mg/L</i>	<i>Partition Coefficient (1) l/kg</i>	<i>Koc (1) l/kg</i>	<i>Henry Law's Constant dimensionless</i>
<b><i>PCBs</i></b>					
Aroclor-1016	6.84E-01	7.15E-03	9.54E+01	4.77E+04	8.20E-03
Aroclor-1221	2.43E-02	1.43E-03	1.68E+01	8.40E+03	3.02E-02
Aroclor-1232	2.43E-02	1.43E-03	1.68E+01	8.40E+03	3.02E-02
Aroclor-1242	2.24E-01	1.43E-03	1.56E+02	7.81E+04	7.79E-03
Aroclor-1248	2.19E-01	1.43E-03	1.53E+02	7.65E+04	1.80E-02
Aroclor-1254	3.74E-01	1.43E-03	2.61E+02	1.31E+05	1.16E-02
Aroclor-1260	1.00E+00	1.43E-03	6.99E+02	3.50E+05	1.38E-02
<b><i>Pesticides</i></b>					
4,4'-DDD	2.80E+00	1.19E-02	2.35E+02	1.18E+05	2.71E-04
4,4'-DDE	1.98E+00	8.42E-03	2.35E+02	1.18E+05	1.71E-03
4,4'-DDT	2.84E+00	8.42E-03	3.37E+02	1.69E+05	3.41E-04
Aldrin	2.76E-02	1.68E-04	1.64E+02	8.20E+04	1.80E-03
alpha-BHC	2.64E-03	4.54E-04	5.61E+00	2.81E+03	2.11E-04
alpha-Chlordane	5.54E-01	8.18E-03	6.76E+01	3.38E+04	1.99E-03
beta-BHC	9.24E-02	1.59E-02	5.61E+00	2.81E+03	2.11E-04
delta-BHC	2.91E-04	5.00E-05	5.61E+00	2.81E+03	2.11E-04
Dieldrin	7.22E-03	1.79E-04	4.02E+01	2.01E+04	4.10E-04
Endosulfan I	6.86E-03	5.00E-04	1.35E+01	6.76E+03	2.67E-03
Endosulfan II	1.37E-03	1.00E-04	1.35E+01	6.76E+03	2.67E-03
Endosulfan sulfate	1.37E-03	1.00E-04	1.35E+01	6.76E+03	2.67E-03
Endrin	1.24E+00	3.07E-02	4.02E+01	2.01E+04	4.10E-04
Endrin Aldehyde	4.04E-03	1.00E-04	4.02E+01	2.01E+04	4.10E-04
Endrin ketone	4.04E-03	1.00E-04	4.02E+01	2.01E+04	4.10E-04
gamma-BHC (Lindane)	1.51E-01	2.60E-02	5.61E+00	2.81E+03	2.11E-04
gamma-Chlordane	5.54E-01	8.18E-03	6.76E+01	3.38E+04	1.99E-03
Heptachlor	5.26E-02	6.36E-04	8.25E+01	4.13E+04	1.21E-02
Heptachlor epoxide	6.42E-03	3.14E-04	2.02E+01	1.01E+04	8.61E-04
Methoxychlor	2.76E+01	5.11E-01	5.38E+01	2.69E+04	8.32E-06
Toxaphene	7.73E-01	5.00E-03	1.54E+02	7.72E+04	2.46E-04
<b><i>Metals</i></b>					
Arsenic	2.92E-01	1.00E-02	<b>2.90E+01</b>	--	0.00E+00
Barium	8.42E+02	2.04E+01	<b>4.10E+01</b>	--	0.00E+00
Cadmium	3.84E+00	5.11E-02	<b>7.50E+01</b>	--	0.00E+00
Chromium	2.76E+08	1.53E+02	<b>1.80E+06</b>	--	0.00E+00
Lead	1.35E+01	1.50E-02	<b>9.00E+02</b>	--	0.00E+00
Mercury	5.33E-01	1.02E-02	<b>5.20E+01</b>	--	0.00E+00
Selenium	2.66E+00	5.11E-01	<b>5.00E+00</b>	--	0.00E+00
Silver	4.34E+00	5.11E-01	<b>8.30E+00</b>	--	0.00E+00

**TABLE 6**  
**CALCULATION OF VOLATILIZATION FACTOR (VF) FOR HSRA SOIL TARGET CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

$$VF (m^3/kg) = \frac{(LS \times V \times DH)}{A} \times \frac{(3.14 \times \alpha \times T)^{1/2}}{(2 \times D_{ei} \times E \times K_{as} \times 10^{-3} \text{ kg/g})}$$

where:

alpha (cm<sup>2</sup>/s) = (D<sub>ei</sub> × E) / (E + [p<sub>s</sub>(1-E)/K<sub>as</sub>])  
 LS/ length of side of contaminated area (m<sup>2</sup>) = 4.50E+01  
 V/ wind speed in mixing zone (m/s) = 2.25E+00  
 DH/ diffusion height (m) = 2.00E+00  
 A/ area of contamination (cm<sup>2</sup>) = 2.03E+07  
 T/ exposure interval (s) = 7.88E+08 (= 25 yrs)  
 p<sub>s</sub>/ density of soil solids (g/cm<sup>3</sup>) = 2.65E+00  
 OC/ soil organic carbon content fraction (unitless) = 2.00E-02  
 D<sub>ei</sub>/ effective diffusivity (cm<sup>2</sup>/s) = D<sub>i</sub> × E<sup>0.33</sup>  
 D<sub>i</sub>/ Molecular Diffusivity (cm<sup>2</sup>/s) = chemical specific  
 E/ total soil porosity (unitless) = 3.50E-01  
 K<sub>as</sub>/ soil/ air partition coefficient (g soil/ cm<sup>3</sup> air) = (H/K<sub>d</sub>) × 41  
 K<sub>d</sub>/ soil-water partition coefficient (cm<sup>3</sup>/g) = Koc × Foc; where Foc = 0.02 (2%)  
 H/ Henry's Law Constant (atm-m<sup>3</sup>/mol) = chemical specific  
 Koc/ organic carbon partition coefficient (cm<sup>3</sup>/g) = chemical specific

**Assumptions:**

Uses default values from Rule 391-3-19, Appendix III, Table 3.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **D<sub>i</sub>, H, Koc, and K<sub>d</sub>** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **D<sub>i</sub>, H, Koc, and K<sub>d</sub>** were taken from RAIS Website (<http://rais.ornl.gov/>)

<u>Parameters</u>	<b>D<sub>i</sub><sup>(1)</sup></b>	<b>D<sub>ei</sub></b>	<b>H<sup>(1)</sup></b>	<b>Koc<sup>(1)</sup></b>	<b>K<sub>d</sub></b>	<b>K<sub>as</sub></b>	<b>alpha</b>	<b>VF</b>
<b>VOCS</b>								
1,1,1-Trichloroethane	6.50E-02	4.60E-02	1.72E-02	4.39E+01	8.78E-01	8.03E-01	6.45E-03	1.54E+03
1,1,2-Trichloroethane	6.70E-02	4.74E-02	8.24E-04	6.07E+01	1.21E+00	2.78E-02	2.66E-04	8.78E+03
1,1-Dichloroethane	8.40E-02	5.94E-02	5.62E-03	3.18E+01	6.36E-01	3.62E-01	4.07E-03	2.10E+03
1,1-Dichloroethene	8.60E-02	6.08E-02	2.61E-02	3.18E+01	6.36E-01	1.68E+00	1.55E-02	8.63E+02
1,2-Dibromo-3-Chloropropane	3.20E-02	2.26E-02	1.47E-04	1.16E+02	2.32E+00	2.60E-03	1.20E-05	4.16E+04
1,2-Dichloroethane	8.60E-02	6.08E-02	1.18E-03	3.96E+01	7.92E-01	6.11E-02	7.46E-04	5.21E+03
2-Butanone	9.10E-02	6.44E-02	5.69E-05	4.51E+00	9.02E-02	2.59E-02	3.36E-04	7.81E+03
4-Methyl-2-pentanone (=MIBK)	7.00E-02	4.95E-02	1.38E-04	1.26E+01	2.52E-01	2.25E-02	2.25E-04	9.56E+03
Acetone	1.10E-01	7.78E-02	3.50E-05	2.36E+00	4.73E-02	3.04E-02	4.77E-04	6.56E+03
Benzene	9.00E-02	6.36E-02	5.55E-03	1.46E+02	2.92E+00	7.80E-02	9.93E-04	4.50E+03
Carbon disulfide	1.10E-01	7.78E-02	1.44E-02	2.19E+01	4.39E-01	1.35E+00	1.67E-02	8.75E+02
Carbon tetrachloride	5.70E-02	4.03E-02	2.76E-02	4.39E+01	8.78E-01	1.29E+00	8.37E-03	1.25E+03
Chlorobenzene	7.20E-02	5.09E-02	3.11E-03	2.34E+02	4.68E+00	2.73E-02	2.80E-04	8.56E+03
Chloroethane	1.00E-01	7.07E-02	1.11E-02	2.19E+01	4.39E-01	1.04E+00	1.23E-02	1.07E+03
Chloroform	7.70E-02	5.45E-02	3.67E-03	3.18E+01	6.36E-01	2.36E-01	2.50E-03	2.75E+03
Chloromethane (methyl chloride)	1.20E-01	8.49E-02	8.82E-03	1.32E+01	2.64E-01	1.37E+00	1.85E-02	8.30E+02
cis-1,2-Dichloroethene	8.80E-02	6.22E-02	4.08E-03	3.96E+01	7.92E-01	2.11E-01	2.56E-03	2.73E+03
Cyclohexane	8.00E-02	5.66E-02	1.50E-01	1.46E+02	2.92E+00	2.11E+00	1.70E-02	7.74E+02
Ethylbenzene	6.80E-02	4.81E-02	7.88E-03	4.46E+02	8.92E+00	3.62E-02	3.51E-04	7.63E+03
Freon 113 (trichlorotrifluoroethane)	3.80E-02	2.69E-02	5.26E-01	1.97E+02	3.94E+00	5.48E+00	1.42E-02	5.73E+02
Isopropylbenzene (cumene)	6.00E-02	4.24E-02	1.15E-02	6.98E+02	1.40E+01	3.38E-02	2.89E-04	8.41E+03
m-Xylenes	6.80E-02	4.81E-02	7.18E-03	3.75E+02	7.51E+00	3.92E-02	3.80E-04	7.33E+03
Methylene chloride	1.00E-01	7.07E-02	3.25E-03	2.19E+01	4.39E-01	3.04E-01	4.11E-03	2.12E+03
o-Xylene	6.90E-02	4.88E-02	5.18E-03	3.83E+02	7.66E+00	2.77E-02	2.73E-04	8.66E+03
p-Xylenes	6.80E-02	4.81E-02	6.90E-03	3.75E+02	7.51E+00	3.77E-02	3.65E-04	7.48E+03
Tetrachloroethene	5.00E-02	3.54E-02	1.77E-02	9.49E+01	1.90E+00	3.82E-01	2.55E-03	2.65E+03
Toluene	7.80E-02	5.52E-02	6.64E-03	2.34E+02	4.68E+00	5.82E-02	6.45E-04	5.61E+03
trans-1,2-Dichloroethene	8.80E-02	6.22E-02	4.08E-03	3.96E+01	7.92E-01	2.11E-01	2.56E-03	2.73E+03
Trichloroethene	6.90E-02	4.88E-02	9.85E-03	6.07E+01	1.21E+00	3.33E-01	3.09E-03	2.43E+03
Vinyl chloride	1.10E-01	7.78E-02	2.78E-02	2.17E+01	4.35E-01	2.62E+00	2.70E-02	5.72E+02
Xylenes (Total)	8.50E-02	6.01E-02	5.18E-03	3.83E+02	7.66E+00	2.77E-02	3.37E-04	7.81E+03

**TABLE 6**  
**CALCULATION OF VOLATILIZATION FACTOR (VF) FOR HSRA SOIL TARGET CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

$$VF (m^3/kg) = \frac{(LS \times V \times DH)}{A} \times \frac{(3.14 \times \alpha \times T)^{1/2}}{(2 \times D_{ei} \times E \times K_{as} \times 10^{-3} \text{ kg/g})}$$

where:

$$\alpha (cm^2/s) = (D_{ei} \times E) / (E + [p_s(1-E)/K_{as}])$$

LS/ length of side of contaminated area (m<sup>2</sup>) = 4.50E+01  
V/ wind speed in mixing zone (m/s) = 2.25E+00  
DH/ diffusion height (m) = 2.00E+00  
A/ area of contamination (cm<sup>2</sup>) = 2.03E+07  
T/ exposure interval (s) = 7.88E+08 (= 25 yrs)  
p<sub>s</sub>/ density of soil solids (g/cm<sup>3</sup>) = 2.65E+00  
OC/ soil organic carbon content fraction (unitless) = 2.00E-02  
D<sub>ei</sub>/ effective diffusivity (cm<sup>2</sup>/s) = D<sub>i</sub> × E<sup>0.33</sup>  
D<sub>i</sub>/ Molecular Diffusivity (cm<sup>2</sup>/s) = chemical specific  
E/ total soil porosity (unitless) = 3.50E-01  
K<sub>as</sub>/ soil/ air partition coefficient (g soil/ cm<sup>3</sup> air) = (H/K<sub>d</sub>) × 41  
K<sub>d</sub>/ soil-water partition coefficient (cm<sup>3</sup>/g) = K<sub>oc</sub> × F<sub>oc</sub>; where F<sub>oc</sub> = 0.02 (2%)  
H/ Henry's Law Constant (atm-m<sup>3</sup>/mol) = chemical specific  
K<sub>oc</sub>/ organic carbon partition coefficient (cm<sup>3</sup>/g) = chemical specific

**Assumptions:**

Uses default values from Rule 391-3-19, Appendix III, Table 3.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **D<sub>i</sub>**, **H**, **K<sub>oc</sub>**, and **K<sub>d</sub>** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **D<sub>i</sub>**, **H**, **K<sub>oc</sub>**, and **K<sub>d</sub>** were taken from RAIS Website (<http://rais.ornl.gov/>)

<i>Parameters</i>	<i>D<sub>i</sub><sup>(1)</sup></i>	<i>D<sub>ei</sub></i>	<i>H<sup>(1)</sup></i>	<i>K<sub>oc</sub><sup>(1)</sup></i>	<i>K<sub>d</sub></i>	<i>K<sub>as</sub></i>	<i>alpha</i>	<i>VF</i>
<b>Additional VOCs</b>								
1,2,3-Trichloropropane	5.91E-02	4.18E-02	1.76E-02	1.16E+02	2.32E+00	3.11E-01	2.48E-03	2.72E+03
1,2,4-Trimethylbenzene	6.07E-02	4.29E-02	6.16E-03	6.14E+02	1.23E+01	2.06E-02	1.79E-04	1.07E+04
1,3,5-Trimethylbenzene	6.02E-02	4.26E-02	8.77E-03	6.02E+02	1.20E+01	2.99E-02	2.57E-04	8.94E+03
2-Hexanone	7.04E-02	4.98E-02	9.32E-05	1.50E+01	3.00E-01	1.27E-02	1.29E-04	1.27E+04
2-Phenylbutane (sec-Butylbenzene)	<b>5.28E-02</b>	3.73E-02	<b>1.76E-02</b>	<b>1.33E+03</b>	2.66E+01	2.71E-02	2.04E-04	1.00E+04
Bromomethane (Methyl bromide)	1.00E-01	7.07E-02	7.34E-03	1.32E+01	2.64E-01	1.14E+00	1.33E-02	1.01E+03
Chlorobromomethane	<b>7.87E-02</b>	5.57E-02	<b>1.46E-03</b>	<b>2.17E+01</b>	4.34E-01	1.38E-01	1.51E-03	3.60E+03
cis-1,3-Dichloropropene	8.23E-02	5.82E-02	3.55E-03	7.22E+01	1.44E+00	1.01E-01	1.17E-03	4.13E+03
Cymene (p-Isopropyltoluene)	<b>5.27E-02</b>	3.73E-02	<b>1.10E-02</b>	<b>1.12E+03</b>	2.24E+01	2.01E-02	1.52E-04	1.17E+04
Dichlorodifluoromethane (CFC-12)	7.77E-02	5.49E-02	3.43E-01	4.39E+01	8.78E-01	1.60E+01	4.20E-02	1.65E+02
Methyl acetate	9.58E-02	6.77E-02	1.15E-04	3.06E+00	6.12E-02	7.70E-02	1.04E-03	4.39E+03
Methyl cyclohexane	<b>7.00E-02</b>	4.95E-02	<b>4.29E-01</b>	<b>2.34E+02</b>	4.68E+00	3.76E+00	2.14E-02	5.58E+02
N-Butylbenzene	<b>5.28E-02</b>	3.73E-02	<b>1.59E-02</b>	<b>1.48E+03</b>	2.96E+01	2.20E-02	1.66E-04	1.11E+04
N-Propylbenzene	6.02E-02	4.26E-02	1.05E-02	8.13E+02	1.63E+01	2.65E-02	2.28E-04	9.49E+03
Styrene	7.11E-02	5.03E-02	2.75E-03	4.46E+02	8.92E+00	1.26E-02	1.29E-04	1.27E+04
tert-Butylbenzene	<b>5.30E-02</b>	3.75E-02	<b>1.32E-02</b>	<b>1.00E+03</b>	2.00E+01	2.70E-02	2.05E-04	1.00E+04
Trichlorofluoromethane (CFC-11)	6.54E-02	4.63E-02	9.70E-02	4.39E+01	8.78E-01	4.53E+00	2.22E-02	5.04E+02
1,1,2,2-Tetrachloroethane	4.89E-02	3.46E-02	3.67E-04	9.49E+01	1.90E+00	7.93E-03	5.56E-05	1.93E+04
1,1-Dichloropropene	--	--	--	--	--	--	--	NV
1,2,3-Trichlorobenzene	3.95E-02	2.79E-02	1.25E-03	1.38E+03	2.76E+01	1.86E-03	1.05E-05	4.44E+04
1,2-Dibromoethane (EDB)	4.30E-02	3.04E-02	6.50E-04	3.96E+01	7.92E-01	3.36E-02	2.07E-04	9.96E+03
1,2-Dichloropropane	8.13E-02	5.75E-02	2.82E-03	6.07E+01	1.21E+00	9.52E-02	1.09E-03	4.28E+03
2,2-Dichloropropane	--	--	--	--	--	--	--	NV
2-Chlorotoluene	6.29E-02	4.45E-02	3.57E-03	3.83E+02	7.66E+00	1.91E-02	1.72E-04	1.09E+04
2-Methylnaphthalene	5.24E-02	3.71E-02	5.18E-04	2.48E+03	4.96E+01	4.28E-04	3.22E-06	8.02E+04
4-Chlorotoluene	6.26E-02	4.43E-02	4.38E-03	3.75E+02	7.50E+00	2.39E-02	2.14E-04	9.79E+03
Bromobenzene	5.37E-02	3.80E-02	2.47E-03	2.34E+02	4.68E+00	2.16E-02	1.66E-04	1.11E+04
Bromodichloromethane	5.63E-02	3.98E-02	2.12E-03	3.18E+01	6.36E-01	1.37E-01	1.08E-03	4.27E+03
Bromoform	<b>1.49E-02</b>	1.05E-02	5.35E-04	3.18E+01	6.36E-01	3.45E-02	7.33E-05	1.67E+04
Dibromochloromethane	3.66E-02	2.59E-02	7.83E-04	3.18E+01	6.36E-01	5.05E-02	2.63E-04	8.80E+03
Dibromomethane	5.51E-02	3.90E-02	8.22E-04	2.17E+01	4.34E-01	7.77E-02	6.05E-04	5.76E+03
Methyl tert-butyl ether (MTBE)	7.53E-02	5.33E-02	5.87E-04	1.16E+01	2.32E-01	1.04E-01	1.10E-03	4.26E+03
trans-1,3-Dichloropropene	8.23E-02	5.82E-02	3.55E-03	7.22E+01	1.44E+00	1.01E-01	1.17E-03	4.13E+03
<b>SVOCS</b>								
1,2,4-Trichlorobenzene	4.00E-02	2.83E-02	1.42E-03	1.36E+03	2.71E+01	2.15E-03	1.23E-05	4.10E+04
1,2-Dichlorobenzene	5.60E-02	3.96E-02	1.92E-03	3.83E+02	7.66E+00	1.03E-02	8.25E-05	1.58E+04
1,3-Dichlorobenzene	<b>5.58E-02</b>	3.95E-02	<b>2.63E-03</b>	<b>3.75E+02</b>	7.50E+00	1.44E-02	1.15E-04	1.34E+04
1,4-Dichlorobenzene	5.50E-02	3.89E-02	2.41E-03	3.75E+02	7.51E+00	1.32E-02	1.04E-04	1.41E+04
Hexachlorobutadiene	<b>5.61E-02</b>	3.97E-02	1.03E-02	8.45E+02	1.69E+01	2.50E-02	2.00E-04	1.01E+04
Naphthalene	6.00E-02	4.24E-02	4.40E-04	1.54E+03	3.09E+01	5.84E-04	5.04E-06	6.42E+04

**TABLE 6**  
**CALCULATION OF VOLATILIZATION FACTOR (VF) FOR HSRA SOIL TARGET CONCENTRATIONS**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

$$VF (m^3/kg) = \frac{(LS \times V \times DH)}{A} \times \frac{(3.14 \times \alpha \times T)^{1/2}}{(2 \times D_{ei} \times E \times K_{as} \times 10^{-3} \text{ kg/g})}$$

where:

- alpha (cm<sup>2</sup>/s) = (D<sub>ei</sub> × E) / (E + [p<sub>s</sub>(1-E)/K<sub>as</sub>])  
 LS/ length of side of contaminated area (m<sup>2</sup>) = 4.50E+01  
 V/ wind speed in mixing zone (m/s) = 2.25E+00  
 DH/ diffusion height (m) = 2.00E+00  
 A/ area of contamination (cm<sup>2</sup>) = 2.03E+07  
 T/ exposure interval (s) = 7.88E+08 (= 25 yrs)  
 p<sub>s</sub>/ density of soil solids (g/cm<sup>3</sup>) = 2.65E+00  
 OC/ soil organic carbon content fraction (unitless) = 2.00E-02  
 D<sub>ei</sub>/ effective diffusivity (cm<sup>2</sup>/s) = D<sub>i</sub> × E<sup>0.33</sup>  
 D<sub>i</sub>/ Molecular Diffusivity (cm<sup>2</sup>/s) = chemical specific  
 E/ total soil porosity (unitless) = 3.50E-01  
 K<sub>as</sub>/ soil/ air partition coefficient (g soil/ cm<sup>3</sup> air) = (H/K<sub>d</sub>) × 41  
 K<sub>d</sub>/ soil-water partition coefficient (cm<sup>3</sup>/g) = K<sub>oc</sub> × F<sub>oc</sub>; where F<sub>oc</sub> = 0.02 (2%)  
 H/ Henry's Law Constant (atm-m<sup>3</sup>/mol) = chemical specific  
 K<sub>oc</sub>/ organic carbon partition coefficient (cm<sup>3</sup>/g) = chemical specific

**Assumptions:**

Uses default values from Rule 391-3-19, Appendix III, Table 3.

(1) Chemical-specific parameters were taken from Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table, June 2011.

Exceptions: Values in bold font for **D<sub>i</sub>, H, K<sub>oc</sub>, and K<sub>d</sub>** were taken from USEPA Soil Screening Guidance, December 2002.

Values in bold font for **D<sub>i</sub>, H, K<sub>oc</sub>, and K<sub>d</sub>** were taken from RAIS Website (<http://rais.ornl.gov/>)

<u>Parameters</u>	<b>D<sub>i</sub><sup>(1)</sup></b>	<b>D<sub>ei</sub></b>	<b>H<sup>(1)</sup></b>	<b>K<sub>oc</sub><sup>(1)</sup></b>	<b>K<sub>d</sub></b>	<b>K<sub>as</sub></b>	<b>alpha</b>	<b>VF</b>
<b>PCBs</b>								
Aroclor-1016	NA	NA	2.00E-04	4.77E+04	9.54E+02	8.60E-06	NV	NV
Aroclor-1221	NA	NA	7.36E-04	8.40E+03	1.68E+02	1.80E-04	NV	NV
Aroclor-1232	NA	NA	7.36E-04	8.40E+03	1.68E+02	1.80E-04	NV	NV
Aroclor-1242	NA	NA	1.90E-04	7.81E+04	1.56E+03	4.99E-06	NV	NV
Aroclor-1248	NA	NA	4.40E-04	7.65E+04	1.53E+03	1.18E-05	NV	NV
Aroclor-1254	NA	NA	2.83E-04	1.31E+05	2.61E+03	4.45E-06	NV	NV
Aroclor-1260	NA	NA	3.36E-04	3.50E+05	6.99E+03	1.97E-06	NV	NV
<b>Pesticides</b>								
4,4'-DDD	<b>1.69E-02</b>	1.20E-02	6.60E-06	1.18E+05	2.35E+03	1.15E-07	2.80E-10	8.62E+06
4,4'-DDE	<b>1.44E-02</b>	1.02E-02	4.16E-05	1.18E+05	2.35E+03	7.26E-07	1.50E-09	3.72E+06
4,4'-DDT	<b>1.37E-02</b>	9.69E-03	8.32E-06	1.69E+05	3.37E+03	1.01E-07	1.99E-10	1.02E+07
Aldrin	<b>1.32E-02</b>	9.34E-03	4.40E-05	8.20E+04	1.64E+03	1.10E-06	2.09E-09	3.15E+06
alpha-BHC	<b>1.42E-02</b>	1.00E-02	5.14E-06	2.81E+03	5.61E+01	3.75E-06	7.66E-09	1.65E+06
alpha-Chlordane	<b>1.18E-02</b>	8.34E-03	4.86E-05	3.38E+04	6.76E+02	2.95E-06	5.00E-09	2.04E+06
beta-BHC	<b>1.42E-02</b>	1.00E-02	5.14E-06	2.81E+03	5.61E+01	3.75E-06	7.66E-09	1.65E+06
delta-BHC	<b>1.42E-02</b>	1.00E-02	5.14E-06	2.81E+03	5.61E+01	3.75E-06	7.66E-09	1.65E+06
Dieldrin	<b>1.25E-02</b>	8.84E-03	1.00E-05	2.01E+04	4.02E+02	1.02E-06	1.83E-09	3.37E+06
Endosulfan I	<b>1.15E-02</b>	8.13E-03	6.50E-05	6.76E+03	1.35E+02	1.97E-05	3.26E-08	7.98E+05
Endosulfan II	<b>1.15E-02</b>	8.13E-03	6.50E-05	6.76E+03	1.35E+02	1.97E-05	3.26E-08	7.98E+05
Endosulfan sulfate	<b>1.15E-02</b>	8.13E-03	6.50E-05	6.76E+03	1.35E+02	1.97E-05	3.26E-08	7.98E+05
Endrin	<b>1.25E-02</b>	8.84E-03	1.00E-05	2.01E+04	4.02E+02	1.02E-06	1.83E-09	3.37E+06
Endrin Aldehyde	<b>1.25E-02</b>	8.84E-03	1.00E-05	2.01E+04	4.02E+02	1.02E-06	1.83E-09	3.37E+06
Endrin ketone	<b>1.25E-02</b>	8.84E-03	1.00E-05	2.01E+04	4.02E+02	1.02E-06	1.83E-09	3.37E+06
gamma-BHC (Lindane)	<b>1.42E-02</b>	1.00E-02	5.14E-06	2.81E+03	5.61E+01	3.75E-06	7.66E-09	1.65E+06
gamma-Chlordane	<b>1.18E-02</b>	8.34E-03	4.86E-05	3.38E+04	6.76E+02	2.95E-06	5.00E-09	2.04E+06
Heptachlor	<b>1.12E-02</b>	7.92E-03	2.94E-04	4.13E+04	8.25E+02	1.46E-05	2.35E-08	9.40E+05
Heptachlor epoxide	<b>1.32E-02</b>	9.34E-03	2.10E-05	1.01E+04	2.02E+02	4.26E-06	8.08E-09	1.60E+06
Methoxychlor	<b>1.56E-02</b>	1.10E-02	2.03E-07	2.69E+04	5.38E+02	1.55E-08	3.47E-11	2.45E+07
Toxaphene	<b>1.16E-02</b>	8.20E-03	6.00E-06	7.72E+04	1.54E+03	1.59E-07	2.66E-10	8.84E+06
<b>Metals</b>								
Arsenic	--	--	--	--	--	--	--	NV
Barium	--	--	--	--	--	--	--	NV
Cadmium	--	--	--	--	--	--	--	NV
Chromium	--	--	--	--	--	--	--	NV
Lead	--	--	--	--	--	--	--	NV
Mercury	3.10E-02	2.19E-02	1.15E-02	--	<b>5.20E+01</b>	9.04E-03	4.02E-05	2.27E+04

**TABLE 7**  
**DERIVATION OF DIRECT EXPOSURE FOR LEAD IN SOIL**  
**(GEORGIA ADULT LEAD MODEL)**  
**ARIVEC CHEMICALS SITE**  
**DOUGLASVILLE, GEORGIA**

$$PRG \text{ for Lead in Soil (ug/g)} = C_s = \frac{(PbB_{\text{adult, central, goal}} - PbB_{\text{adult, 0}})}{(BSF * (EF/AT))}$$

where :

$PbB_{\text{adult, central, goal}} = \frac{PbB_{\text{fetal, 0.95, goal}}}{GSD_1^{1.645} * R_{\text{fetal/maternal}}}$
--

<i>Model Parameters</i>	<i>units</i>	<i>Typical Value</i>	<i>Longterm On-Site Worker</i>
95th Percentile PbB in fetus (PbB <sub>fetal, 0.95, goal</sub> )	(ug/dL)	10	10
Individual geometric standard deviation (GSD <sub>i</sub> )	--	1.8 - 2.1	2.04
R <sub>fetal/maternal</sub>	--	0.9	0.9
Baseline blood lead value (PbB <sub>b</sub> )	(ug/dL)	1.7 - 2.2	1.38
Biokinetic slope factor (BSF)	(ug/dL per ug/day)	0.4	0.4
Soil ingestion rate (I <sub>s</sub> )	(g/day)	0.05	0.05
Soil Exposure Frequency (EF)	(days/yr)	219 - 250	219
Absolute absorption fraction of lead in soil (A <sub>s</sub> )	--	0.12	0.12
Averaging Time (AT)	(days)	365	365
Concentration of lead in groundwater (C <sub>w</sub> ) at the Site	(ug/L)	Site-Specific	13.1
Intake rate of water from on-site groundwater (I <sub>w</sub> )	(L/day)	1	1
Absolute absorption fraction of lead in water (A <sub>w</sub> )	--	0.2	0.2
<b>Calculated PRG [Lead Concentration in Soil (Cs)]</b>	(ug/g = mg/kg)		<b>993</b>

Assumptions:

Uses default values from Rule 391-3-19 , Appendix IV, Table 1, except for C<sub>w</sub>.

C<sub>w</sub>: Value of 13.1 ug/L is maximum concentration from Site wells during March 2009 sampling event.

APPENDIX D

LABORATORY DATA, SAMPLE KEY AND DATA VALIDATION



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## MEMORANDUM

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TO: Mike Reinhardt (Atlanta) REF. NO.: 035029-02-0004

FROM: Angela Bown/bjw/3-NF *AB/bjw* DATE: June 20, 2011  
REVISION: June 21, 2011

C.C.: Terefe Mazengia (Atlanta)

RE: **Analytical Data Assessment and Validation  
Groundwater Monitoring Wells  
Arrivec, Douglasville, Georgia  
May-June 2011**

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### INTRODUCTION

The following document details an assessment and validation of analytical results reported by Analytical Environmental Services, Inc. (AES), in Atlanta, Georgia, for environmental samples collected in May and June, 2011. A sample collection and analysis summary is presented in Table 1.

A summary of the analytical data is presented in Table 2. The analytical methodology utilized and method specific holding time criteria are summarized in Table 3.

Evaluation of the data was based on information obtained from finished data sheets, method blank data, and recovery data from matrix spike (MS), surrogate, and laboratory control (LCS) samples. Quality assurance/quality control (QA/QC) criteria by which these data have been assessed are referenced from the method and the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999.

### SAMPLE HOLDING TIME/PRESERVATION

All samples were shipped on ice and stored at 4°C (±2°C). The method specified holding time was met for the investigative samples. All samples were analyzed for the required parameter with associated reporting limits as specified for the program.

### SURROGATE SPIKE RECOVERIES

In accordance with the method employed, all groundwater samples, blanks, and QA/QC samples analyzed for volatile organic compounds (VOCs) were spiked with surrogate compounds prior to sample analysis.

Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

Samples submitted for VOC determinations were spiked with three surrogate compounds prior to sample analysis. All surrogate recoveries were within laboratory control limits, indicating good analytical efficiency.

#### LABORATORY METHOD BLANK ANALYSES

The purpose of assessing the results of laboratory method blank analyses is to determine the existence and magnitude of sample contamination introduced during analysis. Laboratory method blanks are prepared from deionized water and analyzed as samples.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per analytical batch. All results were non-detect for the compounds of interest, indicating that laboratory contamination was not a factor.

#### LABORATORY CONTROL SAMPLE (LCS) ANALYSES

LCS analyses serve as a monitor of the overall performance of all steps in the analysis, including the sample preparation. LCSs were analyzed using the same sample preparation, analytical method, and QA/QC procedures employed for the investigative samples.

All LCS recoveries were within the established control limits, indicating acceptable overall laboratory performance.

#### MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

The recoveries of MS and MSD analyses are used to assess the analytical accuracy achieved on individual sample matrices. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed for this study. Per the "Guidelines", qualification of data is not required if the sample results exceed four times the spike concentration added. All recoveries and RPDs were acceptable, demonstrating good analytical accuracy and precision.

#### FIELD QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) SAMPLES

The field QA/QC samples consisted of two (2) trip blank samples and two (2) field duplicate sample sets.

##### *Trip Blanks*

To evaluate contamination from sample collection, transportation, and storage activities, trip blanks were collected and submitted to the laboratory. All results were non-detect for the analytes of interest, indicating that good sample collection, transportation and storage techniques were employed.

*Field Duplicates*

Overall precision for the sampling event and laboratory procedures was monitored using the results of the field duplicate sample sets. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the RL, the evaluation criteria is one times the RL value for water samples.

The data indicate that an adequate level of precision was achieved for the sampling event.

CONCLUSION

Based on this assessment, the data produced by AES are acceptable for their intended use without qualification.

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY  
GROUNDWATER MONITORING WELLS  
ARRIVEC  
DOUGLASVILLE, GEORGIA  
MAY-JUNE 2011**

<i>Sample ID</i>	<i>Location ID</i>	<i>Collection Date (mm/dd/yy)</i>	<i>Collection Time (hr:min)</i>	<u><i>Analysis/Parameters</i></u>	<i>Comments</i>
				<i>TCL VOCs</i>	
GW-052511-BAH-001	MW-2B	05/25/11	10:10	X	
GW-052511-BAH-002	MW-CRA-9S	05/25/11	11:15	X	
GW-052511-BAH-003	MW-9R	05/25/11	13:40	X	
GW-052511-BAH-004	MR-9R DUP	05/25/11	13:53	X	GW-052511-BAH-003
GW-052511-DJB-101	MW-15B	05/25/11	11:00	X	
GW-052511-DJB-102	MW-15R	05/25/11	11:50	X	
GW-052511-DJB-103	MW-15R DUP	05/25/11	12:00	X	GW-052511-DJB-102
GW-052711-DJB-104	MW-CRA-2S	05/27/11	10:00	X	MS/MSD
GW-052711-DJB-105	MW-9B	05/27/11	11:50	X	
GW-052711-DJB-106	MW-CRA-1S	05/27/11	13:45	X	
Trip Blank	-	-	-	X	Trip Blank
GW-060111-DJB-107	MW-CRA-7S	06/01/11	11:30	X	
GW-060111-DJB-108	MW-CRA-5B	06/01/11	13:00	X	
GW-060111-DJB-109	MW-CRA-5S	06/01/11	13:30	X	
GW-060111-DJB-110	MW-CRA-8B	06/01/11	15:00	X	
GW-060211-DJB-111	MW-CRA-3B	06/02/11	10:00	X	
GW-060211-DJB-112	MW-CRA-6S	06/02/11	11:15	X	
GW-060211-DJB-113	MW-17B	06/02/11	12:45	X	
GW-060211-DJB-114	MW-17R	06/02/11	13:35	X	
GW-060211-DJB-115	MW-18R	06/02/11	15:00	X	
GW-060311-DJB-116	AW-2	06/03/11	10:00	X	
Trip Blank	-	-	-	X	Trip Blank

## Notes:

- Not applicable.
- TCL Target Compound List.
- VOCs Volatile Organic Compounds.

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>AW-2</i>	<i>MW-CRA-1S</i>	<i>MW-2B</i>	<i>MW-CRA-2S</i>
	<i>Sample Name:</i>	<i>GW-060311-DJB-116</i>	<i>GW-052711-DJB-106</i>	<i>GW-052511-BAH-001</i>	<i>GW-052711-DJB-104</i>
	<i>Sample Date:</i>	<i>6/3/2011</i>	<i>5/27/2011</i>	<i>5/25/2011</i>	<i>5/27/2011</i>
<i>Volatile Organic Compounds</i>	<i>Units</i>				
1,1,1-Trichloroethane	µg/L	88	5.0 U	5.0 U	6.7
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	130	5.0 U	150	5.0 U
1,1-Dichloroethene	µg/L	49	5.0 U	32	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.6	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	µg/L	150 U	150 U	150 U	150 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50 U	50 U	50 U	50 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	50 U	50 U	50 U	50 U
Benzene	µg/L	32	5.0 U	52	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	8.6	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	8800	5.0 U	5200	38

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**ANALYTICAL RESULTS SUMMARY**  
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**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

<i>Location ID:</i>	<i>AW-2</i>	<i>MW-CRA-1S</i>	<i>MW-2B</i>	<i>MW-CRA-2S</i>
<i>Sample Name:</i>	<i>GW-060311-DJB-116</i>	<i>GW-052711-DJB-106</i>	<i>GW-052511-BAH-001</i>	<i>GW-052711-DJB-104</i>
<i>Sample Date:</i>	<i>6/3/2011</i>	<i>5/27/2011</i>	<i>5/25/2011</i>	<i>5/27/2011</i>

*Volatile Organic Compounds (Cont'd.)*

cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	5.0 U	5.0 U	15	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	100	5.0 U	5.0 U	5.0 U
Isopropyl benzene	µg/L	7.2	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	µg/L	5.0 U	5.0 U	6.6	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	11
Toluene	µg/L	1700	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	39	5.0 U	9.9	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	16	27
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrchloroethane (Freon 113)	µg/L	330	10 U	10 U	10 U
Vinyl chloride	µg/L	1600	2.0 U	1700	2.0 U
Xylenes (total)	µg/L	400	5.0 U	5.0 U	5.0 U

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-CRA-3B</i>	<i>MW-CRA-5B</i>	<i>MW-CRA-5S</i>	<i>MW-CRA-6S</i>	<i>MW-CRA-7S</i>
	<i>Sample Name:</i>	<i>GW-060211-DJB-111</i>	<i>GW-060111-DJB-108</i>	<i>GW-060111-DJB-109</i>	<i>GW-060211-DJB-112</i>	<i>GW-060111-DJB-107</i>
	<i>Sample Date:</i>	<i>6/2/2011</i>	<i>6/1/2011</i>	<i>6/1/2011</i>	<i>6/2/2011</i>	<i>6/1/2011</i>
<i>Volatile Organic Compounds</i>	<i>Units</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	7.0	5.0 U	150	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U				
1,1,2-Trichloroethane	µg/L	5.0 U	9.3	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	440	110	27	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	130	47	14	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U				
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U				
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U				
1,2-Dichlorobenzene	µg/L	5.0 U	12	5.0 U	8.4	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	12	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U				
1,3-Dichlorobenzene	µg/L	5.0 U				
1,4-Dichlorobenzene	µg/L	5.0 U				
1,4-Dioxane	µg/L	150 U	550	150 U	150 U	150 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50 U				
2-Hexanone	µg/L	10 U				
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U				
Acetone	µg/L	50 U				
Benzene	µg/L	5.0 U	77	7.3	290	5.0 U
Bromodichloromethane	µg/L	5.0 U				
Bromoform	µg/L	5.0 U				
Bromomethane (Methyl bromide)	µg/L	5.0 U				
Carbon disulfide	µg/L	5.0 U				
Carbon tetrachloride	µg/L	5.0 U				
Chlorobenzene	µg/L	5.0 U	26	5.2	5.0 U	5.0 U
Chloroethane	µg/L	10 U	21	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	5.0 U				
Chloromethane (Methyl chloride)	µg/L	10 U				
cis-1,2-Dichloroethene	µg/L	5.0 U	9900	2200	10000	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

<i>Location ID:</i>	<i>MW-CRA-3B</i>	<i>MW-CRA-5B</i>	<i>MW-CRA-5S</i>	<i>MW-CRA-6S</i>	<i>MW-CRA-7S</i>
<i>Sample Name:</i>	<i>GW-060211-DJB-111</i>	<i>GW-060111-DJB-108</i>	<i>GW-060111-DJB-109</i>	<i>GW-060211-DJB-112</i>	<i>GW-060111-DJB-107</i>
<i>Sample Date:</i>	<i>6/2/2011</i>	<i>6/1/2011</i>	<i>6/1/2011</i>	<i>6/2/2011</i>	<i>6/1/2011</i>

*Volatile Organic Compounds (Cont'd.)*

cis-1,3-Dichloropropene	µg/L	5.0 U				
Cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	72	5.0 U
Dibromochloromethane	µg/L	5.0 U				
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	17	10 U	10 U	10 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	120	5.0 U
Isopropyl benzene	µg/L	5.0 U	8.2	5.0 U	11	5.0 U
Methyl acetate	µg/L	5.0 U				
Methyl cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	71	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U				
Methylene chloride	µg/L	5.0 U	53	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U				
Tetrachloroethene	µg/L	5.0 U	53	15	280	5.0 U
Toluene	µg/L	5.0 U	20	5.0 U	1100	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	33	6.3	140	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U				
Trichloroethene	µg/L	5.0 U	280	140	180	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	5.0 U	410	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	540	150	10 U	10 U
Vinyl chloride	µg/L	2.0 U	770	90	350	2.0 U
Xylenes (total)	µg/L	5.0 U	62	5.0 U	410	5.0 U

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-CRA-8B</i>	<i>MW-9B</i>	<i>MW-9R</i>	<i>MW-9R</i>
	<i>Sample Name:</i>	<i>GW-060111-DJB-110</i>	<i>GW-052711-DJB-105</i>	<i>GW-052511-BAH-003</i>	<i>GW-052511-BAH-004</i>
	<i>Sample Date:</i>	<i>6/1/2011</i>	<i>5/27/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i> <i>(Duplicate)</i>
<i>Volatile Organic Compounds</i>	<i>Units</i>				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	13	76	76
1,1-Dichloroethene	µg/L	5.0 U	6.7	31	31
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	6.9	6.7
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	µg/L	150 U	150 U	150 U	150 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50 U	50 U	50 U	50 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	50 U	50 U	50 U	50 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	5.0 U	200	410	420

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-CRA-8B</i>	<i>MW-9B</i>	<i>MW-9R</i>	<i>MW-9R</i>
	<i>Sample Name:</i>	<i>GW-060111-DJB-110</i>	<i>GW-052711-DJB-105</i>	<i>GW-052511-BAH-003</i>	<i>GW-052511-BAH-004</i>
	<i>Sample Date:</i>	<i>6/1/2011</i>	<i>5/27/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i> <i>(Duplicate)</i>
<i>Volatile Organic Compounds (Cont'd.)</i>					
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	12	13
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.3	7.9	7.7
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	2.0 U	2.4	16	16
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-CRA-9S</i>	<i>MW-15B</i>	<i>MW-15R</i>	<i>MW-15R</i>
	<i>Sample Name:</i>	<i>GW-052511-BAH-002</i>	<i>GW-052511-DJB-101</i>	<i>GW-052511-DJB-102</i>	<i>GW-052511-DJB-103</i>
	<i>Sample Date:</i>	<i>5/25/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i> <i>(Duplicate)</i>
<i>Volatile Organic Compounds</i>	<i>Units</i>				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	µg/L	150 U	150 U	150 U	150 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50 U	50 U	50 U	50 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	50 U	50 U	50 U	50 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	5.0 U	6.6	5.0 U	5.0 U

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-CRA-9S</i>	<i>MW-15B</i>	<i>MW-15R</i>	<i>MW-15R</i>
	<i>Sample Name:</i>	<i>GW-052511-BAH-002</i>	<i>GW-052511-DJB-101</i>	<i>GW-052511-DJB-102</i>	<i>GW-052511-DJB-103</i>
	<i>Sample Date:</i>	<i>5/25/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i>	<i>5/25/2011</i> <i>(Duplicate)</i>
<i>Volatile Organic Compounds (Cont'd.)</i>					
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	8.8	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrchloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**

**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-17B</i>	<i>MW-17R</i>	<i>MW-18R</i>	<i>Trip Blank</i>	<i>Trip Blank</i>
	<i>Sample Name:</i>	<i>GW-060211-DJB-113</i>	<i>GW-060211-DJB-114</i>	<i>GW-060211-DJB-115</i>	<i>TRIP BLANK</i>	<i>TRIP BLANK</i>
	<i>Sample Date:</i>	<i>6/2/2011</i>	<i>6/2/2011</i>	<i>6/2/2011</i>	<i>5/27/2011</i>	<i>6/3/2011</i>
					<i>QA/QC</i>	<i>QA/QC</i>
<i>Volatile Organic Compounds</i>	<i>Units</i>					
1,1,1-Trichloroethane	µg/L	480	110	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	220	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	1600	98	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	520	46	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	18	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	230	9.4	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	µg/L	150 U	150 U	150 U	150 U	150 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	50 U	50 U	50 U	50 U	50 U
2-Hexanone	µg/L	19	24	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	89	390	10 U	10 U	10 U
Acetone	µg/L	460	83	50 U	50 U	50 U
Benzene	µg/L	1500	140	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	11	6.6	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	400	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	54000	11000	7.3	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**GROUNDWATER MONITORING WELLS**  
**ARRIVEC**  
**DOUGLASVILLE, GEORGIA**  
**MAY-JUNE 2011**

	<i>Location ID:</i>	<i>MW-17B</i>	<i>MW-17R</i>	<i>MW-18R</i>	<i>Trip Blank</i>	<i>Trip Blank</i>
	<i>Sample Name:</i>	<i>GW-060211-DJB-113</i>	<i>GW-060211-DJB-114</i>	<i>GW-060211-DJB-115</i>	<i>TRIP BLANK</i>	<i>TRIP BLANK</i>
	<i>Sample Date:</i>	<i>6/2/2011</i>	<i>6/2/2011</i>	<i>6/2/2011</i>	<i>5/27/2011</i>	<i>6/3/2011</i>
					<i>QA/QC</i>	<i>QA/QC</i>
<i>Volatile Organic Compounds (Cont'd.)</i>						
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	730	66	5.0 U	5.0 U	5.0 U
Isopropyl benzene	µg/L	37	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl cyclohexane	µg/L	95	24	5.0 U	5.0 U	5.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	64	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	21	9.6	5.0 U	5.0 U	5.0 U
Toluene	µg/L	9800	620	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	440	11	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	27	2400	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	51	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	4500	1000	2.0 U	2.0 U	2.0 U
Xylenes (total)	µg/L	3400	280	5.0 U	5.0 U	5.0 U

Notes:  
U - Not detected.

TABLE 3

**SAMPLE HOLDING TIME CRITERIA AND ANALYTICAL METHOD SUMMARY  
GROUNDWATER MONITORING WELLS  
ARRIVEC  
DOUGLASVILLE, GEORGIA  
MAY-JUNE 2011**

<i>Parameter</i>	<i>Matrix</i>	<i>Analytical Method</i>	<i>Collection to Analysis</i>
VOCs	Water	SW-846 8260 <sup>(1)</sup>	14 Days

## Notes:

<sup>(1)</sup> Referenced from "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1994 with all subsequent revisions.

VOCs Volatile Organic Compounds.

USEPA United States Environmental Protection Agency.



June 08, 2011

Mike Reinhardt  
Conestoga, Rovers, & Associates, Inc.  
3075 Breckinridge Blvd., Suite 470  
Duluth GA 30096

TEL: (770) 441-0027  
FAX: (770) 441-2050

RE: Arivec

Dear Mike Reinhardt:

Order No: 1105N81

Analytical Environmental Services, Inc. received 11 samples on 5/27/2011 3:05:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Chantelle Kanhai  
Project Manager

1105N81

# CHAIN OF CUSTODY RECORD

<b>CONESTOGA-ROVERS &amp; ASSOCIATES</b>		SHIPPED TO (Laboratory Name): <b>AES</b>		REFERENCE NUMBER: <b>Arrivec 35029</b>		
 Driveth GA David Brytowski		PRINTED NAME: <b>David Brytowski</b>		REMARKS  Standard TAT		
SAMPLER'S SIGNATURE: <i>[Signature]</i>		SAMPLE No.				
SEQ. No.	DATE	TIME	SAMPLE TYPE	No. of Containers	PARAMETERS	REMARKS
5/25	10:10		GW	2	X	
	11:15		BAIT - 001	2	X	
	13:40		BAIT - 002	2	X	
5/25	13:55		BAIT - 003	2	X	
	13:55		BAIT - 004	2	X	
5/25	11:00		PJB - 101	2	X	
	11:50		PJB - 102	2	X	
5/25	12:00		PJB - 103	2	X	
5/27	10:00		PJB - 104	4	X	
5/27	11:50		PJB - 105	2	X	
5/27	13:45		PJB - 106	2	X	
			Trip Blank	2	X	
TOTAL NUMBER OF CONTAINERS						HEALTH/CHEMICAL HAZARDS
RELINQUISHED BY: <i>[Signature]</i>		DATE: 5/27/11		RECEIVED BY: <i>[Signature]</i>		DATE: 5/27/11
		TIME: 15:05				TIME: 3:05
RELINQUISHED BY:		DATE:		RECEIVED BY:		DATE:
		TIME:				TIME:
RELINQUISHED BY:		DATE:		RECEIVED BY:		DATE:
		TIME:				TIME:
METHOD OF SHIPMENT:						WAY BILL No.
White Yellow Pink Goldenrod						RECEIVED FOR LABORATORY BY:  DATE: _____ TIME: _____
Fully Executed Copy Receiving Laboratory Copy Shipper Copy Sampler Copy						No. CRA <b>24229</b>

*[Handwritten mark]*

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-001
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 10:10:00 AM
<b>Lab ID:</b> 1105N81-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,1-Dichloroethane	150	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,1-Dichloroethene	32	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2-Dichloroethane	5.6	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 16:03	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 16:03	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 16:03	GK
Benzene	52	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
cis-1,2-Dichloroethene	5200	250		ug/L	147146	50	06/03/2011 09:52	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Cyclohexane	15	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 16:03	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Methylcyclohexane	6.6	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-001
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 10:10:00 AM
<b>Lab ID:</b> 1105N81-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
trans-1,2-Dichloroethene	9.9	5.0		ug/L	147146	1	06/02/2011 16:03	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Trichloroethene	16	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Vinyl chloride	1700	100		ug/L	147146	50	06/03/2011 09:52	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 16:03	GK
Surr: 4-Bromofluorobenzene	92.5	64.7-130		%REC	147146	50	06/03/2011 09:52	GK
Surr: 4-Bromofluorobenzene	95.4	64.7-130		%REC	147146	1	06/02/2011 16:03	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	147146	50	06/03/2011 09:52	GK
Surr: Dibromofluoromethane	104	80.7-129		%REC	147146	1	06/02/2011 16:03	GK
Surr: Toluene-d8	101	71.1-120		%REC	147146	50	06/03/2011 09:52	GK
Surr: Toluene-d8	98.9	71.1-120		%REC	147146	1	06/02/2011 16:03	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-002
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:15:00 AM
<b>Lab ID:</b> 1105N81-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 16:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 16:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 16:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 16:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-002
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:15:00 AM
<b>Lab ID:</b> 1105N81-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Trichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 16:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 16:33	GK
Surr: 4-Bromofluorobenzene	94	64.7-130		%REC	147146	1	06/02/2011 16:33	GK
Surr: Dibromofluoromethane	99.5	80.7-129		%REC	147146	1	06/02/2011 16:33	GK
Surr: Toluene-d8	99.3	71.1-120		%REC	147146	1	06/02/2011 16:33	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-003
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 1:40:00 PM
<b>Lab ID:</b> 1105N81-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,1-Dichloroethane	76	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,1-Dichloroethene	31	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2-Dichloroethane	6.9	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 17:03	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 17:03	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 17:03	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
cis-1,2-Dichloroethene	410	50		ug/L	147146	10	06/03/2011 13:34	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 17:03	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-003
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 1:40:00 PM
<b>Lab ID:</b> 1105N81-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	12	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Trichloroethene	7.9	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Vinyl chloride	16	2.0		ug/L	147146	1	06/02/2011 17:03	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 17:03	GK
Surr: 4-Bromofluorobenzene	88.7	64.7-130		%REC	147146	10	06/03/2011 13:34	SB
Surr: 4-Bromofluorobenzene	92.5	64.7-130		%REC	147146	1	06/02/2011 17:03	GK
Surr: Dibromofluoromethane	97.5	80.7-129		%REC	147146	1	06/02/2011 17:03	GK
Surr: Dibromofluoromethane	84.8	80.7-129		%REC	147146	10	06/03/2011 13:34	SB
Surr: Toluene-d8	89.4	71.1-120		%REC	147146	10	06/03/2011 13:34	SB
Surr: Toluene-d8	95.7	71.1-120		%REC	147146	1	06/02/2011 17:03	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-004
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 1:55:00 PM
<b>Lab ID:</b> 1105N81-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,1-Dichloroethane	76	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,1-Dichloroethene	31	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2-Dichloroethane	6.7	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 17:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 17:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 17:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
cis-1,2-Dichloroethene	420	50		ug/L	147146	10	06/03/2011 14:31	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 17:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-BAH-004
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 1:55:00 PM
<b>Lab ID:</b> 1105N81-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	13	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Trichloroethene	7.7	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Vinyl chloride	16	2.0		ug/L	147146	1	06/02/2011 17:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 17:33	GK
Surr: 4-Bromofluorobenzene	83.7	64.7-130		%REC	147146	10	06/03/2011 14:31	SB
Surr: 4-Bromofluorobenzene	90.4	64.7-130		%REC	147146	1	06/02/2011 17:33	GK
Surr: Dibromofluoromethane	80.3	80.7-129	S	%REC	147146	10	06/03/2011 14:31	SB
Surr: Dibromofluoromethane	99.2	80.7-129		%REC	147146	1	06/02/2011 17:33	GK
Surr: Toluene-d8	86.3	71.1-120		%REC	147146	10	06/03/2011 14:31	SB
Surr: Toluene-d8	96.7	71.1-120		%REC	147146	1	06/02/2011 17:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-101
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:00:00 AM
<b>Lab ID:</b> 1105N81-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 18:03	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 18:03	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 18:03	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
cis-1,2-Dichloroethene	6.6	5.0		ug/L	147146	1	06/02/2011 18:03	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 18:03	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-101
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:00:00 AM
<b>Lab ID:</b> 1105N81-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Trichloroethene	8.8	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 18:03	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 18:03	GK
Surr: 4-Bromofluorobenzene	92.3	64.7-130		%REC	147146	1	06/02/2011 18:03	GK
Surr: Dibromofluoromethane	97.2	80.7-129		%REC	147146	1	06/02/2011 18:03	GK
Surr: Toluene-d8	97.9	71.1-120		%REC	147146	1	06/02/2011 18:03	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-102
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:50:00 AM
<b>Lab ID:</b> 1105N81-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 18:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 18:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 18:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 18:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-102
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 11:50:00 AM
<b>Lab ID:</b> 1105N81-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Trichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 18:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 18:33	GK
Surr: 4-Bromofluorobenzene	93.1	64.7-130		%REC	147146	1	06/02/2011 18:33	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	147146	1	06/02/2011 18:33	GK
Surr: Toluene-d8	99.1	71.1-120		%REC	147146	1	06/02/2011 18:33	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-103
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 12:00:00 PM
<b>Lab ID:</b> 1105N81-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 19:03	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 19:03	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 19:03	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 19:03	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052511-DJB-103
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/25/2011 12:00:00 PM
<b>Lab ID:</b> 1105N81-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Trichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 19:03	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 19:03	GK
Surr: 4-Bromofluorobenzene	94.2	64.7-130		%REC	147146	1	06/02/2011 19:03	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	147146	1	06/02/2011 19:03	GK
Surr: Toluene-d8	99.7	71.1-120		%REC	147146	1	06/02/2011 19:03	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-104
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 10:00:00 AM
<b>Lab ID:</b> 1105N81-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	6.7	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 14:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 14:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 14:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
cis-1,2-Dichloroethene	38	5.0		ug/L	147146	1	06/02/2011 14:33	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 14:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-104
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 10:00:00 AM
<b>Lab ID:</b> 1105N81-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	11	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Trichloroethene	27	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 14:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 14:33	GK
Surr: 4-Bromofluorobenzene	93.3	64.7-130		%REC	147146	1	06/02/2011 14:33	GK
Surr: Dibromofluoromethane	96.9	80.7-129		%REC	147146	1	06/02/2011 14:33	GK
Surr: Toluene-d8	98.4	71.1-120		%REC	147146	1	06/02/2011 14:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-105
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 11:50:00 AM
<b>Lab ID:</b> 1105N81-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,1-Dichloroethane	13	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,1-Dichloroethene	6.7	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 19:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 19:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 19:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
cis-1,2-Dichloroethene	200	50		ug/L	147146	10	06/03/2011 15:00	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 19:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-105
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 11:50:00 AM
<b>Lab ID:</b> 1105N81-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Trichloroethene	5.3	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Vinyl chloride	2.4	2.0		ug/L	147146	1	06/02/2011 19:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 19:33	GK
Surr: 4-Bromofluorobenzene	83.7	64.7-130		%REC	147146	10	06/03/2011 15:00	SB
Surr: 4-Bromofluorobenzene	94.4	64.7-130		%REC	147146	1	06/02/2011 19:33	GK
Surr: Dibromofluoromethane	81	80.7-129		%REC	147146	10	06/03/2011 15:00	SB
Surr: Dibromofluoromethane	103	80.7-129		%REC	147146	1	06/02/2011 19:33	GK
Surr: Toluene-d8	87.6	71.1-120		%REC	147146	10	06/03/2011 15:00	SB
Surr: Toluene-d8	98.1	71.1-120		%REC	147146	1	06/02/2011 19:33	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-106
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 1:45:00 PM
<b>Lab ID:</b> 1105N81-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 20:03	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 20:03	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 20:03	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 20:03	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-052711-DJB-106
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011 1:45:00 PM
<b>Lab ID:</b> 1105N81-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Trichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 20:03	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 20:03	GK
Surr: 4-Bromofluorobenzene	93.1	64.7-130		%REC	147146	1	06/02/2011 20:03	GK
Surr: Dibromofluoromethane	102	80.7-129		%REC	147146	1	06/02/2011 20:03	GK
Surr: Toluene-d8	97.7	71.1-120		%REC	147146	1	06/02/2011 20:03	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011
<b>Lab ID:</b> 1105N81-011	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,1,2-Trichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,1-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,1-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2-Dibromoethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2-Dichloroethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,2-Dichloropropane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,3-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,4-Dichlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
1,4-Dioxane	BRL	150		ug/L	147146	1	06/02/2011 13:33	GK
2-Butanone	BRL	50		ug/L	147146	1	06/02/2011 13:33	GK
2-Hexanone	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
4-Methyl-2-pentanone	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
Acetone	BRL	50		ug/L	147146	1	06/02/2011 13:33	GK
Benzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Bromodichloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Bromoform	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Bromomethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Carbon disulfide	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Carbon tetrachloride	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Chlorobenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Chloroethane	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
Chloroform	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Chloromethane	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Cyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Dibromochloromethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Dichlorodifluoromethane	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
Ethylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Freon-113	BRL	10		ug/L	147146	1	06/02/2011 13:33	GK
Isopropylbenzene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Methyl acetate	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Methyl tert-butyl ether	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Methylcyclohexane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Methylene chloride	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Styrene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 8-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 5/27/2011
<b>Lab ID:</b> 1105N81-011	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Toluene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Trichloroethene	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Vinyl chloride	BRL	2.0		ug/L	147146	1	06/02/2011 13:33	GK
Xylenes, Total	BRL	5.0		ug/L	147146	1	06/02/2011 13:33	GK
Surr: 4-Bromofluorobenzene	95.3	64.7-130		%REC	147146	1	06/02/2011 13:33	GK
Surr: Dibromofluoromethane	98.3	80.7-129		%REC	147146	1	06/02/2011 13:33	GK
Surr: Toluene-d8	98.1	71.1-120		%REC	147146	1	06/02/2011 13:33	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Conestoga Work Order Number 1105N81

Checklist completed by W.D. [Signature] Date 5/27/11

Carrier name: FedEx  UPS  Courier  Client  US Mail  Other

Shipping container/cooler in good condition? Yes  No  Not Present

Custody seals intact on shipping container/cooler? Yes  No  Not Present

Custody seals intact on sample bottles? Yes  No  Not Present

Container/Temp Blank temperature in compliance? (4°C±2)\* Yes  No

Cooler #1 4°C Cooler #2  Cooler #3  Cooler #4  Cooler#5  Cooler #6

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Was TAT marked on the COC? Yes  No

Proceed with Standard TAT as per project history? Yes  No  Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No

Water - pH acceptable upon receipt? Yes  No  Not Applicable

Sample Condition: Good  Adjusted?  Other(Explain)  Checked by

(For diffusive samples or AIHA lead) Is a known blank included? Yes  No

See Case Narrative for resolution of the Non-Conformance.

\* Samples do not have to comply with the given range for certain parameters.

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1105N81

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147146

Sample ID: <b>MB-147146</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>
Sample Type: <b>MBLK</b>	Test Code: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4138575</b>

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1,2,2-Tetrachloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1,2-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2,4-Trichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dibromo-3-chloropropane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dibromoethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloropropane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,3-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,4-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0	0
2-Butanone	BRL	50	0	0	0	0	0	0	0	0	0
2-Hexanone	BRL	10	0	0	0	0	0	0	0	0	0
4-Methyl-2-pentanone	BRL	10	0	0	0	0	0	0	0	0	0
Acetone	BRL	50	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromodichloromethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromoform	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromomethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon disulfide	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroethane	BRL	10	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1105N81

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147146

Sample ID: <b>MB-147146</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>							
SampleType: <b>MBLK</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4138575</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloromethane	BRL	10	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
cis-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
Cyclohexane	BRL	5.0	0	0	0	0	0	0	0	0	
Dibromochloromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Dichlorodifluoromethane	BRL	10	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Freon-113	BRL	10	0	0	0	0	0	0	0	0	
Isopropylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Methyl acetate	BRL	5.0	0	0	0	0	0	0	0	0	
Methyl tert-butyl ether	BRL	5.0	0	0	0	0	0	0	0	0	
Methylcyclohexane	BRL	5.0	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Styrene	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichlorofluoromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	46.53	0	50	0	93.1	64.7	130	0	0	0	
Surr: Dibromofluoromethane	49.28	0	50	0	98.6	80.7	129	0	0	0	
Surr: Toluene-d8	49.63	0	50	0	99.3	71.1	120	0	0	0	

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1105N81

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147146

Sample ID: <b>LCS-147146</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>							
SampleType: <b>LCS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4138968</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	43.46	5.0	50	0	86.9	60	140	0	0	0	
Benzene	45.71	5.0	50	0	91.4	70	130	0	0	0	
Chlorobenzene	45.35	5.0	50	0	90.7	70	130	0	0	0	
Toluene	46.06	5.0	50	0	92.1	70	130	0	0	0	
Trichloroethene	42.85	5.0	50	0	85.7	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	50.71	0	50	0	101	64.7	130	0	0	0	
Surr: Dibromofluoromethane	49.68	0	50	0	99.4	80.7	129	0	0	0	
Surr: Toluene-d8	51.36	0	50	0	103	71.1	120	0	0	0	

Sample ID: <b>1105N81-008AMS</b>	Client ID: <b>GW-052711-DJB-104</b>	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>							
SampleType: <b>MS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4140364</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	58.06	5.0	50	0	116	46.2	183	0	0	0	
Benzene	54.26	5.0	50	0	109	62.2	143	0	0	0	
Chlorobenzene	50.07	5.0	50	0	100	72.2	137	0	0	0	
Toluene	53.42	5.0	50	0	107	57.8	149	0	0	0	
Trichloroethene	77.16	5.0	50	26.61	101	70.5	149	0	0	0	
Surr: 4-Bromofluorobenzene	46.80	0	50	0	93.6	64.7	130	0	0	0	
Surr: Dibromofluoromethane	48.47	0	50	0	96.9	80.7	129	0	0	0	
Surr: Toluene-d8	49.28	0	50	0	98.6	71.1	120	0	0	0	

Sample ID: <b>1105N81-008AMSD</b>	Client ID: <b>GW-052711-DJB-104</b>	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>							
SampleType: <b>MSD</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4140365</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	57.82	5.0	50	0	116	46.2	183	58.06	0.414	20	
Benzene	52.25	5.0	50	0	104	62.2	143	54.26	3.77	20	

**Qualifiers:** > Greater than Result value < Less than Result value B Analyte detected in the associated method blank  
 BRL Below reporting limit E Estimated (value above quantitation range) H Holding times for preparation or analysis exceeded  
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix  
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

**Client:** Conestoga, Rovers, & Associates, Inc.  
**Project Name:** Arivec  
**Workorder:** 1105N81

**ANALYTICAL QC SUMMARY REPORT**

**BatchID: 147146**

Sample ID: <b>1105N81-008AMSD</b>	Client ID: <b>GW-052711-DJB-104</b>	Units: <b>ug/L</b>	Prep Date: <b>06/02/2011</b>	Run No: <b>198202</b>
SampleType: <b>MSD</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147146</b>	Analysis Date: <b>06/02/2011</b>	Seq No: <b>4140365</b>

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	48.47	5.0	50	0	96.9	72.2	137	50.07	3.25	20	
Toluene	52.13	5.0	50	0	104	57.8	149	53.42	2.44	20	
Trichloroethene	71.36	5.0	50	26.61	89.5	70.5	149	77.16	7.81	20	
Surr: 4-Bromofluorobenzene	46.16	0	50	0	92.3	64.7	130	46.80	0	0	
Surr: Dibromofluoromethane	48.43	0	50	0	96.9	80.7	129	48.47	0	0	
Surr: Toluene-d8	48.90	0	50	0	97.8	71.1	120	49.28	0	0	

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



June 13, 2011

Mike Reinhardt  
Conestoga, Rovers, & Associates, Inc.  
3075 Breckinridge Blvd., Suite 470  
Duluth GA 30096

TEL: (770) 441-0027  
FAX: (770) 441-2050

RE: Arivec

Dear Mike Reinhardt:

Order No: 1106269

Analytical Environmental Services, Inc. received 11 samples on 6/3/2011 11:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Chantelle Kanhai  
Project Manager

# CHAIN OF CUSTODY RECORD

1106269

<b>CONFESTOGA-ROVERS &amp; ASSOCIATES</b> Duluth, GA		SHIPPED TO (Laboratory Name): <b>AES</b>	REFERENCE NUMBER: <b>35029 Arivec</b>				
SAMPLER'S SIGNATURE: <i>D. Bryto</i>		PRINTED NAME: <b>David Bryto</b>					
SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	PARAMETERS	REMARKS
	6/1/11	11:30	GW-060111 - DJB - 107	GW	2	X	Standard TAT
	6/1/11	13:00	GW-060111 - DJB - 108		2	X	
	6/1/11	13:30	GW-060111 - DJB - 109		2	X	
	6/1/11	15:00	GW-060111 - DJB - 110		2	X	
	6/2/11	10:00	GW-060211 - DJB - 111		2	X	
	6/2/11	11:15	GW-060211 - DJB - 112		2	X	
	6/2/11	12:45	GW-060211 - DJB - 113		2	X	
	6/2/11	13:35	GW-060211 - DJB - 114		2	X	
	6/2/11	15:00	GW-060211 - DJB - 115	Y	2	X	
	6/3/11	10:00	GW-060311 - DJB - 116	GW	2	X	
			Trip Blank		2	X	
TOTAL NUMBER OF CONTAINERS					22		
RELINQUISHED BY: <i>Bryto</i>		DATE: 6/3/11	HEALTH/CHEMICAL HAZARDS				
		TIME: 11:40	RECEIVED BY: ①				
RELINQUISHED BY:		DATE:	RECEIVED BY: ②				
		TIME:	RECEIVED BY: ③				
RELINQUISHED BY:		DATE:	WAY BILL No.				
		TIME:					
METHOD OF SHIPMENT:		RECEIVED FOR LABORATORY BY: <i>M.J.</i> No <b>CRA 03338</b>					
White	-Fully Executed Copy						
Yellow	-Receiving Laboratory Copy						
Pink	-Shipper Copy						
Goldenrod	-Sampler Copy						
		DATE: 6/3/11	TIME: 11:45				
		Client					

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-107
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 11:30:00 AM
<b>Lab ID:</b> 1106269-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,1-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,1-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 17:04	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 17:04	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 17:04	SB
Benzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Freon-113	BRL	10		ug/L	147477	1	06/08/2011 17:04	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-107
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 11:30:00 AM
<b>Lab ID:</b> 1106269-001	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Toluene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Trichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Vinyl chloride	BRL	2.0		ug/L	147477	1	06/08/2011 17:04	SB
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/08/2011 17:04	SB
Surr: 4-Bromofluorobenzene	86.9	64.7-130		%REC	147477	1	06/08/2011 17:04	SB
Surr: Dibromofluoromethane	110	80.7-129		%REC	147477	1	06/08/2011 17:04	SB
Surr: Toluene-d8	94.4	71.1-120		%REC	147477	1	06/08/2011 17:04	SB

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-108
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 1:00:00 PM
<b>Lab ID:</b> 1106269-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	7.0	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,1,2-Trichloroethane	9.3	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,1-Dichloroethane	440	50		ug/L	147477	10	06/09/2011 20:15	GK
1,1-Dichloroethene	130	50		ug/L	147477	10	06/09/2011 20:15	GK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,2-Dichlorobenzene	12	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,2-Dichloroethane	12	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
1,4-Dioxane	550	150		ug/L	147477	1	06/08/2011 18:59	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 18:59	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 18:59	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 18:59	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 18:59	SB
Benzene	77	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Chlorobenzene	26	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Chloroethane	21	10		ug/L	147477	1	06/08/2011 18:59	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 18:59	SB
cis-1,2-Dichloroethene	9900	2500		ug/L	147477	500	06/09/2011 20:45	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Dichlorodifluoromethane	17	10		ug/L	147477	1	06/08/2011 18:59	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Freon-113	540	100		ug/L	147477	10	06/09/2011 20:15	GK
Isopropylbenzene	8.2	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Methylene chloride	53	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-108
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 1:00:00 PM
<b>Lab ID:</b> 1106269-002	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	53	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Toluene	20	5.0		ug/L	147477	1	06/08/2011 18:59	SB
trans-1,2-Dichloroethene	33	5.0		ug/L	147477	1	06/08/2011 18:59	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Trichloroethene	280	50		ug/L	147477	10	06/09/2011 20:15	GK
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Vinyl chloride	770	20		ug/L	147477	10	06/09/2011 20:15	GK
Xylenes, Total	62	5.0		ug/L	147477	1	06/08/2011 18:59	SB
Surr: 4-Bromofluorobenzene	95.2	64.7-130		%REC	147477	500	06/09/2011 20:45	GK
Surr: 4-Bromofluorobenzene	95.8	64.7-130		%REC	147477	10	06/09/2011 20:15	GK
Surr: 4-Bromofluorobenzene	98	64.7-130		%REC	147477	1	06/08/2011 18:59	SB
Surr: Dibromofluoromethane	92.4	80.7-129		%REC	147477	500	06/09/2011 20:45	GK
Surr: Dibromofluoromethane	95.5	80.7-129		%REC	147477	10	06/09/2011 20:15	GK
Surr: Dibromofluoromethane	106	80.7-129		%REC	147477	1	06/08/2011 18:59	SB
Surr: Toluene-d8	92.3	71.1-120		%REC	147477	500	06/09/2011 20:45	GK
Surr: Toluene-d8	90.8	71.1-120		%REC	147477	1	06/08/2011 18:59	SB
Surr: Toluene-d8	92.4	71.1-120		%REC	147477	10	06/09/2011 20:15	GK

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-109
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 1:30:00 PM
<b>Lab ID:</b> 1106269-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,1-Dichloroethane	110	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,1-Dichloroethene	47	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 19:28	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 19:28	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 19:28	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 19:28	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 19:28	SB
Benzene	7.3	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Chlorobenzene	5.2	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 19:28	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 19:28	SB
cis-1,2-Dichloroethene	2200	100		ug/L	147477	20	06/09/2011 21:15	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 19:28	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Freon-113	150	10		ug/L	147477	1	06/08/2011 19:28	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-109
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 1:30:00 PM
<b>Lab ID:</b> 1106269-003	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	15	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Toluene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
trans-1,2-Dichloroethene	6.3	5.0		ug/L	147477	1	06/08/2011 19:28	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Trichloroethene	140	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Vinyl chloride	90	2.0		ug/L	147477	1	06/08/2011 19:28	SB
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/08/2011 19:28	SB
Surr: 4-Bromofluorobenzene	86.9	64.7-130		%REC	147477	1	06/08/2011 19:28	SB
Surr: 4-Bromofluorobenzene	96.9	64.7-130		%REC	147477	20	06/09/2011 21:15	GK
Surr: Dibromofluoromethane	104	80.7-129		%REC	147477	1	06/08/2011 19:28	SB
Surr: Dibromofluoromethane	91.7	80.7-129		%REC	147477	20	06/09/2011 21:15	GK
Surr: Toluene-d8	87.9	71.1-120		%REC	147477	1	06/08/2011 19:28	SB
Surr: Toluene-d8	91.3	71.1-120		%REC	147477	20	06/09/2011 21:15	GK

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-110
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 3:00:00 PM
<b>Lab ID:</b> 1106269-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,1-Dichloroethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,1-Dichloroethene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 19:56	SB
2-Butanone	BRL	50		ug/L	147477	1	06/10/2011 15:11	MC
2-Hexanone	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
Acetone	BRL	50		ug/L	147477	1	06/10/2011 15:11	MC
Benzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Bromoform	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Bromomethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Chloroethane	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
Chloroform	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Chloromethane	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Cyclohexane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Freon-113	BRL	10		ug/L	147477	1	06/10/2011 15:11	MC
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Methyl acetate	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Methylene chloride	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Styrene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060111-DJB-110
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/1/2011 3:00:00 PM
<b>Lab ID:</b> 1106269-004	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Toluene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Trichloroethene	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Vinyl chloride	BRL	2.0		ug/L	147477	1	06/10/2011 15:11	MC
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/10/2011 15:11	MC
Surr: 4-Bromofluorobenzene	81	64.7-130		%REC	147477	1	06/08/2011 19:56	SB
Surr: 4-Bromofluorobenzene	93.6	64.7-130		%REC	147477	1	06/10/2011 15:11	MC
Surr: Dibromofluoromethane	102	80.7-129		%REC	147477	1	06/10/2011 15:11	MC
Surr: Dibromofluoromethane	107	80.7-129		%REC	147477	1	06/08/2011 19:56	SB
Surr: Toluene-d8	92.6	71.1-120		%REC	147477	1	06/08/2011 19:56	SB
Surr: Toluene-d8	103	71.1-120		%REC	147477	1	06/10/2011 15:11	MC

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-111
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 10:00:00 AM
<b>Lab ID:</b> 1106269-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,1-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,1-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 21:22	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 21:22	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 21:22	SB
Benzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Freon-113	BRL	10		ug/L	147477	1	06/08/2011 21:22	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-111
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 10:00:00 AM
<b>Lab ID:</b> 1106269-005	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Toluene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Trichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Vinyl chloride	BRL	2.0		ug/L	147477	1	06/08/2011 21:22	SB
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/08/2011 21:22	SB
Surr: 4-Bromofluorobenzene	97.5	64.7-130		%REC	147477	1	06/08/2011 21:22	SB
Surr: Dibromofluoromethane	111	80.7-129		%REC	147477	1	06/08/2011 21:22	SB
Surr: Toluene-d8	94.6	71.1-120		%REC	147477	1	06/08/2011 21:22	SB

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-112
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 11:15:00 AM
<b>Lab ID:</b> 1106269-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	150	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,1-Dichloroethane	27	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,1-Dichloroethene	14	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2-Dichlorobenzene	8.4	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 21:51	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 21:51	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 21:51	SB
Benzene	290	50		ug/L	147477	10	06/09/2011 22:14	GK
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
cis-1,2-Dichloroethene	10000	2500		ug/L	147477	500	06/09/2011 22:44	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Cyclohexane	72	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
Ethylbenzene	120	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Freon-113	BRL	10		ug/L	147477	1	06/08/2011 21:51	SB
Isopropylbenzene	11	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Methylcyclohexane	71	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-112
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 11:15:00 AM
<b>Lab ID:</b> 1106269-006	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	280	50		ug/L	147477	10	06/09/2011 22:14	GK
Toluene	1100	50		ug/L	147477	10	06/09/2011 22:14	GK
trans-1,2-Dichloroethene	140	50		ug/L	147477	10	06/09/2011 22:14	GK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 21:51	SB
Trichloroethene	180	50		ug/L	147477	10	06/09/2011 22:14	GK
Trichlorofluoromethane	410	50		ug/L	147477	10	06/09/2011 22:14	GK
Vinyl chloride	350	20		ug/L	147477	10	06/09/2011 22:14	GK
Xylenes, Total	410	50		ug/L	147477	10	06/09/2011 22:14	GK
Surr: 4-Bromofluorobenzene	95.9	64.7-130		%REC	147477	500	06/09/2011 22:44	GK
Surr: 4-Bromofluorobenzene	96.9	64.7-130		%REC	147477	10	06/09/2011 22:14	GK
Surr: 4-Bromofluorobenzene	106	64.7-130		%REC	147477	1	06/08/2011 21:51	SB
Surr: Dibromofluoromethane	91.3	80.7-129		%REC	147477	500	06/09/2011 22:44	GK
Surr: Dibromofluoromethane	94.3	80.7-129		%REC	147477	10	06/09/2011 22:14	GK
Surr: Dibromofluoromethane	107	80.7-129		%REC	147477	1	06/08/2011 21:51	SB
Surr: Toluene-d8	92.9	71.1-120		%REC	147477	500	06/09/2011 22:44	GK
Surr: Toluene-d8	92	71.1-120		%REC	147477	10	06/09/2011 22:14	GK
Surr: Toluene-d8	94.1	71.1-120		%REC	147477	1	06/08/2011 21:51	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-113
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 12:45:00 PM
<b>Lab ID:</b> 1106269-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	480	50		ug/L	147477	10	06/09/2011 21:02	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,1,2-Trichloroethane	220	50		ug/L	147477	10	06/09/2011 21:02	SB
1,1-Dichloroethane	1600	250		ug/L	147477	50	06/09/2011 20:05	SB
1,1-Dichloroethene	520	50		ug/L	147477	10	06/09/2011 21:02	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,2-Dichlorobenzene	18	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,2-Dichloroethane	230	50		ug/L	147477	10	06/09/2011 21:02	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 22:20	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 22:20	SB
2-Hexanone	19	10		ug/L	147477	1	06/08/2011 22:20	SB
4-Methyl-2-pentanone	89	10		ug/L	147477	1	06/08/2011 22:20	SB
Acetone	460	400		ug/L	147477	10	06/09/2011 21:02	SB
Benzene	1500	50		ug/L	147477	10	06/09/2011 21:02	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Chlorobenzene	11	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Chloroethane	400	100		ug/L	147477	10	06/09/2011 21:02	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 22:20	SB
cis-1,2-Dichloroethene	54000	2500		ug/L	147477	500	06/09/2011 23:14	GK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 22:20	SB
Ethylbenzene	730	50		ug/L	147477	10	06/09/2011 21:02	SB
Freon-113	51	10		ug/L	147477	1	06/08/2011 22:20	SB
Isopropylbenzene	37	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Methylcyclohexane	95	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Methylene chloride	64	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-113
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 12:45:00 PM
<b>Lab ID:</b> 1106269-007	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	21	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Toluene	9800	2500		ug/L	147477	500	06/09/2011 23:14	GK
trans-1,2-Dichloroethene	440	50		ug/L	147477	10	06/09/2011 21:02	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Trichloroethene	27	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:20	SB
Vinyl chloride	4500	100		ug/L	147477	50	06/09/2011 20:05	SB
Xylenes, Total	3400	50		ug/L	147477	10	06/09/2011 21:02	SB
Surr: 4-Bromofluorobenzene	92.1	64.7-130		%REC	147477	50	06/09/2011 20:05	SB
Surr: 4-Bromofluorobenzene	95	64.7-130		%REC	147477	500	06/09/2011 23:14	GK
Surr: 4-Bromofluorobenzene	96.1	64.7-130		%REC	147477	10	06/09/2011 21:02	SB
Surr: 4-Bromofluorobenzene	103	64.7-130		%REC	147477	1	06/08/2011 22:20	SB
Surr: Dibromofluoromethane	94.5	80.7-129		%REC	147477	500	06/09/2011 23:14	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	147477	50	06/09/2011 20:05	SB
Surr: Dibromofluoromethane	99.9	80.7-129		%REC	147477	1	06/08/2011 22:20	SB
Surr: Dibromofluoromethane	105	80.7-129		%REC	147477	10	06/09/2011 21:02	SB
Surr: Toluene-d8	94.2	71.1-120		%REC	147477	50	06/09/2011 20:05	SB
Surr: Toluene-d8	95.7	71.1-120		%REC	147477	500	06/09/2011 23:14	GK
Surr: Toluene-d8	96	71.1-120		%REC	147477	1	06/08/2011 22:20	SB
Surr: Toluene-d8	96.8	71.1-120		%REC	147477	10	06/09/2011 21:02	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-114
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 1:35:00 PM
<b>Lab ID:</b> 1106269-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	110	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,1-Dichloroethane	98	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,1-Dichloroethene	46	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2-Dichloroethane	9.4	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 22:48	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 22:48	SB
2-Hexanone	24	10		ug/L	147477	1	06/08/2011 22:48	SB
4-Methyl-2-pentanone	390	10		ug/L	147477	1	06/08/2011 22:48	SB
Acetone	83	50		ug/L	147477	1	06/08/2011 22:48	SB
Benzene	140	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Chlorobenzene	6.6	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 22:48	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 22:48	SB
cis-1,2-Dichloroethene	11000	500		ug/L	147477	100	06/10/2011 14:05	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 22:48	SB
Ethylbenzene	66	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Freon-113	BRL	10		ug/L	147477	1	06/08/2011 22:48	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Methylcyclohexane	24	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-114
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 1:35:00 PM
<b>Lab ID:</b> 1106269-008	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	9.6	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Toluene	620	50		ug/L	147477	10	06/09/2011 21:31	SB
trans-1,2-Dichloroethene	11	5.0		ug/L	147477	1	06/08/2011 22:48	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Trichloroethene	2400	250		ug/L	147477	50	06/09/2011 20:33	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Vinyl chloride	1000	20		ug/L	147477	10	06/09/2011 21:31	SB
Xylenes, Total	280	5.0		ug/L	147477	1	06/08/2011 22:48	SB
Surr: 4-Bromofluorobenzene	83.7	64.7-130		%REC	147477	100	06/10/2011 14:05	SB
Surr: 4-Bromofluorobenzene	95.2	64.7-130		%REC	147477	10	06/09/2011 21:31	SB
Surr: 4-Bromofluorobenzene	97.5	64.7-130		%REC	147477	1	06/08/2011 22:48	SB
Surr: 4-Bromofluorobenzene	80.1	64.7-130		%REC	147477	50	06/09/2011 20:33	SB
Surr: Dibromofluoromethane	104	80.7-129		%REC	147477	50	06/09/2011 20:33	SB
Surr: Dibromofluoromethane	96.8	80.7-129		%REC	147477	1	06/08/2011 22:48	SB
Surr: Dibromofluoromethane	103	80.7-129		%REC	147477	10	06/09/2011 21:31	SB
Surr: Dibromofluoromethane	115	80.7-129		%REC	147477	100	06/10/2011 14:05	SB
Surr: Toluene-d8	104	71.1-120		%REC	147477	10	06/09/2011 21:31	SB
Surr: Toluene-d8	94.9	71.1-120		%REC	147477	50	06/09/2011 20:33	SB
Surr: Toluene-d8	99.2	71.1-120		%REC	147477	1	06/08/2011 22:48	SB
Surr: Toluene-d8	99.1	71.1-120		%REC	147477	100	06/10/2011 14:05	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-115
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 3:00:00 PM
<b>Lab ID:</b> 1106269-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,1-Dichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,1-Dichloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/09/2011 16:15	SB
2-Butanone	BRL	50		ug/L	147477	1	06/09/2011 16:15	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
Acetone	BRL	50		ug/L	147477	1	06/09/2011 16:15	SB
Benzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Chloroethane	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Chloromethane	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
cis-1,2-Dichloroethene	7.3	5.0		ug/L	147477	1	06/09/2011 16:15	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Freon-113	BRL	10		ug/L	147477	1	06/09/2011 16:15	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Styrene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060211-DJB-115
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/2/2011 3:00:00 PM
<b>Lab ID:</b> 1106269-009	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Toluene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Trichloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Vinyl chloride	BRL	2.0		ug/L	147477	1	06/09/2011 16:15	SB
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/09/2011 16:15	SB
Surr: 4-Bromofluorobenzene	89	64.7-130		%REC	147477	1	06/09/2011 16:15	SB
Surr: Dibromofluoromethane	91.6	80.7-129		%REC	147477	1	06/09/2011 16:15	SB
Surr: Toluene-d8	90.3	71.1-120		%REC	147477	1	06/09/2011 16:15	SB

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060311-DJB-116
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/3/2011 10:00:00 AM
<b>Lab ID:</b> 1106269-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	88	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,1-Dichloroethane	130	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,1-Dichloroethene	49	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/09/2011 22:00	SB
2-Butanone	BRL	50		ug/L	147477	1	06/09/2011 22:00	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/09/2011 22:00	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/09/2011 22:00	SB
Acetone	BRL	50		ug/L	147477	1	06/09/2011 22:00	SB
Benzene	32	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Chlorobenzene	8.6	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Chloroethane	BRL	10		ug/L	147477	1	06/09/2011 22:00	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Chloromethane	BRL	10		ug/L	147477	1	06/09/2011 22:00	SB
cis-1,2-Dichloroethene	8800	250		ug/L	147477	50	06/09/2011 22:57	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/09/2011 22:00	SB
Ethylbenzene	100	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Freon-113	330	100		ug/L	147477	10	06/09/2011 22:28	SB
Isopropylbenzene	7.2	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Styrene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB

<b>Qualifiers:</b>	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> GW-060311-DJB-116
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/3/2011 10:00:00 AM
<b>Lab ID:</b> 1106269-010	<b>Matrix:</b> Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Toluene	1700	50		ug/L	147477	10	06/09/2011 22:28	SB
trans-1,2-Dichloroethene	39	5.0		ug/L	147477	1	06/09/2011 22:00	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Trichloroethene	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Vinyl chloride	1600	20		ug/L	147477	10	06/09/2011 22:28	SB
Xylenes, Total	400	5.0		ug/L	147477	1	06/09/2011 22:00	SB
Surr: 4-Bromofluorobenzene	91.5	64.7-130		%REC	147477	50	06/09/2011 22:57	SB
Surr: 4-Bromofluorobenzene	86.6	64.7-130		%REC	147477	10	06/09/2011 22:28	SB
Surr: 4-Bromofluorobenzene	99.2	64.7-130		%REC	147477	1	06/09/2011 22:00	SB
Surr: Dibromofluoromethane	97.9	80.7-129		%REC	147477	50	06/09/2011 22:57	SB
Surr: Dibromofluoromethane	102	80.7-129		%REC	147477	10	06/09/2011 22:28	SB
Surr: Dibromofluoromethane	108	80.7-129		%REC	147477	1	06/09/2011 22:00	SB
Surr: Toluene-d8	93.2	71.1-120		%REC	147477	50	06/09/2011 22:57	SB
Surr: Toluene-d8	91.1	71.1-120		%REC	147477	10	06/09/2011 22:28	SB
Surr: Toluene-d8	92.6	71.1-120		%REC	147477	1	06/09/2011 22:00	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/3/2011
<b>Lab ID:</b> 1106269-011	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
1,1,1-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,1,2-Trichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,1-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,1-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2-Dibromoethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2-Dichloroethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,2-Dichloropropane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,3-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,4-Dichlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
1,4-Dioxane	BRL	150		ug/L	147477	1	06/08/2011 18:02	SB
2-Butanone	BRL	50		ug/L	147477	1	06/08/2011 18:02	SB
2-Hexanone	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
4-Methyl-2-pentanone	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
Acetone	BRL	50		ug/L	147477	1	06/08/2011 18:02	SB
Benzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Bromodichloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Bromoform	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Bromomethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Carbon disulfide	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Carbon tetrachloride	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Chlorobenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Chloroethane	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
Chloroform	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Chloromethane	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
cis-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Cyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Dibromochloromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Dichlorodifluoromethane	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
Ethylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Freon-113	BRL	10		ug/L	147477	1	06/08/2011 18:02	SB
Isopropylbenzene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Methyl acetate	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Methyl tert-butyl ether	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Methylcyclohexane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Methylene chloride	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Styrene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**

**Date:** 13-Jun-11

<b>Client:</b> Conestoga, Rovers, & Associates, Inc.	<b>Client Sample ID:</b> TRIP BLANK
<b>Project Name:</b> Arivec	<b>Collection Date:</b> 6/3/2011
<b>Lab ID:</b> 1106269-011	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B (SW5030B)</b>								
Tetrachloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Toluene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
trans-1,3-Dichloropropene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Trichloroethene	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Trichlorofluoromethane	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Vinyl chloride	BRL	2.0		ug/L	147477	1	06/08/2011 18:02	SB
Xylenes, Total	BRL	5.0		ug/L	147477	1	06/08/2011 18:02	SB
Surr: 4-Bromofluorobenzene	92.4	64.7-130		%REC	147477	1	06/08/2011 18:02	SB
Surr: Dibromofluoromethane	105	80.7-129		%REC	147477	1	06/08/2011 18:02	SB
Surr: Toluene-d8	90.3	71.1-120		%REC	147477	1	06/08/2011 18:02	SB

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Conestoga

Work Order Number 1104269

Checklist completed by N. Dinitz 10/3/11  
Signature Date

Carrier name: FedEx  UPS  Courier  Client  US Mail  Other

Shipping container/cooler in good condition? Yes  No  Not Present

Custody seals intact on shipping container/cooler? Yes  No  Not Present

Custody seals intact on sample bottles? Yes  No  Not Present

Container/Temp Blank temperature in compliance? (4°C±2)\* Yes  No

Cooler #1 3.9°C Cooler #2 \_\_\_\_\_ Cooler #3 \_\_\_\_\_ Cooler #4 \_\_\_\_\_ Cooler #5 \_\_\_\_\_ Cooler #6 \_\_\_\_\_

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Was TAT marked on the COC? Yes  No

Proceed with Standard TAT as per project history? Yes  No  Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No

Water - pH acceptable upon receipt? Yes  No  Not Applicable

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Sample Condition: Good  Other(Explain) \_\_\_\_\_

(For diffusive samples or AIHA lead) Is a known blank included? Yes  No

See Case Narrative for resolution of the Non-Conformance.

\* Samples do not have to comply with the given range for certain parameters.

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1106269

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147477

Sample ID: <b>MB-147477</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>06/08/2011</b>	Run No: <b>198621</b>
Sample Type: <b>MBLK</b>	Test Code: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147477</b>	Analysis Date: <b>06/08/2011</b>	Seq No: <b>4149666</b>

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1,2,2-Tetrachloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1,2-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2,4-Trichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dibromo-3-chloropropane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dibromoethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloropropane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,3-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,4-Dichlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0	0
2-Butanone	BRL	50	0	0	0	0	0	0	0	0	0
2-Hexanone	BRL	10	0	0	0	0	0	0	0	0	0
4-Methyl-2-pentanone	BRL	10	0	0	0	0	0	0	0	0	0
Acetone	BRL	50	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromodichloromethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromoform	BRL	5.0	0	0	0	0	0	0	0	0	0
Bromomethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon disulfide	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chlorobenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroethane	BRL	10	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

**Client:** Conestoga, Rovers, & Associates, Inc.  
**Project Name:** Arivec  
**Workorder:** 1106269

**ANALYTICAL QC SUMMARY REPORT**

**BatchID: 147477**

Sample ID: <b>MB-147477</b>	Client ID:	Units: <b>ug/L</b>	Prep Date: <b>06/08/2011</b>	Run No: <b>198621</b>
SampleType: <b>MBLK</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>	BatchID: <b>147477</b>	Analysis Date: <b>06/08/2011</b>	Seq No: <b>4149666</b>

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloromethane	BRL	10	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
cis-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
Cyclohexane	BRL	5.0	0	0	0	0	0	0	0	0	
Dibromochloromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Dichlorodifluoromethane	BRL	10	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Freon-113	BRL	10	0	0	0	0	0	0	0	0	
Isopropylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Methyl acetate	BRL	5.0	0	0	0	0	0	0	0	0	
Methyl tert-butyl ether	BRL	5.0	0	0	0	0	0	0	0	0	
Methylcyclohexane	BRL	5.0	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Styrene	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,3-Dichloropropene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichlorofluoromethane	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	43.53	0	50	0	87.1	64.7	130	0	0	0	
Surr: Dibromofluoromethane	57.61	0	50	0	115	80.7	129	0	0	0	
Surr: Toluene-d8	47.76	0	50	0	95.5	71.1	120	0	0	0	

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1106269

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147477

Sample ID: LCS-147477	Client ID:	Units: ug/L	Prep Date: 06/08/2011	Run No: 198621							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 147477	Analysis Date: 06/08/2011	Seq No: 4149475							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	61.79	5.0	50	0	124	60	140	0	0	0	
Benzene	50.37	5.0	50	0	101	70	130	0	0	0	
Chlorobenzene	51.18	5.0	50	0	102	70	130	0	0	0	
Toluene	53.14	5.0	50	0	106	70	130	0	0	0	
Trichloroethene	51.74	5.0	50	0	103	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	55.06	0	50	0	110	64.7	130	0	0	0	
Surr: Dibromofluoromethane	57.00	0	50	0	114	80.7	129	0	0	0	
Surr: Toluene-d8	53.32	0	50	0	107	71.1	120	0	0	0	

Sample ID: 1106269-001AMS	Client ID: GW-060111-DJB-107	Units: ug/L	Prep Date: 06/08/2011	Run No: 198621							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 147477	Analysis Date: 06/08/2011	Seq No: 4149482							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	69.93	5.0	50	0	140	46.2	183	0	0	0	
Benzene	53.13	5.0	50	0	106	62.2	143	0	0	0	
Chlorobenzene	50.78	5.0	50	0	102	72.2	137	0	0	0	
Toluene	54.79	5.0	50	0	110	57.8	149	0	0	0	
Trichloroethene	57.65	5.0	50	1.940	111	70.5	149	0	0	0	
Surr: 4-Bromofluorobenzene	49.85	0	50	0	99.7	64.7	130	0	0	0	
Surr: Dibromofluoromethane	56.40	0	50	0	113	80.7	129	0	0	0	
Surr: Toluene-d8	52.48	0	50	0	105	71.1	120	0	0	0	

Sample ID: 1106269-001AMSD	Client ID: GW-060111-DJB-107	Units: ug/L	Prep Date: 06/08/2011	Run No: 198621							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 147477	Analysis Date: 06/08/2011	Seq No: 4149483							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	69.12	5.0	50	0	138	46.2	183	69.93	1.17	20	
Benzene	50.41	5.0	50	0	101	62.2	143	53.13	5.25	20	

**Qualifiers:**

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Conestoga, Rovers, & Associates, Inc.  
 Project Name: Arivec  
 Workorder: 1106269

**ANALYTICAL QC SUMMARY REPORT**

BatchID: 147477

Sample ID: 1106269-001AMSD	Client ID: GW-060111-DJB-107	Units: ug/L	Prep Date: 06/08/2011	Run No: 198621
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 147477	Analysis Date: 06/08/2011	Seq No: 4149483

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	52.47	5.0	50	0	105	72.2	137	50.78	3.27	20	
Toluene	51.43	5.0	50	0	103	57.8	149	54.79	6.33	20	
Trichloroethene	56.27	5.0	50	1.940	109	70.5	149	57.65	2.42	20	
Surr: 4-Bromofluorobenzene	52.93	0	50	0	106	64.7	130	49.85	0	0	
Surr: Dibromofluoromethane	54.59	0	50	0	109	80.7	129	56.40	0	0	
Surr: Toluene-d8	52.19	0	50	0	104	71.1	120	52.48	0	0	

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX E

SUMMARY OF HISTORICAL GROUNDWATER CONCENTRATIONS

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:	Criteria		MW-CRA-1S	MW-CRA-1S	MW-CRA-1S	MW-2B	MW-CRA-2S	MW-CRA-2S	MW-CRA-2S	MW-CRA-2S	MW-CRA-3B	MW-CRA-3B	MW-CRA-4S	MW-CRA-5B	MW-CRA-5B	MW-5R		
	Type 1	Type 4	WG-093004-TBM-001	071905-TBM-002	GW-031809-DJB-002	GW-032709-DJB-010	WG-093004-TBM-003	071905-TBM-001	GW-071306-TBM-001	GW-032709-DJB-008	GW-031505-DJB-002	GW-032709-DJB-009	GW-031505-DJB-001	GW-051305-DJB-001	GW-040809-SAG-109	MW-5R-2/6/1997-WG		
	RRS	RRS	9/30/2004	7/19/2005	3/18/2009	3/27/2009	9/30/2004	7/19/2005	7/13/2006	3/27/2009	3/15/2005	3/27/2009	3/15/2005	5/13/2005	4/8/2009	2/6/1997		
Sample ID:	CRITERIA		On-site	On-site	On-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	Off-site	Off-site	Off-site		
Sample Date:	a	b																
Sample Area:	Units																	
<b>Volatile Organic Compounds</b>																		
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	-		
1,1,1-Trichloroethane	ug/L	200	13600	5.0 U	5 U	5.0 U	5.0 U	250 U	-	30	120	5.0 U	5.0 U	5.0 U	17	11	10000 <sup>a</sup>	
1,1,2,2-Tetrachloroethane	ug/L	200	200	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
1,1,2-Trichloroethane	ug/L	5	46.4	5.0 U	5 U	5.0 U	5.0 U	250 U	5 U	5.0 U	4.2 J	5.0 U	5.0 U	5.0 U	5.0 U	9.5 <sup>a</sup>	ND U	
1,1-Dichloroethane	ug/L	4000	4000	5.0 U	5 U	5.0 U	5.0 U	250 U	5 U	7.3	20	5.0 U	5.0 U	5.0 U	180	180	440	14000 <sup>ab</sup>
1,1-Dichloroethane	ug/L	7	524	5.0 U	5 U	5.0 U	25 <sup>a</sup>	250 U	5 U	5.0 U	3.6 J	5.0 U	5.0 U	14 <sup>a</sup>	230 <sup>a</sup>	260 <sup>a</sup>	2400 <sup>ab</sup>	
1,1-Dichloropropene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichloropropane	ug/L	40	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	ug/L	70	70	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
1,2,4-Trimethylbenzene	ug/L	70	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	5	5	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
1,2-Dichlorobenzene	ug/L	600	600	5.0 U	5 U	5.0 U	2.1 J	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	18	-	
1,2-Dichloroethane	ug/L	5	5	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	17 <sup>a</sup>	-	
1,2-Dichloropropane	ug/L	5	7.41	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	3.3 J	-	
1,3,5-Trimethylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,3-Dichlorobenzene	ug/L	600	600	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
1,3-Dichloropropane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1,4-Dichlorobenzene	ug/L	75	75	5.0 U	5 U	5.0 U	5.0 U	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 J	ND U	
1,4-Dioxane	ug/L	NV	NV	-	-	150 U	150 U	-	-	-	150 U	-	150 U	-	-	1500	-	
2,2-Dichloropropane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2-Butanone (Methyl Ethyl Ketone)	ug/L	2000	11800	10 U	10 U	50 U	50 U	500 U	50 U	50 U	50 U	10 U	50 U	50 U	50 U	50 U	2900 <sup>a</sup>	
2-Chlorotoluene	ug/L	5	2040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2-Hexanone	ug/L	2000	2000	10 U	10 U	10 U	10 U	500 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND U	
2-Methylnaphthalene	ug/L	10	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4-Chlorotoluene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	2000	4230	10 U	10 U	10 U	10 U	500 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4900 <sup>ab</sup>	
Acetone	ug/L	4000	45600	20 U	20 U	50 U	50 U	1000 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	-	
Benzene	ug/L	5	8.72	5.0 U	5 U	5.0 U	270 <sup>ab</sup>	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	31 <sup>a</sup>	78 <sup>a</sup>	
Bromobenzene	ug/L	5	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	ug/L	100	100	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
Bromoform	ug/L	100	100	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
Bromomethane (Methyl Bromide)	ug/L	10	13.2	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
Carbon disulfide	ug/L	4000	4000	-	-	5.0 U	5.0 U	-	-	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
Carbon tetrachloride	ug/L	5	102	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	-	5.0 U	-	
Chlorobenzene	ug/L	100	136	5.0 U	5 U	5.0 U	1.6 J	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.2	23	-	
Chlorobromomethane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chloroethane	ug/L	10	29200	10 U	5 U	10 U	10 U	500 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 <sup>a</sup>	
Chloroform (Trichloromethane)	ug/L	100	100	5.0 U	5 U	5.0 U	5.0 U	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 J	-	
Chloromethane (Methyl Chloride)	ug/L	3	263	-	5 U	10 U	10 U	-	10 U	10 U	10 U	-	10 U	-	-	10 U	-	
cis-1,2-Dichloroethene	ug/L	70	204	5.0 U	5 U	5.0 U	2800 <sup>ab</sup>	250 U	100 <sup>a</sup>	130 <sup>a</sup>	360 <sup>ab</sup>	5.0 U	5.0 U	160 <sup>a</sup>	3800 <sup>a</sup>	8500 <sup>a</sup>	48000 <sup>ab</sup>	

**TABLE E1  
HISTORICAL GROUNDWATER MONITORING RESULTS  
VOLATILE ORGANIC COMPOUNDS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location: Sample ID: Sample Date: Sample Area:	CRITERIA		MW-CRA-1S	MW-CRA-1S	MW-CRA-1S	MW-2B	MW-CRA-2S	MW-CRA-2S	MW-CRA-2S	MW-CRA-2S	MW-CRA-3B	MW-CRA-3B	MW-CRA-4S	MW-CRA-5B	MW-CRA-5B	MW-5R
	Type 1	Type 4	WG-093004-TBM-001	071905-TBM-002	GW-031809-DJB-002	GW-032709-DJB-010	WG-093004-TBM-003	071905-TBM-001	GW-071306-TBM-001	GW-032709-DJB-008	GW-031505-DJB-002	GW-032709-DJB-009	GW-031505-DJB-001	GW-051305-DJB-001	GW-040809-SAG-109	MW-5R-2/6/1997-WG
	RRS	RRS	9/30/2004	7/19/2005	3/18/2009	3/27/2009	9/30/2004	7/19/2005	7/13/2006	3/27/2009	3/15/2005	3/27/2009	3/15/2005	5/13/2005	4/8/2009	2/6/1997
	CRITERIA		On-site			Off-site	On-site			On-site	On-site		Off-site	Off-site		Off-site
Units	a	b														
cis-1,3-Dichloropropene	ug/L	5	11.9	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
Cyclohexane	ug/L	5	17500	5.0 U	5 U	5.0 U	<b>22<sup>a</sup></b>	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	100	100	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
Dibromomethane	ug/L	500	1020	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	-	5 U	10 U	10 U	-	10 U	10 U	10 U	-	10 U	-	10 U	-
Ethylbenzene	ug/L	700	700	5.0 U	5 U	5.0 U	5.0 U	250 U	12	5.0 U	1.1 J	5.0 U	5.0 U	5.0 U	2.8 J	-
Hexachlorobutadiene	ug/L	10	33.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/L	5	1050	5.0 U	5 U	5.0 U	3.7 J	250 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>8.5<sup>a</sup></b>	-
m&p-Xylene	ug/L	10000	10000	10 U	10 U	-	-	500 U	11	10 U	-	-	10 U	10 U	-	-
Methyl acetate	ug/L	5	5	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
Methyl cyclohexane	ug/L	5	5	5.0 U	5 U	5.0 U	<b>14<sup>ab</sup></b>	250 U	<b>40<sup>ab</sup></b>	<b>11<sup>ab</sup></b>	2.7 J	5.0 U	5.0 U	5.0 U	<b>8.0<sup>a</sup></b>	-
Methyl Tert Butyl Ether	ug/L	5	263	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
Methylene chloride	ug/L	5	119	5.0 U	5 U	5.0 U	5.0 U	250 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>12<sup>a</sup></b>	<b>350<sup>ab</sup></b>
Naphthalene	ug/L	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	ug/L	5	5110	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	ug/L	10000	10000	5.0 U	5 U	-	-	250 U	5 U	5.0 U	-	-	5.0 U	20	-	-
Styrene	ug/L	100	2560	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
tert-Butylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	5	5	5.0 U	5 U	1.2 J	5.0 U	250 U	<b>24<sup>ab</sup></b>	<b>52<sup>ab</sup></b>	<b>140<sup>ab</sup></b>	5.0 U	5.0 U	5.0 U	<b>58<sup>a</sup></b>	ND U
Toluene	ug/L	1000	5240	5.0 U	5 U	5.0 U	21	250 U	17	5.0 U	5.0 U	5.0 U	5.0 U	27	24	-
trans-1,2-Dichloroethene	ug/L	100	161	5.0 U	5 U	5.0 U	7.0	250 U	5 U	5.0 U	1.7 J	5.0 U	5.0 U	5.0 U	18	ND U
trans-1,3-Dichloropropene	ug/L	5	11.9	-	5 U	5.0 U	5.0 U	-	5 U	5.0 U	5.0 U	-	5.0 U	-	5.0 U	-
Trichloroethene	ug/L	5	37.7	5.0 U	5 U	5.0 U	3.7 J	250 U	<b>47<sup>ab</sup></b>	<b>89<sup>ab</sup></b>	<b>350<sup>ab</sup></b>	5.0 U	1.2 J	<b>24<sup>a</sup></b>	<b>680<sup>a</sup></b>	<b>620<sup>a</sup></b>
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	10 U	5 U	5.0 U	5.0 U	500 U	5 U	5.0 U	2.1 J	5.0 U	5.0 U	5.0 U	5.0 U	-
Trifluorotrchloroethane (Freon 113)	ug/L	1000000	1000000	-	5 U	10 U	10 U	-	5 U	10 U	3.1 J	-	10 U	-	900	-
Vinyl chloride	ug/L	2	3.27	2.0 U	2 U	2.0 U	<b>3700<sup>ab</sup></b>	100 U	2 U	<b>7.6<sup>ab</sup></b>	2.0 U	2.0 U	<b>2.3<sup>a</sup></b>	<b>250<sup>a</sup></b>	<b>970<sup>a</sup></b>	<b>3700<sup>ab</sup></b>
Xylene (total)	ug/L	10000	10000	-	-	5.0 U	50	-	-	-	5.0 U	-	5.0 U	-	46	-
VOCs					0		7062				990		0		13614	

Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).

The Remainder of the Wells are compared to Type 4 RRS (b).

Exceedance of RRS is noted in red and bold with letter.

NV- No Value

NR - Not Regulated

J - Estimated, below Quantitation Limits.

5.0 U - Below associated reporting limit.

"-" - Not analyzed.

ug/L - Micrograms per Liter

**TABLE E1  
HISTORICAL GROUNDWATER MONITORING RESULTS  
VOLATILE ORGANIC COMPOUNDS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:		Type 1		Type 4		MW-CRA-5S	MW-CRA-5S	MW-CRA-6S	MW-CRA-6S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S	MW-CRA-8B	MW-CRA-8B	MW-CRA-9S	MW-9B	MW-9R	MW-9R
Sample ID:		RRS	RRS	GW-051305-DJB-002	GW-040809-SAG-108	GW-072106-DJB-103	GW-031809-DJB-001	GW-101906-TBM-001	GW-010207-SAG-001	GW-012808-TBM-001	GW-032709-SAG-102	GW-012808-TBM-002	GW-032709-SAG-103	GW-040809-SAG-106	GW-040809-DJB-011	GW-032709-SAG-104	GW-032709-SAG-105		
Sample Date:		CRITERIA		5/13/2005	4/8/2009	7/21/2006	3/18/2009	10/19/2006	1/2/2007	1/28/2008	3/27/2009	1/28/2008	3/27/2009	4/8/2009	4/8/2009	3/27/2009	3/27/2009		
Sample Area:		CRITERIA		Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site		
Units		a	b																
<b>Volatile Organic Compounds</b>																			
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	200	13600	5.0 U	5.0 U	280 <sup>a</sup>	300 <sup>a</sup>	5.0 U	5.0 U										
1,1,2,2-Tetrachloroethane	ug/L	200	200	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,1,2-Trichloroethane	ug/L	5	46.4	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	4000	4000	5.7	2.5 J	9.3	22	5.0 U	5.0 U										
1,1-Dichloroethene	ug/L	7	524	9.7 <sup>a</sup>	7.0	5 U	19 <sup>a</sup>	5.0 U	15 <sup>a</sup>	150 <sup>a</sup>	140 <sup>a</sup>								
1,1-Dichloropropene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	ug/L	40	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	70	70	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,2,4-Trimethylbenzene	ug/L	70	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	5	5	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,2-Dichlorobenzene	ug/L	600	600	5.0 U	5.0 U	8.4	9.1	5.0 U	5.0 U										
1,2-Dichloroethane	ug/L	5	5	-	5.0 U	5 U	5.0 U	-	5.0 U	3.1 J	14 <sup>ab</sup>	14 <sup>ab</sup>							
1,2-Dichloropropane	ug/L	5	7.41	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,3,5-Trimethylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	600	600	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
1,3-Dichloropropane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	75	75	5.0 U	5.0 U	5 U	1.7 J	5.0 U	1.3 J	1.2 J									
1,4-Dioxane	ug/L	NV	NV	-	150 U	-	150 U	-	-	-	-	-	-	-	-	-	150 U	150 U	150 U
2,2-Dichloropropane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	ug/L	2000	11800	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	7300 <sup>a</sup>	50 U	50 U
2-Chlorotoluene	ug/L	5	2040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	2000	2000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	ug/L	10	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	2000	4230	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	ug/L	4000	45600	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L	5	8.72	5.0 U	5.0 U	990 <sup>ab</sup>	790 <sup>ab</sup>	5.0 U	1.7 J	6.5 <sup>a</sup>	5.9 <sup>a</sup>								
Bromobenzene	ug/L	5	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	100	100	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
Bromoform	ug/L	100	100	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
Bromomethane (Methyl Bromide)	ug/L	10	13.2	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
Carbon disulfide	ug/L	4000	4000	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
Carbon tetrachloride	ug/L	5	102	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U									
Chlorobenzene	ug/L	100	136	5.0 U	5.0 U	5 U	1.9 J	5.0 U	1.6 J	1.5 J									
Chlorobromomethane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	10	29200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	ug/L	100	100	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	ug/L	3	263	-	10 U	10 U	10 U	-	10 U	10 U									
cis-1,2-Dichloroethene	ug/L	70	204	260 <sup>a</sup>	74 <sup>a</sup>	17000 <sup>ab</sup>	25000 <sup>ab</sup>	5.0 U	280 <sup>ab</sup>	1300 <sup>ab</sup>	1200 <sup>ab</sup>								

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:	Type 1 RRS	Type 4 RRS	MW-CRA-5S	MW-CRA-5S	MW-CRA-6S	MW-CRA-6S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S	MW-CRA-8B	MW-CRA-8B	MW-CRA-9S	MW-9B	MW-9R	MW-9R		
			GW-051305-DJB-002	GW-040809-SAG-108	GW-072106-DJB-103	GW-031809-DJB-001	GW-101906-TBM-001	GW-010207-SAG-001	GW-012808-TBM-001	GW-032709-SAG-102	GW-012808-TBM-002	GW-032709-SAG-103	GW-040809-SAG-106	GW-040809-DJB-011	GW-032709-SAG-104	GW-032709-SAG-105		
Sample ID:	CRITERIA		Off-site															
Sample Date:	CRITERIA		Off-site															
Sample Area:	CRITERIA		Off-site															
Units	a	b																
cis-1,3-Dichloropropene	ug/L	5	11.9	-	5.0 U	5 U	5.0 U	-	5.0 U									
Cyclohexane	ug/L	5	17500	5.0 U	5.0 U	80 <sup>a</sup>	92 <sup>a</sup>	5.0 U										
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dibromochloromethane	ug/L	100	100	-	5.0 U	5 U	5.0 U	-	5.0 U									
Dibromomethane	ug/L	500	1020	-	-	-	-	-	-	-	-	-	-	-	-	-		
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	-	10 U	10 U	10 U	-	10 U									
Ethylbenzene	ug/L	700	700	5.0 U	5.0 U	130	130	5.0 U										
Hexachlorobutadiene	ug/L	10	33.7	-	-	-	-	-	-	-	-	-	-	-	-	-		
Isopropylbenzene	ug/L	5	1050	27 <sup>a</sup>	5.0 U	18 <sup>a</sup>	18 <sup>a</sup>	5.0 U										
m&p-Xylene	ug/L	10000	10000	10 U	-	260	-	10 U	-	-	-	-	-	-	-	-		
Methyl acetate	ug/L	5	5	-	5.0 U	5 U	5.0 U	-	5.0 U									
Methyl cyclohexane	ug/L	5	5	5.0 U	5.0 U	82 <sup>ab</sup>	92 <sup>ab</sup>	5.0 U										
Methyl Tert Butyl Ether	ug/L	5	263	-	5.0 U	5 U	5.0 U	-	5.0 U									
Methylene chloride	ug/L	5	119	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.8 J	2.6 J		
Naphthalene	ug/L	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-		
n-Butylbenzene	ug/L	5	5110	-	-	-	-	-	-	-	-	-	-	-	-	-		
n-Propylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-		
o-Xylene	ug/L	10000	10000	5.0 U	-	160	-	5.0 U	5.0 U	-	-	-	-	-	-	-		
Styrene	ug/L	100	2560	-	5.0 U	5 U	5.0 U	-	5.0 U									
tert-Butylbenzene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-		
Tetrachloroethene	ug/L	5	5	5.0 U	1.9 J	620 <sup>ab</sup>	870 <sup>ab</sup>	5.0 U	19 <sup>ab</sup>	18 <sup>ab</sup>								
Toluene	ug/L	1000	5240	5.4	5.0 U	2400 <sup>a</sup>	2200 <sup>a</sup>	5.0 U	5.0 U									
trans-1,2-Dichloroethene	ug/L	100	161	5.0 U	5.0 U	200 <sup>ab</sup>	320 <sup>ab</sup>	5.0 U	1.1 J	3.3 J	3.0 J							
trans-1,3-Dichloropropene	ug/L	5	11.9	-	5.0 U	5 U	5.0 U	-	5.0 U	5.0 U								
Trichloroethene	ug/L	5	37.7	61 <sup>a</sup>	21 <sup>a</sup>	710 <sup>ab</sup>	660 <sup>ab</sup>	22 <sup>a</sup>	7.3 <sup>a</sup>	5.0 U	1.6 J	5.0 U	5.0 U	5.0 U	10 <sup>a</sup>	30 <sup>a</sup>	31 <sup>a</sup>	
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	5.0 U	5.0 U	1300	1600	5.0 U	5.0 U									
Trifluorotrchloroethane (Freon 113)	ug/L	1000000	1000000	-	17	10 U	10 U	-	10 U	3.3 J	30	31						
Vinyl chloride	ug/L	2	3.27	7.7 <sup>a</sup>	2.0 U	120 <sup>ab</sup>	360 <sup>ab</sup>	2.0 U	2.0 U	5.0 U	4.5 <sup>ab</sup>	46 <sup>ab</sup>	46 <sup>ab</sup>					
Xylene (total)	ug/L	10000	10000	-	5.0 U	-	600	-	-	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	

VOCs 52 33082 0 0 0 7595 1778 1656

Notes:

Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).

The Remainder of the Wells are compared to Type 4 RRS (b).

Exceedance of RRS is noted in red and bold with letter.

NV- No Value

NR - Not Regulated

J - Estimated, below Quantitation Limits.

5.0 U - Below associated reporting limit.

"-" - Not analyzed.

ug/L - Micrograms per Liter

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:			MW-15B	MW-15R	MW-17B	MW-17B	MW-17B	MW-17B	MW-17R	MW-17R	MW-17R	MW-18R	MW-18R	ARIVEC WELL AW-2	AW-2	B-1	B-1A	
	Sample ID:	Type 1	Type 4	GW-032509-DJB-007	GW-032509-SAG-101	GW-009	GW-071306-TBM-003	GW-031809-DJB-004	GW-031809-DJB-005	GW-010	GW-071306-TBM-002	GW-031809-DJB-006	GW-011	GW-040809-SAG-107	GW-071306-DJB-102	GW-031809-DJB-003	GW-001	GW-081804-TBM-001
	Sample Date:	RRS	RRS	3/23/2009	3/25/2009	6/11/2004	7/13/2006	3/18/2009	3/18/2009	6/11/2004	7/13/2006	3/18/2009	6/11/2004	4/8/2009	7/13/2006	3/18/2009	6/9/2004	8/18/2004
Sample Area:	CRITERIA		Off-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	On-site	On-site	On-site	On-site	On-site	
Units	a	b																
<b>Volatile Organic Compounds</b>																		
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	-	100 U	-
1,1,1-Trichloroethane	ug/L	200	13600	5.0 U	5.0 U	50 U	1400 <sup>a</sup>	720 <sup>a</sup>	720 <sup>a</sup>	1300 <sup>a</sup>	5.0 U	65	1 U	5.0 U	-	280 <sup>a</sup>	2500 U	
1,1,2,2-Tetrachloroethane	ug/L	200	200	5.0 U	5.0 U	100 U	5.0 U	5.0 U	5.0 U	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	100 U	2500 U	
1,1,2-Trichloroethane	ug/L	5	46.4	5.0 U	5.0 U	50 U	16 <sup>a</sup>	120 <sup>ab</sup>	110 <sup>ab</sup>	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	50 U	2500 U	
1,1-Dichloroethane	ug/L	4000	4000	5.0 U	5.0 U	50 U	880	1000	990	1300	46	32	7.5	4.3 J	260	65	50 U	2500 U
1,1-Dichloroethene	ug/L	7	524	5.0 U	5.0 U	50 U	400 <sup>a</sup>	490 <sup>a</sup>	460 <sup>a</sup>	500 U	13 <sup>a</sup>	15 <sup>a</sup>	1 U	5.0 U	5.0 U	25 <sup>a</sup>	50 U	2500 U
1,1-Dichloropropene	ug/L	5	5	-	-	50 U	-	-	-	500 U	-	-	1 U	-	-	-	50 U	-
1,2,3-Trichlorobenzene	ug/L	5	5	-	-	250 U	-	-	-	2500 U	-	-	5 U	-	-	-	250 U	-
1,2,3-Trichloropropane	ug/L	40	40	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	-	100 U	-
1,2,4-Trichlorobenzene	ug/L	70	70	5.0 U	5.0 U	250 U	5.0 U	5.0 U	5.0 U	2500 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U	250 U	2500 U	
1,2,4-Trimethylbenzene	ug/L	70	70	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	500 <sup>ab</sup>	-	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	5.0 U	5.0 U	250 U	5.0 U	5.0 U	5.0 U	2500 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U	250 U	2500 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	5	5	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	50 U	2500 U	
1,2-Dichlorobenzene	ug/L	600	600	5.0 U	5.0 U	100 U	12	15	15	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	1.8 J	100 U	2500 U
1,2-Dichloroethane	ug/L	5	5	5.0 U	5.0 U	50 U	5.0 U	280 <sup>ab</sup>	260 <sup>ab</sup>	500 U	5.0 U	3.6 J	1 U	5.0 U	5.0 U	50 U	2500 U	
1,2-Dichloropropane	ug/L	5	7.41	5.0 U	5.0 U	50 U	5.0 U	3.4 J	3.3 J	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	50 U	2500 U	
1,3,5-Trimethylbenzene	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	240 <sup>ab</sup>	-	
1,3-Dichlorobenzene	ug/L	600	600	5.0 U	5.0 U	100 U	5.0 U	5.0 U	5.0 U	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	100 U	2500 U	
1,3-Dichloropropane	ug/L	NV	NV	-	-	50 U	-	-	-	500 U	-	-	1 U	-	-	50 U	-	
1,4-Dichlorobenzene	ug/L	75	75	5.0 U	5.0 U	100 U	5.0 U	3.5 J	3.6 J	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	100 U	2500 U	
1,4-Dioxane	ug/L	NV	NV	150 U	150 U	-	-	150 U	150 U	-	-	150 U	-	150 U	-	150 U	-	
2,2-Dichloropropane	ug/L	5	5	-	-	50 U	-	-	-	500 U	-	-	1 U	-	-	50 U	-	
2-Butanone (Methyl Ethyl Ketone)	ug/L	2000	11800	50 U	50 U	-	36000 <sup>ab</sup>	50 U	50 U	-	50 U	50 U	-	50 U	50 U	-	5000 U	
2-Chlorotoluene	ug/L	5	2040	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	100 U	-	
2-Hexanone	ug/L	2000	2000	10 U	10 U	-	320	27	25	-	10 U	10 U	-	10 U	13	10 U	5000 U	
2-Methylnaphthalene	ug/L	10	409	-	-	250 U	-	-	-	2500 U	-	-	5 U	-	-	250 U	-	
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	100 U	-	
4-Chlorotoluene	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	100 U	-	
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	2000	4230	10 U	10 U	-	27000 <sup>ab</sup>	790	810	-	40	13	-	10 U	10 U	-	5000 U	
Acetone	ug/L	4000	45600	50 U	50 U	-	8400 <sup>a</sup>	770	770	-	50 U	28 J	-	50 U	50 U	-	10000 U	
Benzene	ug/L	5	8.72	5.0 U	5.0 U	50 U	1400 <sup>ab</sup>	1200 <sup>ab</sup>	1200 <sup>ab</sup>	1800 <sup>ab</sup>	17 <sup>ab</sup>	24 <sup>ab</sup>	1 U	5.0 U	5.0 U	10 <sup>ab</sup>	50 U	2500 U
Bromobenzene	ug/L	5	144	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	100 U	-	
Bromodichloromethane	ug/L	100	100	5.0 U	5.0 U	100 U	5.0 U	5.0 U	5.0 U	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	100 U	2500 U	
Bromoform	ug/L	100	100	5.0 U	5.0 U	100 U	5.0 U	5.0 U	5.0 U	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	100 U	2500 U	
Bromomethane (Methyl Bromide)	ug/L	10	13.2	5.0 U	5.0 U	250 U	5.0 U	5.0 U	5.0 U	2500 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U	250 U	2500 U	
Carbon disulfide	ug/L	4000	4000	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	-	5.0 U	5.0 U	-	2500 U	
Carbon tetrachloride	ug/L	5	102	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	5.8 <sup>a</sup>	50 U	2500 U
Chlorobenzene	ug/L	100	136	5.0 U	5.0 U	50 U	16	11	11	500 U	5.0 U	5.0 U	1 U	5.0 U	11	3.7 J	50 U	2500 U
Chlorobromomethane	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	100 U	-	
Chloroethane	ug/L	10	29200	10 U	10 U	250 U	27 <sup>a</sup>	710 <sup>a</sup>	680 <sup>a</sup>	2500 U	30 <sup>a</sup>	10 U	5 U	10 U	10 U	250 U	5000 U	
Chloroform (Trichloromethane)	ug/L	100	100	5.0 U	5.0 U	50 U	10	4.5 J	4.6 J	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	50 U	2500 U	
Chloromethane (Methyl Chloride)	ug/L	3	263	10 U	10 U	250 U	10 U	10 U	1.6 J	2500 U	10 U	10 U	5 U	10 U	10 U	250 U	5000 U	
cis-1,2-Dichloroethene	ug/L	70	204	8.1	4.1 J	2400 <sup>ab</sup>	67000 <sup>ab</sup>	61000 <sup>ab</sup>	62000 <sup>ab</sup>	59000 <sup>ab</sup>	2300 <sup>ab</sup>	3100 <sup>ab</sup>	1 U	260 <sup>ab</sup>	3300 <sup>ab</sup>	1100 <sup>ab</sup>	8000 <sup>ab</sup>	

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:	CRITERIA		MW-15B	MW-15R	MW-17B	MW-17B	MW-17B	MW-17B	MW-17R	MW-17R	MW-17R	MW-18R	MW-18R	ARIVEC WELL AW-2	AW-2	B-1	B-1A		
Sample ID:	Type 1	Type 4	GW-032509-DJB-007	GW-032509-SAG-101	GW-009	GW-071306-TBM-003	GW-031809-DJB-004	GW-031809-DJB-005	GW-010	GW-071306-TBM-002	GW-031809-DJB-006	GW-011	GW-040809-SAG-107	GW-071306-DJB-102	GW-031809-DJB-003	GW-001	GW-081804-TBM-001		
Sample Date:	RRS	RRS	3/23/2009	3/25/2009	6/11/2004	7/13/2006	3/18/2009	3/18/2009	6/11/2004	7/13/2006	3/18/2009	6/11/2004	4/8/2009	7/13/2006	3/18/2009	6/9/2004	8/18/2004		
Sample Area:	CRITERIA		Off-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	On-site	On-site	On-site	On-site	On-site		
Units	a	b																	
cis-1,3-Dichloropropene	ug/L	5	11.9	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	5.0 U	50 U	2500 U
Cyclohexane	ug/L	5	17500	5.0 U	5.0 U	-	65 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	-	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	-	2500 U
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	-	2 U	-	-	-	100 U	-
Dibromochloromethane	ug/L	100	100	5.0 U	5.0 U	100 U	5.0 U	5.0 U	5.0 U	1000 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	100 U	2500 U
Dibromomethane	ug/L	500	1020	-	-	100 U	-	-	-	1000 U	-	-	-	2 U	-	-	-	100 U	-
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	10 U	10 U	250 U	10 U	10 U	10 U	2500 U	10 U	10 U	10 U	5 U	10 U	10 U	10 U	250 U	5000 U
Ethylbenzene	ug/L	700	700	5.0 U	5.0 U	50 U	470	610	610	500 U	6.4	8.9	1 U	5.0 U	5.0 U	40	20	180	2500 U
Hexachlorobutadiene	ug/L	10	33.7	-	-	250 U	-	-	-	2500 U	-	-	5 U	-	-	-	-	250 U	-
Isopropylbenzene	ug/L	5	1050	5.0 U	5.0 U	100 U	15 <sup>a</sup>	34 <sup>a</sup>	34 <sup>a</sup>	1000 U	5.0 U	5.0 U	2 U	5.0 U	5.0 U	5.0 U	6.8 <sup>a</sup>	100 U	2500 U
m&p-Xylene	ug/L	10000	10000	-	-	100	1000	-	-	1200	17	-	2 U	-	-	86	-	640	5000 U
Methyl acetate	ug/L	5	5	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U	5.0 U	-	2500 U
Methyl cyclohexane	ug/L	5	5	5.0 U	5.0 U	-	42 <sup>ab</sup>	88 <sup>ab</sup>	87 <sup>ab</sup>	-	5.0 U	3.2 J	-	5.0 U	5.0 U	5.0 U	5.4 <sup>ab</sup>	-	2500 U
Methyl Tert Butyl Ether	ug/L	5	263	5.0 U	5.0 U	250 U	5.0 U	5.0 U	5.0 U	2500 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	250 U	2500 U
Methylene chloride	ug/L	5	119	5.0 U	5.0 U	250 U	26 <sup>a</sup>	47 <sup>a</sup>	42 <sup>a</sup>	2500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	250 U	2500 U
Naphthalene	ug/L	20	20	-	-	250 U	-	-	-	2500 U	-	-	5 U	-	-	-	-	250 U	-
n-Butylbenzene	ug/L	5	5110	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	-	-	100 U	-
n-Propylbenzene	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	-	-	100 U	-
o-Xylene	ug/L	10000	10000	-	-	50 U	410	-	-	560	6.6	-	1 U	-	-	28	-	210	2500 U
Styrene	ug/L	100	2560	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	2500 U
tert-Butylbenzene	ug/L	5	5	-	-	100 U	-	-	-	1000 U	-	-	2 U	-	-	-	-	100 U	-
Tetrachloroethene	ug/L	5	5	5.0 U	5.0 U	50 U	51 <sup>ab</sup>	23 <sup>ab</sup>	23 <sup>ab</sup>	500 U	5.0 U	2.3 J	1 U	5.0 U	5.0 U	5.0 U	5.4 <sup>ab</sup>	1100 <sup>ab</sup>	31000 <sup>ab</sup>
Toluene	ug/L	1000	5240	18	5.0 U	150	9700 <sup>ab</sup>	12000 <sup>ab</sup>	12000 <sup>ab</sup>	10000 <sup>ab</sup>	170	640	1 U	5.0 U	5.0 U	1100 <sup>a</sup>	140	970	2500 U
trans-1,2-Dichloroethene	ug/L	100	161	5.0 U	5.0 U	50 U	140 <sup>a</sup>	270 <sup>ab</sup>	270 <sup>ab</sup>	500 U	14	18	1 U	5.0 U	5.0 U	16	11	50 U	2500 U
trans-1,3-Dichloropropene	ug/L	5	11.9	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	2500 U
Trichloroethene	ug/L	5	37.7	13 <sup>a</sup>	5.0 U	50 U	47 <sup>ab</sup>	21 <sup>a</sup>	20 <sup>a</sup>	500 U	5.0 U	5.0 U	1 U	5.0 U	5.0 U	5.0 U	4.1 J	2900 <sup>ab</sup>	2500 U
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	5.0 U	5.0 U	250 U	58	66	56	2500 U	5.0 U	2.4 J	5 U	5.0 U	5.0 U	5.0 U	4.1 J	250 U	2500 U
Trifluorotrichloroethane (Freon 113)	ug/L	1000000	1000000	10 U	10 U	-	10 U	58	53	-	10 U	10 U	-	10 U	10 U	60	110	-	5000 U
Vinyl chloride	ug/L	2	3.27	2.0 U	2.0 U	100 U	780 <sup>ab</sup>	7000 <sup>ab</sup>	7100 <sup>ab</sup>	1300 <sup>ab</sup>	110 <sup>ab</sup>	23 <sup>ab</sup>	2 U	2.0 U	2.0 U	4500 <sup>ab</sup>	1100 <sup>ab</sup>	100 U	1000 U
Xylene (total)	ug/L	10000	10000	5.0 U	5.0 U	-	-	3000	2900	-	-	46	-	5.0 U	5.0 U	-	81	-	-

VOCs

Notes:

Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).

The Remainder of the Wells are compared to Type 4 RRS (b).

Exceedance of RRS is noted in red and bold with letter.

NV- No Value

NR - Not Regulated

J - Estimated, below Quantitation Limits.

5.0 U - Below associated reporting limit.

"-" - Not analyzed.

ug/L - Micrograms per Liter

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:			B-1B	B-1C	B-2C	B-3	B-4B	B-8	B-8A	B-11	B-11C	B-12	B-13	B-14	B-15	B-16	B-20	B-22	
Sample ID:	Type 1	Type 4	GW-081804-TBM-002	GW-081804-TBM-003	GW-081904-TBM-005	GW-002	GW-081904-TBM-006	GW-003	WG-093004-TBM-002	GW-004	GW-081904-TBM-007	GW-005	GW-006	GW-007	GW-008	031005-TBM-001	GW-031405-TBM-004	031005-TBM-003	
Sample Date:	RRS	RRS	8/18/2004	8/18/2004	8/19/2004	6/9/2004	8/19/2004	6/9/2004	9/30/2004	6/10/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005	3/14/2005	3/10/2005	
Sample Area:	CRITERIA		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	
Units	a	b																	
<b>Volatile Organic Compounds</b>																			
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	1000 U	-	-	-	
1,1,1-Trichloroethane	ug/L	200	13600	290 <sup>a</sup>	530 J <sup>a</sup>	5.0 U	500 U	840 J <sup>a</sup>	4100 <sup>ab</sup>	250 U	58	5.0 U	25 U	500 U	300 <sup>a</sup>	500 U	5 U	6.4	5 U
1,1,2,2-Tetrachloroethane	ug/L	200	200	250 U	250 U	5.0 U	1000 U	250 U	1000 U	-	20 U	5.0 U	50 U	1000 U	1000 U	5 U	5 U	-	5 U
1,1,2-Trichloroethane	ug/L	5	46.4	250 U	250 U	5.0 U	500 U	250 U	500 U	250 U	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	5.0 U	5 U
1,1-Dichloroethane	ug/L	4000	4000	250 U	250 U	5.0 U	1600	1500 J	2000	250 U	310	43	67	500 U	99	640	5 U	9.2	5 U
1,1-Dichloroethene	ug/L	7	524	250 U	250 U	5.0 U	500 U	250 U	1600 <sup>ab</sup>	250 U	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	5.0 U	5 U
1,1-Dichloropropene	ug/L	5	5	-	-	-	500 U	-	5500 <sup>ab</sup>	-	10 U	-	25 U	500 U	50 U	500 U	-	-	-
1,2,3-Trichlorobenzene	ug/L	5	5	-	-	-	2500 U	-	2500 U	-	50 U	-	125 U	2500 U	250 U	2500 U	5 U	-	5 U
1,2,3-Trichloropropane	ug/L	40	40	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
1,2,4-Trichlorobenzene	ug/L	70	70	250 U	250 U	5.0 U	2500 U	250 U	2500 U	-	50 U	5.0 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
1,2,4-Trimethylbenzene	ug/L	70	70	-	-	-	4100 <sup>ab</sup>	-	370000 I <sup>ab</sup>	-	52	-	65	1000 U	370 <sup>ab</sup>	1000 U	5 U	-	5 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	250 U	250 U	5.0 U	2500 U	250 U	2500 U	-	50 U	5.0 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	5	5	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
1,2-Dichlorobenzene	ug/L	600	600	250 U	250 U	5.0 U	1000 U	250 U	1000 U	250 U	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	5.0 U	5 U
1,2-Dichloroethane	ug/L	5	5	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
1,2-Dichloropropane	ug/L	5	7.41	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
1,3,5-Trimethylbenzene	ug/L	5	5	-	-	-	1300 <sup>ab</sup>	-	46000 <sup>ab</sup>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	765 <sup>ab</sup>	5 U
1,3-Dichlorobenzene	ug/L	600	600	250 U	250 U	5.0 U	1000 U	250 U	1000 U	-	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	-	5 U
1,3-Dichloropropane	ug/L	NV	NV	-	-	-	500 U	-	500 U	-	10 U	-	25 U	500 U	50 U	500 U	-	-	-
1,4-Dichlorobenzene	ug/L	75	75	250 U	250 U	5.0 U	1000 U	250 U	1000 U	250 U	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	5.0 U	5 U
1,4-Dioxane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	ug/L	5	5	-	-	-	500 U	-	500 U	-	10 U	-	25 U	500 U	50 U	500 U	5 U	-	5 U
2-Butanone (Methyl Ethyl Ketone)	ug/L	2000	11800	500 U	500 U	10 U	-	500 U	-	500 U	-	10 U	-	-	-	-	10 U	10 U	10 U
2-Chlorotoluene	ug/L	5	2040	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
2-Hexanone	ug/L	2000	2000	500 U	500 U	10 U	-	500 U	-	500 U	-	10 U	-	-	-	-	5 U	10 U	5 U
2-Methylnaphthalene	ug/L	10	409	-	-	-	2500 U	-	2500 U	-	50 U	-	125 U	2500 U	250 U	2500 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	-	-	1000 U	-	8600 <sup>ab</sup>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
4-Chlorotoluene	ug/L	5	5	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	2000	4230	500 U	500 U	10 U	-	500 U	-	500 U	-	10 U	-	-	-	-	50 U	10 U	50 U
Acetone	ug/L	4000	45600	1000 U	1000 U	20 U	-	1000 U	-	1000 U	-	20 U	-	-	-	-	5 U	43	5 U
Benzene	ug/L	5	8.72	1900 <sup>ab</sup>	250 U	5.0 U	500 U	1500 J <sup>ab</sup>	5400 <sup>ab</sup>	250 U	10 U	5.0 U	25 U	500 U	50 U	840 <sup>ab</sup>	795 <sup>ab</sup>	220 <sup>ab</sup>	795 <sup>ab</sup>
Bromobenzene	ug/L	5	144	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Bromodichloromethane	ug/L	100	100	250 U	250 U	5.0 U	1000 U	250 U	1000 U	-	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Bromoform	ug/L	100	100	250 U	250 U	5.0 U	1000 U	250 U	1000 U	-	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Bromomethane (Methyl Bromide)	ug/L	10	13.2	250 U	250 U	5.0 U	2500 U	250 U	2500 U	-	50 U	5.0 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
Carbon disulfide	ug/L	4000	4000	250 U	250 U	5.0 U	-	250 U	-	-	-	5.0 U	-	-	-	-	-	-	-
Carbon tetrachloride	ug/L	5	102	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
Chlorobenzene	ug/L	100	136	250 U	250 U	5.0 U	500 U	250 U	500 U	250 U	10 U	5.0 U	120 <sup>a</sup>	500 U	50 U	500 U	5 U	5.0 U	5 U
Chlorobromomethane	ug/L	5	5	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	-	-	-
Chloroethane	ug/L	10	29200	500 U	500 U	10 U	2500 U	1100 J <sup>a</sup>	2500 U	500 U	270 <sup>a</sup>	22 <sup>a</sup>	125 U	2500 U	250 U	2500 U	5 U	10 U	5 U
Chloroform (Trichloromethane)	ug/L	100	100	250 U	250 U	5.0 U	500 U	250 U	500 U	250 U	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	5.0 U	5 U
Chloromethane (Methyl Chloride)	ug/L	3	263	500 U	500 U	10 U	2500 U	500 U	2500 U	-	50 U	10 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
cis-1,2-Dichloroethene	ug/L	70	204	2500 <sup>ab</sup>	7900 J <sup>ab</sup>	5.0 U	4100 <sup>ab</sup>	4900 J <sup>ab</sup>	160000 <sup>ab</sup>	1000 <sup>ab</sup>	530 <sup>ab</sup>	170 <sup>a</sup>	58	26000 <sup>ab</sup>	8200 <sup>ab</sup>	49000 <sup>ab</sup>	5 U	600 <sup>ab</sup>	5 U

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:	CRITERIA		B-1B	B-1C	B-2C	B-3	B-4B	B-8	B-8A	B-11	B-11C	B-12	B-13	B-14	B-15	B-16	B-20	B-22	
Sample ID:	Type 1	Type 4	GW-081804-TBM-002	GW-081804-TBM-003	GW-081904-TBM-005	GW-002	GW-081904-TBM-006	GW-003	WG-093004-TBM-002	GW-004	GW-081904-TBM-007	GW-005	GW-006	GW-007	GW-008	031005-TBM-001	GW-031405-TBM-004	031005-TBM-003	
Sample Date:	RRS	RRS	8/18/2004	8/18/2004	8/19/2004	6/9/2004	8/19/2004	6/9/2004	9/30/2004	6/10/2004	8/19/2004	6/10/2004	6/11/2004	6/11/2004	6/11/2004	3/10/2005	3/14/2005	3/10/2005	
Sample Area:	CRITERIA		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	
Units	a	b																	
cis-1,3-Dichloropropene	ug/L	5	11.9	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
Cyclohexane	ug/L	5	17500	<b>370<sup>a</sup></b>	250 U	5.0 U	-	250 U	-	250 U	-	5.0 U	-	-	-	5 U	<b>17<sup>a</sup></b>	-	5 U
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	-	-	1000 U	-	<b>12000<sup>ab</sup></b>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Dibromochloromethane	ug/L	100	100	250 U	250 U	5.0 U	1000 U	250 U	1000 U	-	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Dibromomethane	ug/L	500	1020	-	-	-	1000 U	-	1000 U	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	500 U	500 U	10 U	2500 U	500 U	2500 U	-	50 U	10 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
Ethylbenzene	ug/L	700	700	400	540 J	5.0 U	<b>7600<sup>ab</sup></b>	<b>890 J<sup>ab</sup></b>	<b>49000<sup>ab</sup></b>	250 U	26	5.0 U	41	500 U	280	500 U	<b>1025<sup>ab</sup></b>	130	<b>808<sup>ab</sup></b>
Hexachlorobutadiene	ug/L	10	33.7	-	-	-	2500 U	-	2500 U	-	50 U	-	125 U	2500 U	250 U	2500 U	5 U	-	5 U
Isopropylbenzene	ug/L	5	1050	250 U	250 U	5.0 U	1000 U	250 U	<b>7500<sup>ab</sup></b>	250 U	20 U	5.0 U	50 U	1000 U	100 U	1000 U	5 U	<b>15<sup>a</sup></b>	5 U
m&p-Xylene	ug/L	10000	10000	910	1800 J	10 U	<b>22000<sup>ab</sup></b>	4200 J	<b>190000<sup>ab</sup></b>	500 U	130	10 U	150	1000 U	1100	1500	1380	400	1090
Methyl acetate	ug/L	5	5	250 U	250 U	5.0 U	-	250 U	-	-	5.0 U	-	-	-	-	-	-	-	-
Methyl cyclohexane	ug/L	5	5	<b>930<sup>ab</sup></b>	<b>430 J<sup>ab</sup></b>	5.0 U	-	250 U	-	250 U	-	5.0 U	-	-	-	-	-	<b>34<sup>ab</sup></b>	-
Methyl Tert Butyl Ether	ug/L	5	263	250 U	250 U	5.0 U	2500 U	250 U	2500 U	-	50 U	5.0 U	125 U	2500 U	250 U	2500 U	5 U	-	5 U
Methylene chloride	ug/L	5	119	250 U	250 U	5.0 U	2500 U	250 U	2500 U	250 U	50 U	5.0 U	125 U	2500 U	250 U	2500 U	10 U	5.0 U	10 U
Naphthalene	ug/L	20	20	-	-	-	2500 U	-	<b>26000<sup>ab</sup></b>	-	<b>65<sup>ab</sup></b>	-	125 U	2500 U	<b>540<sup>ab</sup></b>	2500 U	5 U	-	5 U
n-Butylbenzene	ug/L	5	5110	-	-	-	1000 U	-	<b>10000<sup>ab</sup></b>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
n-Propylbenzene	ug/L	5	5	-	-	-	1000 U	-	<b>13000<sup>ab</sup></b>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
o-Xylene	ug/L	10000	10000	250 U	750 J	5.0 U	7900	1600 J	<b>62000<sup>ab</sup></b>	250 U	54	5.0 U	51	500 U	350	700	590	170	618
Styrene	ug/L	100	2560	250 U	250 U	5.0 U	500 U	250 U	<b>1600<sup>a</sup></b>	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
tert-Butylbenzene	ug/L	5	5	-	-	-	1000 U	-	<b>2200<sup>ab</sup></b>	-	20 U	-	50 U	1000 U	100 U	1000 U	5 U	-	5 U
Tetrachloroethene	ug/L	5	5	<b>280<sup>ab</sup></b>	250 U	5.0 U	500 U	250 U	<b>40000<sup>ab</sup></b>	250 U	10 U	<b>11<sup>ab</sup></b>	25 U	500 U	50 U	500 U	<b>4100<sup>ab</sup></b>	<b>78<sup>ab</sup></b>	5 U
Toluene	ug/L	1000	5240	<b>1400<sup>a</sup></b>	<b>3200 J<sup>a</sup></b>	5.0 U	<b>38000<sup>ab</sup></b>	<b>13000<sup>ab</sup></b>	<b>930000 J<sup>ab</sup></b>	250 U	850	67	840	500 U	<b>1900<sup>a</sup></b>	<b>7100<sup>ab</sup></b>	<b>1790<sup>a</sup></b>	44	<b>1370<sup>a</sup></b>
trans-1,2-Dichloroethene	ug/L	100	161	250 U	250 U	5.0 U	500 U	250 U	500 U	250 U	10 U	7.2	25 U	500 U	50 U	500 U	5 U	5.0 U	5 U
trans-1,3-Dichloropropene	ug/L	5	11.9	250 U	250 U	5.0 U	500 U	250 U	500 U	-	10 U	5.0 U	25 U	500 U	50 U	500 U	5 U	-	5 U
Trichloroethene	ug/L	5	37.7	<b>580<sup>ab</sup></b>	250 U	5.0 U	500 U	250 U	500 U	250 U	<b>12<sup>a</sup></b>	<b>15<sup>a</sup></b>	25 U	500 U	50 U	500 U	<b>875<sup>ab</sup></b>	<b>28<sup>a</sup></b>	5 U
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	<b>5400<sup>ab</sup></b>	250 U	5.0 U	2500 U	250 U	2500 U	250 U	50 U	5.0 U	125 U	2500 U	250 U	2500 U	5 U	130	5 U
Trifluorotrchloroethane (Freon 113)	ug/L	1000000	1000000	500 U	500 U	10 U	-	500 U	-	-	-	10 U	-	-	-	-	-	-	-
Vinyl chloride	ug/L	2	3.27	100 U	100 U	2.0 U	1000 U	<b>690 J<sup>ab</sup></b>	<b>1100<sup>ab</sup></b>	100 U	<b>48<sup>ab</sup></b>	<b>70<sup>ab</sup></b>	50 U	1000 U	100 U	<b>4200<sup>ab</sup></b>	5 U	<b>2.4<sup>a</sup></b>	5 U
Xylene (total)	ug/L	10000	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

VOCs  
 Notes:  
 Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).  
 The Remainder of the Wells are compared to Type 4 RRS (b).  
 Exceedance of RRS is noted in red and bold with letter.  
 NV- No Value  
 NR - Not Regulated  
 J - Estimated, below Quantitation Limits.  
 5.0 U - Below associated reporting limit.  
 "-" - Not analyzed.  
 ug/L - Micrograms per Liter

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:			B-22	B-23	B-29	B-30	B-31	B-33	B-34	B-37	B-38	B-39	B-40	B-41	B-44	
Sample ID:	Type 1	Type 4	GW-031405-TBM-003	031405-TBM-002	GW-050505-TBM-100	GW-050505-TBM-101	GW-050505-TBM-102	GW-050505-TBM-103	GW-050505-TBM-104	GW-062205-DJB-001	GW-062205-DJB-002	GW-062205-DJB-003	GW-062205-DJB-004	GW-062205-DJB-005	GW-071206-DJB-101	
Sample Date:	RRS	RRS	3/14/2005	3/16/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	
Sample Area:	CRITERIA		On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	
Units	a	b														
<b>Volatile Organic Compounds</b>																
1,1,1,2-Tetrachloroethane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,1-Trichloroethane	ug/L	200	13600	5.0 U	906 <sup>a</sup>	5.0 U	5.0 U	5.0 U	2500 <sup>a</sup>	8.8	5.0 U	5.0 U	5.0 U	5.0 U	480 <sup>a</sup>	
1,1,2,2-Tetrachloroethane	ug/L	200	200	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,1,2-Trichloroethane	ug/L	5	46.4	5.0 U	5 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethane	ug/L	4000	4000	49	648	36	5.0 U	540	1100	5.0 U	5.0 U	5.0 U	5.0 U	220.6	190.4	310
1,1-Dichloroethane	ug/L	7	524	5.0 U	5 U	5.0 U	5.0 U	9.0 <sup>a</sup>	200 <sup>a</sup>	5.0 U	5.0 U	5.0 U	5.0 U	35.1 <sup>a</sup>	44.6 <sup>a</sup>	5.0 U
1,1-Dichloropropene	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichloropropane	ug/L	40	40	-	5 U	-	-	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	ug/L	70	70	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,2,4-Trimethylbenzene	ug/L	70	70	-	5 U	-	-	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	5	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,2-Dichlorobenzene	ug/L	600	600	5.0 U	5 U	5.0 U	5.0 U	18	500	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	120
1,2-Dichloroethane	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,2-Dichloropropane	ug/L	5	7.41	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,3,5-Trimethylbenzene	ug/L	5	5	-	1570 <sup>ab</sup>	-	-	-	-	-	-	-	-	-	-	
1,3-Dichlorobenzene	ug/L	600	600	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
1,3-Dichloropropane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	
1,4-Dichlorobenzene	ug/L	75	75	5.0 U	5 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	14	
1,4-Dioxane	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-	-	
2,2-Dichloropropane	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	
2-Butanone (Methyl Ethyl Ketone)	ug/L	2000	11800	10 U	10 U	50 U	50 U	50 U	5000 U	50 U	100 U	100 U	100 U	100 U	100 U	65000 <sup>ab</sup>
2-Chlorotoluene	ug/L	5	2040	-	5 U	-	-	-	-	-	-	-	-	-	-	
2-Hexanone	ug/L	2000	2000	10 U	5 U	10 U	10 U	10 U	1000 U	10 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	10 U
2-Methylnaphthalene	ug/L	10	409	-	-	-	-	-	-	-	-	-	-	-	-	
2-Phenylbutane (sec-Butylbenzene)	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	
4-Chlorotoluene	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	2000	4230	10 U	50 U	10 U	10 U	10 U	1000 U	10 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	8100 <sup>ab</sup>
Acetone	ug/L	4000	45600	71	5 U	50 U	50 U	50 U	5000 U	50 U	50 U	50 U	50 U	50 U	50 U	6100 <sup>a</sup>
Benzene	ug/L	5	8.72	310 <sup>ab</sup>	5 U	5.0 U	5.0 U	7.9 <sup>a</sup>	1900 <sup>ab</sup>	5.0 U	5.0 U	694.1 <sup>ab</sup>	622.4 <sup>ab</sup>	15.6 <sup>ab</sup>	16.5 <sup>ab</sup>	20 <sup>ab</sup>
Bromobenzene	ug/L	5	144	-	5 U	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	ug/L	100	100	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
Bromoform	ug/L	100	100	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
Bromomethane (Methyl Bromide)	ug/L	10	13.2	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
Carbon disulfide	ug/L	4000	4000	-	-	-	-	-	-	-	-	-	-	-	5.0 U	
Carbon tetrachloride	ug/L	5	102	-	5 U	-	-	-	-	-	-	-	-	-	5.0 U	
Chlorobenzene	ug/L	100	136	5.0 U	5 U	5.0 U	5.0 U	15	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	760 <sup>ab</sup>
Chlorobromomethane	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	
Chloroethane	ug/L	10	29200	34 <sup>a</sup>	5 U	10 U	10 U	29 <sup>a</sup>	1000 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	130 <sup>a</sup>
Chloroform (Trichloromethane)	ug/L	100	100	5.0 U	5 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl Chloride)	ug/L	3	263	-	5 U	-	-	-	-	-	-	-	-	-	10 U	
cis-1,2-Dichloroethene	ug/L	70	204	260 <sup>ab</sup>	5 U	530 <sup>ab</sup>	30	110 <sup>a</sup>	17000 <sup>ab</sup>	20	5.0 U	248.6 <sup>ab</sup>	227.4 <sup>ab</sup>	5.0 U	5.0 U	590 <sup>ab</sup>

TABLE E1  
 HISTORICAL GROUNDWATER MONITORING RESULTS  
 VOLATILE ORGANIC COMPOUNDS  
 FORMER ARIVEC CHEMICALS FACILITY  
 DOUGLASVILLE, GEORGIA

Sample Location:			B-22	B-23	B-29	B-30	B-31	B-33	B-34	B-37	B-38	B-39	B-40	B-41	B-44	
Sample ID:	Type 1	Type 4	GW-031405-TBM-003	031405-TBM-002	GW-050505-TBM-100	GW-050505-TBM-101	GW-050505-TBM-102	GW-050505-TBM-103	GW-050505-TBM-104	GW-062205-DJB-001	GW-062205-DJB-002	GW-062205-DJB-003	GW-062205-DJB-004	GW-062205-DJB-005	GW-071206-DJB-101	
Sample Date:	RRS	RRS	3/14/2005	3/16/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	5/5/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	6/22/2005	7/12/2006	
Sample Area:	CRITERIA		On-site	On-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	Off-site	On-site	
	Units	a	b													
cis-1,3-Dichloropropene	ug/L	5	11.9	-	5 U	-	-	-	-	-	-	-	-	-	-	5.0 U
Cyclohexane	ug/L	5	17500	<b>55<sup>a</sup></b>	5 U	5.0 U	5.0 U	<b>8100<sup>a</sup></b>	5.0 U	-	-	-	-	-	-	5.0 U
Cymene (p-Isopropyltoluene)	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	100	100	-	5 U	-	-	-	-	-	-	-	-	-	-	5.0 U
Dibromomethane	ug/L	500	1020	-	5 U	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/L	1000	20400	-	5 U	-	-	-	-	-	-	-	-	-	-	10 U
Ethylbenzene	ug/L	700	700	100	<b>7260<sup>ab</sup></b>	5.0 U	5.0 U	120	<b>7000<sup>ab</sup></b>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>3200<sup>ab</sup></b>
Hexachlorobutadiene	ug/L	10	33.7	-	5 U	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/L	5	1050	<b>11<sup>a</sup></b>	5 U	5.0 U	5.0 U	5.0 U	<b>1000<sup>a</sup></b>	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>81<sup>a</sup></b>
m&p-Xylene	ug/L	10000	10000	310	9760	5.0 U	5.0 U	290	<b>26000<sup>ab</sup></b>	5.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	<b>14000<sup>ab</sup></b>
Methyl acetate	ug/L	5	5	-	-	-	-	-	-	-	-	-	-	-	-	5.0 U
Methyl cyclohexane	ug/L	5	5	<b>67<sup>ab</sup></b>	5 U	5.0 U	5.0 U	5.0 U	<b>17000<sup>ab</sup></b>	5.0 U	-	-	-	-	-	5.0 U
Methyl Tert Butyl Ether	ug/L	5	263	-	5 U	-	-	-	-	-	-	-	-	-	-	5.0 U
Methylene chloride	ug/L	5	119	5.0 U	10 U	5.0 U	5.0 U	5.0 U	500 U	5.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	5.0 U
Naphthalene	ug/L	20	20	-	<b>521<sup>ab</sup></b>	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	ug/L	5	5110	-	5 U	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	ug/L	10000	10000	190	3810	5.0 U	5.0 U	90	8800	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3400
Styrene	ug/L	100	2560	-	5 U	-	-	-	-	-	-	-	-	-	-	5.0 U
tert-Butylbenzene	ug/L	5	5	-	5 U	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	5	5	5.0 U	<b>707<sup>ab</sup></b>	5.0 U	5.0 U	5.0 U	<b>2400<sup>ab</sup></b>	<b>5.4<sup>a</sup></b>	5.0 U	5.0 U	5	<b>8.1<sup>ab</sup></b>	<b>8.1<sup>ab</sup></b>	<b>19<sup>ab</sup></b>
Toluene	ug/L	1000	5240	370	<b>39200<sup>ab</sup></b>	5.0 U	5.0 U	16	<b>18000<sup>ab</sup></b>	14	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	<b>39000<sup>ab</sup></b>
trans-1,2-Dichloroethene	ug/L	100	161	5.0 U	5 U	11	5.0 U	7.9	500 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5	11.9	-	5 U	-	-	-	-	-	-	-	-	-	-	5.0 U
Trichloroethene	ug/L	5	37.7	5.0 U	<b>1520<sup>ab</sup></b>	<b>10<sup>a</sup></b>	5.0 U	5.0 U	<b>4000<sup>ab</sup></b>	<b>5.6<sup>a</sup></b>	5.0 U	5.0 U	5.0 U	5.0 U	<b>15<sup>a</sup></b>	<b>9.7<sup>a</sup></b>
Trichlorofluoromethane (CFC-11)	ug/L	2000	2000	7.1	5 U	5.0 U	5.0 U	5.0 U	240	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trifluorotrchloroethane (Freon 113)	ug/L	1000000	1000000	-	-	-	-	-	-	-	-	-	-	-	-	35
Vinyl chloride	ug/L	2	3.27	<b>25<sup>ab</sup></b>	2 U	<b>6.3<sup>ab</sup></b>	<b>4.9<sup>ab</sup></b>	<b>37<sup>ab</sup></b>	200 U	2.0 U	5.0 U	<b>23.5<sup>ab</sup></b>	<b>30.1<sup>ab</sup></b>	<b>74.5<sup>ab</sup></b>	5.0 U	<b>79<sup>ab</sup></b>
Xylene (total)	ug/L	10000	10000	-	-	-	-	-	-	-	-	-	-	-	-	-

VOCs

Notes:

Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).

The Remainder of the Wells are compared to Type 4 RRS (b).

Exceedance of RRS is noted in red and bold with letter.

NV- No Value

NR - Not Regulated

J - Estimated, below Quantitation Limits.

5.0 U - Below associated reporting limit.

"-" - Not analyzed.

ug/L - Micrograms per Liter

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-1S		MW-CRA-1S	MW-2B	MW-CRA-2S		MW-CRA-2S	MW-CRA-2S	MW-CRA-2S	MW-CRA-3B	MW-CRA-3B	MW-CRA-4S
Sample ID:	Type 1	Type 4	WG-093004-TBM-001	071905-TBM-002	GW-031809-DJB-002	GW-032709-DJB-010	WG-093004-TBM-003	071905-TBM-001	GW-071306-TBM-001	GW-032709-DJB-008	GW-031505-DJB-002	GW-032709-DJB-009	GW-031505-DJB-001	
Sample Date:	RRS	RRS	9/30/2004	7/19/2005	3/18/2009	3/27/2009	9/30/2004	7/19/2005	7/13/2006	3/27/2009	3/15/2005	3/27/2009	3/15/2005	
Sample Area:	CRITERIA		On-site	On-site	On-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site	
Units	a	b												
<b>Metals</b>														
Arsenic	ug/L	1.00E+01	1.00E+01	-	-	50 U	50 U	-	-	50 U	50 U	-	50 U	-
Barium	ug/L	2.00E+03	2.04E+04	-	-	8.4 J	19.8 J	-	-	20 U	7.6 J	-	2.6 J	-
Cadmium	ug/L	5.00E+00	5.11E+01	-	-	5 U	5 UJ	-	-	5 U	0.7 J	-	5 U	-
Chromium III	ug/L	1.00E+02	1.53E+05	-	-	0.7 J	10 U	-	-	10 U	2.5 J	-	8.7 J	-
Chromium VI	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-
Lead	ug/L	1.50E+01	1.50E+01	-	-	10 U	10 U	-	-	10 U	10 U	-	6.6 J	-
Mercury	ug/L	2.00E+00	1.02E+01	-	-	0.2 U	0.2 U	-	-	0.2 U	0.2 UJ	-	0.2 U	-
Selenium	ug/L	5.00E+01	5.11E+02	-	-	20 U	9.6 J	-	-	20 U	20 U	-	15.3 J	-
Silver	ug/L	1.00E+02	5.11E+02	-	-	10 U	10 U	-	-	10 U	10 U	-	3.4 J	-
Arsenic (Dissolved)	ug/L	1.00E+01	1.00E+01	-	-	50 U	50 U	-	-	-	50 U	-	50 U	-
Barium (Dissolved)	ug/L	2.00E+03	2.04E+04	-	-	4.4 J	20	-	-	-	4.7 J	-	4 J	-
Cadmium (Dissolved)	ug/L	5.00E+00	5.11E+01	-	-	5 U	0.4 J	-	-	-	1.1 J	-	5 U	-
Chromium III (Dissolved)	ug/L	1.00E+02	1.53E+05	-	-	10 U	10 U	-	-	-	2.4 J	-	4.8 J	-
Chromium VI (Dissolved)	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-	-
Lead (Dissolved)	ug/L	1.50E+01	1.50E+01	-	-	10 U	10 U	-	-	-	10 U	-	3.6 J	-
Mercury (Dissolved)	ug/L	2.00E+00	1.02E+01	-	-	0.2 U	0.2 U	-	-	-	0.04 J	-	0.2 U	-
Selenium (Dissolved)	ug/L	5.00E+01	5.11E+02	-	-	20 U	20 U	-	-	-	20 U	-	12.6 J	-
Silver (Dissolved)	ug/L	1.00E+02	5.11E+02	-	-	10 U	10 U	-	-	-	10 U	-	1.1 J	-
<b>Polychlorinated biphenyls (PCBs)</b>														
Aroclor-1016 (PCB-1016)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1221 (PCB-1221)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1232 (PCB-1232)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1242 (PCB-1242)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1248 (PCB-1248)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1254 (PCB-1254)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-
Aroclor-1260 (PCB-1260)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	-	-

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-1S			MW-2B	MW-CRA-2S			MW-CRA-3B		MW-CRA-4S	
Sample ID:	Type 1	Type 4	WG-093004-TBM-001	071905-TBM-002	GW-031809-DJB-002	GW-032709-DJB-010	WG-093004-TBM-003	071905-TBM-001	GW-071306-TBM-001	GW-032709-DJB-008	GW-031505-DJB-002	GW-032709-DJB-009	GW-031505-DJB-001
Sample Date:	RRS	RRS	9/30/2004	7/19/2005	3/18/2009	3/27/2009	9/30/2004	7/19/2005	7/13/2006	3/27/2009	3/15/2005	3/27/2009	3/15/2005
Sample Area:	CRITERIA		On-site	On-site	On-site	Off-site	On-site	On-site	On-site	On-site	On-site	On-site	Off-site
Units	a	b											
<b>Pesticides</b>													
4,4'-DDD	ug/L	1.00E-01	1.19E+01	-	-	-	-	-	-	-	-	-	-
4,4'-DDE	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-	-
4,4'-DDT	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-	-
Aldrin	ug/L	5.00E-02	1.68E-01	-	-	-	-	-	-	-	-	-	-
alpha-BHC	ug/L	5.00E-02	4.54E-01	-	-	-	-	-	-	-	-	-	-
alpha-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-	-
beta-BHC	ug/L	5.00E-02	1.59E+01	-	-	-	-	-	-	-	-	-	-
delta-BHC	ug/L	5.00E-02	5.00E-02	-	-	-	-	-	-	-	-	-	-
Dieldrin	ug/L	1.00E-01	1.79E-01	-	-	-	-	-	-	-	-	-	-
Endosulfan I	ug/L	5.00E-01	5.00E-01	-	-	-	-	-	-	-	-	-	-
Endosulfan II	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	-
Endosulfan sulfate	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	-
Endrin	ug/L	2.00E+00	3.07E+01	-	-	-	-	-	-	-	-	-	-
Endrin aldehyde	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	-
Endrin ketone	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	-
gamma-BHC (Lindane)	ug/L	2.00E-01	2.60E+01	-	-	-	-	-	-	-	-	-	-
gamma-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-	-
Heptachlor	ug/L	4.00E-01	6.36E-01	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	ug/L	2.00E-01	3.14E-01	-	-	-	-	-	-	-	-	-	-
Methoxychlor	ug/L	4.00E+01	5.11E+02	-	-	-	-	-	-	-	-	-	-
Toxaphene	ug/L	3.00E+00	5.00E+00	-	-	-	-	-	-	-	-	-	-

Notes:

Wells MW-CRA-4S, 5B, 5S, 7S, 8B and B-34 are compared to Type 1 RRS only (a).  
 The Remainder of the Wells are compared to Type 4 RRS (b).  
 Exceedance of RRS is noted in red and bold with letter.  
 J - Estimated, below Quantitation Limits.  
 U - Below reporting limit at associated value.  
 "--" - Not analyzed.  
 ug/L - Micrograms per Liter  
 NV- No Value

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-5B	MW-CRA-5B	MW-5R	MW-CRA-5S	MW-CRA-5S	MW-CRA-6S	MW-CRA-6S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S	
Sample ID:	Type 1	Type 4	GW-051305-DJB-001	GW-040809-SAG-109	MW-5R-2/6/1997-WG	GW-051305-DJB-002	GW-040809-SAG-108	GW-072106-DJB-103	GW-031809-DJB-001	GW-101906-TBM-001	GW-010207-SAG-001	GW-012808-TBM-001	
Sample Date:	RRS	RRS	5/13/2005	4/8/2009	2/6/1997	5/13/2005	4/8/2009	7/21/2006	3/18/2009	10/19/2006	1/2/2007	1/28/2008	
Sample Area:	CRITERIA		Off-site										
Units	a	b											
<b>Metals</b>													
Arsenic	ug/L	1.00E+01	1.00E+01	-	50 U	-	-	50 U	50 U	50 U	-	-	-
Barium	ug/L	2.00E+03	2.04E+04	-	126	-	-	36.4	28.5	105	-	-	-
Cadmium	ug/L	5.00E+00	5.11E+01	-	5 U	-	-	5 U	5 U	5 U	-	-	-
Chromium III	ug/L	1.00E+02	1.53E+05	-	0.8 J	-	-	1.3 J	10 U	0.8 J	-	-	-
Chromium VI	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead	ug/L	1.50E+01	1.50E+01	-	10 U	-	-	10 U	10 U	8.4 J	-	-	-
Mercury	ug/L	2.00E+00	1.02E+01	-	0.2 J	-	-	0.2 UJ	0.2 U	0.2 U	-	-	-
Selenium	ug/L	5.00E+01	5.11E+02	-	20 U	-	-	20 U	20 U	20 UJ	-	-	-
Silver	ug/L	1.00E+02	5.11E+02	-	0.3 J	-	-	10 U	10 U	10 U	-	-	-
Arsenic (Dissolved)	ug/L	1.00E+01	1.00E+01	-	50 U	-	-	50 U	-	50 U	-	-	-
Barium (Dissolved)	ug/L	2.00E+03	2.04E+04	-	117	-	-	31.8	-	96	-	-	-
Cadmium (Dissolved)	ug/L	5.00E+00	5.11E+01	-	5 U	-	-	5 U	-	5 U	-	-	-
Chromium III (Dissolved)	ug/L	1.00E+02	1.53E+05	-	10 U	-	-	10 U	-	10 U	-	-	-
Chromium VI (Dissolved)	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead (Dissolved)	ug/L	1.50E+01	1.50E+01	-	10 U	-	-	10 U	-	6 J	-	-	-
Mercury (Dissolved)	ug/L	2.00E+00	1.02E+01	-	0.18 J	-	-	0.2 UJ	-	0.2 U	-	-	-
Selenium (Dissolved)	ug/L	5.00E+01	5.11E+02	-	20 U	-	-	20 U	-	23.8 J	-	-	-
Silver (Dissolved)	ug/L	1.00E+02	5.11E+02	-	10 U	-	-	10 U	-	10 U	-	-	-
<b>Polychlorinated biphenyls (PCBs)</b>													
Aroclor-1016 (PCB-1016)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1221 (PCB-1221)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1232 (PCB-1232)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1242 (PCB-1242)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1248 (PCB-1248)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1254 (PCB-1254)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-
Aroclor-1260 (PCB-1260)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	0.12 U	-	-	-	-

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-5B	MW-CRA-5B	MW-5R	MW-CRA-5S	MW-CRA-5S	MW-CRA-6S	MW-CRA-6S	MW-CRA-7S	MW-CRA-7S	MW-CRA-7S
Sample ID:	Type 1	Type 4	GW-051305-DJB-001	GW-040809-SAG-109	MW-5R-2/6/1997-WG	GW-051305-DJB-002	GW-040809-SAG-108	GW-072106-DJB-103	GW-031809-DJB-001	GW-101906-TBM-001	GW-010207-SAG-001	GW-012808-TBM-001
Sample Date:	RRS	RRS	5/13/2005	4/8/2009	2/6/1997	5/13/2005	4/8/2009	7/21/2006	3/18/2009	10/19/2006	1/2/2007	1/28/2008
Sample Area:	CRITERIA		Off-site									
Units	a	b										
<b>Pesticides</b>												
4,4'-DDD	ug/L	1.00E-01	1.19E+01	-	-	-	-	-	-	-	-	-
4,4'-DDE	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-
4,4'-DDT	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-
Aldrin	ug/L	5.00E-02	1.68E-01	-	-	-	-	-	-	-	-	-
alpha-BHC	ug/L	5.00E-02	4.54E-01	-	-	-	-	-	-	-	-	-
alpha-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-
beta-BHC	ug/L	5.00E-02	1.59E+01	-	-	-	-	-	-	-	-	-
delta-BHC	ug/L	5.00E-02	5.00E-02	-	-	-	-	-	-	-	-	-
Dieldrin	ug/L	1.00E-01	1.79E-01	-	-	-	-	-	-	-	-	-
Endosulfan I	ug/L	5.00E-01	5.00E-01	-	-	-	-	-	-	-	-	-
Endosulfan II	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-
Endosulfan sulfate	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-
Endrin	ug/L	2.00E+00	3.07E+01	-	-	-	-	-	-	-	-	-
Endrin aldehyde	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-
Endrin ketone	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-
gamma-BHC (Lindane)	ug/L	2.00E-01	2.60E+01	-	-	-	-	-	-	-	-	-
gamma-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-
Heptachlor	ug/L	4.00E-01	6.36E-01	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	ug/L	2.00E-01	3.14E-01	-	-	-	-	-	-	-	-	-
Methoxychlor	ug/L	4.00E+01	5.11E+02	-	-	-	-	-	-	-	-	-
Toxaphene	ug/L	3.00E+00	5.00E+00	-	-	-	-	-	-	-	-	-

**TABLE E 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS**  
**ADDITIONAL PARAMETERS**  
**FORMER ARIVEC CHEMICALS FACILITY**  
**DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-7S	MW-CRA-8B	MW-CRA-8B	MW-CRA-9S	MW-9B	MW-9R	MW-9R	MW-15B	MW-15R	MW-17B	MW-17B
Sample ID:	Type 1	Type 4	GW-032709-SAG-102	GW-012808-TBM-002	GW-032709-SAG-103	GW-040809-SAG-106	GW-040809-DJB-011	GW-032709-SAG-104	GW-032709-SAG-105	GW-032509-DJB-007	GW-032509-SAG-101	GW-009	GW-071306-TBM-003
Sample Date:	RRS	RRS	3/27/2009	1/28/2008	3/27/2009	4/8/2009	4/8/2009	3/27/2009	3/27/2009	3/25/2009	3/25/2009	6/11/2004	7/13/2006
Sample Area:	CRITERIA		Off-site	On-site	On-site								
Units	a	b											
<b>Metals</b>													
Arsenic	ug/L	1.00E+01	1.00E+01	50 U	-	50 U	-	50 U					
Barium	ug/L	2.00E+03	2.04E+04	22.4	-	16 J	24.8	20.2	61.1	62.6	270	9.6 J	441
Cadmium	ug/L	5.00E+00	5.11E+01	0.5 J	-	5 U	0.3 J	5 U	5 UJ	0.4 J	5 U	5 U	5 U
Chromium III	ug/L	1.00E+02	1.53E+05	10 U	-	10 UJ	1.2 J	3.6 J	10 U	10 UJ	10 U	10 U	10 U
Chromium VI	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead	ug/L	1.50E+01	1.50E+01	3.4 J	-	2.5 J	10 U	10 UJ	2.4 J	2.4 J	2.3 J	3.3 J	10 U
Mercury	ug/L	2.00E+00	1.02E+01	0.2 U	-	0.2 U	0.16 J	0.2 UJ	0.74	0.74	0.2 UJ	0.2 UJ	0.2 U
Selenium	ug/L	5.00E+01	5.11E+02	20 U	-	20 U	12.4 J	20 U	20 U				
Silver	ug/L	1.00E+02	5.11E+02	10 U	-	10 U	10 U	10 U	10 U	0.5 J	10 U	10 U	10 U
Arsenic (Dissolved)	ug/L	1.00E+01	1.00E+01	50 U	-	50 U	50 U	-					
Barium (Dissolved)	ug/L	2.00E+03	2.04E+04	20.6	-	14.6 J	20 J	13.4 J	62.7	62.2	268	7.6 J	-
Cadmium (Dissolved)	ug/L	5.00E+00	5.11E+01	0.8 J	-	5 U	5 U	5 U	0.6 J	0.5 J	5 U	5 U	-
Chromium III (Dissolved)	ug/L	1.00E+02	1.53E+05	10 U	-	2.7 J	10 U	10 U	10 U	0.6 J	10 U	10 U	-
Chromium VI (Dissolved)	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead (Dissolved)	ug/L	1.50E+01	1.50E+01	10 U	-	10 U	10 U	6.9 J	10 U	10 U	10 U	10 U	-
Mercury (Dissolved)	ug/L	2.00E+00	1.02E+01	0.06 J	-	0.2 U	0.16 J	0.2 UJ	0.2 U	0.2 U	0.05 J	0.05 J	-
Selenium (Dissolved)	ug/L	5.00E+01	5.11E+02	20 U	-	20 U	20 U	-					
Silver (Dissolved)	ug/L	1.00E+02	5.11E+02	10 U	-	10 U	10 U	-					
<b>Polychlorinated biphenyls (PCBs)</b>													
Aroclor-1016 (PCB-1016)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1221 (PCB-1221)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1232 (PCB-1232)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1242 (PCB-1242)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1248 (PCB-1248)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1254 (PCB-1254)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U
Aroclor-1260 (PCB-1260)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	-	-	-	0.50 U

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-CRA-7S	MW-CRA-8B	MW-CRA-8B	MW-CRA-9S	MW-9B	MW-9R	MW-9R	MW-15B	MW-15R	MW-17B	MW-17B
Sample ID:	Type 1	Type 4	GW-032709-SAG-102	GW-012808-TBM-002	GW-032709-SAG-103	GW-040809-SAG-106	GW-040809-DJB-011	GW-032709-SAG-104	GW-032709-SAG-105	GW-032509-DJB-007	GW-032509-SAG-101	GW-009	GW-071306-TBM-003
Sample Date:	RRS	RRS	3/27/2009	1/28/2008	3/27/2009	4/8/2009	4/8/2009	3/27/2009	3/27/2009	3/25/2009	3/25/2009	6/11/2004	7/13/2006
Sample Area:	CRITERIA		Off-site	On-site	On-site								
Units	a	b											
<b>Pesticides</b>													
4,4'-DDD	ug/L	1.00E-01	1.19E+01	-	-	-	-	-	-	-	-	-	0.10 U
4,4'-DDE	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-	0.10 U
4,4'-DDT	ug/L	1.00E-01	8.42E+00	-	-	-	-	-	-	-	-	-	0.10 U
Aldrin	ug/L	5.00E-02	1.68E-01	-	-	-	-	-	-	-	-	-	0.050 U
alpha-BHC	ug/L	5.00E-02	4.54E-01	-	-	-	-	-	-	-	-	-	0.050 U
alpha-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-	0.10*
beta-BHC	ug/L	5.00E-02	1.59E+01	-	-	-	-	-	-	-	-	-	0.050 U
delta-BHC	ug/L	5.00E-02	5.00E-02	-	-	-	-	-	-	-	-	-	0.050 U
Dieldrin	ug/L	1.00E-01	1.79E-01	-	-	-	-	-	-	-	-	-	0.10 U
Endosulfan I	ug/L	5.00E-01	5.00E-01	-	-	-	-	-	-	-	-	-	0.050 U
Endosulfan II	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	0.10 U
Endosulfan sulfate	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	0.10 U
Endrin	ug/L	2.00E+00	3.07E+01	-	-	-	-	-	-	-	-	-	0.10 U
Endrin aldehyde	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	0.10 U
Endrin ketone	ug/L	1.00E-01	1.00E-01	-	-	-	-	-	-	-	-	-	0.10 U
gamma-BHC (Lindane)	ug/L	2.00E-01	2.60E+01	-	-	-	-	-	-	-	-	-	0.050 U
gamma-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	-	-	-	-	-	-	0.050 U
Heptachlor	ug/L	4.00E-01	6.36E-01	-	-	-	-	-	-	-	-	-	0.050 U
Heptachlor epoxide	ug/L	2.00E-01	3.14E-01	-	-	-	-	-	-	-	-	-	0.050 U
Methoxychlor	ug/L	4.00E+01	5.11E+02	-	-	-	-	-	-	-	-	-	0.50 U
Toxaphene	ug/L	3.00E+00	5.00E+00	-	-	-	-	-	-	-	-	-	5.0 U

**TABLE E 2**  
**HISTORICAL GROUNDWATER MONITORING RESULTS**  
**ADDITIONAL PARAMETERS**  
**FORMER ARIVEC CHEMICALS FACILITY**  
**DOUGLASVILLE, GEORGIA**

Sample Location:			MW-17B	MW-17B	MW-17R	MW-17R	MW-17R	MW-18R	MW-18R	ARIVEC WELL AW-2	AW-2	B-44	
Sample ID:	Type 1	Type 4	GW-031809-DJB-004	GW-031809-DJB-005	GW-010	GW-071306-TBM-002	GW-031809-DJB-006	GW-011	GW-040809-SAG-107	GW-071306-DJB-102	GW-031809-DJB-003	GW-071206-DJB-101	
Sample Date:	RRS	RRS	3/18/2009	3/18/2009	6/11/2004	7/13/2006	3/18/2009	6/11/2004	4/8/2009	7/13/2006	3/18/2009	7/12/2006	
Sample Area:	CRITERIA		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	
Units	a	b											
<b>Metals</b>													
Arsenic	ug/L	1.00E+01	1.00E+01	50 U	50 U	-	50 U	50 U	-	50 U	50 U	50 U	52.9 <sup>nd</sup>
Barium	ug/L	2.00E+03	2.04E+04	74.1	75	-	20 U	125	-	86.6	20.2	18.2 J	1230
Cadmium	ug/L	5.00E+00	5.11E+01	5 U	5 U	-	5 U	5 U	-	5 U	5 U	5 U	38 <sup>nd</sup>
Chromium III	ug/L	1.00E+02	1.53E+05	5 J	5.3 J	-	10 U	4.2 J	-	10 U	10 U	7.6 J	2550 <sup>nd</sup>
Chromium VI	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead	ug/L	1.50E+01	1.50E+01	9.1 J	8 J	-	10 U	13.1	-	10 U	10 U	12.9	4510 <sup>nd</sup>
Mercury	ug/L	2.00E+00	1.02E+01	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 UJ	0.2 U	0.2 U	41.8 <sup>nd</sup>
Selenium	ug/L	5.00E+01	5.11E+02	11.4 J	11.2 J	-	20 U	20 U	-	20 U	20 U	11.6 J	20 U
Silver	ug/L	1.00E+02	5.11E+02	2.8 J	2.4 J	-	10 U	10 U	-	10 U	10 U	2.3 J	19.8
Arsenic (Dissolved)	ug/L	1.00E+01	1.00E+01	50 U	50 U	-	-	50 U	-	50 U	-	50 U	-
Barium (Dissolved)	ug/L	2.00E+03	2.04E+04	71	73.6	-	-	101	-	83.7	-	16.9 J	-
Cadmium (Dissolved)	ug/L	5.00E+00	5.11E+01	5 U	5 U	-	-	5 U	-	5 U	-	5 U	-
Chromium III (Dissolved)	ug/L	1.00E+02	1.53E+05	4.7 J	4.5 J	-	-	0.7 J	-	10 U	-	3.9 J	-
Chromium VI (Dissolved)	ug/L	NV	NV	-	-	-	-	-	-	-	-	-	-
Lead (Dissolved)	ug/L	1.50E+01	1.50E+01	7.7 J	7.4 J	-	-	3.7 J	-	10 U	-	9.2 J	-
Mercury (Dissolved)	ug/L	2.00E+00	1.02E+01	0.2 U	0.2 U	-	-	0.2 U	-	0.2 UJ	-	0.2 U	-
Selenium (Dissolved)	ug/L	5.00E+01	5.11E+02	12.2 J	20 U	-	-	20 U	-	20 U	-	9.9 J	-
Silver (Dissolved)	ug/L	1.00E+02	5.11E+02	10 U	2.6 J	-	-	10 U	-	10 U	-	10 U	-
<b>Polychlorinated biphenyls (PCBs)</b>													
Aroclor-1016 (PCB-1016)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1221 (PCB-1221)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1232 (PCB-1232)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1242 (PCB-1242)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1248 (PCB-1248)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1254 (PCB-1254)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U
Aroclor-1260 (PCB-1260)	ug/L	5.00E-01	1.43E+00	-	-	-	-	-	-	0.50 U	-	-	0.50 U

**TABLE E 2  
HISTORICAL GROUNDWATER MONITORING RESULTS  
ADDITIONAL PARAMETERS  
FORMER ARIVEC CHEMICALS FACILITY  
DOUGLASVILLE, GEORGIA**

Sample Location:			MW-17B	MW-17B	MW-17R	MW-17R	MW-17R	MW-18R	MW-18R	ARIVEC WELL AW-2	AW-2	B-44
Sample ID:	Type 1	Type 4	GW-031809-DJB-004	GW-031809-DJB-005	GW-010	GW-071306-TBM-002	GW-031809-DJB-006	GW-011	GW-040809-SAG-107	GW-071306-DJB-102	GW-031809-DJB-003	GW-071206-DJB-101
Sample Date:	RRS	RRS	3/18/2009	3/18/2009	6/11/2004	7/13/2006	3/18/2009	6/11/2004	4/8/2009	7/13/2006	3/18/2009	7/12/2006
Sample Area:	CRITERIA		On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site	On-site
Units	a	b										
<b>Pesticides</b>												
4,4'-DDD	ug/L	1.00E-01	1.19E+01	-	-	-	0.10 U	-	-	-	-	-
4,4'-DDE	ug/L	1.00E-01	8.42E+00	-	-	-	0.10 U	-	-	-	-	-
4,4'-DDT	ug/L	1.00E-01	8.42E+00	-	-	-	0.10 U	-	-	-	-	-
Aldrin	ug/L	5.00E-02	1.68E-01	-	-	-	0.050 U	-	-	-	-	-
alpha-BHC	ug/L	5.00E-02	4.54E-01	-	-	-	0.050 U	-	-	-	-	-
alpha-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	0.050 U	-	-	-	-	-
beta-BHC	ug/L	5.00E-02	1.59E+01	-	-	-	0.050 U	-	-	-	-	-
delta-BHC	ug/L	5.00E-02	5.00E-02	-	-	-	0.050 U	-	-	-	-	-
Dieldrin	ug/L	1.00E-01	1.79E-01	-	-	-	0.10 U	-	-	-	-	-
Endosulfan I	ug/L	5.00E-01	5.00E-01	-	-	-	0.050 U	-	-	-	-	-
Endosulfan II	ug/L	1.00E-01	1.00E-01	-	-	-	0.10 U	-	-	-	-	-
Endosulfan sulfate	ug/L	1.00E-01	1.00E-01	-	-	-	0.10 U	-	-	-	-	-
Endrin	ug/L	2.00E+00	3.07E+01	-	-	-	0.10 U	-	-	-	-	-
Endrin aldehyde	ug/L	1.00E-01	1.00E-01	-	-	-	0.10 U	-	-	-	-	-
Endrin ketone	ug/L	1.00E-01	1.00E-01	-	-	-	0.10 U	-	-	-	-	-
gamma-BHC (Lindane)	ug/L	2.00E-01	2.60E+01	-	-	-	0.050 U	-	-	-	-	-
gamma-Chlordane	ug/L	5.00E-02	8.18E+00	-	-	-	0.050 U	-	-	-	-	-
Heptachlor	ug/L	4.00E-01	6.36E-01	-	-	-	0.050 U	-	-	-	-	-
Heptachlor epoxide	ug/L	2.00E-01	3.14E-01	-	-	-	0.050 U	-	-	-	-	-
Methoxychlor	ug/L	4.00E+01	5.11E+02	-	-	-	0.50 U	-	-	-	-	-
Toxaphene	ug/L	3.00E+00	5.00E+00	-	-	-	5.0 U	-	-	-	-	-

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Christine Mayo