

Sonoco Products Company

Vapor Intrusion Evaluation Report

Grief, Inc. Facility Town of Tonawanda Erie County New York

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VAPOR INTRUSION EVALUATION REPORT

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Town of Tonawanda
Erie County, New York
NYSDEC VCP Number V00334-9

October 2008

Prepared for:

Sonoco Products Company

Prepared by:

Environmental Resources Management 5788 Widewaters Parkway Dewitt, New York 13214

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1.0 INTRODUCTION

Environmental Resources Management (ERM) is conducting investigation and remediation activities at the Greif, Inc. (Greif) facility located at 2122 Colvin Boulevard in the Town of Tonawanda, Erie County, New York (the Site) on behalf of Sonoco Products Company (Sonoco) pursuant to Voluntary Cleanup Agreement (VCA) Index Number B9-0574-00-03. The Site has been identified by the New York State Department of Environmental Conservation (NYSDEC) as Voluntary Cleanup Program (VCP) Site Number V00334-9. The NYSDEC requested the submittal of a work plan for evaluation of vapor intrusion at the Site.

As part of the VCP, ERM prepared a Work Plan for Vapor Intrusion Evaluation (ERM, 2007b) as requested by the NYSDEC. The work plan included investigation and sampling of soil vapor, sub-slab vapor, indoor air, and outdoor ambient air to evaluate the potential for vapor intrusion of Site-related contaminants. The NYSDEC accepted the work plan in November 2007 and field work and sampling occurred during the week of 10 December 2007.

This report presents a summary of data collected during the field investigation, analytical results for Site-specific compounds of potential concern, and recommended actions consistent with guidance from the New York State Department of Health (NYSDOH) dated October 2006 (NYSDOH, 2006).

1.1 SITE DESCRIPTION AND BACKGROUND INFORMATION

The Site consists of an industrial building located on approximately 25-acres in the Town of Tonawanda, Erie County, New York. The Site is located in a mixed industrial/commercial/residential area approximately one-quarter mile south of Highway I-290 (Figure 1). The current and future contemplated use of the Site is restricted commercial. Adjoining properties are as follows:

- North vacant land (including a former railroad siding and a wooded area) and residential apartments;
- South a local park/sports fields (Walter M. Kenney Field) and land recently developed into commercial office space;
- East Colvin Boulevard with single family/duplex homes further east; and
- West a business park adjacent to a major railroad line formerly traversed by two railroad spurs into the Site.

Figure 2 presents a map showing the general Site layout and locations of selected Site features. The building is surrounded by paved parking areas, storage areas, and landscaped areas. The north, west and east sides of the Site are fenced to restrict access. There are two main gates on the east side of the Site where employees and visitors routinely enter the Site. There is also an unused gate on the west side of the Site at the location of a former railroad spur into the Site.

Based on information provided by Grief and ERM's review of Site plans, the building was originally constructed in 1948. From 1948 to 1985 the Site was owned and operated by Continental Fiber Drum and/or Continental Can Corporation. Historical manufacturing operations at this time consisted of the production of fiber drums but also included production of the metal lids and rims used to seal the fiber drums.

Sonoco acquired the Fiber Drum Division in 1985. The major existing manufacturing operations reportedly continued generally unchanged until the mid-1990s. In 1995, the varnishing and degreasing processes on the metal utilized to produce the lids and rims used in the fiber drums were discontinued. Greif subsequently acquired the Site in May 1998. The Site continues to be used for the manufacture of fiber drums and associated products. Secondary operations include equipment maintenance and administrative activities.

Site topography is relatively flat with an average elevation of approximately 586-feet above mean sea level. The Site is situated approximately 3.5-miles east of the Niagara River and 1.1-miles south of Ellicott Creek in the Erie-Ontario Lowlands physiographic province of western New York State. Topographic relief within one-half mile of the Site is minimal (approximately 15-feet).

Surficial geology in the vicinity of the Site was previously mapped by the New York State Geological Survey (NYSGS) as lacustrine silt and clay. These deposits consist predominantly of varved or laminated, calcareous silt and clay deposited in proglacial lakes with variable thicknesses. Bedrock in the vicinity of the Site consists predominantly of dolostones, shales, and evaporites of the Upper Silurian Salina Group based on mapping performed by NYSGS. Bedrock at the Site occurs at a depth of approximately 75-feet below ground surface (b.g.s.).

ERM performed subsurface investigation at the Site with the overall objective to evaluate the nature and extent of soil and ground water potentially affected by Site activities. Environmental investigations initially were performed in connection with the purchase of the Site. The scope of work associated with subsurface investigations generally

included installation of soil borings, ground water monitoring wells, and collection of soil, soil vapor, and ground water samples for analysis of selected parameters at an approved environmental laboratory. Soil vapor samples were associated with a passive soil vapor survey and were reported as absolute mass, not as concentrations (ERM, 2001). Detailed information regarding previous environmental investigation at the Site is summarized the Data Gap Investigation Report (ERM, 2003). Detailed information regarding completed and ongoing Interim Remedial Measures (IRMs) at the Site are summarized in the dense, non-aqueous phase liquid (DNAPL) Recovery IRM Pilot Test Report (ERM, 2005) and Interim Report - Soil Excavation IRM (ERM, 2006).

Several volatile organic compounds (VOCs) of potential concern have been identified in Site soil, soil vapor, and/or ground water samples previously collected beneath or proximal to the main building at the Site. Samples collected for laboratory analysis during the implementation of this Work Plan were analyzed for the specific VOCs listed below that have been previously detected in soil, soil vapor, and/or ground water samples collected at the Site.

- Acetone
- Benzene
- 2-Butanone
- Carbon tetrachloride
- Chloroethane
- Chloroform
- 1,1-Dichloroethane (DCA)
- 1,2-DCA
- 1,1-Dichloroethene (DCE)
- cis-1,2-DCE
- trans-1,2-DCE
- Ethylbenzene
- Methylene chloride
- 4-Methyl-2-pentanone
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethene (PCE)
- Toluene
- 1,1,1-Trichloroethane (TCA)
- 1,1,2-TCA
- Trichloroethene (TCE)
- 1,2,4-Trimethylbenzene
- Vinyl chloride
- Xylenes

1.2 CONCEPTUAL SITE MODEL

Previous environmental investigation has shown that VOCs of potential concern are limited to the southwestern portion of the building and adjacent exterior areas in three areas of concern:

- 1. the Varnish Pit Area;
- 2. the Former Drum Storage Area; and
- 3. the Former Varnish Underground Storage Tank (UST) Area.

The locations of these areas of concern are illustrated in Figure 2. Available data indicates that the primary VOCs of potential concern released in these areas are 1,1,1-TCA, TCE, and xylenes.

DNAPL has been observed in the saturated zone in the vicinity of the varnish pit. DNAPL was actively recovered to the extent practicable through an IRM. There are also lower quantities of light, non-aqueous phase liquid (LNAPL) on top of the saturated zone in the vicinity of monitoring well MW-23 that is also being recovered to the extent practicable. The DNAPL and the LNAPL are derived from the same parent material that is consistent with varnish formerly used in the varnish pit. Degreasing operations also formerly occurred in the vicinity of the varnish pit.

Previous soil vapor sampling and monitoring associated with IRM activities have shown that there are VOCs in soil vapor present beneath the western portion of the main building and that there has been some migration of VOCs in the vapor phase along a 3-inch diameter sanitary sewer line that runs from the Varnish Pit to the north and then east towards Colvin Boulevard.

Two large #2 fuel oil USTs were formerly located outside the facility adjacent to the boiler room. Soil borings previously installed in this area did not reveal elevated concentrations of VOCs and there is no evidence indicating that there are VOCs in soil vapor in this portion of the building. However, this area represents the southeastern portion of the building where elevated concentrations of VOCs in soil vapor, if any, might be anticipated based on the location of the former fuel oil USTs.

2.0 FIELD WORK

The objective of vapor intrusion evaluation work was to identify the presence and extent of specific VOCs in sub-slab vapor, indoor air, and outdoor air samples at the Site. As requested by the NYSDEC, the evaluation is also being performed to evaluate the potential for on- and off-Site soil vapor migration.

Investigative field work and associated activities were conducted in general conformance with the most recent NYSDEC-approved Site-specific Health and Safety Plan (ERM 2004) and the NYSDEC-approved Site-specific Quality Assurance Project Plan (ERM, 2000). Field data and relevant observations were documented in a bound, dedicated field notebook, on appropriate sampling forms, and/or with color photographs.

2.1 PRE-SAMPLING INSPECTION AND PREPARATIONS

ERM conducted a pre-sampling inspection of the main level of the building on 10 December 2007 (prior to any sampling) to identify and minimize building factors or conditions that may interfere with the proposed investigation. Information on floor slab layout and condition, construction characteristics, general air flow characteristics, HVAC systems, other potentially relevant physical conditions, and potential sources of VOCs inside the main building were described and documented on a building inventory form. Chemicals or other products used in the facility for routine manufacturing and/or maintenance operations were documented on the building inventory form. A calibrated photoionization detector (PID) with an 11.7eV lamp was used to collect readings at selected areas inside the building and recorded on the inventory forms. Copies of the inventory forms are presented in Attachment A. To the extent practicable, reasonable effort was made to avoid activities inside the building that may interfere with or dilute ambient indoor air within 24 hours before and during the investigation, however the survey and sampling were completed in active manufacturing areas. Sample locations were chosen to minimize sample disturbance by manufacturing actives, to minimize effects of sampling activities on production activities, but yet still be located in areas to complete the objectives of the study.

2.2 SAMPLE COLLECTION

Samples were collected during the week of 10 December 2007 using approved methods and procedures described in the NYSDEC-approved

work plan (ERM, 2007b). Table 1 presents a summary of samples collected during the vapor intrusion evaluation.

ERM subcontracted TREC Environmental of Spencerport, New York to install six temporary soil vapor points (SV-01 to SV-06) along the perimeter of the Greif facility. Soil vapor points were generally installed adjacent to the property boundary (Figure 3) or were located as close to the property boundary as feasible based on site conditions and obstructions. Soil vapor locations SV-04 and SV-05 were located approximately 50-feet south of the property line due to the presence of a wet, wooded area between the sample locations and the northern property boundary. Soil vapor sample SV-06 was placed close to the sanitary sewer line from the building to road slightly west of Colvin Boulevard due to subsurface utilities located in the right-of-way along the roadway. This sample was located to evaluate potential vapor migration along the sanitary sewer line. Analytical results for soil vapor samples are summarized in Table 2.

Sub-slab vapor points (SSV-07 to SSV-10; Figure 3) were installed by ERM by drilling holes into the building's concrete floor using an electric hammer drill. Four sub-slab vapor points were installed inside the Greif facility, one in each main quadrant of the facility. Sub-slab vapor points were sealed at the surface with bees wax. ERM waited 24-hours before setting 6-liter Summa canisters to allow the wetted bentonite to expand and tightly seal the borehole. All subsurface sampling points were tested with a helium tracer gas to verify that ambient air was not being drawn into the sampling container. Analytical results for sub-slab vapor samples are summarized in Table 3.

The outdoor air sample (OA-01; Figure 3) was located in an up-wind direction during the sampling interval. The wind was blowing from the northeast on the date of sampling. The sample canister was placed outside a chain-linked fence approximately 6-feet above the ground level on the northeast corner of the facility's employee parking lot. Analytical results for the outdoor air sample are summarized in Table 4.

Four indoor air samples (IA-07 through IA-10; Figure 3) were co-located with sub-slab vapor samples and assigned similar numerical identifiers.

Sub-slab sample	<u>Indoor air sample</u>	<u>Duplicate</u>
SSV-07	IA-07	IA-7/DUP-1
SSV-08	IA-08	SSV-08/DUP-2
SSV-09	IA-09	
SSV-10	IA-10	

ERM located these samples away from areas that had any visual floor cracks, away from drafty areas, and did not place indoor air samples under ventilation ducts. ERM recorded such information, such as distance from duct openings, open doors, etc. on field data collection sheets (Attachment A).

Duplicate samples were collected at one soil vapor, sub-slab vapor and indoor air location (Table 1 and Figure 3). The indoor air duplicate sample was placed side-by-side with the corresponding sample while the soil vapor and sub-slab vapor samples were connected to the subsurface sample via an above-ground tube using an air-tight "tee" connector. Analytical results for indoor air samples are summarized in Table 4.

Flow into Summa canisters was controlled by laboratory pre-set 24-hour flow controllers. Valves on all Summa canisters were opened on 11 December 2007. On the morning of 12 December 2007, ERM personnel visually checked the pressure gauges on the Summa canisters and shut the valves on those that had low vacuum (< 3-inches Hg). ERM continued to check the gauges throughout the day and shut valves when they reached low vacuum or reached the end of the 24-hour sampling period.

Upon completion of sample collection activities, ERM removed the temporary sampling points and plugged the borings with sand and bentonite. ERM patched sub-slab vapor boreholes with a fast setting, non-shrinking epoxy. Samples were subsequently shipped with chain of custody documentation to the project laboratory for analysis.

2.3 ANALYTICAL METHODS AND REPORTING

All vapor samples and blind duplicate samples collected during implementation of this Work Plan were submitted to Spectrum Analytical Laboratories (Spectrum) of Agawam, Massachusetts, an environmental laboratory approved through the New York State Department of Health Environmental Laboratory Approval Program for analysis of VOCs by United States Environmental Protection Agency (USEPA) Method TO-15. ERM requested that Spectrum verify in writing that they are capable of detecting VOCs and report them at the appropriate reporting limits. The laboratory was advised that analyses for samples collected during implementation of the Work Plan shall achieve detections limits of at least $1.0~\mu g\ /m^3$ for each compound, with the exception of sub-slab vapor samples, which shall achieve detection limits of $0.25~\mu g\ /m^3$ for TCE.

The laboratory analytical report is presented in Attachment B. ERM's Project QA/QC Officer reviewed the laboratory analytical report and

prepared a Data Usability Summary Report (DUSR). The DUSR is presented in Attachment C.

3.0 SAMPLING RESULTS

3.1 SOIL VAPOR

Low concentrations of the VOCs 1,1,1-TCA and TCE were detected in soil vapor sample SV-01 at concentrations of 30.6 and 14 micrograms per cubic meter (μ g/m³), respectfully (Table 2). These concentrations convert to 0.006 and 0.002 parts-per-million (ppm), respectively.

VOCs of potential concern were not detected in soil vapor sample SV-02.

Very low concentrations of 12 compounds of potential concern were detected in soil vapor sample SV-03 (Table 2) at concentrations ranging from 0.8 to 3.3 μ g/m³ (0.000 to 0.001 ppm). The VOCs detected in this sample are consistent with the VOCs detected in the outdoor ambient air sample (see Section 3.3). VOCs were not detected in the associated duplicate sample (DUP-3).

A total of six compounds of potential concern were detected in soil vapor samples SV-04 and SV-05 at concentrations ranging from 1.8 to 37.8 $\mu g/m^3$ (0.001 to 0.016 ppm). The predominant VOCs detected in these samples were 1,1,1-TCA, TCE, and acetone. The concentrations of 1,1,1-TCA and TCE in these samples are similar to the concentrations detected in soil vapor sample SV-01.

The canister for sample SV-06 apparently collected soil vapor at a slightly higher than suggested rate. Six compounds of potential concern were detected in this sample at concentrations ranging from 4.4 to 212 $\mu g/m^3$ (0.001 to 0.039 ppm). The predominant VOCs detected in this sample were 1,1,1-TCA and acetone.

Several VOCs of potential concern were detected in soil vapor samples, particularly at locations SV-01, SV-04, SV-05, and SV-06. However, the VOCs detected in soil vapor samples were also typically detected in the outdoor ambient air sample collected from the up-wind side of the Site.

3.2 SUB-SLAB VAPOR

One or more compounds of potential concern were detected in all four sub-slab vapor samples. Six compounds of potential concern were detected at relatively high concentrations in sub-slab vapor sample SSV-07. The predominant VOCs detected at this location were 1,1,1-TCA and TCE. The VOCs 1,1,1-TCA and TCE were detected at concentrations of

23,897 and 9,940 μ g/m³ (4.38 and 1.448 ppm) in sample SSV-07, respectively.

Significant differences were observed in results between sub-slab vapor sample SSV-08 and its duplicate, DUP-2. Twelve VOCs of potential concern were detected in sample SV-08 at concentrations ranging from 1.1 to 15.3 μ g/m³ (0.000 to 0.006 ppm). However, seven VOCs of potential concern were detected in duplicate sample DUP-2 at concentrations ranging from 313 to 32,500 μ g/m³ (0.083 to 4.734 ppm). The predominant VOCs detected in sample DUP-2 were TCE, 1,1,1-TCA, and 1,1-DCE. The project laboratory suggested to ERM that there may have been a malfunction of the regulator or tubing associated with sample SSV-08, which contained VOCs at concentrations generally three orders of magnitude less than the concentrations detected in sample DUP-2. Therefore it is possible that ambient indoor air may have diluted sub-slab vapors in the sample collection canister for location SSV-08. ERM interprets the analytical results for sample DUP-2 as being more representative of sub-slab vapor concentrations at location SSV-08.

Three VOCs of potential concern were detected in sub-slab vapor sample SSV-09 at concentrations ranging from 15 to 797 μ g/m³ (0.006 to 0.146 ppm). The predominant VOCs detected were 1,1,1-TCA and TCE. Acetone was also detected in this sample.

TCE was the only VOC detected in sub-slab vapor sample SSV-10 and it was detected at a concentration of 225 μ g/m³ (0.033 ppm).

3.3 OUTDOOR AIR

Twelve compounds of potential concern were detected from the ambient outdoor air sample at concentrations ranging from 0.9 to 6.3 μ g/m³ (0.000 to 0.003 ppm), indicating that many compounds of potential concern at the Site are typically present in air at and around the facility. VOCs detected in the outdoor ambient air sample include:

- acetone;
- benzene;
- 2-butanone;
- carbon tetrachloride;
- ethylbenzene;
- methylene chloride;
- PCE;
- toluene;
- 1,1,1-TCA;

- TCE;
- m- and p-xylenes; and
- o-xylene.

3.4 INDOOR AIR

One or more VOCs of potential concern were detected in the indoor air samples. Four VOCs were detected at low concentrations ranging from 5.9 to 12.8 $\mu g/m^3$ (0.001 to 0.005 ppm) in the indoor air sample collected from indoor air sample IA-07. Results for the associated blind duplicate sample (sample DUP-1) were generally consistent. Five VOCs were detected at concentrations ranging from 2.3 to 36 $\mu g/m^3$ (0.001 to 0.007 ppm).

Acetone was the only VOC detected in indoor air sample IA-08 and it was detected at a concentration of $14 \mu g/m^3$ (0.006 ppm).

Acetone was the only VOC detected in indoor air sample IA-09 and it was detected at a concentration of $20.4 \,\mu\text{g/m}^3$ (0.009 ppm).

The VOCs methylene chloride and toluene were the only VOCs detected at indoor air sample IA-10 and they were detected at concentrations of 3.6 and 6.9 μ g/m³ (0.001 and 0.002 ppm), respectively.

The project laboratory advised ERM that indoor air samples could not be analyzed to the desired low detection limits due to relatively elevated levels of target and non-target compounds present in the sample. Field screening data and chemical inventory sheets suggest it is likely that these VOCs are present as a result of the manufacturing processes and associated operations that occur routinely in the Greif facility.

4.0 DECISION MATRICES AND RECOMMENDED ACTIONS

The NYSDOH (2006) developed decision matrices for evaluation of vapor intrusion at sites in New York State. To date, a total of four compounds, all of which are compounds of potential concern at the Site, have been assigned to a decision matrix. The four compounds are:

- carbon tetrachloride;
- PCE;
- 1,1,1-TCA; and
- TCE.

TCE and carbon tetrachloride have been assigned to NYSDOH Matrix 1. PCE and 1,1,1-TCA have been assigned to NYSDOH Matrix 2. The matrices compare sub-slab and indoor air concentrations of a compound as a basis for a decision regarding further investigation, monitoring, or potential remedial action. The detection of compounds of potential concern in indoor air samples does not necessarily mean that vapor intrusion from the sub-slab into indoor air is occurring, particularly when these compounds are detected in outdoor ambient air. Additionally, a recommendation for mitigation based on evaluation of data according to procedures outlined in NYSDOH (2006) does not necessarily indicate that vapor intrusion from the sub-slab into indoor air is actively occurring at a facility.

As outlined in NYSDOH (2006), the decision matrices are generic and site-specific conditions regarding source and extent of affected media, building construction, layout, land use, and other conditions potentially relevant to vapor intrusion should be considered in the development of recommended actions. Relevant considerations are summarized below.

Condition of the Building Floor Slab

The concrete floor in the building seems to be intact and without pathways for sub-slab vapor to enter the facility. Some minor cracks were observed; however, observed cracks appear to be filled with a sealant-type material.

Source and Extent of Affected Media

Based on investigative activities performed to date, known subsurface sources of VOCs of potential concern at the Site are limited to affected areas in the southwestern portion of the Site. These areas include:

- the Varnish Pit Area;
- the Former Varnish UST Area; and

 the previously-remediated Former Drum Storage Area/Soil Boring GB-10 Area.

The varnish pit at the Site formerly contained two aboveground storage tanks for virgin varnish and a varnish dip tank. The varnish pit measures approximately 20-feet wide by 30-feet long and it is approximately 10 feet deep (Figure 3).

The varnish pit has been inactive since May 1995 and the current owner advises ERM that varnishing operations are not planned at the Site in the future. The varnish pit is still present at the Site and there is no air-tight barrier between the varnish pit and air inside the facility. VOCs of potential concern may possibly be emitted from the surficial walls and/or floor of the varnish pit due to the active use of varnish and other chemicals in the varnish pit over a period of approximately 45 years.

Southwest of the building is the Former Drum Storage Area and Soil Boring GB-10 Area (Figure 2). VOCs of potential concern are present in this area. Concentrations of VOCs in this area were significantly reduced to the satisfaction of the NYSDEC through implementation of a successful soil excavation IRM (ERM, 2006).

The Former Varnish UST Area is located outside and just west of the building. The main VOC of potential concern associated with this area is xylenes. Chlorinated solvent s were generally not detected in soil and ground water samples collected from this area.

Other sources of compounds of potential concern were identified in chemical products that are routinely used inside the building during ERM's pre-sample survey. These compounds were typically listed as ingredients in common chemicals used by maintenance and production personnel in the plant. These potential sources of VOCs in indoor air were documented on the sample collection sheets (Attachment A). Production operations were ongoing during the sampling period; therefore, it is reasonable to assume that some or all of these chemicals were actively being used during the sample collection period.

Completed and Proposed Remedial Actions

Completed remedial actions at the Site include excavation of grossly-affected soil in the Former Drum Storage Area and Soil Boring GB-10 Area in 2005. Additionally, a vacuum-enhanced DNAPL recovery system has been operating in the Varnish Pit Area. This system removed DNAPL, contaminated ground water, and soil vapor from beneath the southwestern portion of the building. Liquid recovery was terminated in May 2008 following removal of recoverable DNAPL from the vicinity of

the varnish pit. The vacuum enhancement, which has been operational since March of 2007, causes a negative pressure beneath the southwestern portion of the building's concrete floor. Vapor extraction continues from four recovery wells around the varnish pit in order to maintain sub-slab de-pressurization.

ERM submitted a Focused Feasibility Study (FFS) Report to the NYSDEC and the NYSDOH in June 2007. ERM anticipates receiving comments from the NYSDEC on the FFS Report in the summer of 2008. The FFS Report recommends the following additional remedial actions at the Site:

- sub-slab depressurization beneath the building, which will also facilitate recovery of VOCs from affected soil and ground water beneath the building;
- natural attenuation of soil and ground water beneath the building;
 and
- in-situ thermal treatment of affected soil and ground water in the Former Varnish UST Area.

Factors Affecting Vapor Migration

Shallow soil at the Site consists predominantly of silty clay or clayey silt. Due to limited pore space connectivity and matrix permeability in clayrich soil, and the general predominance of vertical fracture and macropore conduits, shallow soil at the Site is generally not conducive to lateral vapor migration.

VOCs can volatize into soil from affected ground water. As such, ground water flow should be characterized for vapor intrusion studies. Shallow ground water flow direction at the Site is generally towards the north, although there are flow variations caused by the building foundation, structures within the building footprint, and steel sheet piling placed during excavation of the Former Drum Storage Area. Migration of VOCs up-gradient (to the south) of source areas is not expected due to the generally south to north ground water flow direction. Ground water elevations are relatively shallow at 3- to 6-feet b.g.s.

A significant amount of ground water monitoring has been performed at the Site in several rounds of investigation as well as a two-year long quarterly ground water monitoring program that was completed in late 2007. ERM is preparing a report summarizing the results of ground water monitoring at the Site. A map showing the location of monitoring wells at the Site is presented in Figure 4. The following shallow and intermediate monitoring wells are located between affected areas at the Site and property boundaries.

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- MW-1A;
- MW-3;
- MW-4;
- MW-5;
- MW-6;
- MW-7A;
- MW-8;
- MW-15;
- MW-16;
- MW-17; and
- MW-19.

These wells are present on all four sides of the Site building between the building and the property boundaries. VOCs of potential concern have not been detected in any of these monitoring wells, indicating that there has been no off-Site migration of VOCs in ground water from affected areas at the Site.

The shallow depth of ground water reduces the possible pore space of the soil column above the water table, limiting the mass of VOCs that may be present in soil vapor. The thickness of saturated soil within the capillary fringe at the Site will also reduce the total volume of pore space available for VOCs within the unsaturated soil column. Therefore, any VOCS present will tend to be present at shallower depths which will facilitate vertical migration to and from the atmosphere relative to lateral migration.

Underground conduit pathways for vapor migration are present at the Site. Vapors will tend to be captured and retained within the backfilled trench, especially in areas capped by asphalt covering, or may be released at surface grates within paved areas. A potential underground conduit is the 3-inch sanitary sewer line that runs north from the varnish pit, and then turns to the east and runs out towards Colvin Boulevard (Figure 2). ERM placed two sample points near this potential conduit; sub-slab vapor point (SSV-09) within the eastern portion of the building, and soil vapor point (SV-06) in the grassy area between the building and Colvin Boulevard (Figure 3).

The Site building is an older structure that contains many open gaps to the outside; these include but are not limited to:

- broken upper windows;
- gaps between the walls and conduits that exit the building;
- open dock and shipping bay doors; and
- open side doors.

The building is heated with ceiling mounted, natural gas heaters that move and mix air. A separate ventilation system is also active that remains running during Site operations. Grief was operating while ERM collected the 24-hour indoor air samples. Therefore, use of processing, production, or cleaning chemicals may have occurred near sampling locations during the sampling duration. Use of chemicals near and within the building could affect the number of compounds detected as well as the reporting limits of Site-specific compounds in the samples.

The concrete floor within the Greif building is generally competent and of strong integrity. Cracks are uncommon and where they exist, have a low aperture and appear to be filled. Large cracks or gaps in the floor were not observed except for the varnish pit itself, which was designed and constructed as a large opening at the floor level of the facility for production purposes.

As previously discussed and agreed by ERM and the NYSDEC, the DNAPL recovery system, which also recovers sub-slab vapors, was in operation during the entire period of the vapor intrusion evaluation. The decision to keep the DNAPL recovery system operational was based on the fact that a sub-slab depressurization system will be operational in the future and therefore performance of the evaluation during active vapor recovery would be more representative of current and future building conditions.

Relevant Standards, Criteria, and Guidance.

The NYSDEC currently does not have any standards, criteria, or guidance on soil vapor in New York State. The following air guideline values have been established by the NYSDOH for VOCs of potential concern at the Site.

Compound	Air Guideline Value (mcg/m³)
Methylene Chloride	60
PCE	100
TCE	5

The purpose of a guideline is to help guide decisions about the nature of efforts to reduce exposure to the compound.

NYSDOH (2006) is the applicable regulatory guidance document for the evaluation of vapor intrusion in New York State. Interpretation of data and associated recommendations for additional action are based on NYSDOH (2006).

Development of Recommended Actions

Comparison of detected concentrations in sub-slab and indoor air samples results in the following summary of recommended actions from the NYSDOH decision matrices for the various co-located sampling locations at the Site. In some instances, the actual reporting limits achieved during laboratory analysis resulted in several potential decision matrix recommended actions. Instances where three or more decision matrix recommended actions are possible based on current analytical data are identified in the summary below as "Unknown".

	Decision	Matrix 1	Decision	Matrix 2
Sample Location	TCE	Carbon Tetrachloride	PCE	1,1,1-TCA
SSV-07/IA-07	Mitigate	Unknown	Unknown	Mitigate
SSV-08/IA-08	Mitigate	Unknown	Unknown	Mitigate
SSV-09/IA-09	Monitor or Mitigate	Unknown	No further action or Take reasonable and practicable actions to identify sources and reduce exposures	Monitor or Mitigate
SSV-10/IA-10	Monitor or Mitigate	Unknown	No further action or Take reasonable and practicable actions to identify sources and reduce exposures	No further action

The detected concentrations of TCE and 1,1,1-TCA indicate that all of the "unknown" decisions for carbon tetrachloride and PCE as insignificant with regards to decision-making on recommended actions, as mitigation or monitoring are warranted at all interior sampling locations based primarily on detected concentrations of TCE and to a lesser extent on detected concentrations of 1,1,1-TCA. The evaluation suggests that mitigation appears warranted beneath the western half of the building (sample locations SSV-07/IA-07 and SSV-08/IA-08) and may also be warranted beneath the northeastern quadrant of the building (sample location SSV-09/IA-09). At a minimum, monitoring appears warranted beneath the eastern half of the building (sample locations SSV-09/IA-09 and SSV-10/IA-10).

4.1 RECOMMENDED ACTIONS

ERM recommends mitigation of potential vapor intrusion in the western half of the facility and additional monitoring in the eastern half of the facility. The following specific actions are recommended based on the results of the vapor intrusion evaluation.

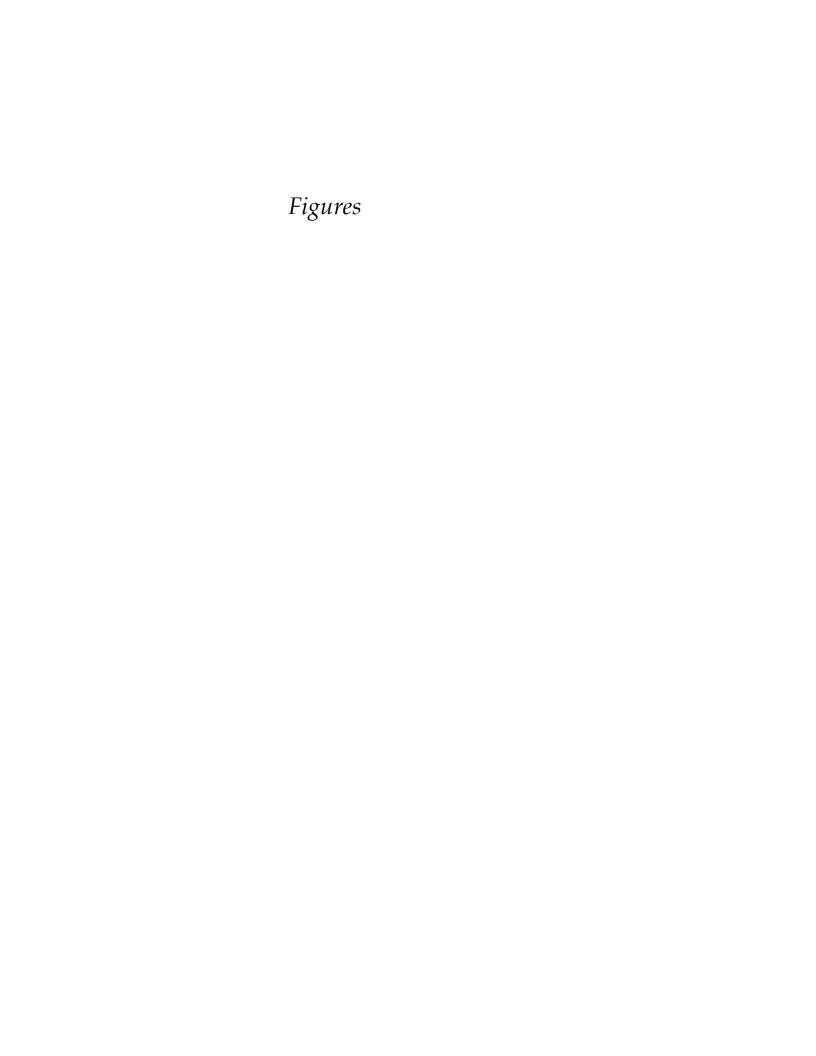
- 1. Vapor extraction through existing DNAPL recovery system equipment should continue until a system specifically designed for sub-slab depressurization is installed and operational.
- 2. A sub-slab depressurization (SSD) system should be designed and installed to provide mitigation of potential vapor intrusion beneath the western half of the building.
- 3. Engineering controls should be designed and employed to capture and control VOCs prior to their release from the varnish pit into indoor ambient air, or the varnish pit should be otherwise isolated to the extent practicable from indoor ambient air.
- 4. Sub-slab vapor monitoring points should be installed and sampled in the eastern half of the building to provide additional data on the potential for vapor intrusion beneath the eastern half of the building.
- 5. If necessary based on the results of the additional sub-slab vapor monitoring, the SSD system could be expanded to cover the eastern half of the building.

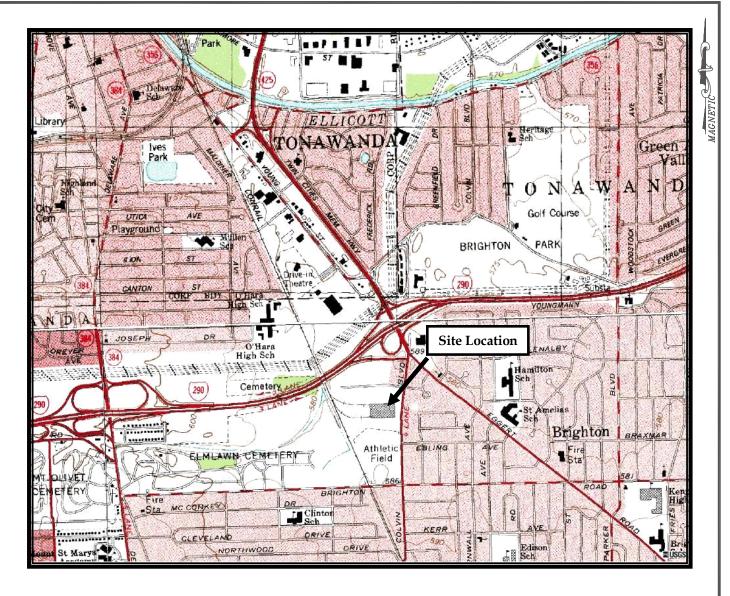
An option for preventing or controlling VOC emissions from the varnish pit into indoor ambient air includes sealing of joints between the varnish oven and the varnish pit to the extent practicable to facilitate active collection and treatment of vapors from the varnish pit. Collected vapors could be recovered and treated if necessary through an extension of the same system that will be used to treat vapors collected from the beneath the building floor slab.

The proposed SSD system will include extraction points specifically designed for sub-slab vapor extraction that will be installed at the bottom of the concrete flooring and screened 2- to 3-inches into the material beneath the floor. The sub-slab vapor extraction points will be installed in the western half of the facility along with vacuum monitoring points in a phased approach to allow pilot testing to confirm radius of influence and facilitate proper spacing of additional extraction points as necessary.

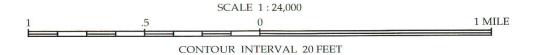
Sonoco recently requested permission from the NYSDEC in correspondence dated 12 June 2008 to submit an IRM Work Plan for the installation of a sub-slab depressurization system at the Site. If this approach is approved by the NYSDEC, ERM intends to provide a conceptual design for the sub-slab depressurization system and additional details regarding the recommended approach described above to the NYSDEC for review and comment in a SSD IRM Work Plan.

- ERM, 2000. Work Plan for Remedial Investigation, 2122 Colvin Boulevard, Tonawanda, New York. NYSDEC VCP Number V00334-9, ERM Project Number D6713.00.01, June 2000.
- ERM, 2001. Voluntary Remedial Investigation Report, Greif Bros. Site, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number D6714.00, 28 November 2001.
- ERM, 2003. Data Gap Investigation Report, Greif Bros. Site, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0001242, December 2003.
- ERM, 2004. Interim Remedial Measure Work Plan, Greif Bros. Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0016742, June 2004.
- ERM, 2005. DNAPL Recovery IRM Pilot Test Report, Greif Bros. Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0021621, May 2005.
- ERM, 2006. Interim Report Soil Excavation Interim Remedial Measure, Greif Bros. Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0017521, 28 April 2006.
- ERM, 2007a. Focused Feasibility Study Report, Greif Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0051923, June 2007.
- ERM, 2007b. Work Plan for Vapor Intrusion Evaluation, Greif Facility, 2122 Colvin Boulevard, Town of Tonawanda, Erie County, New York. NYSDEC VCP Number V00334-9, ERM Project Number 0070448, November 2007.
- NYSDOH, 2006. Guidance for evaluating soil vapor intrusion in the State of New York (Final). New York State Department of Health, Center for Environmental Health, Bureau of Environmental Exposure Investigation, Albany, October 2006, 92 pp.





Buffalo NE Quadrangle New York 7.5 Minute Series

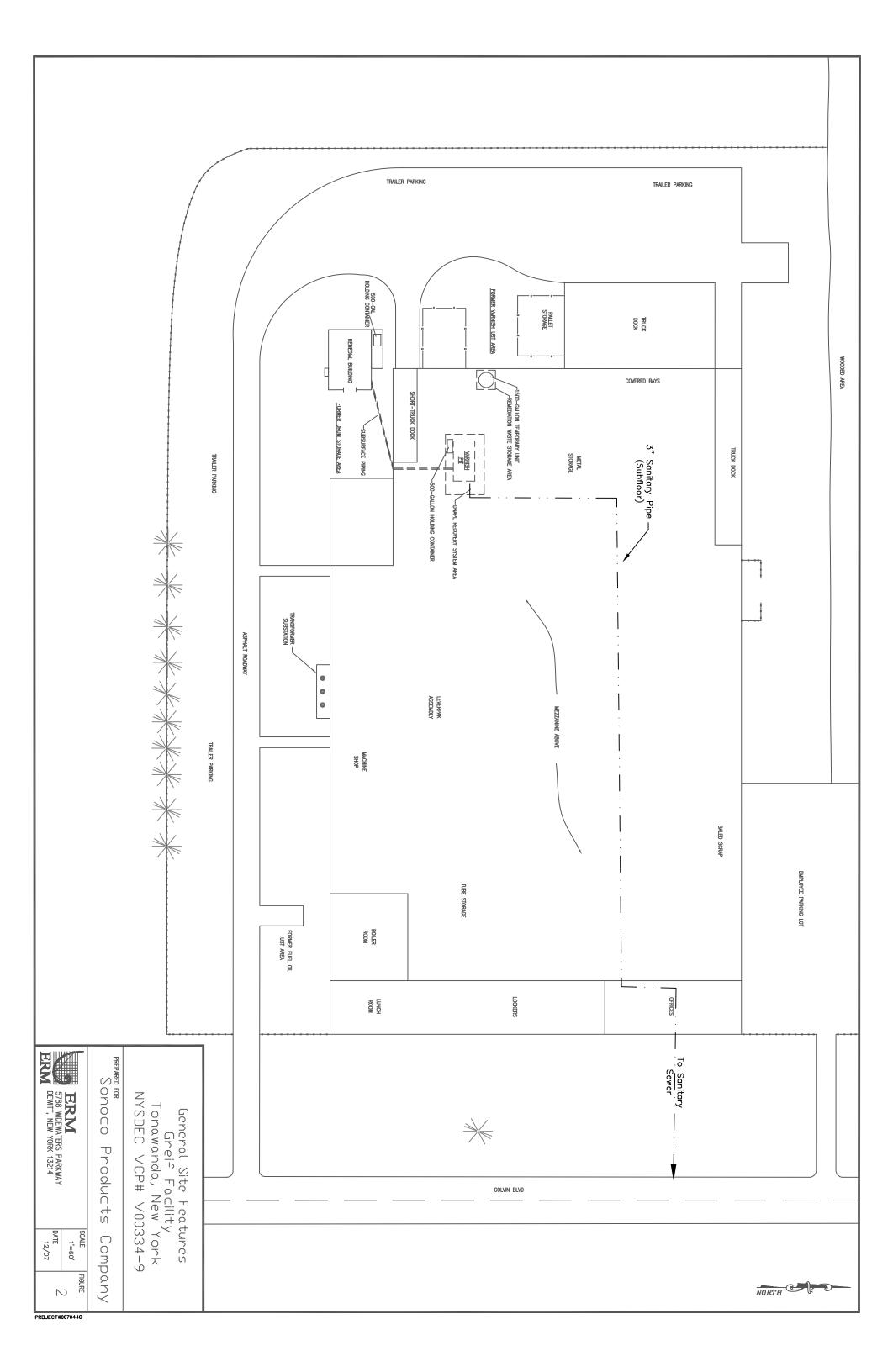


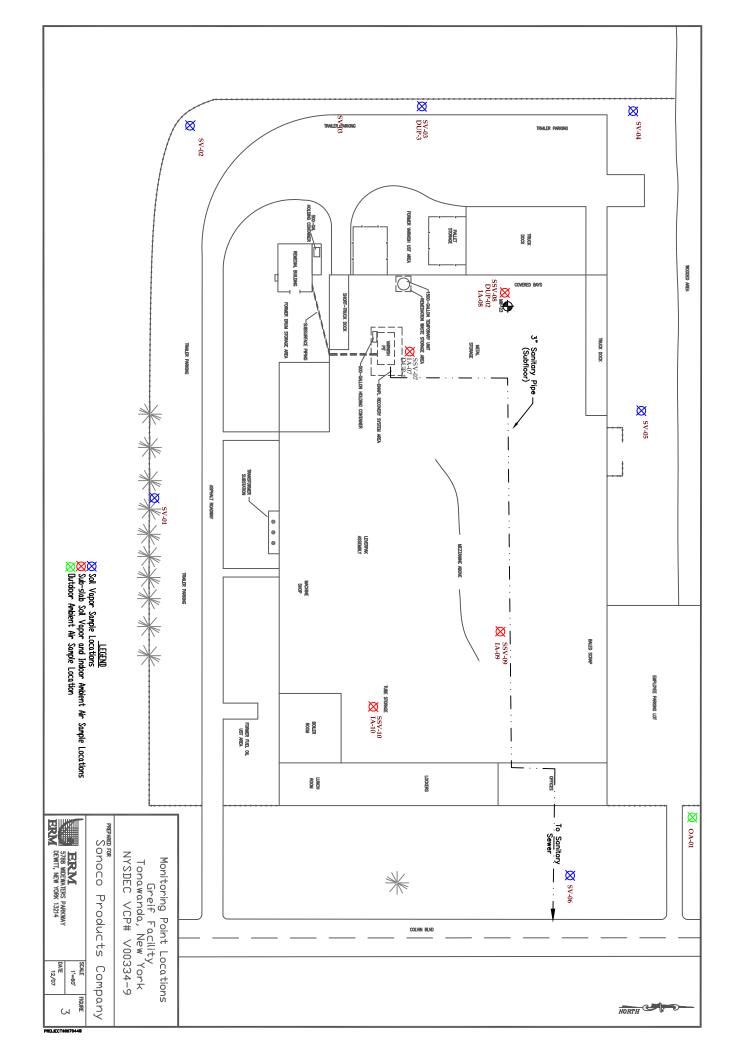
Site Location Map Grief Facility Tonawanda, New York NYSDEC VCP# V00334-9

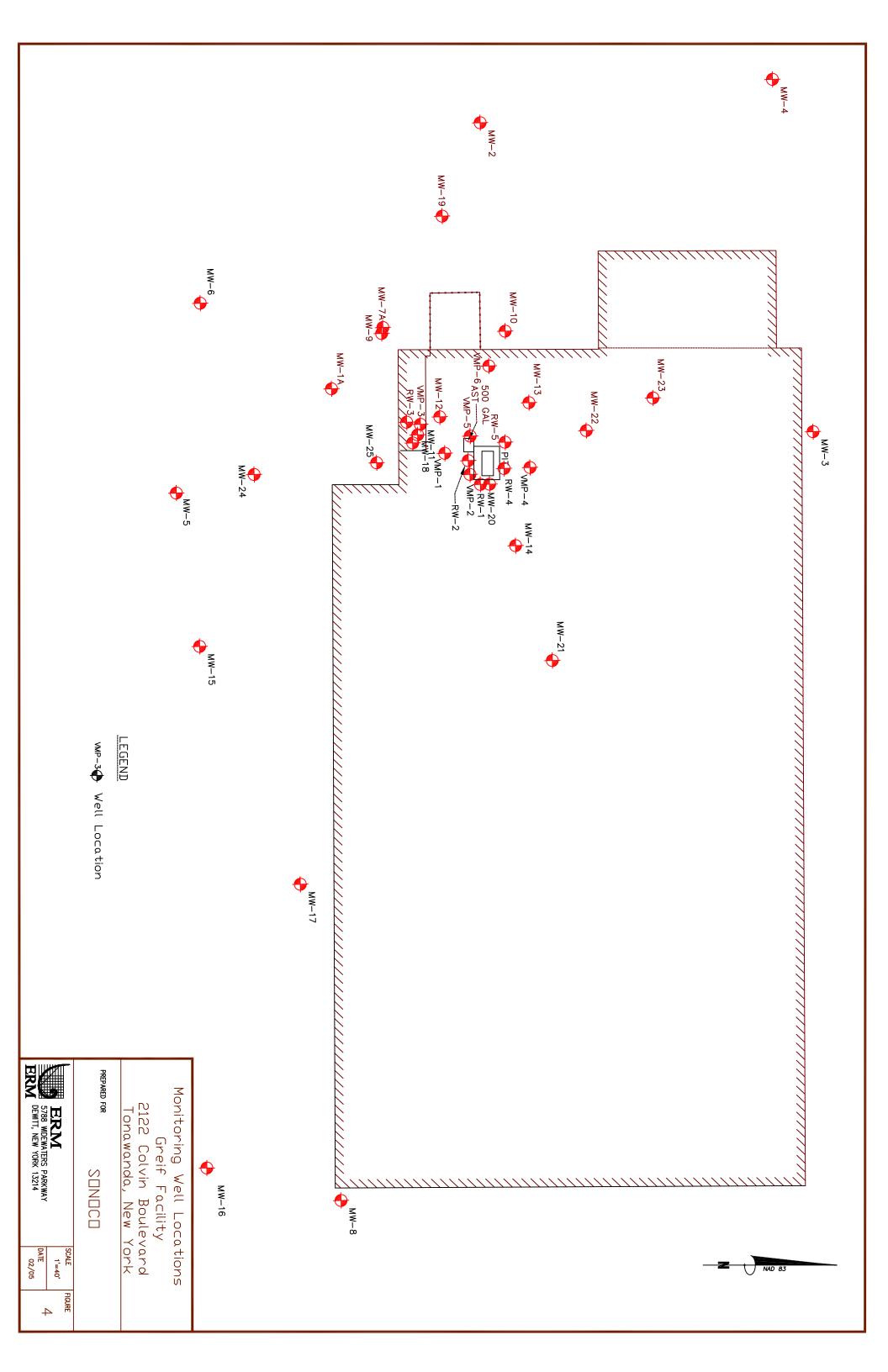
_{iepared for} Sonoco Products Company



SCALE	FIGURE
NTS	4
DATE 5/07	
0,01	







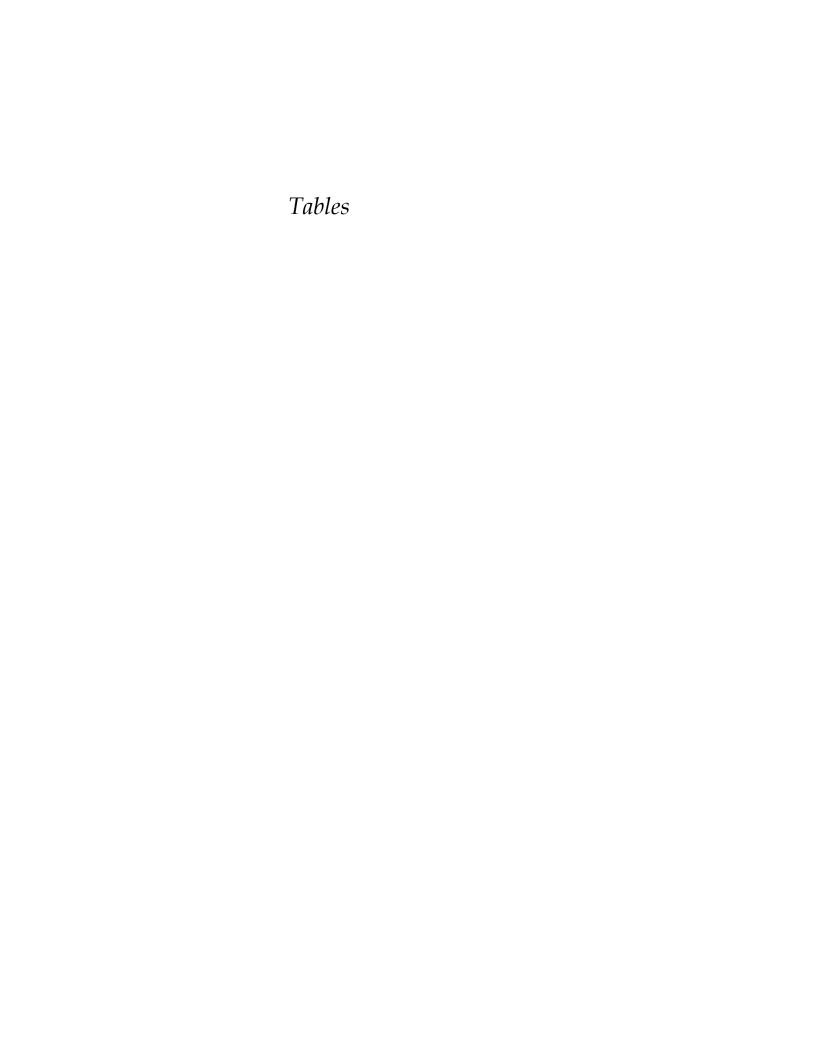


TABLE 1 - SUMMARY OF SAMPLES VAPOR INTRUSION EVALUATION GREIF FACILITY - TONAWANDA, NEW YORK NYSDEC VCP NUMBER V00334-9 ERM PROJECT NUMBER 0070448

Sample Designation	Collection Date	Sample Type	Sample Matrix
Greif-IA-07	12-Dec-07	Grab	Indoor Air
Greif-IA-08	12-Dec-07	Grab	Indoor Air
Greif-IA-09	12-Dec-07	Grab	Indoor Air
Greif-IA-10	12-Dec-07	Grab	Indoor Air
Greif-SSV-07	12-Dec-07	Grab	Sub-Slab Vapor
Greif-SSV-08	12-Dec-07	Grab	Sub-Slab Vapor
Greif-SSV-09	12-Dec-07	Grab	Sub-Slab Vapor
Greif-SSV-10	12-Dec-07	Grab	Sub-Slab Vapor
Greif-OA-01	12-Dec-07	Grab	Outdoor Air
Greif-SV-01	12-Dec-07	Grab	Soil Vapor
Greif-SV-02	12-Dec-07	Grab	Soil Vapor
Greif-SV-03	12-Dec-07	Grab	Soil Vapor
Greif-SV-04	12-Dec-07	Grab	Soil Vapor
Greif-SV-05	12-Dec-07	Grab	Soil Vapor
Greif-SV-06	12-Dec-07	Grab	Soil Vapor
		Duplicate of Greif-	
Greif-DUP-1	12-Dec-07	IA-07	Indoor Air
		Duplicate of Greif-	
Greif-DUP-2	12-Dec-07	SSV-08	Sub-Slab Vapor
		Duplicate of Greif-	
Greif-DUP-3	12-Dec-07	SV-03	Soil Vapor

TABLE 2 - SOIL VAPOR SAMPLE RESULTS VAPOR INTRUSION EVALUATION GREIF FACILITY - TONAWANDA, NEW YORK NYSDEC VCP NUMBER V00334-9 ERM PROJECT NUMBER 0070448

Compand	Molar Weight	Greif-SV-011	V-011	Greif-SV-02	$V-02^{2}$	Greif.	Greif-SV-03	Greif-DUP-3	UP-3	Greif-SV-04 ²	$3V-04^{2}$	Greif-	Greif-SV-051	Greif-SV-061	V-061
Compound	gram MW	µg/m³	mdd	ng/m³	ppm	µg/m³	mdd	µg/m³	mdd	µg/m³	mdd	µg/m³	uidd	ng/m³	mdd
1,1,1-TRICHLOROETHANE	133.4	30.6	900.0	ND<2.7	-	6.0	0.000	ND<2.7	1	35.1	900.0	27.1	0.005	212	0.039
1,1,2,2-TETRACHLOROETHANE	167.85	ND<17.2	1	ND<3.4	1	ND<1.0	ı	ND<3.4	-	ND<3.4	ı	ND<6.9	ı	ND<6.9	ı
1,1,2-TRICHLOROETHANE	133.4	ND<13.6	}	ND<2.7	_	8.0>UN	-	ND<2.7	ı	ND<2.7	ı	ND<5.5	-	ND<5.5	ŧ
1,1-DICHLOROETHANE	98.96	ND<10.1	1	ND<2.0	ı	9.0>QN	-	ND<2.0	ı	ND<2.0	ı	ND<4.1	1	4.5	0.001
1,1-DICHLOROETHENE	96.95	0.6>QN	ı	ND<2.0	1	ND<0.6	ı	ND<2.0	ı	ND<2.0	ı	ND<4.0	ı	ND<4.0	ı
1,2,4-TRIMETHYLBENZENE	120.19	ND<12.3	1	ND<02.5	1	1.3	0.000	ND<02.5	1	ND<02.5	1	ND<4.9	1	ND<4.9	ı
1,2-DICHLOROETHANE	98.86	ND<10,1	ı	ND<2.0	1	ND<0.6	ı	ND<2.0	1	ND<2.0	1	ND<4.1	1	ND<4.1	ł
2-BUTANONE (MEK)	72.11	ND<7.4	ı	ND<1.5	ı	2.4	0.001	ND<1.5	ı	2.5	0.001	4.9	0.002	4.4	0.001
ACETONE	58.08	0.5>QN	1	ND<1.2	1	3.3	0.001	ND<1.2	i	27.6	0.012	37.8	0.016	63.2	0.027
BENZENE	78	ND<8.0	1	ND<1.6	ı	2.2	0.001	9.L>QN	1	ND<1.6	ŀ	ND<3.2	_	ND<3.2	1
CARBON TETRACHLORIDE	153.24	ND<15.7	1	ND<3.2	-	1.2	0.000	ND<3.2	ł	ND<3.2	-	ND<6.3		ND<6.3	1
CHLOROETHANE	50.49	ND<6.6	ı	ND<1.3	-	ND<0.4	1	ND<1.3	ŧ	ND<1.3	1	ND<2.6	1	ND<2.6	1
CHLOROFORM	119.38	ND<12.2	ı	ND<2.4	1	ND<0.7	1	ND<2.4	1	ND<2.4	1	ND<4.9		ND<4.9	1
CIS-1,2-DICHLOROETHENE	96.94	ND<9.9	1	ND<2.0	1	ND<0.6	ı	ND<2.0	ı	ND<2.0	1	ND<4.0	ı	ND<4.0	_
ETHYLBENZENE	106.16	ND<10.8	1	ND<2.2	1	8.0	0.000	ND<2.2	1	ND<2.2	-	ND<4.3		ND<4.3	1
METHYLENE CHLORIDE	84.93	ND<8.7	ı	ND<1,7	1	3.3	0.001	ND<1.7	ı	1.8	0.001	ND<3.5	1	ND<3.5	-
4-METHYL-2-PENTANONE	100.16	ND<10.2	1	ND<2.1	1	ND<0.6	ı	ND<2.1	1	ND<2.1	l	ND<4.1	ı	ND<4.1	ı
P/M-XYLENE	106.17	ND<21.7	1	ND<4.3	ł	2.1	0.000	ND<4.3	ŀ	ND<4.3	1	ND<8.7	1	ND<8.7	ı
O-XYLENE	106.17	ND<10.8	***	ND<2.2	ı	8.0	0.000	ND<2.2	-	ND<2.2	ı	ND<4.3	ı	ND<4.3	I
TETRACHLOROETHENE	133.42	ND<17.0	1	ND<3.4	ł	1.2	0.000	ND<3.4	1	ND<3.4	;	ND<6.8	-	ND<6.8	
TOLUENE	92.13	ND<9.4	1	9.1>dN	ŀ	1.7	0.000	0.1>UN	ı	5.9	0.002	6.3	0.002	6.9	0.002
TRANS-1,2-DICHLOROETHENE	133.42	ND<9.9	ı	ND<2.0	ı	9.0>QN	1	ND<2.0	1	ND<2.0	ı	ND<4.0	1	ND<4.0	***
TRICHLOROETHENE	167.85	14	0.002	ND<2.7	ı	ND<0.8	ı	ND<2.7	ł	13.3	0.002	20.4	0.003	13.4	0.002
VINYL CHLORIDE	62.5	ND<6.4	ļ	ND<1.3	-	ND<0.4	1	ND<1.3	- 1	ND<1.3	1	ND<2.6		ND<2.6	-

*: could not be analyzed for SIM due to high concentrations of target and/or non-target compounds present in the sample. *: could not be analyzed for SIM due to low pressure of the cans and have a final reporting levels of 0.5ppbv.

ND<2.2: compound not detected at concentrations greater than the listed number.

TABLE 3 - SUB-SLAB VAPOR SAMPLE RESULTS VAPOR INTRUSION EVALUATION GREIF FACILITY - TONAWANDA, NEW YORK NYSDEC VCP NUMBER V00334-9 ERM PROJECT NUMBER 0070448

Compound	Molar Weight	Greif-SSV-071	$SV-07^1$	Greif-SSV-082	$SV-08^2$	Greif-DUP-2 ¹	UP-21	Greif.SSV-091	SV-091	Greif-SSV-10 ¹	V-10 ¹
aunodino.	gram MW	µg/m³	mdd	µg/m³	mdd	µg/m³	mdd	µg/m³	mdd	µg/m³	mdd
1,1,1-TRICHLOROETHANE	133.4	23,897	4.380	6.2	0.001	12,800	2.346	164	0.146	ND<54.6	**
1,1,2,2-TETRACHLOROETHANE	167.85	ND<174	ŀ	ND<1.0	1	ND<409	1	ND<34.3	1	ND<68.7	1
1,1,2-TRICHLOROETHANE	133.4	ND<139	-	ND<0.8	1	ND<325	- L	ND<27.3	1	ND<54.6	
1,1-DICHLOROETHANE	96:86	908	0.199	3.9	0.001	2,940	0.726	ND<20.2	1	ND<40.5	
1,1-DICHLOROETHENE	96.95	1,180	0.298	17	0.004	6,630	1.672	ND<19.8	ı	ND<39.7	
1,2,4-TRIMETHYLBENZENE	120.19	ND<125	-	ND<0.7	ŀ	ND<293	1	ND<24.6	1	ND<49.2	1
1,2-DICHLOROETHANE	98:96	ND<103	ł	9.0>QN	1	ND<241	I	ND<20.2	**	ND<40.5	1
2-BUTANONE (MEK)	72.11	ND<74.9	ł	2.2	0.001	ND<175	l	ND<14.7		ND<29.5	ı
ACETONE	58.08	214	0.000	15.3	900.0	710	0.299	15	900.0	ND<23.8	1
BENZENE	78	ND<81	1	1.1	0.000	ND<190	ı	ND<16.0	1	ND<31.9	ı
CARBON TETRACHLORIDE	153.24	ND<160	1	1.4	0.000	ND<374	ı	ND<31.5	ŀ	ND<62.9	1
CHLOROETHANE	50.49	29>QN		ND<0.4	1	ND<157		ND<13.2	1	ND<26.4	L
CHLOROFORM	119.38	ND<124	-	ND<0.7	:	ND<290	ł	ND<24.3	ŧ	ND<48.7	ŀ
CIS-1,2-DICHLOROETHENE	96.94	246	0.062	9.0	0.000	519	0.131	ND<19.8	1	ND<39.7	ŀ
ETHYLBENZENE	106.16	ND<110		ND<0.7	1	ND<258		ND<21.7	1	ND<43.4	1
METHYLENE CHLORIDE	84.93	ND<88.2	}	2.5	0.001	ND<207	ł	ND<17.4	1	ND<34.7	ı
4-METHYL-2-PENTANONE	100.16	ND<104	-	ND<0.6	7	ND<244	1	ND<20.5	i.	ND<41.0	1
P/M-XYLENE	106.17	ND<220	ł	1.4	0.000	ND<516	ı	ND<43.4	ł	ND<86.7	ŀ
O-XYLENE	106.17	ND<110		ND<0.7	1	ND<258	ł	ND<21.7	1	ND<43.4	
TETRACHLOROETHENE	133.42	ND<172	-	ND<1.0	1	ND<403	ł	ND<33.9	1	ND<67.8	1
TOLUENE	92.13	ND<95.6	1	5.2	0.001	313	0.083	ND<18.8	1	ND<37.6	ł
TRANS-1,2-DICHLOROETHENE	133.42	ND<101	-	ND<0.6	1	ND<236	-	ND<19.8	ł	ND<39.7	1
TRICHLOROETHENE	167.85	9,940	1.448	3.5	0.001	32,500	4.734	82.2	0.012	225	0.033
VINYL CHLORIDE	62.5	ND<64.9	-	ND<0.4	1	ND<152	ŀ	ND<12.8		ND<25.6	ŀ

 1 : could not be analyzed for SIM due to high concentrations of target and/or non-target compounds present in the sample. These are qualified appropriately.

2; could not be analyzed for SIM due to low pressure of the cans and have a final reporting levels of 0.5ppbv. ND<2.2: compound not detected at concentrations greater than the listed number.

TABLE 4 - INDOOR & OUTDOOR AIR SAMPLE RESULTS
VAPOR INTRUSION EVALUATION
GREIF FACILITY - TONAWANDA, NEW YORK
NYSDEC VCP NUMBER V00334-9
ERM PROJECT NUMBER 0070448

						INDOOR	OR					OUTDOOR	OOR
Common	Molar Weight	Greif-IA-07	(A-07	Greif-DUP-1 ²	$UP-1^2$	Greif-IA-08	A-08 ¹	Greif-IA-09 ¹	A-091	Greif-IA-10 ²	$A-10^{2}$	Greif-OA-01	A-01
Compound	gram MW	µg/m3	bbm	µg/m3	urdd	µg/m3	mdd	mg/m3	mdd	рд/m3	mdd	µg/m3	undd
1,1,1-TRICHLOROETHANE	133.4	12.8	0.002	36	0.007	ND<27.3	i i	ND<27.3	1	ND<2.7	1	2.9	0.001
1,1,2,2-TETRACHLOROETHANE	167.85	ND<3.4	1	ND<3.4		ND<34.3	ł	ND<34.3	ı	ND<3.4	1	ND<1.0	1
1,1,2-TRICHLOROETHANE	133.4	ND<2.7	ŧ	ND<2.7	1	ND<27.3	-	ND<27.3	1	ND<2.7	1	ND<0.8	l
1,1-DICHLOROETHANE	98.96	ND<2.0		ND<2.0		ND<20.2	1	ND<20.2	1	ND<2.0	1	ND<0.6	1
1,1-DICHLOROETHENE	96.95	ND<2.0	ł	ND<2.0	1	ND<19.8	1	ND<19.8	1	ND<2.0	-	ND<0.6	1
1,2,4-TRIMETHYLBENZENE	120.19	ND<02.5	1	ND<02.5	1	ND<24.6	ŀ	ND<24.6	ŧ	ND<02.5	1	ND<0.7	1
1,2-DICHLOROETHANE	98.96	ND<2.0	1	ND<2.0	-	ND<20.2	1	ND<20.2	1	ND<2.0	ŧ	ND<0.6	1
2-BUTANONE (MEK)	72.11	ND<1.5	1	ND<1.5	1	ND<14.7	+	ND<14.7	1	ND<1.5	ı	1.2	0.000
ACETONE	58.08	11.9	0.005	15.1	900.0	14	900.0	20.4	0.00	ND<1.2	ı	6.3	0.003
BENZENE	78	9.L>QN	1	2.3	0.001	ND<16.0	ı	ND<16.0	1	ND<1.6	1	1.0	0.000
CARBON TETRACHLORIDE	153.24	ND<3.2		ND<3.2	1	ND<31.5	ŧ	ND<31.5	-	ND<3.2	1	1.4	0.000
CHLOROETHANE	50.49	ND<1.3	1	ND<1.3		ND<13.2	ŧ	ND<13.2	1	ND<1.3	-	ND<0.7	l
CHLOROFORM	119.38	ND<2.4	l	ND<2.4	1	ND<24.3	1	ND<24.3	1	ND<2.4	1	ND<0.7	1
CIS-1,2-DICHLOROETHENE	96.94	ND<2.0	1	ND<2.0	1	ND<19.8	1	ND<19.8		ND<2.0	1	ND<0.6	ŀ
ETHYLBENZENE	106.16	ND<2.2	1	ND<2.2	1	ND<21.7	1	ND<21.7	ŧ	ND<2.2	1	6.0	0.000
METHYLENE CHLORIDE	84.93	ND<1.7	1	ND<1.7	1	ND<17.4	ı	ND<17.4	1	3.6	0.001	1.0	0.000
4-METHYL-2-PENTANONE	100.16	ND<2.1	-	ND<2.1	1	ND<20.5	ŀ	ND<20.5	1	ND<2.1		ND<0.6	1
P/M-XYLENE	106.17	ND<4.3	I	ND<4.3	ı	ND<43.4	1	ND<43.4	I	ND<4.3	ļ	1.6	0.000
O-XYLENE	106.17	ND<2.2		ND<2.2	-	ND<21.7	1	ND<21.7	ŀ	ND<2.2	1	1.0	0.000
TETRACHLOROETHENE	133.42	ND<3.4	-	ND<3.4	1	ND<33.9		ND<33.9	1	ND<3.4	1	1.1	0.000
TOLUENE	92.13	9.9	0.002	9.4	0.002	ND<18.8	1	ND<18.8	ı	6.9	0.002	5.1	0.001
TRANS-1,2-DICHLOROETHENE	133.42	ND<2.0	1	ND<2.0	-	ND<19.8	ı	ND<19.8	ı	ND<2.0	1	9.0>QN	1
TRICHLOROETHENE	167.85	5.9	0.001	15.8	0.002	ND<26.9	1	ND<26.9	1	ND<2.7	1	1.6	0.000
VINYL CHLORIDE	62.5	ND<1.3	ı	ND<1.3	1	ND<12.8		ND<12.8	1	ND<1.3	Į.	ND<0.4	ı

 1 : could not be analyzed for SIM due to high concentrations of target and/or non-target compounds present in the sample. These are qualified appropriately.

2: could not be analyzed for SIM due to low pressure of the cans and have a final reporting levels of 0.5ppbv. ND<2.2: compound not detected at concentrations greater than the listed number.

Attachment A Field Forms

ERM

5788 Widewaters Parkway, Dewitt, New York 13214

Boring	Number
5V-	1

ERM

BORING LOG

Drilling Com					0070449	Date & Time Completed: 12/	10/07 10:2	5
40	ac				Paul Willey Method Dirad Push Core Barrel(s)	Sampler(s)	Sampler Hammer	Drop
Trilling Equi	co kr				Method /	Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)	os bro				Core Barrel(s)	Geologist(s)		
DEPTH		SAMPL	ES			K, > en + 3		
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DES	SCRIPTION	REN	MARKS
grade)	Number LOCATION	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:			
0 -	LOCATION				Grave 1	Parking Lot		
0 -	\	3.9	6.0	NM	mad. brown, Silt	to sm gravel,		
		1	0.0	1	mad. brown, 5: It maist radist brown 5: send, maist	HI some Fine		
1			0.0		send, maist			
2			8.0		1			
					raddish brown si	14, some clay,		
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ERM

5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number SV-Z

ERM

BORING LOG

Project June Proj	Project Name					Project Number	Date & Time Started:	17/10/27- 10:00	
DEPTH SAMPLES (II) tollow Samph (part) (par	ري.	ei P				00+0448	Date & Time Completed:	Camples However	Drop
DEPTH SAMPLES (II) tollow Samph (part) (par	8					Poreman	oampier(8)	Sampler Frammer	-
DEPTH SAMPLES (II) tollow Samph (part) (par	Drilling Equi	pment				Method Method	Elevation & Datum	Completion Depth	Rock Depth
DEPTH SAMPLES (II) tollow Samph (part) (par	4	.,	ol p			Direct Push	_	4'	<u> </u>
DEPTH SAMPLES (II) tollow Samph (part) (par	Bit Size(s)		- <u>J</u>		******	Core Barrel(s)	Geologist(s)		
Solid Description Solid Brown (1999) LOCATION: SURFACE DESCRIPTION SOLID DESCRIPTION REMARKS SOLID DESCRIPTION REMARKS SOLID DESCRIPTION REMARKS SURFACE DESCRIPTION Gress Gress Location Location Location Location Location Location SURFACE DESCRIPTION REMARKS SOLID DESCRIPTION REMARKS R							R. Sonts		
(It below Early Paris) Surple Recovery TID David (1907) David Recovery TID David (1907) David Recovery TID D	DEPTH		SAMPL	ES		1			
DOCATION OCATION OC						SOIL DES	CRIPTION	REMAR	KS
DISCATION: SUBSACE DESCRIPTION OR FRESS Mad brown 5: It and mad Subsace of second 5: It and a clay; mod. brown 5: It and mad Subsace of second	,		-						-
Gress 1.5 0.0 Nm mod brown 5:1t, Some clay 1 0.6 strong stand stand mod. 1 0.0 mod brown 5:1t and mod. 1 0.0 mod strong still and clay; 1 mod strong st	gracie)			(рри)	Count	SURFACE DESCRIPTION:			
		200111011				6-05			
	<u> </u>					0125	Sama ala.	, 	
		\	1.5	0.0	NM	med stewn Sitt	, Jone Cial	′	
		1	•		1	mo.st cit	and mode		
	1		1	0.6		Mad Brown SIT	maist		
	_	1				and home silt	and clay.		
				0.0		moist			
3 4 4 5 5 6 6 7 8 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10									
3 4 4 5 5 6 6 7 8 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0								
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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

ERM

BORING LOG

Project Name					Project Number	Date & Time Started:	Sampler Hammer Completion Depth	
ري Drilling Com	pany				Foreman	Sampler(s)	Sampler Hammer	Drop
To	96				Paul Willey			-
Drilling Equi	ipment	ـ ا			Method /	Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)	co bro	275			Core Barrel(s)	Geologist(s)	<u> </u>	
						Geologist(s) R. Sants		
DEPTH		SAMPL	r		CON DE		DEA	A A DIVO
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DE	SCRIPTION	REN	IARKS
grade)	Number	(teet)	(ppm)	Counts				
	LOCATION	:			SURFACE DESCRIPTION:			
0			· 	<u></u>	Gravel	erking lot		
	\	4.0	0.3	NM	Desk brown, Sil	here of course	a's L	
	1	,		1	Derk brown, Sil send to sm. se Dark brown silt, maist Radish brown, maist	Same Coursesa.	nd	•
1			0.6		meist			
			1.2		Radish bram,	s; H, some clay	/	
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Boring Number 5788 Widewaters Parkway, Dewitt, New York 13214

5V-34

ERI	M				BORING	G LOG		
Project Name	& Location				Project Number	Date & Time Started:		
Drilling Com	pany				Foreman	Date & Time Completed: Sampler(s)	Sampler Hammer	Drop
					Method	Elevation & Datum	Completion Depth	Rock Depth
Drilling Equi	pment				iyietilot			
Bit Size(s)					Core Barrel(s)	Geologist(s)		
<u>DEPTH</u>		SAMPL			COLL DE	CCDIDTION	DEV	MARKS
(ft below grade)	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts		SCRIPTION		MAKKS
	LOCATION	N:			SURFACE DESCRIPTION:			
<u> </u>	-	*4,0	0,0		madbian 5:1+	and fines sen	d	
1		Ì	0,0		SURFACE DESCRIPTION: Grass Madbion 5:1+ + Conce clay roddish Grown 5. moist	ilt, trace ela	/	
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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number

ERM

BORING LOG

Drilling Com					0070 44 G	Date & Time Completed: 17/16	3/07- 11	:5 <
					Paral Willow	Date & Time Started: Date & Time Completed: 12/16 Sampler(s) Elevation & Datum Geologist(s) R, Sen+3	Sampler Hammer	Drop
Drilling Equi	ipment	 			Method /	Elevation & Datum	Completion Depth	Rock Depth
Bit Size(s)	co pro	250			Core Barrel(s)	Geologist(s)	<u> </u>	
DEPTH		SAMPL	ES		T.	N. > 6473		
(ft below	Sample	Recovery	FID/ PID	Blow	SOIL DES	SCRIPTION	RE	EMARKS
grade)	Number LOCATION	(teet)	(ppm)	Counts	SURFACE DESCRIPTION:			
0 -					6105	L doub Ci o	a co an id	and the
	\	4.0	0.0	NM	Send Send	, 50me 4.ne	thro	eghout
1 .			6.0		Berkgreun, silt Send Raddish bown Send, meist Greyish brewn,	s; It and fine		
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5788 Widewaters Parkway, Dewitt, New York 13214

Boring Number 5V-6

FRM

BORING LOG

Project Name					Project Number	Date & Time Started:	17/10/107	
ري Drilling Com	ei P				0070448	Date & Time Completed:	141010+ 12	:05
					Project Number OOTO 448 Foreman Paul Willcy Method Core Barrel(s)	Sampler(s)	Sampler Hammer	Drop
Tr Drilling Equi	nment				Method	Elevation & Datum	Completion Depth	Rock Depth
5	66 G C	ح يار			Direct Push	_	4'	
Drilling Equi	1-				Core Barrel(s)	Geologist(s)		
						R. Sents		
DEPTH		SAMPI	LES		}			
			FID/		SOIL DES	CRIPTION	EMARKS	
(ft below grade)	Sample Number	Recovery (teet)	PID (ppm)	Blow Counts				
	LOCATION	:		!	SURFACE DESCRIPTION:	***************************************		
					Gress			
<u> </u>					Dak brown sil	+ and fine		
	\	3.6	0.6	NM	send, moist	-		
				1	Oress Perk brown sil Send, maist Grayish brown, Fine send, m	silt som	e	^
1					Fine send, m	ist	"he	nd''
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	$\vdash +$		0.0					
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Attachment B Laboratory Analytical Report

Report Date: 09-Jan-08 16:33

Attn: Jon Fox



Final Report Re-Issued Report Revised Report

Laboratory Report

Environmental Resources Management 5788 Widewaters Pkwy Dewitt, NY 13214

Project: Greif - Tunawanda, NY

Project 0070448

Laboratory ID	Client Sample ID	Container	<u>Matrix</u>	Date Sampled	Date Received
SA72249-01	Greif-IA-07	Summa canister	Air	12-Dec-07 08:48	13-Dec-07 10:48
SA72249-02	Greif-SSV-07	Summa canister	Air	12-Dec-07 09:38	13-Dec-07 10:48
SA72249-03	Greif-IA-08	Summa canister	Air	12-Dec-07 10:13	13-Dec-07 10:48
SA72249-04	Greif-SSV-08	Summa canister	Air	12-Dec-07 08:50	13-Dec-07 10:48
SA72249-05	Greif-IA-09	Summa canister	Air	12-Dec-07 08:53	13-Dec-07 10:48
SA72249-06	Greif-SSV-09	Summa canister	Air	12-Dec-07 08:53	13-Dec-07 10:48
SA72249-07	Greif-IA-10	Summa canister	Air	12-Dec-07 08:58	13-Dec-07 10:48
SA72249-08	Greif-SSV-10	Summa canister	Air	12-Dec-07 08:58	13-Dec-07 10:48
SA72249-09	Greif-DUP-2	Summa canister	Air	12-Dec-07 00:00	13-Dec-07 10:48
SA72249-10	Greif-DUP-1	Summa canister	Air	12-Dec-07 00:00	13-Dec-07 10:48
SA72249-11	Greif-SV-05	Summa canister	Air	12-Dec-07 10:55	13-Dec-07 10:48
SA72249-12	Greif-SV-06	Summa canister	Air	12-Dec-07 11:05	13-Dec-07 10:48
SA72249-13	Greif-OA-01	Summa canister	Air	12-Dec-07 11:00	13-Dec-07 10:48
SA72249-14	Greif-SV-01	Summa canister	Air	12-Dec-07 13:40	13-Dec-07 10:48
SA72249-15	Greif-SV-02	Summa canister	Air	12-Dec-07 13:50	13-Dec-07 10:48
SA72249-16	Greif-SV-03	Summa canister	Air	12-Dec-07 14:00	13-Dec-07 10:48
SA72249-17	Greif-SV-04	Summa canister	Air	12-Dec-07 14:15	13-Dec-07 10:48
SA72249-18	Greif-DUP-3	Summa canister	Air	12-Dec-07 00:00	13-Dec-07 10:48

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Please note that this report contains 39 pages of analytical data plus Chain of Custody document(s).

This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Massachusetts Certification # M-MA138/MA1110

Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538/2972

New Jersey # MA011/MA012 New York # 11393/11840

Rhode Island # 98

USDA # S-51435 Vermont # VT-11393 enelac.

Authorized by:

Hanibal C. Tayeh, Ph.D. President/Laboratory Director

Technical Reviewer's Initial:



Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The samples contained in this work order were analyzed by EPA TO-15. The client requested reporting levesl requiring the data to be analyzed and processed using SIM technique. This was not originally noted when the order for equipment was sent, therefore the cans were were not cleaned down to 0.2 ppbv levels.

The client requested that SIM still be run and the laboratory was able to do this for samples SA72249-04, -13 and -16 to a final reporting level of 0.15 ppbv.

Samples SA72249-02, -03, -05, -06, -08, -09, -11, -12 and -14 could not be analyzed for SIM due to high concentrations of target and/or non-target compounds present in the samples. These are qualifed appropriately.

Samples SA72249-01, -07, -10, -15 and -17 could not be analyzed for SIM due to the low pressure of the cans and have final reporting levels of 0.5 ppbv.

Matrix Air Collection Date/Time 12-Dec-07 08:48

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"	"	"
67-64-1	Acetone	5.01	0.500	11.9	1.2		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-09-2	Methylene chloride	BRL	0.500	BRL	1.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.5		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		u u	"	"	"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		"	"	"	"
71-55-6	1,1,1-Trichloroethane	2.34	0.500	12.8	2.7		"	"	"	"
71-43-2	Benzene	BRL	0.500	BRL	1.6		u u	"	"	"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		"	"	"	"
79-01-6	Trichloroethene	1.09	0.500	5.9	2.7		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		u u	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		"	"	"	"
108-88-3	Toluene	1.76	0.500	6.6	1.9		"	"	"	"
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		"	"	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		"	"	"	"
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		"	"	"	"
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	87	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 09:38

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 19-Dec-07		GS				
75-01-4	Vinyl chloride	BRL	25.4	BRL	64.9		EPA TO-15	20-Dec-07	7121453	WB
75-00-3	Chloroethane	BRL	25.4	BRL	67.0		"	"	"	
67-64-1	Acetone	89.9	25.4	214.0	60.4		"	"	"	"
75-35-4	1,1-Dichloroethene	297	25.4	1180.0	101.0		"	"	"	"
75-09-2	Methylene chloride	BRL	25.4	BRL	88.2		"	"	u u	"
156-60-5	trans-1,2-Dichloroethene	BRL	25.4	BRL	101.0		"	"	"	"
75-34-3	1,1-Dichloroethane	199	25.4	806.0	103.0		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	25.4	BRL	74.9		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	62.0	25.4	246.0	101.0		"	"	u u	"
67-66-3	Chloroform	BRL	25.4	BRL	124.0		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	25.4	BRL	103.0		"	"	"	"
71-55-6	1,1,1-Trichloroethane	6110	25.4	33300.0	139.0	E	"	"	"	"
71-43-2	Benzene	BRL	25.4	BRL	81.0		"	w.	u u	"
56-23-5	Carbon tetrachloride	BRL	25.4	BRL	160.0		"	w.	u u	"
79-01-6	Trichloroethene	1850	25.4	9940.0	137.0		"	w.	u u	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	25.4	BRL	104.0		"	"	"	
79-00-5	1,1,2-Trichloroethane	BRL	25.4	BRL	139.0		"	w.	u u	"
108-88-3	Toluene	BRL	25.4	BRL	95.6		"	w.	u u	"
127-18-4	Tetrachloroethene	BRL	25.4	BRL	172.0		"	w.	u u	"
100-41-4	Ethylbenzene	BRL	25.4	BRL	110.0		"	"	"	
1330-20-7	m,p-Xylene	BRL	50.8	BRL	220.0		"	"	"	
95-47-6	o-Xylene	BRL	25.4	BRL	110.0		u u	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	BRL	25.4	BRL	174.0		u u	"	"	
95-63-6	1,2,4-Trimethylbenzene	BRL	25.4	BRL	125.0		II .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	91	75	-125 %			"	"	"	"
Re-analy	sis of EPA TO-15									
71-55-6	1,1,1-Trichloroethane	4380	127	23900.0	693.0		EPA TO-15	18-Dec-07	7121342	WB
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	93	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 10:13

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	ed 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	5.00	BRL	12.8		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	5.00	BRL	13.2		"	"	"	"
67-64-1	Acetone	5.90	5.00	14.0	11.9		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-09-2	Methylene chloride	BRL	5.00	BRL	17.4		··	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	5.00	BRL	20.2		u u	"	"	"
78-93-3	2-Butanone (MEK)	BRL	5.00	BRL	14.7		u u	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
67-66-3	Chloroform	BRL	5.00	BRL	24.3		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	5.00	BRL	20.2		u u	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	5.00	BRL	27.3		"	"	"	"
71-43-2	Benzene	BRL	5.00	BRL	16.0		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	5.00	BRL	31.5		"	"	"	"
79-01-6	Trichloroethene	BRL	5.00	BRL	26.9		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00	BRL	20.5		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	5.00	BRL	27.3		"	"	"	"
108-88-3	Toluene	BRL	5.00	BRL	18.8		"	"	"	"
127-18-4	Tetrachloroethene	BRL	5.00	BRL	33.9		"	"	"	"
100-41-4	Ethylbenzene	BRL	5.00	BRL	21.7		u u	"	"	"
1330-20-7	m,p-Xylene	BRL	10.0	BRL	43.4		"	"	"	"
95-47-6	o-Xylene	BRL	5.00	BRL	21.7		u u	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00	BRL	34.3		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00	BRL	24.6		II .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	90	75	i-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 08:50

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 20-Dec-07						
75-01-4	Vinyl chloride	BRL	0.150	BRL	0.4		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	0.150	BRL	0.4		"	"	"	"
67-64-1	Acetone	6.43	0.150	15.3	0.4		"	"	"	"
75-35-4	1,1-Dichloroethene	4.29	0.150	17.0	0.6		"	"	"	"
75-09-2	Methylene chloride	0.720	0.150	2.5	0.5		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
75-34-3	1,1-Dichloroethane	0.970	0.150	3.9	0.6		"	"	"	"
78-93-3	2-Butanone (MEK)	0.750	0.150	2.2	0.4		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	0.155	0.150	0.6	0.6		"	"	"	"
67-66-3	Chloroform	BRL	0.150	BRL	0.7		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.150	BRL	0.6		"	"	"	"
71-55-6	1,1,1-Trichloroethane	1.13	0.150	6.2	0.8		"	u u	"	"
71-43-2	Benzene	0.339	0.150	1.1	0.5		"	"	"	"
56-23-5	Carbon tetrachloride	0.219	0.150	1.4	0.9		"	u u	"	"
79-01-6	Trichloroethene	0.650	0.150	3.5	0.8		"	u u	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.150	BRL	0.6		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.150	BRL	8.0		"	"	"	"
108-88-3	Toluene	1.37	0.150	5.2	0.6		"	u u	"	"
127-18-4	Tetrachloroethene	BRL	0.150	BRL	1.0		"	u u	"	"
100-41-4	Ethylbenzene	BRL	0.150	BRL	0.7		"	"	"	"
1330-20-7	m,p-Xylene	0.330	0.150	1.4	0.7		"	"	"	"
95-47-6	o-Xylene	BRL	0.150	BRL	0.7		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.150	BRL	1.0		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.150	BRL	0.7		u u	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	88	75	-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 08:53

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	5.00	BRL	12.8		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	5.00	BRL	13.2		"	"	"	"
67-64-1	Acetone	8.60	5.00	20.4	11.9		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-09-2	Methylene chloride	BRL	5.00	BRL	17.4		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	5.00	BRL	20.2		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	5.00	BRL	14.7		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
67-66-3	Chloroform	BRL	5.00	BRL	24.3		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	5.00	BRL	20.2		"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	5.00	BRL	27.3		"	"	"	"
71-43-2	Benzene	BRL	5.00	BRL	16.0		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	5.00	BRL	31.5		"	"	"	"
79-01-6	Trichloroethene	BRL	5.00	BRL	26.9		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00	BRL	20.5		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	5.00	BRL	27.3		"	"	"	"
108-88-3	Toluene	BRL	5.00	BRL	18.8		"	"	"	"
127-18-4	Tetrachloroethene	BRL	5.00	BRL	33.9		"	"	"	"
100-41-4	Ethylbenzene	BRL	5.00	BRL	21.7		"	"	"	"
1330-20-7	m,p-Xylene	BRL	10.0	BRL	43.4		"	"	"	"
95-47-6	o-Xylene	BRL	5.00	BRL	21.7		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00	BRL	34.3		"	n n	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00	BRL	24.6		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	90	75	i-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 08:53

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	5.00	BRL	12.8		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	5.00	BRL	13.2		"	"	"	"
67-64-1	Acetone	6.30	5.00	15.0	11.9		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-09-2	Methylene chloride	BRL	5.00	BRL	17.4		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	5.00	BRL	20.2		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	5.00	BRL	14.7		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	5.00	BRL	19.8		"	"	"	"
67-66-3	Chloroform	BRL	5.00	BRL	24.3		··	"	"	"
107-06-2	1,2-Dichloroethane	BRL	5.00	BRL	20.2		··	"	"	"
71-55-6	1,1,1-Trichloroethane	146	5.00	797.0	27.3		"	"	"	"
71-43-2	Benzene	BRL	5.00	BRL	16.0		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	5.00	BRL	31.5		"	"	"	"
79-01-6	Trichloroethene	15.3	5.00	82.2	26.9		··	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	5.00	BRL	20.5		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	5.00	BRL	27.3		"	"	"	"
108-88-3	Toluene	BRL	5.00	BRL	18.8		··	"	"	"
127-18-4	Tetrachloroethene	BRL	5.00	BRL	33.9		··	"	"	"
100-41-4	Ethylbenzene	BRL	5.00	BRL	21.7		"	"	"	"
1330-20-7	m,p-Xylene	BRL	10.0	BRL	43.4		"	"	"	"
95-47-6	o-Xylene	BRL	5.00	BRL	21.7		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	5.00	BRL	34.3		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	5.00	BRL	24.6		II .	u u	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	91	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 08:58

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 24-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	24-Dec-07	7121749	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"	"	"
67-64-1	Acetone	BRL	0.500	BRL	1.2		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-09-2	Methylene chloride	1.04	0.500	3.6	1.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.5		··	"	"	
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		··	"	"	
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		··	"	"	
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.7		"	"		"
71-43-2	Benzene	BRL	0.500	BRL	1.6		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		··	"	"	
79-01-6	Trichloroethene	BRL	0.500	BRL	2.7		"	"		"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		··	"	"	
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		··	"	"	
108-88-3	Toluene	1.83	0.500	6.9	1.9		"	"		"
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		u u	"	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		··	"	"	
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		··	"	"	
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		"	"		"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		II .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	87	75	-125 %			"	"	"	"

Sample Identification Greif-SSV-10 SA72249-08

Client Project # 0070448

Matrix Air Collection Date/Time 12-Dec-07 08:58

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	10.0	BRL	25.6		EPA TO-15	20-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	10.0	BRL	26.4		u u	"	"	"
67-64-1	Acetone	BRL	10.0	BRL	23.8		"	u u	"	"
75-35-4	1,1-Dichloroethene	BRL	10.0	BRL	39.7		"	u u	"	"
75-09-2	Methylene chloride	BRL	10.0	BRL	34.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	10.0	BRL	39.7		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	10.0	BRL	40.5		"	u u	"	"
78-93-3	2-Butanone (MEK)	BRL	10.0	BRL	29.5		"	u u	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	10.0	BRL	39.7		"	"	"	"
67-66-3	Chloroform	BRL	10.0	BRL	48.7		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	10.0	BRL	40.5		"	u u	"	"
71-55-6	1,1,1-Trichloroethane	BRL	10.0	BRL	54.6		"	u u	"	"
71-43-2	Benzene	BRL	10.0	BRL	31.9		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	10.0	BRL	62.9		"	u u	"	"
79-01-6	Trichloroethene	41.8	10.0	225.0	53.7		"	u u	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	10.0	BRL	41.0		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	10.0	BRL	54.6		u u	"	"	"
108-88-3	Toluene	BRL	10.0	BRL	37.6		u u	"	"	"
127-18-4	Tetrachloroethene	BRL	10.0	BRL	67.8		"	u u	"	"
100-41-4	Ethylbenzene	BRL	10.0	BRL	43.4		"	"	"	"
1330-20-7	m,p-Xylene	BRL	20.0	BRL	86.7		"	"	"	"
95-47-6	o-Xylene	BRL	10.0	BRL	43.4		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	10.0	BRL	68.7		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	10.0	BRL	49.2		II .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	89	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 00:00

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Qualit	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 19-Dec-07		GS				
75-01-4	Vinyl chloride	BRL	59.5	BRL	152.0		EPA TO-15	20-Dec-07	7121453	WB
75-00-3	Chloroethane	BRL	59.5	BRL	157.0		"	"	•	"
67-64-1	Acetone	295	59.5	701.0	141.0		"	"	•	"
75-35-4	1,1-Dichloroethene	1670	59.5	6630.0	236.0		"	"	•	"
75-09-2	Methylene chloride	BRL	59.5	BRL	207.0		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	59.5	BRL	236.0		"	"	•	"
75-34-3	1,1-Dichloroethane	727	59.5	2940.0	241.0		"	"	•	"
78-93-3	2-Butanone (MEK)	BRL	59.5	BRL	175.0		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	131	59.5	519.0	236.0		"	"	•	"
67-66-3	Chloroform	BRL	59.5	BRL	290.0		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	59.5	BRL	241.0		"	"	"	"
71-55-6	1,1,1-Trichloroethane	2350	59.5	12800.0	325.0		"	"	"	"
71-43-2	Benzene	BRL	59.5	BRL	190.0		"	"	•	"
56-23-5	Carbon tetrachloride	BRL	59.5	BRL	374.0		"	"	"	"
79-01-6	Trichloroethene	6050	59.5	32500.0	320.0		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	59.5	BRL	244.0		"	"	•	"
79-00-5	1,1,2-Trichloroethane	BRL	59.5	BRL	325.0		"	"	"	"
108-88-3	Toluene	83.3	59.5	313.0	224.0		"	"	"	"
127-18-4	Tetrachloroethene	BRL	59.5	BRL	403.0		"	"	"	"
100-41-4	Ethylbenzene	BRL	59.5	BRL	258.0		"	"	"	"
1330-20-7	m,p-Xylene	BRL	119	BRL	516.0		"	"	"	"
95-47-6	o-Xylene	BRL	59.5	BRL	258.0		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	59.5	BRL	409.0		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	59.5	BRL	293.0		n .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	93	75	-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 00:00

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 20-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	21-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"	"	"
67-64-1	Acetone	6.34	0.500	15.1	1.2		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-09-2	Methylene chloride	BRL	0.500	BRL	1.7		··	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		u u	"	"	"
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.5		u u	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		u u	"	"	"
71-55-6	1,1,1-Trichloroethane	6.60	0.500	36.0	2.7		"	"	"	"
71-43-2	Benzene	0.720	0.500	2.3	1.6		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		"	"	"	"
79-01-6	Trichloroethene	2.94	0.500	15.8	2.7		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		"	"	"	"
108-88-3	Toluene	2.51	0.500	9.4	1.9		"	"	"	"
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		"	"	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		u u	"	"	"
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		"	"	"	"
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		u u	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		II .	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	90	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 10:55

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses				_	_				
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	1.00	BRL	2.6		EPA TO-15	21-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	1.00	BRL	2.6		"	"	"	"
67-64-1	Acetone	15.9	1.00	37.8	2.4		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
75-09-2	Methylene chloride	BRL	1.00	BRL	3.5		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	1.00	BRL	4.1		"	"	"	"
78-93-3	2-Butanone (MEK)	1.66	1.00	4.9	3.0		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
67-66-3	Chloroform	BRL	1.00	BRL	4.9		··	"	"	"
107-06-2	1,2-Dichloroethane	BRL	1.00	BRL	4.1		"	"	"	"
71-55-6	1,1,1-Trichloroethane	4.96	1.00	27.1	5.5		"	"	"	"
71-43-2	Benzene	BRL	1.00	BRL	3.2		··	"	"	"
56-23-5	Carbon tetrachloride	BRL	1.00	BRL	6.3		"	"	"	"
79-01-6	Trichloroethene	3.80	1.00	20.4	5.4		u u	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	1.00	BRL	4.1		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	1.00	BRL	5.5		"	"	"	"
108-88-3	Toluene	1.68	1.00	6.3	3.8		"	"	"	"
127-18-4	Tetrachloroethene	BRL	1.00	BRL	6.8		"	"	"	"
100-41-4	Ethylbenzene	BRL	1.00	BRL	4.3		"	"	"	"
1330-20-7	m,p-Xylene	BRL	2.00	BRL	8.7		u u	"	"	"
95-47-6	o-Xylene	BRL	1.00	BRL	4.3		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00	BRL	6.9		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00	BRL	4.9		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	88	75	i-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 11:05

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	1.00	BRL	2.6		EPA TO-15	21-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	1.00	BRL	2.6		"	"	"	"
67-64-1	Acetone	26.6	1.00	63.2	2.4		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
75-09-2	Methylene chloride	BRL	1.00	BRL	3.5		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
75-34-3	1,1-Dichloroethane	1.12	1.00	4.5	4.1		"	"	"	"
78-93-3	2-Butanone (MEK)	1.50	1.00	4.4	3.0		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	1.00	BRL	4.0		"	"	"	"
67-66-3	Chloroform	BRL	1.00	BRL	4.9		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	1.00	BRL	4.1		"	"	"	"
71-55-6	1,1,1-Trichloroethane	38.8	1.00	212.0	5.5		"	"	"	"
71-43-2	Benzene	BRL	1.00	BRL	3.2		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	1.00	BRL	6.3		··	"	"	"
79-01-6	Trichloroethene	2.50	1.00	13.4	5.4		··	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	1.00	BRL	4.1		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	1.00	BRL	5.5		"	"	"	"
108-88-3	Toluene	1.82	1.00	6.9	3.8		··	"	"	"
127-18-4	Tetrachloroethene	BRL	1.00	BRL	6.8		··	"	"	"
100-41-4	Ethylbenzene	BRL	1.00	BRL	4.3		"	"	"	"
1330-20-7	m,p-Xylene	BRL	2.00	BRL	8.7		"	"	"	"
95-47-6	o-Xylene	BRL	1.00	BRL	4.3		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	1.00	BRL	6.9		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	1.00	BRL	4.9		II .	· ·	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	92	75	i-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 11:00

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07						
75-01-4	Vinyl chloride	BRL	0.150	BRL	0.4		EPA TO-15	21-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	0.150	BRL	0.4		"	"	"	"
67-64-1	Acetone	2.64	0.150	6.3	0.4		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
75-09-2	Methylene chloride	0.273	0.150	1.0	0.5		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.150	BRL	0.6		"	"	"	"
78-93-3	2-Butanone (MEK)	0.400	0.150	1.2	0.4		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
67-66-3	Chloroform	BRL	0.150	BRL	0.7		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.150	BRL	0.6		"	"	"	"
71-55-6	1,1,1-Trichloroethane	0.530	0.150	2.9	8.0		"	"	"	"
71-43-2	Benzene	0.310	0.150	1.0	0.5		"	"	"	"
56-23-5	Carbon tetrachloride	0.220	0.150	1.4	0.9		"	"	"	"
79-01-6	Trichloroethene	0.295	0.150	1.6	8.0		··	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.150	BRL	0.6		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.150	BRL	8.0		"	"	"	"
108-88-3	Toluene	1.35	0.150	5.1	0.6		··	"	"	"
127-18-4	Tetrachloroethene	0.167	0.150	1.1	1.0		··	"	"	"
100-41-4	Ethylbenzene	0.196	0.150	0.9	0.7		"	"	"	"
1330-20-7	m,p-Xylene	0.370	0.150	1.6	0.7		"	"	"	"
95-47-6	o-Xylene	0.229	0.150	1.0	0.7		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.150	BRL	1.0		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	0.228	0.150	1.1	0.7		II .	· ·	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	90	75	-125 %			u u	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 13:40

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 20-Dec-07		R05				
75-01-4	Vinyl chloride	BRL	2.50	BRL	6.4		EPA TO-15	21-Dec-07	7121541	WB
75-00-3	Chloroethane	BRL	2.50	BRL	6.6		"	"	"	"
67-64-1	Acetone	BRL	2.50	BRL	5.9		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	2.50	BRL	9.9		"	"	"	"
75-09-2	Methylene chloride	BRL	2.50	BRL	8.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	2.50	BRL	9.9		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	2.50	BRL	10.1		"	"	"	"
78-93-3	2-Butanone (MEK)	BRL	2.50	BRL	7.4		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	2.50	BRL	9.9		"	"	"	"
67-66-3	Chloroform	BRL	2.50	BRL	12.2		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	2.50	BRL	10.1		"	"	"	"
71-55-6	1,1,1-Trichloroethane	5.60	2.50	30.6	13.6		"	"	"	"
71-43-2	Benzene	BRL	2.50	BRL	8.0		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	2.50	BRL	15.7		··	"	"	"
79-01-6	Trichloroethene	2.60	2.50	14.0	13.4		··	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	2.50	BRL	10.2		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	2.50	BRL	13.6		"	"	"	"
108-88-3	Toluene	BRL	2.50	BRL	9.4		··	"	"	"
127-18-4	Tetrachloroethene	BRL	2.50	BRL	17.0		··	"	"	"
100-41-4	Ethylbenzene	BRL	2.50	BRL	10.8		"	"	"	"
1330-20-7	m,p-Xylene	BRL	5.00	BRL	21.7		"	"	"	"
95-47-6	o-Xylene	BRL	2.50	BRL	10.8		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	2.50	BRL	17.2		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	2.50	BRL	12.3		II .	· ·	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	88	75	i-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 13:50

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 21-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	21-Dec-07	7121849	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"		"
67-64-1	Acetone	BRL	0.500	BRL	1.2		u u	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"		"
75-09-2	Methylene chloride	BRL	0.500	BRL	1.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"		"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		u u	"	"	"
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.5		u u	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"		"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		"	"		"
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		u u	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.7		"	"	"	"
71-43-2	Benzene	BRL	0.500	BRL	1.6		"	"		"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		"	"		"
79-01-6	Trichloroethene	BRL	0.500	BRL	2.7		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		"	"		"
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		"	"		"
108-88-3	Toluene	BRL	0.500	BRL	1.9		"	"	"	"
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		"	"	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		u u	"	"	"
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		"	"		"
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	84	75	-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 14:00

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	ppbv	Prepare	d 21-Dec-07						
75-01-4	Vinyl chloride	BRL	0.150	BRL	0.4		EPA TO-15	21-Dec-07	7121849	WB
75-00-3	Chloroethane	BRL	0.150	BRL	0.4		"	"	"	"
67-64-1	Acetone	1.40	0.150	3.3	0.4		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
75-09-2	Methylene chloride	0.950	0.150	3.3	0.5		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.150	BRL	0.6		"	"	"	"
78-93-3	2-Butanone (MEK)	0.805	0.150	2.4	0.4		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.150	BRL	0.6		"	"	"	"
67-66-3	Chloroform	BRL	0.150	BRL	0.7		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.150	BRL	0.6		"	"	"	"
71-55-6	1,1,1-Trichloroethane	0.155	0.150	0.9	0.8		"	"	"	"
71-43-2	Benzene	0.680	0.150	2.2	0.5		"	"	"	"
56-23-5	Carbon tetrachloride	0.193	0.150	1.2	0.9		"	"	"	"
79-01-6	Trichloroethene	0.218	0.150	1.2	0.8		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.150	BRL	0.6		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.150	BRL	0.8		"	"	"	"
108-88-3	Toluene	0.450	0.150	1.7	0.6		"	"	"	"
127-18-4	Tetrachloroethene	BRL	0.150	BRL	1.0		"	"	"	"
100-41-4	Ethylbenzene	0.185	0.150	0.8	0.7		"	"	"	"
1330-20-7	m,p-Xylene	0.486	0.150	2.1	0.7		"	"	"	"
95-47-6	o-Xylene	0.191	0.150	0.8	0.7		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.150	BRL	1.0		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	0.258	0.150	1.3	0.7		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	87	75	-125 %			"	"	"	

Matrix Air Collection Date/Time 12-Dec-07 14:15

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 21-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	21-Dec-07	7121849	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"	"	"
67-64-1	Acetone	11.6	0.500	27.6	1.2		"	"	"	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-09-2	Methylene chloride	0.510	0.500	1.8	1.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		"	"	"	"
78-93-3	2-Butanone (MEK)	0.830	0.500	2.5	1.5		"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		"	"	"	"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		"	"	"	"
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		"	"	"	"
71-55-6	1,1,1-Trichloroethane	6.43	0.500	35.1	2.7		"	"	"	"
71-43-2	Benzene	BRL	0.500	BRL	1.6		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		"	"	"	"
79-01-6	Trichloroethene	2.47	0.500	13.3	2.7		"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		"	"	"	"
108-88-3	Toluene	1.56	0.500	5.9	1.9		"	"	"	"
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		"	"	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		"	"	"	"
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		"	"	"	"
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	88	75	-125 %			"	"	"	"

Matrix Air Collection Date/Time 12-Dec-07 00:00

CAS No.	Analyte(s)	Result Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Batch	Analyst
Air Quali	ty Analyses									
EPA TO-	<u>15</u>	<u>ppbv</u>	Prepare	d 21-Dec-07						
75-01-4	Vinyl chloride	BRL	0.500	BRL	1.3		EPA TO-15	21-Dec-07	7121849	WB
75-00-3	Chloroethane	BRL	0.500	BRL	1.3		"	"	•	"
67-64-1	Acetone	BRL	0.500	BRL	1.2		"	"	•	"
75-35-4	1,1-Dichloroethene	BRL	0.500	BRL	2.0		"	"	•	"
75-09-2	Methylene chloride	BRL	0.500	BRL	1.7		"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL	0.500	BRL	2.0		··	"	"	"
75-34-3	1,1-Dichloroethane	BRL	0.500	BRL	2.0		"	"	•	"
78-93-3	2-Butanone (MEK)	BRL	0.500	BRL	1.5		"	"	•	
156-59-2	cis-1,2-Dichloroethene	BRL	0.500	BRL	2.0		··	"	"	"
67-66-3	Chloroform	BRL	0.500	BRL	2.4		"	"	•	
107-06-2	1,2-Dichloroethane	BRL	0.500	BRL	2.0		"	"	•	
71-55-6	1,1,1-Trichloroethane	BRL	0.500	BRL	2.7		"	"	•	"
71-43-2	Benzene	BRL	0.500	BRL	1.6		"	"	"	"
56-23-5	Carbon tetrachloride	BRL	0.500	BRL	3.2		··	"	"	"
79-01-6	Trichloroethene	BRL	0.500	BRL	2.7		u u	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL	0.500	BRL	2.1		··	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL	0.500	BRL	2.7		"	"	•	
108-88-3	Toluene	BRL	0.500	BRL	1.9		"	"	•	
127-18-4	Tetrachloroethene	BRL	0.500	BRL	3.4		"	u u	"	"
100-41-4	Ethylbenzene	BRL	0.500	BRL	2.2		"	"	•	"
1330-20-7	m,p-Xylene	BRL	1.00	BRL	4.3		u u	"	"	"
95-47-6	o-Xylene	BRL	0.500	BRL	2.2		"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL	0.500	BRL	3.4		"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL	0.500	BRL	2.5		"	"	"	"
Surrogate	recoveries:									
460-00-4	4-Bromofluorobenzene	86	75-	-125 %			"	"	"	"

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121342 - General Air Prep										
Blank (7121342-BLK1)				Prepared &	Analyzed:	18-Dec-07				
Propene	BRL	0.500	ppbv							
Dichlorodifluoromethane (Freon12)	BRL	0.500	ppbv							
Chloromethane	BRL	0.500	ppbv							
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500	ppbv							
Vinyl chloride	BRL	0.500	ppbv							
1,3-Butadiene	BRL	0.500	ppbv							
Bromomethane	BRL	0.500	ppbv							
Chloroethane	BRL	0.500	ppbv							
Acetone	BRL	0.500	ppbv							
Trichlorofluoromethane (Freon 11)	BRL	0.500	ppbv							
Ethanol	BRL	0.500	ppbv							
1,1-Dichloroethene	BRL	0.500	ppbv							
Methylene chloride	BRL	0.500	ppbv							
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500	ppbv							
Carbon disulfide	BRL	0.500	ppbv							
trans-1,2-Dichloroethene	BRL	0.500	ppbv							
1,1-Dichloroethane	BRL	0.500	ppbv							
Methyl tert-butyl ether	BRL	0.500]	ppbv							
Isopropyl alcohol	BRL	0.500	ppbv							
2-Butanone (MEK)	BRL	0.500	ppbv							
cis-1,2-Dichloroethene	BRL	0.500	ppbv							
Hexane	BRL	0.500	ppbv							
Ethyl acetate	BRL	0.500	ppbv							
Chloroform	BRL	0.500	ppbv							
Tetrahydrofuran	BRL	0.500	ppbv							
1,2-Dichloroethane	BRL	0.500	ppbv							
1,1,1-Trichloroethane	BRL	0.500	ppbv							
Benzene	BRL	0.500	ppbv							
Carbon tetrachloride	BRL	0.500	ppbv							
Cyclohexane	BRL	0.500	ppbv							
1,2-Dichloropropane	BRL	0.500	ppbv							
Bromodichloromethane	BRL	0.500	ppbv							
Trichloroethene	BRL	0.500								
n-Heptane	BRL	0.500	ppbv							
4-Methyl-2-pentanone (MIBK)	BRL	0.500								
cis-1,3-Dichloropropene	BRL	0.500 1								
trans-1,3-Dichloropropene	BRL	0.500 1								
1,1,2-Trichloroethane	BRL	0.500								
Toluene	BRL	0.500								
2-Hexanone (MBK)	BRL	0.500	ppbv							
Dibromochloromethane	BRL	0.500								
1,2-Dibromoethane (EDB)	BRL	0.500								
Tetrachloroethene	BRL	0.500								
Chlorobenzene	BRL	0.500								
Ethylbenzene	BRL	0.500								
m,p-Xylene	BRL	1.00								
Bromoform	BRL	0.500								
Styrene	BRL	0.500								
o-Xylene	BRL	0.500								
1,1,2,2-Tetrachloroethane	BRL	0.500								
1,3,5-Trimethylbenzene	BRL	0.500								
4-Ethyltoluene	BRL	0.500								
1,2,4-Trimethylbenzene	BRL	0.500								
1,3-Dichlorobenzene	BRL	0.500	ppbv							

Analyte(s)	Result	*RDL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121342 - General Air Prep									
Blank (7121342-BLK1)			Prepared 8	Analyzed:	18-Dec-07				
Benzyl chloride	BRL	0.500 ppbv							
1,4-Dichlorobenzene	BRL	0.500 ppbv							
1,2-Dichlorobenzene	BRL	0.500 ppbv							
1,2,4-Trichlorobenzene	BRL	0.500 ppbv							
Hexachlorobutadiene	BRL	0.500 ppbv							
Surrogate: 4-Bromofluorobenzene	9.26	ppbv	10.0		93	75-125			
LCS (7121342-BS1)			Prepared &	k Analyzed:	18-Dec-07				
Propene	8.12	ppbv	10.0		81	70-130			
Dichlorodifluoromethane (Freon12)	7.44	ppbv	10.0		74	70-130			
Chloromethane	11.4	ppbv	10.0		114	70-130			
1,2-Dichlorotetrafluoroethane (Freon 114)	9.78	ppbv	10.0		98	70-130			
Vinyl chloride	9.25	ppbv	10.0		92	70-130			
1,3-Butadiene	9.36	ppbv	10.0		94	70-130			
Bromomethane	9.57	ppbv	10.0		96	70-130			
Chloroethane	9.37	ppbv	10.0		94	70-130			
Acetone	8.60	ppbv	10.0		86	70-130			
Trichlorofluoromethane (Freon 11)	9.14	ppbv	10.0		91	70-130			
Ethanol	9.05	ppbv	10.0		90	55.1-230			
1,1-Dichloroethene	8.85	ppbv	10.0		88	70-130			
Methylene chloride	9.10	ppbv	10.0		91	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	9.20	ppbv	10.0		92	70-130			
Carbon disulfide	8.92	ppbv	10.0		89	70-130			
rans-1,2-Dichloroethene	9.58	ppbv	10.0		96	70-130			
1,1-Dichloroethane	9.49	ppbv	10.0		95	70-130			
Methyl tert-butyl ether	8.72	ppbv	10.0		87	70-130			
sopropyl alcohol	9.09	ppbv	10.0		91	70-130			
2-Butanone (MEK)	8.41	ppbv	10.0		84	70-130			
cis-1,2-Dichloroethene	8.88	ppbv	10.0		89	70-130			
Hexane	9.93	ppbv	10.0		99	70-130			
Ethyl acetate	9.57	ppbv	10.0		96	70-130			
Chloroform	8.88	ppbv	10.0		89	70-130			
Γetrahydrofuran	8.92	ppbv	10.0		89	70-130			
1,2-Dichloroethane	8.56	ppbv	10.0		86	70-130			
1,1,1-Trichloroethane	8.82	ppbv	10.0		88	70-130			
Benzene	9.90	ppbv	10.0		99	70-130			
Carbon tetrachloride	8.37	ppbv	10.0		84	70-130			
Cyclohexane	8.85	ppbv	10.0		88	70-130			
1,2-Dichloropropane	9.14	ppbv	10.0		91	70-130			
Bromodichloromethane	9.25	ppbv	10.0		92	70-130			
Trichloroethene	9.99	ppbv	10.0		100	70-130			
n-Heptane	9.71	ppbv	10.0		97	70-130			
4-Methyl-2-pentanone (MIBK)	9.35	ppbv	10.0		94	70-130			
cis-1,3-Dichloropropene	8.34	ppbv	10.0		83	70-130			
trans-1,3-Dichloropropene	8.91	ppbv	10.0		89	70-130			
1,1,2-Trichloroethane	9.41	ppbv	10.0		94	70-130			
Toluene	10.8	ppbv	10.0		108	70-130			
2-Hexanone (MBK)	10.1	ppbv	10.0		101	70-130			
Dibromochloromethane	14.1	ppbv	10.0		141	70-130			QC2
1,2-Dibromoethane (EDB)	9.27	ppbv	10.0		93	70-130			
Tetrachloroethene	9.22	ppbv	10.0		92	70-130			
Chlorobenzene	9.10	ppbv	10.0		91	70-130			
Ethylbenzene	9.39	ppbv	10.0		94	70-130			
m,p-Xylene	19.4	ppbv	20.0		97	70-130			

Analyte(s)	Result	*RDL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121342 - General Air Prep									
LCS (7121342-BS1)			Prepared &	& Analyzed:	18-Dec-07				
Bromoform	8.42	ppbv	10.0		84	70-130			
Styrene	8.69	ppbv	10.0		87	70-130			
o-Xylene	9.71	ppbv	10.0		97	70-130			
1,1,2,2-Tetrachloroethane	10.4	ppbv	10.0		104	70-130			
1,3,5-Trimethylbenzene	9.53	ppbv	10.0		95	70-130			
4-Ethyltoluene	9.31	ppbv	10.0		93	70-130			
1,2,4-Trimethylbenzene	9.05	ppbv	10.0		90	70-130			
1,3-Dichlorobenzene	9.88	ppbv	10.0		99	70-130			
Benzyl chloride	10.2	ppbv	10.0		102	70-130			
1,4-Dichlorobenzene	10.4	ppbv	10.0		104	70-130			
1,2-Dichlorobenzene	11.0	ppbv	10.0		110	70-130			
1,2,4-Trichlorobenzene	7.66	ppbv	10.0		77	70-130			
Hexachlorobutadiene	8.53	ppbv	10.0		85	70-130			
Surrogate: 4-Bromofluorobenzene	9.69	ppbv	10.0		97	75-125			
Duplicate (7121342-DUP1)	Som	rce: SA72345-01	Drangrad &	k Analyzed:	18 Dec 07				
Propene	3.55	0.500 ppbv	1 repared 6	3.43	10-DCC-07		3	30	
Dichlorodifluoromethane (Freon12)	1.30	0.500 ppbv		1.24			5	30	
Chloromethane	0.780	0.500 ppbv		0.730			7	30	
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv		BRL			,	30	
Vinyl chloride	BRL	0.500 ppbv		BRL				30	
1,3-Butadiene	BRL			BRL				30	
Bromomethane	BRL	0.500 ppbv 0.500 ppbv		BRL				30	
Chloroethane	BRL	0.500 ppbv		BRL			0	30	
Acetone	98.2	0.500 ppbv		90.1			9	30	
Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv		BRL			2	30	
Ethanol	72.0	0.500 ppbv		70.9			2	30	
1,1-Dichloroethene	BRL	0.500 ppbv		BRL			_	30	
Methylene chloride	1.18	0.500 ppbv		1.10			7	30	
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv		BRL				30	
Carbon disulfide	0.400	0.500 ppbv		0.370			8	30	J
trans-1,2-Dichloroethene	BRL	0.500 ppbv		BRL				30	
1,1-Dichloroethane	BRL	0.500 ppbv		BRL				30	
Methyl tert-butyl ether	BRL	0.500 ppbv		BRL				30	
Isopropyl alcohol	26.9	0.500 ppbv		27.0			0.3	30	
2-Butanone (MEK)	10.5	0.500 ppbv		9.65			8	30	
cis-1,2-Dichloroethene	BRL	0.500 ppbv		BRL				30	
Hexane	0.510	0.500 ppbv		0.470			8	30	
Ethyl acetate	BRL	0.500 ppbv		BRL				30	
Chloroform	BRL	0.500 ppbv		BRL				30	
Tetrahydrofuran	BRL	0.500 ppbv		BRL				30	
1,2-Dichloroethane	BRL	0.500 ppbv		BRL				30	
1,1,1-Trichloroethane	BRL	0.500 ppbv		BRL				30	
Benzene	0.590	0.500 ppbv		0.540			9	30	
Carbon tetrachloride	BRL	0.500 ppbv		BRL				30	
Cyclohexane	BRL	0.500 ppbv		BRL				30	
1,2-Dichloropropane	BRL	0.500 ppbv		BRL				30	
Bromodichloromethane	BRL	0.500 ppbv		BRL				30	
Trichloroethene	BRL	0.500 ppbv		BRL				30	
n-Heptane	BRL	0.500 ppbv		BRL				30	
4-Methyl-2-pentanone (MIBK)	4.63	0.500 ppbv		4.52			2	30	
cis-1,3-Dichloropropene	BRL	0.500 ppbv		BRL				30	
trans-1,3-Dichloropropene	BRL	0.500 ppbv		BRL				30	
1,1,2-Trichloroethane	BRL	0.500 ppbv		BRL				30	

			Spike	Source		%REC		RPD	
Analyte(s)	Result	*RDL U	nits Level	Result	%REC	Limits	RPD	Limit	Flag
Batch 7121342 - General Air Prep									
Duplicate (7121342-DUP1)	Sour	ce: SA72345-01	Prepared &	& Analyzed:	18-Dec-07	,			
Toluene	1.69	0.500 ppbv		1.60			5	30	
2-Hexanone (MBK)	1.46	0.500 ppbv		1.47			0.7	30	
Dibromochloromethane	BRL	0.500 ppbv		BRL				30	
1,2-Dibromoethane (EDB)	BRL	0.500 ppbv		BRL				30	
Tetrachloroethene	BRL	0.500 ppbv		BRL				30	
Chlorobenzene	BRL	0.500 ppbv		BRL				30	
Ethylbenzene	BRL	0.500 ppbv		BRL				30	
m,p-Xylene	0.890	1.00 ppbv		0.870			2	30	J
Bromoform	BRL	0.500 ppbv		BRL				30	
Styrene	BRL	0.500 ppbv		BRL				30	
o-Xylene	0.410	0.500 ppbv		0.400			2	30	J
1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv		BRL				30	
1,3,5-Trimethylbenzene	BRL	0.500 ppbv		BRL				30	
4-Ethyltoluene	BRL	0.500 ppbv		BRL				30	
1,2,4-Trimethylbenzene	0.590	0.500 ppbv		0.590			0	30	
1,3-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
Benzyl chloride	BRL	0.500 ppbv		BRL				30	
1,4-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
1,2-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500 ppbv		BRL				30	
Hexachlorobutadiene	BRL	0.500 ppbv		BRL				30	
Surrogate: 4-Bromofluorobenzene	9.50	ppbv	10.0		95	75-125			
Batch 7121453 - General Air Prep									
Blank (7121453-BLK1)			Prepared &	& Analyzed:	19-Dec-07	,			
Propene	BRL	0.500 ppbv							
Dichlorodifluoromethane (Freon12)	BRL	0.500 ppbv							
Chloromethane	BRL	0.500 ppbv							

Blank (7121453-BLK1)		Prepared & Analyzed: 19-Dec-07
Propene	BRL	0.500 ppbv
Dichlorodifluoromethane (Freon12)	BRL	0.500 ppbv
Chloromethane	BRL	0.500 ppbv
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv
Vinyl chloride	BRL	0.500 ppbv
1,3-Butadiene	BRL	0.500 ppbv
Bromomethane	BRL	0.500 ppbv
Chloroethane	BRL	0.500 ppbv
Acetone	BRL	0.500 ppbv
Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv
Ethanol	BRL	0.500 ppbv
1,1-Dichloroethene	BRL	0.500 ppbv
Methylene chloride	BRL	0.500 ppbv
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv
Carbon disulfide	BRL	0.500 ppbv
trans-1,2-Dichloroethene	BRL	0.500 ppbv
1,1-Dichloroethane	BRL	0.500 ppbv
Methyl tert-butyl ether	BRL	0.500 ppbv
Isopropyl alcohol	BRL	0.500 ppbv
2-Butanone (MEK)	BRL	0.500 ppbv
cis-1,2-Dichloroethene	BRL	0.500 ppbv
Hexane	BRL	0.500 ppbv
Ethyl acetate	BRL	0.500 ppbv
Chloroform	BRL	0.500 ppbv
Tetrahydrofuran	BRL	0.500 ppbv
1,2-Dichloroethane	BRL	0.500 ppbv
1,1,1-Trichloroethane	BRL	0.500 ppbv
Benzene	BRL	0.500 ppbv
Carbon tetrachloride	BRL	0.500 ppbv

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121453 - General Air Prep										
Blank (7121453-BLK1)				Prepared &	t Analyzed:	19-Dec-07				
Cyclohexane	BRL	0.500	ppbv							
1,2-Dichloropropane	BRL	0.500	ppbv							
Bromodichloromethane	BRL	0.500								
Trichloroethene	BRL	0.500	ppbv							
n-Heptane	BRL	0.500								
4-Methyl-2-pentanone (MIBK)	BRL	0.500	ppbv							
cis-1,3-Dichloropropene	BRL	0.500	ppbv							
trans-1,3-Dichloropropene	BRL	0.500	ppbv							
1,1,2-Trichloroethane	BRL	0.500								
Toluene	BRL	0.500	ppbv							
2-Hexanone (MBK)	BRL	0.500	ppbv							
Dibromochloromethane	BRL	0.500	ppbv							
1,2-Dibromoethane (EDB)	BRL	0.500	ppbv							
Tetrachloroethene	BRL	0.500	ppbv							
Chlorobenzene	BRL	0.500								
Ethylbenzene	BRL	0.500								
m,p-Xylene	BRL	1.00								
Bromoform	BRL	0.500								
Styrene	BRL	0.500								
o-Xylene	BRL	0.500								
1,1,2,2-Tetrachloroethane	BRL	0.500								
1,3,5-Trimethylbenzene	BRL	0.500								
4-Ethyltoluene	BRL	0.500								
1,2,4-Trimethylbenzene	BRL	0.500								
1,3-Dichlorobenzene	BRL	0.500								
Benzyl chloride	BRL	0.500								
1,4-Dichlorobenzene	BRL	0.500								
1,2-Dichlorobenzene	BRL	0.500								
1,2,4-Trichlorobenzene	BRL	0.500								
Hexachlorobutadiene	BRL	0.500								
Surrogate: 4-Bromofluorobenzene	9.19		ppbv	10.0		92	75-125			
LCS (7121453-BS1)				Prenared &	λ Analyzed:	19-Dec-07				
Propene	8.07		ppbv	10.0	c many zea.	81	70-130			
Dichlorodifluoromethane (Freon12)	7.32		ppbv	10.0		73	70-130			
Chloromethane	11.3		ppbv	10.0		113	70-130			
1,2-Dichlorotetrafluoroethane (Freon 114)	9.62		ppbv	10.0		96	70-130			
Vinyl chloride	9.11		ppbv	10.0		91	70-130			
1,3-Butadiene	9.20		ppbv	10.0		92	70-130			
Bromomethane	9.36		ppbv	10.0		94	70-130			
Chloroethane	9.21		ppbv	10.0		92	70-130			
Acetone	8.42		ppbv	10.0		84	70-130			
Trichlorofluoromethane (Freon 11)	9.00		ppbv	10.0		90	70-130			
Ethanol	8.66		ppbv	10.0		87	55.1-230			
1,1-Dichloroethene	8.73		ppbv	10.0		87	70-130			
Methylene chloride	8.95		ppbv	10.0		90	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	9.07		ppbv	10.0		91	70-130			
Carbon disulfide	9.02		ppbv	10.0		90	70-130			
trans-1,2-Dichloroethene	9.19		ppbv	10.0		92	70-130			
1,1-Dichloroethane	9.28		ppbv	10.0		93	70-130			
Methyl tert-butyl ether	8.46		ppbv	10.0		93 85	70-130			
Isopropyl alcohol	8.64		ppbv	10.0		86	70-130			
2-Butanone (MEK)	8.13			10.0		81	70-130			
			ppbv							
cis-1,2-Dichloroethene	8.57		ppbv	10.0		86	70-130			

Analyte(s)	Result	*RDL Units	Spike Level	Source Result %REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121453 - General Air Prep								
LCS (7121453-BS1)			Prepared &	k Analyzed: 19-Dec-0	7			
Hexane	9.67	ppbv	10.0	97	70-130			
Ethyl acetate	9.09	ppbv	10.0	91	70-130			
Chloroform	9.84	ppbv	10.0	98	70-130			
Tetrahydrofuran	8.68	ppbv	10.0	87	70-130			
1,2-Dichloroethane	8.43	ppbv	10.0	84	70-130			
1,1,1-Trichloroethane	8.53	ppbv	10.0	85	70-130			
Benzene	9.55	ppbv	10.0	96	70-130			
Carbon tetrachloride	8.06	ppbv	10.0	81	70-130			
Cyclohexane	8.54	ppbv	10.0	85	70-130			
1,2-Dichloropropane	8.95	ppbv	10.0	90	70-130			
Bromodichloromethane	9.08	ppbv	10.0	91	70-130			
Trichloroethene	9.65	ppbv	10.0	96	70-130			
n-Heptane	9.40	ppbv	10.0	94	70-130			
4-Methyl-2-pentanone (MIBK)	8.89	ppbv	10.0	89	70-130			
cis-1,3-Dichloropropene	8.00	ppbv	10.0	80	70-130			
trans-1,3-Dichloropropene	8.52	ppbv	10.0	85	70-130			
1,1,2-Trichloroethane	9.10	ppbv	10.0	91	70-130			
Toluene	10.4	ppbv	10.0	104	70-130			
2-Hexanone (MBK)	8.88	ppbv	10.0	89	70-130			
Dibromochloromethane	13.4	ppbv	10.0	134	70-130			QC2
1,2-Dibromoethane (EDB)	8.73	ppbv	10.0	87	70-130			
Tetrachloroethene	8.49	ppbv	10.0	85	70-130			
Chlorobenzene	8.40	ppbv	10.0	84	70-130			
Ethylbenzene	8.81	ppbv	10.0	88	70-130			
m,p-Xylene	18.0	ppbv	20.0	90	70-130			
Bromoform	7.65	ppbv	10.0	76	70-130			
Styrene	7.76	ppbv	10.0	78	70-130			
o-Xylene	9.03	ppbv	10.0	90	70-130			
1,1,2,2-Tetrachloroethane	9.57	ppbv	10.0	96	70-130			
1,3,5-Trimethylbenzene	8.55	ppbv	10.0	86	70-130			
4-Ethyltoluene	8.44	ppbv	10.0	84	70-130			
1,2,4-Trimethylbenzene	8.09	ppbv	10.0	81	70-130			
1,3-Dichlorobenzene	8.33	ppbv	10.0	83	70-130			
Benzyl chloride	7.77	ppbv	10.0	78	70-130			
1,4-Dichlorobenzene	8.73	ppbv	10.0	87	70-130			
1,2-Dichlorobenzene	9.04	ppbv	10.0	90	70-130			
1,2,4-Trichlorobenzene	2.38	ppbv	10.0	24	70-130			QC2
Hexachlorobutadiene	5.10	ppbv	10.0	51	70-130			QC2
Surrogate: 4-Bromofluorobenzene	9.28	ppbv	10.0	93	75-125			
Duplicate (7121453-DUP1)	Sour	rce: SA72461-01	Prepared &	k Analyzed: 19-Dec-0	17			
Propene	2.94	0.500 ppbv	т.	2.74		7	30	
Dichlorodifluoromethane (Freon12)	0.470	0.500 ppbv		0.440		7	30	J
Chloromethane	0.790	0.500 ppbv		0.730		8	30	
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv		BRL		-	30	
Vinyl chloride	BRL	0.500 ppbv		BRL			30	
1,3-Butadiene	BRL	0.500 ppbv		BRL			30	
Bromomethane	BRL	0.500 ppbv		BRL			30	
Chloroethane	BRL	0.500 ppbv		BRL			30	
Acetone	46.8	0.500 ppbv		43.4		8	30	
Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv		BRL		o	30	
Ethanol	21.8	0.500 ppbv		20.4		6	30	
	BRL	0.500 ppbv 0.500 ppbv		BRL		U	30	
1,1-Dichloroethene								
Methylene chloride	BRL	0.500 ppbv		BRL			30	

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121453 - General Air Prep										
Duplicate (7121453-DUP1)	Soui	ce: SA72461	-01	Prepared &	Analyzed:	19-Dec-07				
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 p	pbv		BRL				30	
Carbon disulfide	0.310	0.500 p	pbv		BRL				30	J
trans-1,2-Dichloroethene	BRL	0.500 p	pbv		BRL				30	
1,1-Dichloroethane	BRL	0.500 p	pbv		BRL				30	
Methyl tert-butyl ether	BRL	0.500 p	pbv		BRL				30	
sopropyl alcohol	3.06	0.500 pp	pbv		2.89			6	30	
2-Butanone (MEK)	5.43	0.500 p	pbv		5.06			7	30	
cis-1,2-Dichloroethene	BRL	0.500 pp	pbv		BRL				30	
Hexane	BRL	0.500 p	pbv		BRL				30	
Ethyl acetate	BRL	0.500 pp	pbv		BRL				30	
Chloroform	BRL	0.500 pp	pbv		BRL				30	
Tetrahydrofuran	BRL	0.500 pp	pbv		BRL				30	
1,2-Dichloroethane	BRL	0.500 p	pbv		BRL				30	
1,1,1-Trichloroethane	BRL	0.500 p	pbv		BRL				30	
Benzene	0.460	0.500 p	pbv		0.430			7	30	J
Carbon tetrachloride	BRL	0.500 pp			BRL				30	
Cyclohexane	BRL	0.500 p	pbv		BRL				30	
1,2-Dichloropropane	BRL	0.500 pp	pbv		BRL				30	
Bromodichloromethane	BRL	0.500 pp	pbv		BRL				30	
Trichloroethene	BRL	0.500 pp	pbv		BRL				30	
n-Heptane	BRL	0.500 pp	pbv		BRL				30	
4-Methyl-2-pentanone (MIBK)	BRL	0.500 p	pbv		BRL				30	
cis-1,3-Dichloropropene	BRL	0.500 p	pbv		BRL				30	
trans-1,3-Dichloropropene	BRL	0.500 p	pbv		BRL				30	
1,1,2-Trichloroethane	BRL	0.500 p	pbv		BRL				30	
Toluene	0.780	0.500 pp	pbv		0.760			3	30	
2-Hexanone (MBK)	0.510	0.500 p	pbv		0.500			2	30	
Dibromochloromethane	BRL	0.500 p	pbv		BRL				30	
1,2-Dibromoethane (EDB)	BRL	0.500 p	pbv		BRL				30	
Tetrachloroethene	BRL	0.500 p	pbv		BRL				30	
Chlorobenzene	BRL	0.500 p	pbv		BRL				30	
Ethylbenzene	BRL	0.500 p	pbv		BRL				30	
m,p-Xylene	0.440	1.00 p	pbv		0.460			4	30	J
Bromoform	BRL	0.500 pp	pbv		BRL				30	
Styrene	BRL	0.500 pp	pbv		BRL				30	
o-Xylene	BRL	0.500 p	pbv		BRL				30	
1,1,2,2-Tetrachloroethane	BRL	0.500 p	pbv		BRL				30	
1,3,5-Trimethylbenzene	BRL	0.500 pp	pbv		BRL				30	
4-Ethyltoluene	BRL	0.500 pp	pbv		BRL				30	
1,2,4-Trimethylbenzene	BRL	0.500 p	pbv		BRL				30	
1,3-Dichlorobenzene	BRL	0.500 pp	pbv		BRL				30	
Benzyl chloride	BRL	0.500 pp	pbv		BRL				30	
1,4-Dichlorobenzene	BRL	0.500 pp	pbv		BRL				30	
1,2-Dichlorobenzene	BRL	0.500 pp	pbv		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500 pp	pbv		BRL				30	
Hexachlorobutadiene	BRL	0.500 pp	pbv		BRL				30	
Surrogate: 4-Bromofluorobenzene	9.39	p	pbv	10.0		94	75-125			
Batch 7121541 - General Air Prep										
Blank (7121541-BLK1)				Prepared &	Analyzed:	20-Dec-07				
Propene	BRL	0.500 pp	-							
Dichlorodifluoromethane (Freon12)	BRL	0.500 pp								
Chloromethane	BRL	0.500 p	-							
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 p	pbv							

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121541 - General Air Prep										
Blank (7121541-BLK1)				Prepared &	Analyzed:	20-Dec-07				
Vinyl chloride	BRL	0.500	ppbv	1						
1,3-Butadiene	BRL	0.500								
Bromomethane	BRL	0.500								
Chloroethane	BRL	0.500								
Acetone	BRL	0.500								
Trichlorofluoromethane (Freon 11)	BRL	0.500	ppbv							
Ethanol	BRL	0.500								
1,1-Dichloroethene	BRL	0.500								
Methylene chloride	BRL	0.500								
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500								
Carbon disulfide	BRL	0.500								
trans-1,2-Dichloroethene	BRL	0.500								
1,1-Dichloroethane	BRL	0.500								
Methyl tert-butyl ether	BRL	0.500								
Isopropyl alcohol	BRL	0.500								
2-Butanone (MEK)	BRL	0.500								
cis-1,2-Dichloroethene	BRL	0.500								
Hexane	BRL	0.500								
Ethyl acetate	BRL	0.500								
Chloroform	BRL	0.500	ppbv							
Tetrahydrofuran	BRL	0.500	ppbv							
1,2-Dichloroethane	BRL	0.500								
1,1,1-Trichloroethane	BRL	0.500								
Benzene	BRL	0.500								
Carbon tetrachloride	BRL	0.500								
Cyclohexane	BRL	0.500								
1,2-Dichloropropane	BRL	0.500								
Bromodichloromethane	BRL	0.500								
Trichloroethene	BRL	0.500								
n-Heptane	BRL	0.500								
4-Methyl-2-pentanone (MIBK)	BRL	0.500								
cis-1,3-Dichloropropene	BRL	0.500								
trans-1,3-Dichloropropene	BRL	0.500								
1,1,2-Trichloroethane	BRL	0.500								
Toluene	BRL	0.500								
2-Hexanone (MBK)	BRL	0.500								
Dibromochloromethane	BRL	0.500								
1,2-Dibromoethane (EDB)	BRL	0.500								
Tetrachloroethene	BRL	0.500								
Chlorobenzene	BRL	0.500								
Ethylbenzene	BRL	0.500								
m,p-Xylene	BRL	1.00								
Bromoform	BRL	0.500								
Styrene	BRL	0.500								
o-Xylene	BRL	0.500								
1,1,2,2-Tetrachloroethane	BRL	0.500								
1,3,5-Trimethylbenzene	BRL	0.500								
4-Ethyltoluene	BRL	0.500								
1,2,4-Trimethylbenzene	BRL	0.500								
1,3-Dichlorobenzene	BRL	0.500								
Benzyl chloride	BRL	0.500								
1,4-Dichlorobenzene	BRL	0.500								
1,2-Dichlorobenzene	BRL	0.500								
1,2,4-Trichlorobenzene	BRL	0.500								

Analyte(s)	Result	*RDL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121541 - General Air Prep				<u> </u>					
Blank (7121541-BLK1)			Prepared &	Analyzed:	20-Dec-07				
Hexachlorobutadiene	BRL	0.500 ppbv	1						
Surrogate: 4-Bromofluorobenzene	8.85	ppbv	10.0		88	75-125			
LCS (7121541-BS1)			Prepared &	λ Analyzed:	20-Dec-07				
Propene	9.61	ppbv	10.0	· · · · · · · · · · · · · · · · · · ·	96	70-130			
Dichlorodifluoromethane (Freon12)	8.50	ppbv	10.0		85	70-130			
Chloromethane	12.3	ppbv	10.0		123	70-130			
1,2-Dichlorotetrafluoroethane (Freon 114)	11.1	ppbv	10.0		111	70-130			
Vinyl chloride	10.8	ppbv	10.0		108	70-130			
1,3-Butadiene	10.6	ppbv	10.0		106	70-130			
Bromomethane	10.9	ppbv	10.0		109	70-130			
Chloroethane	10.8	ppbv	10.0		108	70-130			
Acetone	9.40	ppbv	10.0		94	70-130			
Trichlorofluoromethane (Freon 11)	9.95	ppbv	10.0		100	70-130			
Ethanol	9.71	ppbv	10.0		97	55.1-230			
1,1-Dichloroethene	9.55	ppbv	10.0		96	70-130			
Methylene chloride	10.2	ppbv	10.0		102	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	9.80	ppbv	10.0		98	70-130			
Carbon disulfide	10.2	ppbv	10.0		102	70-130			
trans-1,2-Dichloroethene	10.5	ppbv	10.0		105	70-130			
1,1-Dichloroethane	10.9	ppbv	10.0		109	70-130			
Methyl tert-butyl ether	9.44	ppbv	10.0		94	70-130			
Isopropyl alcohol	10.6	ppbv	10.0		106	70-130			
2-Butanone (MEK)	9.60	ppbv	10.0		96	70-130			
cis-1,2-Dichloroethene	9.83	ppbv	10.0		98	70-130			
Hexane	10.3	ppbv	10.0		103	70-130			
Ethyl acetate	10.8	ppbv	10.0		108	70-130			
Chloroform	10.0	ppbv	10.0		100	70-130			
Tetrahydrofuran	10.1	ppbv	10.0		101	70-130			
1,2-Dichloroethane	9.66	ppbv	10.0		97	70-130			
1,1,1-Trichloroethane	9.47	ppbv	10.0		95	70-130			
Benzene	10.6	ppbv	10.0		106	70-130			
Carbon tetrachloride	9.00	ppbv	10.0		90	70-130			
Cyclohexane	9.54	ppbv	10.0		95	70-130			
1,2-Dichloropropane	10.8	ppbv	10.0		108	70-130			
Bromodichloromethane	10.8	ppbv	10.0		108	70-130			
Trichloroethene	11.1	ppbv	10.0		111	70-130			
n-Heptane	10.7	ppbv	10.0		107	70-130			
4-Methyl-2-pentanone (MIBK)	11.2	ppbv	10.0		112	70-130			
cis-1,3-Dichloropropene	9.77	ppbv	10.0		98	70-130			
trans-1,3-Dichloropropene	10.5	ppbv	10.0		105	70-130			
1,1,2-Trichloroethane	11.0	ppbv	10.0		110	70-130			
Toluene	11.0	ppbv	10.0		110	70-130			
2-Hexanone (MBK)	12.2	ppbv	10.0		122	70-130			
Dibromochloromethane	15.6	ppbv	10.0		156	70-130			QC2
1,2-Dibromoethane (EDB)	10.2	ppbv	10.0		102	70-130			
Tetrachloroethene	8.59	ppbv	10.0		86	70-130			
Chlorobenzene	8.83	ppbv	10.0		88	70-130			
Ethylbenzene	9.29	ppbv	10.0		93	70-130			
m,p-Xylene	18.1	ppbv	20.0		90	70-130			
Bromoform	7.84	ppbv	10.0		78	70-130			
Styrene	8.52	ppbv	10.0		85	70-130			
o-Xylene	9.05	ppbv	10.0		90	70-130			
1,1,2,2-Tetrachloroethane	10.2	ppbv	10.0		102	70-130			

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121541 - General Air Prep										
LCS (7121541-BS1)				Prepared &	Analyzed:	20-Dec-07				
1,3,5-Trimethylbenzene	8.80	1	opbv	10.0		88	70-130			
4-Ethyltoluene	8.51	1	opbv	10.0		85	70-130			
1,2,4-Trimethylbenzene	8.35	1	opbv	10.0		84	70-130			
1,3-Dichlorobenzene	8.66	1	opbv	10.0		87	70-130			
Benzyl chloride	10.8	1	opbv	10.0		108	70-130			
1,4-Dichlorobenzene	9.37	1	opbv	10.0		94	70-130			
1,2-Dichlorobenzene	9.50	1	opbv	10.0		95	70-130			
1,2,4-Trichlorobenzene	7.95	1	opbv	10.0		80	70-130			
Hexachlorobutadiene	6.94	1	opbv	10.0		69	70-130			QC2
Surrogate: 4-Bromofluorobenzene	9.54	1	opbv	10.0		95	75-125			
Duplicate (7121541-DUP1)	Sour	ce: SA7251	2-01	Prepared &	x Analyzed:	20-Dec-07				
Propene	BRL	0.500 1		•	BRL				30	
Dichlorodifluoromethane (Freon12)	0.590	0.500 1	-		0.560			5	30	
Chloromethane	0.970	0.500 1	opbv		0.920			5	30	
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 1	opbv		BRL				30	
Vinyl chloride	BRL	0.500 1	opbv		BRL				30	
1,3-Butadiene	BRL	0.500 1	opbv		BRL				30	
Bromomethane	BRL	0.500 1	opbv		BRL				30	
Chloroethane	BRL	0.500 1	opbv		BRL				30	
Acetone	8.92	0.500 1	opbv		8.79			1	30	
Trichlorofluoromethane (Freon 11)	0.410	0.500 1	opbv		0.380			8	30	J
Ethanol	97.6	0.500 1	opbv		96.4			1	30	
1,1-Dichloroethene	BRL	0.500 1	opbv		BRL				30	
Methylene chloride	1.26	0.500 1	opbv		1.21			4	30	
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 1	opbv		BRL				30	
Carbon disulfide	BRL	0.500 1	opbv		BRL				30	
trans-1,2-Dichloroethene	BRL	0.500 1	opbv		BRL				30	
1,1-Dichloroethane	BRL	0.500 1	opbv		BRL				30	
Methyl tert-butyl ether	BRL	0.500 1	opbv		BRL				30	
Isopropyl alcohol	11.4	0.500 1	opbv		11.3			1	30	
2-Butanone (MEK)	1.37	0.500 1	opbv		1.40			2	30	
cis-1,2-Dichloroethene	BRL	0.500 1	opbv		BRL				30	
Hexane	1.15	0.500 1	opbv		1.12			3	30	
Ethyl acetate	BRL	0.500 1	opbv		BRL				30	
Chloroform	BRL	0.500 1	opbv		BRL				30	
Tetrahydrofuran	BRL	0.500 1	opbv		BRL				30	
1,2-Dichloroethane	BRL	0.500]	opbv		BRL				30	
1,1,1-Trichloroethane	BRL	0.500]	opbv		BRL				30	
Benzene	1.89	0.500]	opbv		1.80			5	30	
Carbon tetrachloride	BRL	0.500 1	opbv		BRL				30	
Cyclohexane	0.460	0.500 1	opbv		0.440			4	30	J
1,2-Dichloropropane	0.610	0.500 1			0.600			2	30	
Bromodichloromethane	BRL	0.500 1	opbv		BRL				30	
Trichloroethene	BRL	0.500 1			BRL				30	
n-Heptane	0.680	0.500 1	opbv		0.670			1	30	
4-Methyl-2-pentanone (MIBK)	BRL	0.500 1	-		BRL				30	
cis-1,3-Dichloropropene	BRL	0.500]	opbv		BRL				30	
trans-1,3-Dichloropropene	BRL	0.500 1			BRL				30	
1,1,2-Trichloroethane	BRL	0.500 1	opbv		BRL				30	
Toluene	3.83	0.500 1	opbv		3.70			3	30	
2-Hexanone (MBK)	BRL	0.500 1			BRL				30	
Dibromochloromethane	BRL	0.500 1	opbv		BRL				30	
1,2-Dibromoethane (EDB)	BRL	0.500]	opbv		BRL				30	

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
	Result	·KDL	Units	Level	Kesuit	/0KEC	Limits	KLD	Limit	гие
Batch 7121541 - General Air Prep										
Duplicate (7121541-DUP1)		ce: SA7251		Prepared &		20-Dec-07				
Tetrachloroethene	0.850	0.500]			0.800			6	30	
Chlorobenzene	BRL	0.500 1			BRL				30	
Ethylbenzene	0.550	0.500 1			0.530			4	30	
m,p-Xylene	1.65	1.00]	ppbv		1.58			4	30	
Bromoform	BRL	0.500 1			BRL				30	
Styrene	BRL	0.500 1			BRL				30	
o-Xylene	0.620	0.500]	•		0.590			5	30	
1,1,2,2-Tetrachloroethane	BRL	0.500 1	ppbv		BRL				30	
1,3,5-Trimethylbenzene	BRL	0.500]			BRL				30	
4-Ethyltoluene	BRL	0.500 1	ppbv		BRL				30	
1,2,4-Trimethylbenzene	0.420	0.500 1	ppbv		0.400			5	30	J
1,3-Dichlorobenzene	BRL	0.500 1	ppbv		BRL				30	
Benzyl chloride	BRL	0.500 1	ppbv		BRL				30	
1,4-Dichlorobenzene	BRL	0.500 1	ppbv		BRL				30	
1,2-Dichlorobenzene	BRL	0.500 1	ppbv		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500 1			BRL				30	
Hexachlorobutadiene	BRL	0.500]	ppbv		BRL				30	
Surrogate: 4-Bromofluorobenzene	8.87	I	ppbv	10.0		89	75-125			
Batch 7121749 - General Air Prep										
Blank (7121749-BLK1)				Prepared &	: Analyzed:	24-Dec-07				
Propene	BRL	0.500 1	ppbv							
Dichlorodifluoromethane (Freon12)	BRL	0.500 1	ppbv							
Chloromethane	BRL	0.500 1	ppbv							
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 1								
Vinyl chloride	BRL	0.500 1	ppbv							
1,3-Butadiene	BRL	0.500 1	ppbv							
Bromomethane	BRL	0.500 1								
Chloroethane	BRL	0.500 1								
Acetone	BRL	0.500 1								
Trichlorofluoromethane (Freon 11)	BRL	0.500 1								
Ethanol	BRL	0.500 1								
1,1-Dichloroethene	BRL	0.500 1								
Methylene chloride	BRL	0.500 1								
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 1								
Carbon disulfide	BRL	0.500 1								
trans-1,2-Dichloroethene	BRL	0.500 1								
1,1-Dichloroethane	BRL	0.500 1								
Methyl tert-butyl ether	BRL	0.500								
Isopropyl alcohol	BRL	0.500 1								
2-Butanone (MEK)	BRL	0.500 1								
cis-1,2-Dichloroethene	BRL	0.500 1								
Hexane	BRL	0.500 1								
Ethyl acetate	BRL	0.500 1								
Chloroform	BRL	0.500 1								
Tetrahydrofuran	BRL	0.500 1								
1,2-Dichloroethane	BRL	0.500 1								
1,1,1-Trichloroethane	BRL	0.500 1								
Benzene	BRL	0.500 1								
Carbon tetrachloride	BRL	0.500 1								
Cyclohevane										
Cyclohexane	BRL BRI	0.500 1								
Cyclohexane 1,2-Dichloropropane Bromodichloromethane	BRL BRL	0.500 p 0.500 p	ppbv							

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121749 - General Air Prep										
Blank (7121749-BLK1)				Prepared &	Analyzed:	24-Dec-07				
n-Heptane	BRL	0.500	ppbv	P						
4-Methyl-2-pentanone (MIBK)	BRL	0.500								
cis-1,3-Dichloropropene	BRL	0.500								
trans-1,3-Dichloropropene	BRL	0.500								
1,1,2-Trichloroethane	BRL	0.500								
Toluene	BRL	0.500								
2-Hexanone (MBK)	BRL	0.500								
Dibromochloromethane	BRL	0.500	ppbv							
1,2-Dibromoethane (EDB)	BRL	0.500								
Tetrachloroethene	BRL	0.500								
Chlorobenzene	BRL	0.500								
Ethylbenzene	BRL	0.500								
m,p-Xylene	BRL	1.00								
Bromoform	BRL	0.500								
Styrene	BRL	0.500								
o-Xylene	BRL	0.500								
1,1,2,2-Tetrachloroethane	BRL	0.500								
1,3,5-Trimethylbenzene	BRL	0.500	ppbv							
4-Ethyltoluene	BRL	0.500								
1,2,4-Trimethylbenzene	BRL	0.500	ppbv							
1,3-Dichlorobenzene	BRL	0.500	ppbv							
Benzyl chloride	BRL	0.500								
1,4-Dichlorobenzene	BRL	0.500	ppbv							
1,2-Dichlorobenzene	BRL	0.500	ppbv							
1,2,4-Trichlorobenzene	BRL	0.500								
Hexachlorobutadiene	BRL	0.500	ppbv							
Surrogate: 4-Bromofluorobenzene	8.90		ppbv	10.0		89	75-125			
LCS (7121749-BS1)				Prepared &	z Analyzed:	24-Dec-07				
Propene	10.7		ppbv	10.0		107	70-130			
Dichlorodifluoromethane (Freon12)	10.3		ppbv	10.0		103	70-130			
Chloromethane	13.9		ppbv	10.0		139	70-130			QC2
1,2-Dichlorotetrafluoroethane (Freon 114)	12.9		ppbv	10.0		129	70-130			
Vinyl chloride	12.1		ppbv	10.0		121	70-130			
1,3-Butadiene	12.1		ppbv	10.0		121	70-130			
Bromomethane	12.6		ppbv	10.0		126	70-130			
Chloroethane	12.1		ppbv	10.0		121	70-130			
Acetone	10.6		ppbv	10.0		106	70-130			
Trichlorofluoromethane (Freon 11)	12.5		ppbv	10.0		125	70-130			
Ethanol	11.2		ppbv	10.0		112	55.1-230			
1,1-Dichloroethene	10.7		ppbv	10.0		107	70-130			
Methylene chloride	11.0		ppbv	10.0		110	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	11.2		ppbv	10.0		112	70-130			
Carbon disulfide	10.7		ppbv	10.0		107	70-130			
trans-1,2-Dichloroethene	12.2		ppbv	10.0		122	70-130			
1,1-Dichloroethane	12.3		ppbv	10.0		123	70-130			
Methyl tert-butyl ether	11.0		ppbv	10.0		110	70-130			
Isopropyl alcohol	12.1		ppbv	10.0		121	70-130			
2-Butanone (MEK)	11.0		ppbv	10.0		110	70-130			
cis-1,2-Dichloroethene	11.4		ppbv	10.0		114	70-130			
Hexane	11.7		ppbv	10.0		117	70-130			
Ethyl acetate	11.7		ppbv	10.0		117	70-130			
Chloroform	11.8		ppbv	10.0		118	70-130			
Tetrahydrofuran	11.5									

Analyte(s)	Result	*RDL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121749 - General Air Prep									
LCS (7121749-BS1)			Prepared &	k Analyzed:	24-Dec-07				
1,2-Dichloroethane	11.6	ppbv	10.0		116	70-130			
1,1,1-Trichloroethane	11.7	ppbv	10.0		117	70-130			
Benzene	12.3	ppbv	10.0		123	70-130			
Carbon tetrachloride	11.3	ppbv	10.0		113	70-130			
Cyclohexane	10.9	ppbv	10.0		109	70-130			
1,2-Dichloropropane	11.8	ppbv	10.0		118	70-130			
Bromodichloromethane	12.6	ppbv	10.0		126	70-130			
Trichloroethene	12.8	ppbv	10.0		128	70-130			
n-Heptane	12.0	ppbv	10.0		120	70-130			
4-Methyl-2-pentanone (MIBK)	12.2	ppbv	10.0		122	70-130			
cis-1,3-Dichloropropene	10.9	ppbv	10.0		109	70-130			
trans-1,3-Dichloropropene	12.0	ppbv	10.0		120	70-130			
1,1,2-Trichloroethane	12.4	ppbv	10.0		124	70-130			
Toluene	12.6	ppbv	10.0		126	70-130			
2-Hexanone (MBK)	12.9	ppbv	10.0		129	70-130			
Dibromochloromethane	18.7	ppbv	10.0		187	70-130			QC2
1,2-Dibromoethane (EDB)	11.9	ppbv	10.0		119	70-130			
Tetrachloroethene	10.6	ppbv	10.0		106	70-130			
Chlorobenzene	10.7	ppbv	10.0		107	70-130			
Ethylbenzene	11.4	ppbv	10.0		114	70-130			
m,p-Xylene	22.2	ppbv	20.0		111	70-130			
Bromoform	10.1	ppbv	10.0		101	70-130			
Styrene	10.1	ppbv	10.0		101	70-130			
o-Xylene	11.1	ppbv	10.0		111	70-130			
1,1,2,2-Tetrachloroethane	11.8		10.0		118	70-130			
	10.8	ppbv	10.0		108	70-130			
1,3,5-Trimethylbenzene	10.8	ppbv	10.0		106	70-130			
4-Ethyltoluene	10.0	ppbv	10.0		100				
1,2,4-Trimethylbenzene 1,3-Dichlorobenzene		ppbv				70-130			
*	10.7	ppbv	10.0		107	70-130			
Benzyl chloride	12.7	ppbv	10.0		127	70-130			
1,4-Dichlorobenzene	11.6	ppbv	10.0		116	70-130			
1,2-Dichlorobenzene	11.9	ppbv	10.0		119	70-130			
1,2,4-Trichlorobenzene	10.2	ppbv	10.0		102	70-130			
Hexachlorobutadiene	8.91	ppbv	10.0		89	70-130			
Surrogate: 4-Bromofluorobenzene	9.62	ppbv	10.0		96	75-125			
Duplicate (7121749-DUP1)		ce: SA72559-01	Prepared &	Analyzed:	24-Dec-07			20	
Propene	BRL	0.500 ppbv		BRL				30	
Dichlorodifluoromethane (Freon12)	0.480	0.500 ppbv		0.480			0	30	J
Chloromethane	0.710	1.00 ppbv		0.720			1	30	J
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv		BRL				30	
Vinyl chloride	BRL	0.500 ppbv		BRL				30	
1,3-Butadiene	BRL	0.500 ppbv		BRL				30	
Bromomethane	BRL	0.500 ppbv		BRL				30	
Chloroethane	BRL	0.500 ppbv		BRL				30	
Acetone	2.80	0.500 ppbv		2.84			1	30	
Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv		BRL				30	
Ethanol	8.41	0.500 ppbv		8.81			5	30	
1,1-Dichloroethene	BRL	0.500 ppbv		BRL				30	
Methylene chloride	BRL	0.500 ppbv		BRL				30	
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv		BRL				30	
Carbon disulfide	BRL	0.500 ppbv		BRL				30	
trans-1,2-Dichloroethene	BRL	0.500 ppbv		BRL				30	
1,1-Dichloroethane	BRL	0.500 ppbv		BRL				30	

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121749 - General Air Prep										
Duplicate (7121749-DUP1)	Sour	rce: SA72559	-01	Prepared &	Analyzed:	24-Dec-07				
Methyl tert-butyl ether	BRL	0.500 p		-F	BRL				30	
Isopropyl alcohol	1.46	0.500 p	-		1.49			2	30	
2-Butanone (MEK)	BRL	0.500 p	-		BRL				30	
cis-1,2-Dichloroethene	BRL	0.500 p	-		BRL				30	
Hexane	BRL	0.500 p	pbv		BRL				30	
Ethyl acetate	0.300	0.500 p	pbv		0.310			3	30	J
Chloroform	BRL	0.500 p	pbv		BRL				30	
Tetrahydrofuran	BRL	0.500 p	pbv		BRL				30	
1,2-Dichloroethane	BRL	0.500 p			BRL				30	
1,1,1-Trichloroethane	BRL	0.500 p	pbv		BRL				30	
Benzene	0.310	0.500 p	pbv		0.320			3	30	J
Carbon tetrachloride	BRL	0.500 p	pbv		BRL				30	
Cyclohexane	BRL	0.500 p	pbv		BRL				30	
1,2-Dichloropropane	BRL	0.500 p	pbv		BRL				30	
Bromodichloromethane	BRL	0.500 p	-		BRL				30	
Trichloroethene	BRL	0.500 p	pbv		BRL				30	
n-Heptane	BRL	0.500 p	pbv		BRL				30	
4-Methyl-2-pentanone (MIBK)	BRL	0.500 p			BRL				30	
cis-1,3-Dichloropropene	BRL	0.500 p	-		BRL				30	
trans-1,3-Dichloropropene	BRL	0.500 p	-		BRL				30	
1,1,2-Trichloroethane	BRL	0.500 p	-		BRL				30	
Toluene	0.420	0.500 p	-		0.430			2	30	J
2-Hexanone (MBK)	BRL	0.500 p			BRL				30	
Dibromochloromethane	BRL	0.500 p	-		BRL				30	
1,2-Dibromoethane (EDB)	BRL	0.500 p	•		BRL				30	
Tetrachloroethene	BRL	0.500 p	-		BRL				30	
Chlorobenzene	BRL	0.500 p	•		BRL				30	
Ethylbenzene	BRL	0.500 p			BRL				30	
m,p-Xylene	BRL	1.00 p	-		BRL				30	
Bromoform	BRL	0.500 p			BRL				30	
Styrene	BRL	0.500 p	-		BRL				30	
o-Xylene	BRL	0.500 p	-		BRL				30	
1,1,2,2-Tetrachloroethane	BRL	0.500 p	-		BRL				30	
1,3,5-Trimethylbenzene	BRL	0.500 p	•		BRL				30	
4-Ethyltoluene	BRL	0.500 p			BRL				30	
1,2,4-Trimethylbenzene	BRL	0.500 p			BRL				30	
1,3-Dichlorobenzene	BRL	0.500 p			BRL				30	
Benzyl chloride	BRL	0.500 p	-		BRL				30	
1,4-Dichlorobenzene	BRL	0.500 p	-		BRL				30	
1,2-Dichlorobenzene	BRL	0.500 p	•		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500 p	-		BRL				30	
Hexachlorobutadiene	BRL	0.500 p	•		BRL				30	
Surrogate: 4-Bromofluorobenzene	8.97		pbv	10.0		90	75-125			
Batch 7121849 - General Air Prep										
Blank (7121849-BLK1)				Prepared &	λ Analyzed:	21-Dec-07				
Propene	BRL	0.500 p	pbv	- F-m-1 m 64						
Dichlorodifluoromethane (Freon12)	BRL	0.500 p	-							
Chloromethane	BRL	0.500 p	-							
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 p	•							
Vinyl chloride	BRL	0.500 p								
1,3-Butadiene	BRL	0.500 p								
Bromomethane	BRL	0.500 p								
Chloroethane	BRL	0.500 p								

Analyte(s)	Result	*RDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121849 - General Air Prep										
Blank (7121849-BLK1)				Prepared &	x Analyzed:	21-Dec-07				
Acetone	BRL	0.500	ppbv	1						
Trichlorofluoromethane (Freon 11)	BRL	0.500								
Ethanol	BRL	0.500								
1,1-Dichloroethene	BRL	0.500								
Methylene chloride	BRL	0.500	ppbv							
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500								
Carbon disulfide	BRL	0.500								
trans-1,2-Dichloroethene	BRL	0.500	ppbv							
1,1-Dichloroethane	BRL	0.500	ppbv							
Methyl tert-butyl ether	BRL	0.500	ppbv							
Isopropyl alcohol	BRL	0.500	ppbv							
2-Butanone (MEK)	BRL	0.500	ppbv							
cis-1,2-Dichloroethene	BRL	0.500	ppbv							
Hexane	BRL	0.500								
Ethyl acetate	BRL	0.500								
Chloroform	BRL	0.500								
Tetrahydrofuran	BRL	0.500	ppbv							
1,2-Dichloroethane	BRL	0.500								
1,1,1-Trichloroethane	BRL	0.500	ppbv							
Benzene	BRL	0.500	ppbv							
Carbon tetrachloride	BRL	0.500	ppbv							
Cyclohexane	BRL	0.500	ppbv							
1,2-Dichloropropane	BRL	0.500	ppbv							
Bromodichloromethane	BRL	0.500	ppbv							
Trichloroethene	BRL	0.500	ppbv							
n-Heptane	BRL	0.500	ppbv							
4-Methyl-2-pentanone (MIBK)	BRL	0.500	ppbv							
cis-1,3-Dichloropropene	BRL	0.500	ppbv							
trans-1,3-Dichloropropene	BRL	0.500	ppbv							
1,1,2-Trichloroethane	BRL	0.500	ppbv							
Toluene	BRL	0.500	ppbv							
2-Hexanone (MBK)	BRL	0.500	ppbv							
Dibromochloromethane	BRL	0.500	ppbv							
1,2-Dibromoethane (EDB)	BRL	0.500	ppbv							
Tetrachloroethene	BRL	0.500								
Chlorobenzene	BRL	0.500	ppbv							
Ethylbenzene	BRL	0.500	ppbv							
m,p-Xylene	BRL		ppbv							
Bromoform	BRL	0.500	ppbv							
Styrene	BRL	0.500	ppbv							
o-Xylene	BRL	0.500								
1,1,2,2-Tetrachloroethane	BRL	0.500	ppbv							
1,3,5-Trimethylbenzene	BRL	0.500	ppbv							
4-Ethyltoluene	BRL	0.500								
1,2,4-Trimethylbenzene	BRL	0.500								
1,3-Dichlorobenzene	BRL	0.500								
Benzyl chloride	BRL	0.500								
1,4-Dichlorobenzene	BRL	0.500								
1,2-Dichlorobenzene	BRL	0.500								
1,2,4-Trichlorobenzene	BRL	0.500								
Hexachlorobutadiene	BRL	0.500	ppbv							
Surrogate: 4-Bromofluorobenzene	8.94		ppbv	10.0		89	75-125			

Analyte(s)	Result	*RDL Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Fla
Batch 7121849 - General Air Prep									
LCS (7121849-BS1)			Prepared &	Analyzed:	21-Dec-07				
Propene	9.81	ppbv	10.0		98	70-130			
Dichlorodifluoromethane (Freon12)	9.04	ppbv	10.0		90	70-130			
Chloromethane	12.5	ppbv	10.0		125	70-130			
1,2-Dichlorotetrafluoroethane (Freon 114)	11.5	ppbv	10.0		115	70-130			
Vinyl chloride	11.0	ppbv	10.0		110	70-130			
1,3-Butadiene	10.8	ppbv	10.0		108	70-130			
Bromomethane	11.4	ppbv	10.0		114	70-130			
Chloroethane	11.0	ppbv	10.0		110	70-130			
Acetone	9.45	ppbv	10.0		94	70-130			
Trichlorofluoromethane (Freon 11)	10.8	ppbv	10.0		108	70-130			
Ethanol	9.87	ppbv	10.0		99	55.1-230			
1,1-Dichloroethene	9.94	ppbv	10.0		99	70-130			
Methylene chloride	10.5	ppbv	10.0		105	70-130			
1,1,2-Trichlorotrifluoroethane (Freon 113)	10.2	ppbv	10.0		102	70-130			
Carbon disulfide	10.4	ppbv	10.0		104	70-130			
trans-1,2-Dichloroethene	11.1	ppbv	10.0		111	70-130			
1,1-Dichloroethane	11.2	ppbv	10.0		112	70-130			
Methyl tert-butyl ether	9.82	ppbv	10.0		98	70-130			
Isopropyl alcohol	10.8	ppbv	10.0		108	70-130			
2-Butanone (MEK)	9.65	ppbv	10.0		96	70-130			
cis-1,2-Dichloroethene	10.1	ppbv	10.0		101	70-130			
Hexane	10.5	ppbv	10.0		105	70-130			
Ethyl acetate	11.0	ppbv	10.0		110	70-130			
Chloroform	10.4	ppbv	10.0		104	70-130			
Tetrahydrofuran	10.5	ppbv	10.0		105	70-130			
1,2-Dichloroethane	10.0	ppbv	10.0		100	70-130			
1,1,1-Trichloroethane	9.87	ppbv	10.0		99	70-130			
Benzene	11.0	ppbv	10.0		110	70-130			
Carbon tetrachloride	9.41	ppbv	10.0		94	70-130			
Cyclohexane	9.74	ppbv	10.0		97	70-130			
1,2-Dichloropropane	11.0	ppbv	10.0		110	70-130			
Bromodichloromethane	11.1	ppbv	10.0		111	70-130			
Trichloroethene	11.6	ppbv	10.0		116	70-130			
n-Heptane	10.9	ppbv	10.0		109	70-130			
4-Methyl-2-pentanone (MIBK)	11.4	ppbv	10.0		114	70-130			
cis-1,3-Dichloropropene	9.99	ppbv	10.0		100	70-130			
trans-1,3-Dichloropropene	10.8	ppbv	10.0		108	70-130			
1,1,2-Trichloroethane	11.3	ppbv	10.0		113	70-130			
Toluene	11.4	ppbv	10.0		114	70-130			
2-Hexanone (MBK)	12.3	ppbv	10.0		123	70-130			
Dibromochloromethane	16.3	ppbv	10.0		163	70-130			QO
1,2-Dibromoethane (EDB)	10.6	ppbv	10.0		106	70-130			
Tetrachloroethene	8.80	ppbv	10.0		88	70-130			
Chlorobenzene	9.28	ppbv	10.0		93	70-130			
Ethylbenzene	9.80	ppbv	10.0		98	70-130			
m,p-Xylene	19.0	ppbv	20.0		95	70-130			
Bromoform	8.29	ppbv	10.0		83	70-130			
Styrene	8.81	ppbv	10.0		88	70-130			
o-Xylene	9.61	ppbv	10.0		96	70-130			
1,1,2,2-Tetrachloroethane	10.7	ppbv	10.0		107	70-130			
1,3,5-Trimethylbenzene	9.22	ppbv	10.0		92	70-130			
4-Ethyltoluene	9.03	ppbv	10.0		90	70-130			
1,2,4-Trimethylbenzene	8.78	ppbv	10.0		88	70-130			
1,3-Dichlorobenzene	9.08	ppbv	10.0		91	70-130			

Analyte(s)	Result	*RDL Units	Spike Level	Source Result %R	%RI EC Lim		RPD Limit	Flag
Batch 7121849 - General Air Prep								
LCS (7121849-BS1)			Prepared &	k Analyzed: 21-D	ec-07			
Benzyl chloride	11.3	ppbv	10.0	11		30		
1,4-Dichlorobenzene	9.79	ppbv	10.0	9				
1,2-Dichlorobenzene	9.89	ppbv	10.0	9				
1,2,4-Trichlorobenzene	7.89	ppbv	10.0	7				
Hexachlorobutadiene	7.01	ppbv	10.0	7				
Surrogate: 4-Bromofluorobenzene	9.51	ppbv	10.0	9	5 75-1	25		
Duplicate (7121849-DUP1)	Som	rce: SA72483-01	Prepared &	k Analyzed: 21-D	ec-07			
Propene	BRL	0.500 ppbv	Trepureu	BRL			30	
Dichlorodifluoromethane (Freon12)	0.480	0.500 ppbv		0.440		9	30	J
Chloromethane	BRL	0.500 ppbv		BRL			30	
1,2-Dichlorotetrafluoroethane (Freon 114)	BRL	0.500 ppbv		BRL			30	
Vinyl chloride	BRL	0.500 ppbv		BRL			30	
1,3-Butadiene	BRL	0.500 ppbv		BRL			30	
Bromomethane	BRL	0.500 ppbv		BRL			30	
Chloroethane	BRL	0.500 ppbv		BRL			30	
Acetone	BRL	0.500 ppbv		BRL			30	
Trichlorofluoromethane (Freon 11)	BRL	0.500 ppbv		BRL			30	
Ethanol	2.66	0.500 ppbv		2.45		8	30	
1,1-Dichloroethene	BRL	0.500 ppbv		BRL			30	
Methylene chloride	BRL	0.500 ppbv		BRL			30	
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	0.500 ppbv		BRL			30	
Carbon disulfide	24.2	0.500 ppbv		25.5		5	30	
trans-1,2-Dichloroethene	BRL	0.500 ppbv		BRL		3	30	
1,1-Dichloroethane	0.490	0.500 ppbv		0.450		9	30	J
Methyl tert-butyl ether	BRL	0.500 ppbv		BRL			30	
Isopropyl alcohol	0.700	0.500 ppbv		0.610		14	30	
2-Butanone (MEK)	BRL	0.500 ppbv		BRL		• •	30	
cis-1,2-Dichloroethene	BRL	0.500 ppbv		BRL			30	
Hexane	3.96	0.500 ppbv		3.85		3	30	
Ethyl acetate	BRL	0.500 ppbv		BRL		,	30	
Chloroform	BRL	0.500 ppbv		BRL			30	
Tetrahydrofuran	BRL	0.500 ppbv		BRL			30	
1.2-Dichloroethane	BRL	0.500 ppbv		BRL			30	
1,1,1-Trichloroethane	12.1	0.500 ppbv		11.8		3	30	
Benzene	3.83	0.500 ppbv		3.74		2	30	
Carbon tetrachloride	BRL	0.500 ppbv		BRL		-	30	
Cyclohexane	25.4	0.500 ppbv		25.4		0.2	30	
1,2-Dichloropropane	BRL	0.500 ppbv		BRL		0.2	30	
Bromodichloromethane	0.470	0.500 ppbv		0.450		4	30	J
Trichloroethene	97.9	0.500 ppbv		97.8		0.08	30	
n-Heptane	1.33	0.500 ppbv		1.27		5	30	
4-Methyl-2-pentanone (MIBK)	BRL	0.500 ppbv		1.80		, ,	30	
cis-1,3-Dichloropropene	BRL	0.500 ppbv		BRL			30	
trans-1,3-Dichloropropene	BRL	0.500 ppbv		BRL			30	
1,1,2-Trichloroethane	BRL	0.500 ppbv		BRL			30	
Toluene	6.40	0.500 ppbv		6.35		0.8	30	
2-Hexanone (MBK)	BRL	0.500 ppbv		BRL		0.0	30	
Dibromochloromethane	BRL	0.500 ppbv		BRL			30	
1,2-Dibromoethane (EDB)	BRL	0.500 ppbv		BRL			30	
Tetrachloroethene	12.5	0.500 ppbv		12.5		0.4	30	
Chlorobenzene	BRL	0.500 ppbv		BRL		U. T	30	
Ethylbenzene	0.370	0.500 ppbv		0.340		8	30	J
m,p-Xylene	0.960	1.00 ppbv		0.870		10	30	J
m,p-zsytene	0.900	1.00 ppov		0.070		10	30	,

Analyte(s)	Result	*RDL U	Spike nits Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 7121849 - General Air Prep									
Duplicate (7121849-DUP1)	Sour	ce: SA72483-01	Prepared &	Analyzed:	21-Dec-07				
Bromoform	BRL	0.500 ppbv		BRL				30	
Styrene	BRL	0.500 ppbv		BRL				30	
o-Xylene	0.410	0.500 ppbv		0.380			8	30	J
1,1,2,2-Tetrachloroethane	BRL	0.500 ppbv		BRL				30	
1,3,5-Trimethylbenzene	BRL	0.500 ppbv		BRL				30	
4-Ethyltoluene	BRL	0.500 ppbv		BRL				30	
1,2,4-Trimethylbenzene	BRL	0.500 ppbv		BRL				30	
1,3-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
Benzyl chloride	BRL	0.500 ppbv		BRL				30	
1,4-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
1,2-Dichlorobenzene	BRL	0.500 ppbv		BRL				30	
1,2,4-Trichlorobenzene	BRL	0.500 ppbv		BRL				30	
Hexachlorobutadiene	BRL	0.500 ppbv		BRL				30	
Surrogate: 4-Bromofluorobenzene	9.93	ppbv	10.0		99	75-125			

Notes and Definitions

R05 Elevated Reporting Limits due to the presence of high levels of non-target analytes.

QC2 Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

GS This sample was not able to be analyzed for low level reporting limits due to high concentrations of other target analytes

in the sample.

E The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

<u>Method Blank</u>: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by: Hanibal C. Tayeh, Ph.D. Nicole Brown



· All TATs subject to laboratory approval.	☐ Rush TAT - Date Needed:	Standard TAT - 7 to 10 business days	Special Handling:

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DW=Drinking Water GW=Groundwater WW=Wastewater O=Oil SW= Surface Water SO=Soil SL=Slúdge A=Air

Lab Id:

Sample Id:

Time:

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G=Grab

C=Composite

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6re: F-55V-68

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Greit IA-08

Gre. F-55V-07

0938 3480

1013

\$10-47-07

(20cc07 Date:

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7=CH3OH 8= NaHSO4 9=_

2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid

P.O. No.: 007

2026

Project Mgr.: Jon Fux

Report To: _

ERM

Invoice To: __

5788 Willewaters 8kmg Dewith NY 13214

EDD Format

☐ Fax results when available to (

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DE-mail to Jon. Fox Cern. con Robert-Sorts @ orm. con

todd, marsh e enn. com



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Page Z of Z

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Project Mgr.:

Jon Fox

P.O. No.:

Report To: _

ERM

Invoice To:

THE PARTY

Dewith NY 13211

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scope of work associated with subsurface investigations generally included installation of soil borings, ground water monitoring wells, and collection of soil, soil vapor, and ground water samples for analysis of selected parameters at an approved environmental laboratory. Previous soil vapor samples collected at the Site were associated with a passive soil vapor survey and were reported as absolute masses, not as concentrations (ERM, 2001). Detailed information regarding previous environmental investigation at the Site is summarized the Data Gap Investigation Report (ERM, 2003). Detailed information regarding completed and ongoing Interim Remedial Measures (IRMs) at the Site are summarized in the dense, non-aqueous phase liquid (DNAPL) Recovery IRM Pilot Test Report (ERM, 2005) and Interim Report - Soil Excavation IRM (ERM, 2006).

Several volatile organic compounds (VOCs) of potential concern have been identified in Site soil, soil vapor, and/or ground water samples previously collected beneath or proximal to the main building at the Site. Samples collected for laboratory analysis during the implementation of this Work Plan will be analyzed for the specific VOCs listed below that were previously detected in soil, soil vapor, and/or ground water samples collected at the Site.

- Acetone
- Benzene
- · 2-Butanone
- Carbon tetrachloride
- Chloroethane
- Chloroform
- 1,1-Dichloroethane (DCA)
- 1,2-DCA
- 1,1-Dichloroethene (DCE)
- cis-1,2-DCE
- trans-1,2-DCE
- Ethylbenzene
- · Methylene chloride
- · 4-Methyl-2-pentanone
- 1,1,2,2-Tetrachloroethane
- · Tetrachloroethene (PCE)
- Toluene
- 1,1,1-Trichloroethane (TCA)
- 1,1,2-TCA
- Trichloroethene (TCE)
- 1,2,4-Trimethylbenzene
- Vinyl chloride
- Xylenes

ERM

Attachment C Data Usability Summary Report

DATA USABILITY SUMMARY REPORT (DUSR)
SONOCO PRODUCTS COMPANY
GREIF BROS. FACILITY, TONOWANDA, NEW YORK
AIR SAMPLE ANALYSIS
ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)
PROJECT NUMBER 0017521.7
SPECTRUM ANALYTICAL
SAMPLE DELIVERY GROUP (SDG) 72249

Deliverables:

The above referenced data package for fifteen (15) air samples and three (3) blind field duplicate samples contains sufficient deliverables as stipulated under the 2005 New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) Category B deliverables. The sample were analyzed following "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B", Compendium Method TO-15, "Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)". The data have been evaluated according to the protocols and quality control (QC) requirements of the ASP, the National Functional Guidelines for Organic Data Review (October 1999), the USEPA Region 2 Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15 and the reviewer's professional judgment.

This report pertains to the following air samples collected on 12 December 2007:

<u>Sample ID</u>		QC Sample ID
Greif-IA-07	Greif-SV-05	Greif-DUP-1 (blind field duplicate of sample Greif-IA-07)
Greif-SSV-07	Greif-SV-06	Greif-DUP-2 (blind field duplicate of sample Greif-SSV-08)
Greif-IA-08	Greif-OA-01	Greif-DUP-3 (blind field duplicate of sample Greif-SV-03)
Greif-SSV-08	Greif-SV-01	
Greif-IA-09	Greif-SV-02	
Greif-SSV-09	Greif-SV-03	
Greif-IA-10	Greif-SV-04	
Greif-SSV-10		

The following items/criteria were reviewed:

- Chains-of-Custody (COCs)
- Data completeness, Deliverables and Analysis Data Sheets (Form I)
- Cover letter and Narrative
- Canister Receipt/Log-in sheet (Leak Checks)
- Canister Certification Blanks/Spikes/Pressure Differences
- Holding times
- Surrogate compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries, summary and data
- Laboratory Check Sample (LCS) recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- GC/MS chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above were in compliance with the analytical methods and with the ASP and USEPA criteria with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

- Only the following compounds were required: Acetone Benzene, 2-Butanone, Carbon tetrachloride, Chloroethane, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Ethylbenzene, Methylene chloride, 4-Methyl-2-pentanone, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, 1,2,4-Trimethylbenzene, Vinyl chloride, and Xylene (Total).
- The required minimum reporting limit (RL) for all requested compounds for samples denoted with an "IA", "SV" and "OA" was 1.0 ug/m³ while the required minimum RL for all requested compounds for samples denoted with an "SSV" was 0.25 ug/m³. The laboratory was to achieve this by analyzing the samples by Selective

Ion Monitoring (SIM). As noted in the laboratory's Case Narrative, the canisters were not cleaned down to the requested levels and SIM analysis could only be performed on samples Greif-SSV-08, Greif-OA-01, and Greif-SV-03. Any positive concentration below 0.2 ppbv for these samples may be considered biased and have been qualified "J".

- The reporting limits for samples Greif-SSV-07, Greif-IA-08, Greif-IA-09, Greif-SSV-09, Greif-SSV-10, Greif-DUP-2, Greif-SV-05, Greif-SV-06, and Greif-SV-01 are elevated due to the dilution required based on the elevated concentration of target compounds. The laboratory utilized a D qualifier to indicate this dilution. The D qualifier has been removed as it is unnecessary. No qualification of the sample data is required.
- The concentration of 1,1,1-trichloroethene was above the calibration range of the instrument in sample Greif-SSV-07. The sample was reanalyzed at a further dilution. The result to be utilized for 1,1,1-trichloroethene is from the further diluted analysis. The Form I has been manually edited to show this concentration. No additional qualification of the sample data is required.
- The following table includes compounds that did not meet QC criteria in the Laboratory Control Sample (LCS). For a percent recovery (%R) below QC criteria (70-130%), positive results in all samples associated with the LCS are considered estimated and qualified "J", while non-detects in all samples associated with the LCS are considered estimated and qualified "UJ".

LCS	Compound	% Recovery	Associated Samples
7121453	1,2,4-trimethylbenzene	24%	Greif-SSV-07, Greif-DUP-2

- 2-butanone, ethylbenzene, and o-xylene were not positively identified in sample Greif-IA-07, however were reported as positive detects in the associated blind field duplicate sample, Greif-DUP-1. As a result the results for these compounds only are considered estimated and have been qualified "J" for positive detects and "UJ" for non-detects.
- Numerous compounds were positively identified in sample Greif-SV-03, however were reported as non-detects in the

- associated blind field duplicate sample, Greif-DUP-3. As a result all results are considered estimated and have been qualified "J" for positive detects and "UJ" for non-detects.
- Numerous compounds were positively identified in sample Greif-SSV-08 as well as the associated blind field duplicate sample, Greif-DUP-2. However, the reported concentrations were vastly different. The Summa canister for sample Greif-SSV-08 apparently malfunctioned during sample collection and is believed to have allowed an unknown amount of ambient air to enter the canister. Results for sample Greif-SSV-08 are possibly biased and have been qualified "J" for positive detects and "UJ" for non-detects. The same qualifiers have been applied to the associated blind field duplicate sample as there is no way to verify the accuracy of these results.

Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed: Dated: 27 March 2008

Andrew J. Coenen ERM QA Officer

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tinawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-13

File ID:

B22051.D

Sampled:

12/20/07 08:50

Analyzed:

12/21/07 02:28

% Solids:

12/12/07 11:00

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument:

Air2

CACNO	COMPOUND		DILLITION	CONC. (ppbv)	CONC (na/m2)	0
CAS NO.	COMPOUND		DILUTION		CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		1	0.150	0.4	U
75-00-3	Chloroethane		1	0.150	0.4	U
67-64-1	Acetone	No. of the second secon		2.64	6.3	
75-35-4	1,1-Dichloroethene		1	0.150	0.6	U
75-09-2	Methylene chloride		1	0.273	0.9	
156-60-5	trans-1,2-Dichloroethene		1	0.150	0.6	U
75-34-3	1,1-Dichloroethane		1	0.150	0.6	U
78-93-3	2-Butanone (MEK)		1	0.400	1.2	
156-59-2	cis-1,2-Dichloroethene		1	0.150	0.6	U
67-66-3	Chloroform		1	0.150	0.7	U
107-06-2	1,2-Dichloroethane		1	0.150	0.6	U
71-55-6	1,1,1-Trichloroethane		1	0.530	2.9	
71-43-2	Benzene		1	0.310	1.0	
56-23-5	Carbon tetrachloride		1	0.220	1.4	
79-01-6	Trichloroethene		1	0.295	1.6	
108-10-1	4-Methyl-2-pentanone (MIBK)		1	0.150	0.6	U
79-00-5	1,1,2-Trichloroethane		1	0.150	0.8	U
108-88-3	Toluene		1	1.35	5.1	
127-18-4	Tetrachloroethene		1	0.167	1.1	J
100-41-4	Ethylbenzene		1	0.196	0.8	J
1330-20-7	m,p-Xylene		1	0.370	1.6	
95-47-6	o-Xylene		1	0.229	1.0	
79-34-5	1,1,2,2-Tetrachloroethane		1	0.150	1.0	U
95-63-6	1,2,4-Trimethylbenzene		1	0.228	1.1	
SYSTEM MON	IITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
l-Bromofluorob	penzene	10.0	9.04	90	75 - 125	
NTERNAL ST	ANDARD	AREA	RT	REF AREA	REF RT	Q
					9	

5793092

2746595

11.78

17.38

6818820

3258375

11.79

17.38

1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-14

File ID:

B22052.D

Sampled:

Prepared:

12/20/07 08:50

Analyzed:

12/21/07 03:12

12/12/07 13:40

% Solids:

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch: <u>7121541</u> Sequence: <u>S801746</u> Calibration: <u>0801024</u>	
CAS NO. COMPOUND DILUTION CONC	CONC. (ug/m3)
75-01-4 Vinyl chloride 5 0.6	1.8 T
75-00-3 Chloroethane 5 0.7	2.1
67-64-1 Acetone 5 1.	2.6

75-01-4	Vinyl chloride	5	0.690	1.8	UI
75-00-3	Chloroethane	5	0.790	2.1	UD
67-64-1	Acetone	5	1.11	2.6	UD
75-35-4	1,1-Dichloroethene	5	0.620	2.5	UD
75-09-2	Methylene chloride	5	0.550	1.9	UI
156-60-5	trans-1,2-Dichloroethene	5	0.350	1.4	UID
75-34-3	1,1-Dichloroethane	5	0.830	3.4	UID
78-93-3	2-Butanone (MEK)	5	0.525	1.5	UD
156-59-2	cis-1,2-Dichloroethene	5	0.605	2.4	UD
67-66-3	Chloroform	5	1.10	5.4	UD
107-06-2	1,2-Dichloroethane	5	1.24	5.0	UI
71-55-6	1,1,1-Trichloroethane	5	5.60	30.6	D
71-43-2	Benzene	5	0.620	2.0	UD
56-23-5	Carbon tetrachloride	5	1.10	6.9	UID
79-01-6	Trichloroethene	5	2.60	14.0	D
108-10-1	4-Methyl-2-pentanone (MIBK)	5	1.70	7.0	Ub
79-00-5	1,1,2-Trichloroethane	5	0.800	4.4	UD
108-88-3	Toluene	5	2.25	8.5	Л
127-18-4	Tetrachloroethene	5	0.715	4.8	UD
100-41-4	Ethylbenzene	5	0.705	3,1	UI
1330-20-7	m,p-Xylene	5	1.23	5.3	UI
95-47-6	o-Xylene	5	0.580	2.5	UI
79-34-5	1,1,2,2-Tetrachloroethane	5	1.26	8.7	UD
95-63-6	1,2,4-Trimethylbenzene	5	0.720	3.5	UD

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	8.81	88	75 - 125	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1168988	9.54	1431251	9.55	
1,4-Difluorobenzene	5497660	11.78	6818820	11.79	
Chlorobenzene-d5	2571241	17.38	3258375	17.38	

^{*} Values outside of QC limits

Air2

FORM I - AIR ANALYSIS DATA SHEET EPA TO-15

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Calibration:

Greif - Tımawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

S800622

SA72249-15

File ID:

B22069.D

Instrument:

Sampled:

2 111

Edoordiory ID

12/21/07 07 14

Analyzed:

12/21/07 21:32

oumpreu.

12/12/07 13:50

Prepared: Preparation: 12/21/07 07:14

and the second

84

REF AREA

1688612

8107328

3858679

8.43

RT

9.55

11.78

17.38

75 - 125

REF RT

9.55

11.79

17.39

Q

% Solids: Batch:

7121849

Sequence:

General Air Prep

Initial/Final: 0801024 200 ml / 200 ml

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		1	0.138	0.4	U
75-00-3	Chloroethane		1	0.158	0.4	U
67-64-1	Acetone		1	0.222	0.5	U
75-35-4	1,1-Dichloroethene		1	0.124	0.5	U
75-09-2	Methylene chloride		1	0.110	0.4	U
156-60-5	trans-1,2-Dichloroethene		1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane		1	0.166	0.7	U
78-93-3	2-Butanone (MEK)		1	0.105	0.3	U
156-59-2	cis-1,2-Dichloroethene		1	0.121	0.5	U
67-66-3	Chloroform		1	0.221	1.1	U
107-06-2	1,2-Dichloroethane		1	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane		1	0.130	0.7	U
71-43-2	Benzene		1	0.124	0.4	U
56-23-5	Carbon tetrachloride		1	0.221	1.4	U
79-01-6	Trichloroethene		I	0.153	0.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)		1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane		1	0.160	0.9	U
108-88-3	Toluene		1	0.122	0.5	U
127-18-4	Tetrachloroethene		1/	0.143	1.0	U
100-41-4	Ethylbenzene		1	0.141	0.6	U
1330-20-7	m,p-Xylene		1	0.246	1.1	U
95-47-6	o-Xylene		1	0.116	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		I	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene		1	0.144	0.7	U
YSTEM MON	NITORING COMPOUND AI	DDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q

10.0

AREA

1816282

8511589

3876197

4-Bromofluorobenzene

Bromochloromethane

1,4-Difluorobenzene

Chlorobenzene-d5

INTERNAL STANDARD

^{*} Values outside of QC limits

Air2

FORM I - AIR ANALYSIS DATA SHEET EPA TO-15

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-16

File ID:

B22070.D

Instrument:

Sampled:

3/5)yz=6522-62-2(11)y

Analyzed:

12/21/07 22:20

% Solids:

12/12/07 14:00

Prepared: Preparation: 12/21/07 07:14 General Air Prep

Initial/Final:

Batch:

7121849

Sequence:

S800622

Calibration:

0801024

200 ml / 200 ml

CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	1	0.150	0.4	U 🅽
75-00-3	Chloroethane	1	0.150	0.4	U J
67-64-1	Acetone	1	1.40	3.3	J
75-35-4	1,1-Dichloroethene	1	0.150	0.6	UJ
75-09-2	Methylene chloride	1	0.950	3.3	J
156-60-5	trans-1,2-Dichloroethene	1	0.150	0.6	UJ
75-34-3	1,1-Dichloroethane	1	0.150	0.6	Uj
78-93-3	2-Butanone (MEK)	1	0.805	2.4	J
156-59-2	cis-1,2-Dichloroethene	1	0.150	0.6	UJ
67-66-3	Chloroform	1	0.150	0.7	U
107-06-2	1,2-Dichloroethane	1	0.150	0.6	U
71-55-6	1,1,1-Trichloroethane	1	0.155	0.8	5
71-43-2	Benzene	1	0.680	2.2	J
56-23-5	Carbon tetrachloride	1	0.193	1.2	J
79-01-6	Trichloroethene	1	0.218	1.2	J
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.150	0.6	UJ
79-00-5	1,1,2-Trichloroethane	1	0.150	0.8	UJ
108-88-3	Toluene	1	0.450	1.7	J
127-18-4	Tetrachloroethene	1	0.150	1.0	n 2
100-41-4	Ethylbenzene	1	0.185	0.8	J
1330-20-7	m,p-Xylene	1	0.486	2.1	J
95-47-6	o-Xylene	1	0.191	0.8	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.150	1.0	UJ
95-63-6	1,2,4-Trimethylbenzene	1	0,258	1.3	1

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	8.71	87	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1854956	9.55	1688612	9.55	
1,4-Difluorobenzene	8777493	11.78	8107328	11.79	
Chlorobenzene-d5	3959000	17.38	3858679	17.39	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Laboratory ID:

SA72249-18

File ID:

B22072.D

Sampled:

<u>Air</u>

12/21/07 07:14

Analyzed:

12/21/07 23:55

% Solids:

12/12/07 00:00

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121849

Sequence:

S800622

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	1	0.138	0.4	U
75-00-3	Chloroethane	1	0.158	0.4	U
67-64-1	Acetone	1	0.222	0.5	U
75-35-4	1,1-Dichloroethene	1	0.124	0.5	U
75-09-2	Methylene chloride	1	0.110	0.4	U
156-60-5	trans-1,2-Dichloroethene	1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane	1	0.166	0.7	U
78-93-3	2-Butanone (MEK)	1	0.105	0.3	U
156-59-2	cis-1,2-Dichloroethene	1	0.121	0.5	U
67-66-3	Chloroform	1	0.221	1.1	U
107-06-2	1,2-Dichloroethane	1	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane	1	0.130	0.7	U
71-43-2	Benzene	1	0.124	0.4	U
56-23-5	Carbon tetrachloride	1	0.221	1.4	U
79-01-6	Trichloroethene	1	0.153	0.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane	1	0.160	0.9	U
108-88-3	Toluene	1	0.122	0.5	U
127-18-4	Tetrachloroethene	1	0.143	1.0	U
100-41-4	Ethylbenzene	1	0.141	0.6	U
1330-20-7	m,p-Xylene	1	0.246	1.1	U
95-47-6	o-Xylene	1	0.116	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene	1	0.144	0.7	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	8.59	86	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1783868	9.54	1688612	9.55	
1,4-Difluorobenzene	8295971	11.78	8107328	11.79	
Chlorobenzene-d5	3749971	17.38	3858679	17.39	

^{*} Values outside of QC limits

Air2

FORM I - AIR ANALYSIS DATA SHEET EPA TO-15

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-17

File ID:

B22071.D

Instrument:

Sampled:

1.411

20

Analyzed:

12/21/07 23:07

% Solids:

12/12/07 14:15

Prepared: Preparation: 12/21/07 07:14 General Air Prep

Initial/Final:

200 ml / 200 ml

9.55

11.79

17.39

1688612

8107328

3858679

Batch:

7121849

Sequence:

S800622

Calibration:

0801024

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		1	0.138	0.4	U
75-00-3	Chloroethane		1	0.158	0.4	U
67-64-1	Acetone		1	11.6	27.6	
75-35-4	1,1-Dichloroethene		1	0.340	1.3	J
75-09-2	Methylene chloride		1	0.510	1.8	
156-60-5	trans-1,2-Dichloroethene		1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane		1	0.166	0.7	U
78-93-3	2-Butanone (MEK)		1	0.830	2.4	
156-59-2	cis-1,2-Dichloroethene		1	0.121	0.5	U
67-66-3	Chloroform		1	0.221	1.1	U
107-06-2	1,2-Dichloroethane		1	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane		1	6.43	35.1	
71-43-2	Benzene		1	0.410	1.3	J
56-23-5	Carbon tetrachloride		1	0.221	1.4	U
79-01-6	Trichloroethene		1	2.47	13.3	
108-10-1	4-Methyl-2-pentanone (MIBK)		1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane		1	0.160	0.9	U
108-88-3	Toluene		1	1.56	5.9	
127-18-4	Tetrachloroethene		1	0.143	1.0	U
100-41-4	Ethylbenzene		1	0.141	0.6	U
1330-20-7	m,p-Xylene		1	0.490	2.1	J
95-47-6	o-Xylene		1	0,116	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		1	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene		1	0.144	0.7	U
SYSTEM MON	NITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluoro	benzene	10.0	8.83	88	75 - 125	
INTERNAL ST	TANDARD	AREA	RT	REF AREA	REF RT	Q
THE STATE OF THE S						

1913679

9009810

4074778

9.55

11.78

17.38

Bromochloromethane

1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tanawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-11

File ID:

B22049.D

Sampled:

12/20/07 08:50

Analyzed:

12/21/07 01:00

% Solids:

12/12/07 10:55

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Sequence:

S801746

Calibration:

0801024

h:	<u>7121541</u> Sequence: <u>S801746</u>	Calibration:	0801024	Instrument:	Air2
CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	2	0.276	0.7	UD
75-00-3	Chloroethane	2	0.316	0.8	UI
67-64-1	Acetone	2	15.9	37.8	В
75-35-4	1,1-Dichloroethene	2	0.248	1.0	Ub
75-09-2	Methylene chloride	2	0.220	0.8	UI
156-60-5	trans-1,2-Dichloroethene	2	0.140	0.6	UI
75-34-3	1,1-Dichloroethane	2	0.332	1.3	U
78-93-3	2-Butanone (MEK)	2	1.66	4.9	D
156-59-2	cis-1,2-Dichloroethene	2	0.242	1.0	U
67-66-3	Chloroform	2	0.442	2.2	UI
107-06-2	1,2-Dichloroethane	2	0.498	2.0	UI
71-55-6	1,1,1-Trichloroethane	2	4.96	27.1	I
71-43-2	Benzene	2	0.248	0.8	U
56-23-5	Carbon tetrachloride	2	0.442	2.8	UI
79-01-6	Trichloroethene	2	3.80	20.4	Ib
108-10-1	4-Methyl-2-pentanone (MIBK)	2	0.678	2.8	U
79-00-5	1,1,2-Trichloroethane	2	0.320	1.7	UI
108-88-3	Toluene	2	1.68	6.3	П
127-18-4	Tetrachloroethene	2	0.286	1.9	UL
100-41-4	Ethylbenzene	2	0.282	1.2	UI
1330-20-7	m,p-Xylene	2	1.08	4.7	Л
95-47-6	o-Xylene	2	0.232	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2	0.506	3.5	U
95-63-6	1,2,4-Trimethylbenzene	2	0.288	1.4	UI

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QCLIMITS	Q
4-Bromofluorobenzene	10.0	8.80	88	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1200286	9.55	1431251	9.55	
1,4-Difluorobenzene	5660957	11.78	6818820	11.79	
Chlorobenzene-d5	2679771	17.38	3258375	17.38	

ADDED (makes) COMC (makes)

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tanawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

B22050.D

Matrix:

Air

Laboratory ID:

SA72249-12

File ID:

Sampled:

12/12/07 11:05

Prepared:

12/20/07 08:50

Analyzed:

12/21/07 01:44

% Solids:

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		2	0.276	0.7	UD
75-00-3	Chloroethane		2	0.316	0.8	UD
67-64-1	Acetone		2	26.6	63.2	П
75-35-4	1,1-Dichloroethene		2	0.680	2.7	110
75-09-2	Methylene chloride		2	0.220	0.8	Uþ
156-60-5	trans-1,2-Dichloroethene		2	0.140	0.6	UD
75-34-3	1,1-Dichloroethane			1.12	4.5	I)
78-93-3	2-Butanone (MEK)		2	1.50	4.4	I
156-59-2	cis-1,2-Dichloroethene		2	0.242	1.0	UÞ
67-66-3	Chloroform		2	0.442	2.2	UID
107-06-2	1,2-Dichloroethane		2	0.498	2.0	UD
71-55-6	1,1,1-Trichloroethane		2	38.8	211.7	П
71-43-2	Benzene		2	0.640	2.0	лр
56-23-5	Carbon tetrachloride		2	0.442	2.8	UD
79-01-6	Trichloroethene		2	2.50	13.4	D
108-10-1	4-Methyl-2-pentanone (MIBK)		2	0.678	2.8	UD
79-00-5	1,1,2-Trichloroethane		2	0.320	1.7	UD
108-88-3	Toluene		2	1.82	6.8	D
127-18-4	Tetrachloroethene		2	0.286	1.9	UD
100-41-4	Ethylbenzene		2	0.282	1.2	Up
1330-20-7	m,p-Xylene		2	0.740	3.2	л
95-47-6	o-Xylene		2	0.232	1.0	UD
79-34-5	1,1,2,2-Tetrachloroethane		2	0.506	3.5	UI
95-63-6	1,2,4-Trimethylbenzene		2	0.288	1.4	UI

4-Bromofluorobenzene	10.0	9.18	92	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1314430	9.55	1431251	9.55	
1,4-Difluorobenzene	6248283	11.78	6818820	11.79	
Chlorobenzene-d5	2932945	17.38	3258375	17.38	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tinawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-01

File ID:

B22041.D

Sampled:

12/12/07 00.4

Prepared:

12/20/07 08:50

Analyzed:

12/20/07 19:04

% Solids:

12/12/07 08:48

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	11	0.138	0.4	U
75-00-3	Chloroethane	1	0.158	0.4	U
67-64-1	Acetone	1	5.01	11.9	
75-35-4	1,1-Dichloroethene	1	0.124	0.5	U
75-09-2	Methylene chloride	1	0.110	0.4	U
156-60-5	trans-1,2-Dichloroethene	1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane	1	0.166	0.7	U
78-93-3	2-Butanone (MEK)	1	0.105	0.3	U
156-59-2	cis-1,2-Dichloroethene	1	0.121	0.5	U
67-66-3	Chloroform	1	0.221	1.1	U
107-06-2	1,2-Dichloroethane	1	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane	1	2.34	12.8	
71-43-2	Benzene	1	0.470	1.5	J
56-23-5	Carbon tetrachloride	1	0.221	1.4	U
79-01-6	Trichloroethene	1	1.09	5.9	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane	1	0.160	0.9	U
108-88-3	Toluene	1	1.76	6.6	
127-18-4	Tetrachloroethene	1	0.143	1.0	U
100-41-4	Ethylbenzene	1	0.141	0.6	U
1330-20-7	m,p-Xylene	I	0.670	2.9	J
95-47-6	o-Xylene	1	0.116	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene	1	0.144	0.7	U

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	8.74	87	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1303479	9.56	1431251	9.55	
1,4-Difluorobenzene	6159564	11.79	6818820	11.79	
Chlorobenzene-d5	2852812	17.38	3258375	17.38	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tanawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-10

File ID:

B22048.D

Sampled:

12/12/07 00:00

Prepared:

12/20/07 08:50

Analyzed:

12/21/07 00:13

% Solids:

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	1	0.138	0.4	U
75-00-3	Chloroethane	1	0.158	0.4	U
67-64-1	Acetone	Ī	6.34	15.1	
75-35-4	1,1-Dichloroethene	I	0.124	0.5	U
75-09-2	Methylene chloride	1	0.110	0.4	U
156-60-5	trans-1,2-Dichloroethene	1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane	i	0.166	0.7	U
78-93-3	2-Butanone (MEK)	1	0.490	1.4	J
156-59-2	cis-1,2-Dichloroethene	1	0.121	0.5	U
67-66-3	Chloroform	1	0.221	1.1	U
107-06-2	1,2-Dichloroethane	Ĩ.	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane	1	6.60	36.0	
71-43-2	Benzene	1	0.720	2.3	
56-23-5	Carbon tetrachloride	1	0.221	1.4	U
79-01-6	Trichloroethene	1	2.94	15.8	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane	1	0.160	0.9	U
108-88-3	Toluene	1	2.51	9.4	
127-18-4	Tetrachloroethene	1	0.143	1.0	U
100-41-4	Ethylbenzene	1	0.300	1.3	J
1330-20-7	m,p-Xylene	1	0.880	3.8	J
95-47-6	o-Xylene	1	0.330	1.4	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene	1	0.144	0.7	U

ADDED (ppbv)

10.0

AREA

1300671

6197367

2882878

CONC (ppbv)

8.96

RT

9.55

11.78

17.38

% REC

90

REF AREA

1431251

6818820

3258375

QC LIMITS

75 - 125

REF RT

9.55

11.79

17.38

Q

Q

4-Bromofluorobenzene

Bromochloromethane

1,4-Difluorobenzene

Chlorobenzene-d5

INTERNAL STANDARD

SYSTEM MONITORING COMPOUND

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Laboratory ID:

SA72249-02

File ID:

B22026.D

Sampled:

<u>Air</u>

Analyzed:

12/20/07 01:33

% Solids:

12/12/07 09:38

Prepared: Preparation: 12/19/07 08:33

Initial/Final:

200 ml / 200 ml

Batch:

7121453

Sequence:

General Air Prep

S801745

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND	DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	50.8	7.01	17.9	UD
75-00-3	Chloroethane	50.8	8.03	21.2	UD
67-64-1	Acetone	50.8	89.9	213.6	D
75-35-4	1,1-Dichloroethene	50.8	297	1,178.3	Ď
75-09-2	Methylene chloride	50.8	5.59	19.4	UD
156-60-5	trans-1,2-Dichloroethene	50.8	3.55	14.1	UD
75-34-3	1,1-Dichloroethane	50.8	199	805.8	D
78-93-3	2-Butanone (MEK)	50.8	5.33	15.7	UI
156-59-2	cis-1,2-Dichloroethene	50.8	62.0	245.8	D
67-66-3	Chloroform	50.8	11.2	54.5	UD
107-06-2	1,2-Dichloroethane	50.8	12.6	51.0	UD
71-55-6	1,1,1-Trichloroethane	50.8	380 6110 23	817 1 _{33,336.4}	DE
71-43-2	Benzene	50.8	6.30	20.1	UD
56-23-5	Carbon tetrachloride	50.8	11.2	70.5	UD
79-01-6	Trichloroethene	50.8	1850	9,942.3	D
108-10-1	4-Methyl-2-pentanone (MIBK)	50.8	17.2	70.5	UP
79-00-5	1,1,2-Trichloroethane	50.8	8.13	44.4	UD
108-88-3	Toluene	50.8	6.20	23.3	UI
127-18-4	Tetrachloroethene	50.8	7.26	49.2	UD
100-41-4	Ethylbenzene	50.8	7.16	31.0	UIP
1330-20-7	m,p-Xylene	50.8	12.5	54.2	UD
95-47-6	o-Xylene	50.8	5.89	25.5	UP
79-34-5	1,1,2,2-Tetrachloroethane	50.8	12.9	88.6	UD
95-63-6	1,2,4-Trimethylbenzene	50.8	7.32	36.0	UI,

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	9.06	91	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1398435	9.55	1589072	9.55	
1,4-Difluorobenzene	6688206	11.79	7800235	11.79	
Chlorobenzene-d5	3179003	17.38	3628344	17.39	

^{*} Values outside of QC limits

Greif-SSV-07

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

B21992.D

Matrix:

Air

Laboratory ID:

SA72249-02RE1

File ID:

Sampled:

12/12/07 09:38

Prepared:

12/18/07 08:17

Analyzed:

12/18/07 17:36

% Solids:

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:	7121342	Sequence:	<u>S801737</u>	Calibration:	0801024	Instrument	Air2
CAS NO.	COMPOUND	6		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
71-55-6	1,1,1-Trichlor	oethane		254	4380	23,897.4	p
SYSTEM MON	NITORING COM	POUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorol	benzene		10.0	9.28	93	75 - 125	
INTERNAL ST	TANDARD		AREA	RT	REF AREA	REF RT	Q
Bromochlorom	ethane		1561010	9.55	1442460	9.55	
1,4-Difluorober	nzene		7575852	11.78	7113840	11.79	
Chlorobenzene-	-d5		3490523	17.38	3205009	17.39	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-03

File ID:

B22042.D

Sampled:

12/20/07 08:50

Analyzed:

12/20/07 19:47

% Solids:

12/12/07 10:13

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument:

Air2

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		10	1.38	3.5	UIÞ
75-00-3	Chloroethane		10	1.58	4.2	UI
67-64-1	Acetone		10	5.90	14.0	D
75-35-4	1,1-Dichloroethene		10	1.24	4.9	UIÞ
75-09-2	Methylene chloride		10	1.10	3.8	UI
156-60-5	trans-1,2-Dichloroethene		10	0.699	2.8	UI
75-34-3	1,1-Dichloroethane		10	1.66	6.7	UI
78-93-3	2-Butanone (MEK)		10	1.05	3.1	UI
156-59-2	cis-1,2-Dichloroethene		10	1.21	4.8	UI
67-66-3	Chloroform		10	2.21	10.8	UI
107-06-2	1,2-Dichloroethane		10	2.49	10.1	UI
71-55-6	1,1,1-Trichloroethane		10	3.40	18.6	Л
71-43-2	Benzene		10	1.24	4.0	UD
56-23-5	Carbon tetrachloride		10	2.21	13.9	UD
79-01-6	Trichloroethene		10	1.53	8.2	UI
108-10-1	4-Methyl-2-pentanone (MIBK)		10	3.39	13.9	UI
79-00-5	1,1,2-Trichloroethane		10	1.60	8.7	UD
108-88-3	Toluene		10	1.22	4.6	UI
127-18-4	Tetrachloroethene		10	1,43	9.7	UI
100-41-4	Ethylbenzene		10	1.41	6.1	UI
1330-20-7	m,p-Xylene		10	2.46	10.7	UI
95-47-6	o-Xylene		10	1,16	5.0	UI
79-34-5	1,1,2,2-Tetrachloroethane		10	2.53	17.4	UI
95-63-6	1,2,4-Trimethylbenzene		10	1.44	7.1	UI
YSTEM MON	IITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q

SYSTEM MONITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
4-Bromofluorobenzene	10.0	8.98	90	75 - 125	
INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1339712	9.54	1431251	9.55	
1,4-Difluorobenzene	6356008	11.78	6818820	11.79	
Chlorobenzene-d5	2951580	17.38	3258375	17.38	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project: Received: Greif - Timawanda, NY

Project Number:

0070448

Laboratory ID:

SA72249-04

12/13/07 10:48

B22043.D

Matrix: Sampled: Air

Laboratory II

01112217 01

File ID:

Sampicu.

12/12/07 08:50

Prepared:

12/20/07 08:50

Analyzed:

12/20/07 20:34

% Solids:

12/12/07 00.30

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

75 - 125

REF RT

9.55 11.79

17.38

Q

88

REF AREA

1431251

6818820

3258375

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument:

Air2

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		1	0.150	0.4	U
75-00-3	Chloroethane		1	0.150	0.4	U
67-64-1	Acetone		1	6.43	15.3	
75-35-4	1,1-Dichloroethene		1	4.29	17.0	
75-09-2	Methylene chloride		I	0.720	2.5	
156-60-5	trans-1,2-Dichloroethene		1	0.150	0.6	U
75-34-3	1,1-Dichloroethane		1	0.970	3.9	
78-93-3	2-Butanone (MEK)		1	0.750	2.2	
156-59-2	cis-1,2-Dichloroethene		1	0.155	0.6	
67-66-3	Chloroform		1	0.150	0.7	U
107-06-2	1,2-Dichloroethane		1	0.150	0.6	U
71-55-6	1,1,1-Trichloroethane		1	1.13	6.2	
71-43-2	Benzene		1	0.339	1.1	
56-23-5	Carbon tetrachloride		1	0.219	1.4	
79-01-6	Trichloroethene		1	0.650	3.5	
108-10-1	4-Methyl-2-pentanone (MIBK)		Ĩ	0.150	0,6	U
79-00-5	1,1,2-Trichloroethane		1	0.150	0.8	U
108-88-3	Toluene		I	1.37	5.2	
127-18-4	Tetrachloroethene		1	0.150	1.0	U
100-41-4	Ethylbenzene		1	0.150	0.7	U
1330-20-7	m,p-Xylene		1	0.330	1.4	
95-47-6	o-Xylene		1	0.150	0.7	U
79-34-5	1,1,2,2-Tetrachloroethane		1	0.150	1.0	U
95-63-6	3-6 1,2,4-Trimethylbenzene		1	0.150	0.7	U
YSTEM MON	NITORING COMPOUND AD	DED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q

10.0

AREA

1250671

5886446

2777073

8.78

RT

9.54

11.78

17.38

4-Bromofluorobenzene

1,4-Difluorobenzene

Chlorobenzene-d5

INTERNAL STANDARD
Bromochloromethane

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tinawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-09

File ID:

B22027.D

Sampled:

10/10/07 00

Prepared:

12/19/07 08:33

Analyzed:

12/20/07 02:18

% Solids:

12/12/07 00:00

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121453

Sequence:

S801745

Calibration:

0801024

Instrument:

Air2

CAS NO.	COMPOUND	COMPOUND		CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		119	16.4	41.9	UI 🤇
75-00-3	Chloroethane		119	18.8	49.6	UI
67-64-1	Acetone		119	295	701.0	I
75-35-4	1,1-Dichloroethene		119	1670	6,625.4	10
75-09-2	Methylene chloride		119	13.1	45.5	UI
156-60-5	trans-1,2-Dichloroethene		119	8.32	33.0	UI
75-34-3	1,1-Dichloroethane		119	727	2,943.7	D
78-93-3	2-Butanone (MEK)		119	12.5	36.9	UD
156-59-2	cis-1,2-Dichloroethene		119	131	519.4	D
67-66-3	Chloroform		119	26.3	128.0	UD
107-06-2	1,2-Dichloroethane		119	29.6	119.9	UI
71-55-6	1,1,1-Trichloroethane		119	2350	12,821.7	D
71-43-2	Benzene		119	14.8	47.2	UID
56-23-5	Carbon tetrachloride		119	26,3	165.4	UI
79-01-6	Trichloroethene		119	6050	32,514.1	I
108-10-1	4-Methyl-2-pentanone (MIBK)		119	40.3	165.2	UD
79-00-5	1,1,2-Trichloroethane		119	19.0	103.7	UI
108-88-3	Toluene		119	83.3	313.4	D
127-18-4	Tetrachloroethene		119	17.0	115.3	UD
100-41-4	Ethylbenzene		119	16.8	72.8	UD
1330-20-7	m,p-Xylene		119	29.3	127.0	UD
95-47-6	o-Xylene		119	13.8	59.8	UD
79-34-5	1,1,2,2-Tetrachloroethane		119	30.1	206.7	UL
95-63-6	1,2,4-Trimethylbenzene		119	17.1	84.1	UD \
SYSTEM MONITORING COMPOUND ADDED (ppbv)		CONC (ppbv)	% REC	QC LIMITS	Q	
4-Bromofluorol	benzene	10.0	9.27	93	75 - 125	
INTERNAL ST	TANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane 1492257		9.54	1589072	9.55		
Company to the second second second		Constitution of the Consti		1		

7130534

3342751

11.78

17.38

7800235

3628344

11.79

17.39

1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tinawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-05

File ID:

B22044.D

Sampled:

Prepared:

12/20/07 08:50

Analyzed:

12/20/07 21:17

% Solids:

12/12/07 08:53

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

REF AREA

1431251

6818820

3258375

RT

9.54

11.78

17.38

REF RT

9.55

11.79

17.38

Q

Air2 Instrument:

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		10	1.38	3.5	UI
75-00-3	Chloroethane		10	1.58	4.2	UI
67-64-1	Acetone		10	8.60	20.4	I
75-35-4	1,1-Dichloroethene		10	1.24	4.9	UD
75-09-2	Methylene chloride		10	1.10	3.8	UI
156-60-5	trans-1,2-Dichloroethene		10	0.699	2.8	UI
75-34-3	1,1-Dichloroethane		10	1.66	6.7	UI
78-93-3	2-Butanone (MEK)		10	1.05	3.1	UI
156-59-2	cis-1,2-Dichloroethene		10	1.21	4.8	UI
67-66-3	Chloroform		10	2.21	10.8	UI
107-06-2	1,2-Dichloroethane		10	2.49	10.1	UD
71-55-6	1,1,1-Trichloroethane		10	3.50	19.1	Л
71-43-2	Benzene		10	1.24	4.0	UIP
56-23-5	Carbon tetrachloride		10	2.21	13.9	UD
79-01-6	Trichloroethene		10	3.30	17.7	Л
108-10-1	4-Methyl-2-pentanone (MIBK)		10	3.39	13.9	UD
79-00-5	1,1,2-Trichloroethane		10	1.60	8.7	UI
108-88-3	Toluene		10	3.40	12.8	Л
127-18-4	Tetrachloroethene		10	1.43	9.7	UD
100-41-4	Ethylbenzene		10	1.41	6.1	UI
1330-20-7	m,p-Xylene		10	2.46	10.7	UI
95-47-6	o-Xylene		10	1.16	5.0	UD
79-34-5	1,1,2,2-Tetrachloroethane		10	2.53	17.4	UI
95-63-6	1,2,4-Trimethylbenzene		10	1.44	7.1	UD
YSTEM MONITORING COMPOUND ADDED (ppbv)		CONC (ppbv)	% REC	QC LIMITS	Q	
-Bromofluorobenzene 10.0		10.0	9.02	90	75 - 125	

AREA

1269252

6031307

2870804

INTERNAL STANDARD

Bromochloromethane 1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-06

File ID:

B22045.D

Sampled:

Euroratory 12.

12/20/07 08:50

Analyzed:

12/20/07 22:00

% Solids:

12/12/07 08:53

Prepared: Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument: Air2

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		10	1.38	3.5	UD
75-00-3	Chloroethane		10	1.58	4.2	UI
67-64-1	Acetone		10	6.30	15.0	I
75-35-4	1,1-Dichloroethene		10	1.24	4.9	UÌ
75-09-2	Methylene chloride		10	1.10	3.8	UI
156-60-5	trans-1,2-Dichloroethene		10	0.699	2.8	UI
75-34-3	1,1-Dichloroethane		10	1.66	6.7	UI
78-93-3	2-Butanone (MEK)		10	1.05	3.1	UD
156-59-2	cis-1,2-Dichloroethene		10	1.21	4.8	UI
67-66-3	Chloroform		10	2.21	10.8	UI
107-06-2	1,2-Dichloroethane		10	2.49	10.1	UI
71-55-6	1,1,1-Trichloroethane		10	146	796.6	T/
71-43-2	Benzene		10	1.24	4.0	U
56-23-5	Carbon tetrachloride		10	2.21	13.9	U
79-01-6	Trichloroethene		10	15.3	82.2	I
108-10-1	4-Methyl-2-pentanone (MIBK)		10	3.39	13.9	UD
79-00-5	1,1,2-Trichloroethane		10	1.60	8.7	UI
108-88-3	Toluene		10	4.20	15.8	JI
127-18-4	Tetrachloroethene		10	1.43	9.7	UL
100-41-4	Ethylbenzene		10	1.41	6.1	UID
1330-20-7	m,p-Xylene		10	2.46	10.7	UI
95-47-6	o-Xylene		10	1.16	5.0	UI
79-34-5	1,1,2,2-Tetrachloroethane		10	2.53	17.4	UI
95-63-6	5-63-6 1,2,4-Trimethylbenzene		10	1.44	7.1	UI
YSTEM MO	NITORING COMPOUND	ADDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
-Bromofluorobenzene 10.0		10.0	9.10	91	75 - 125	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	1306701	9.54	1431251	9.55	
1,4-Difluorobenzene	6194081	11.78	6818820	11.79	
Chlorobenzene-d5	2956248	17.38	3258375	17.38	

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Trinawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-07

File ID:

B22116.D

Sampled:

7111

12/24/07 07:15

Analyzed:

12/24/07 15:26

% Solids:

12/12/07 08:58

Prepared: Preparation:

General Air Prep

Initial/Final:

1790242

8352155

3896738

9.54

11.78

17.38

9.54

11.78

17.38

200 ml / 200 ml

Batch:

7121749

Sequence:

S801883

Calibration:

0801024

Instrument:

Air2

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride	Vinyl chloride		0.138	0.4	U
75-00-3	Chloroethane		1	0.158	0.4	U
67-64-1	Acetone		1	0.222	0.5	U
75-35-4	1,1-Dichloroethene		1	0.124	0.5	U
75-09-2	Methylene chloride		1	1.04	3.6	
156-60-5	trans-1,2-Dichloroethene		1	0.0699	0.3	U
75-34-3	1,1-Dichloroethane		1	0.166	0.7	U
78-93-3	2-Butanone (MEK)		1	0.105	0.3	U
156-59-2	cis-1,2-Dichloroethene		1	0.121	0.5	U
67-66-3	Chloroform		1	0.221	1.1	U
107-06-2	1,2-Dichloroethane		1	0.249	1.0	U
71-55-6	1,1,1-Trichloroethane		1	0.130	0.7	U
71-43-2	Benzene		1	0.124	0.4	U
56-23-5	Carbon tetrachloride		1	0.221	1.4	U
79-01-6	Trichloroethene		1	0.153	0.8	U
108-10-1	4-Methyl-2-pentanone (MIBK)		1	0.339	1.4	U
79-00-5	1,1,2-Trichloroethane		1	0.160	0.9	U
108-88-3	Toluene		1	1.83	6.9	
127-18-4	Tetrachloroethene		1	0.143	1.0	U
100-41-4	Ethylbenzene		1	0.141	0.6	U
1330-20-7	m,p-Xylene		1	0.246	1.1	U
95-47-6	o-Xylene		1	0.116	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane		1	0.253	1.7	U
95-63-6	1,2,4-Trimethylbenzene		1	0.144	0.7	U
SYSTEM MONITORING COMPOUND ADDED (ppbv)		CONC (ppbv)	% REC	QC LIMITS	Q	
4-Bromofluorobenzene 10.0		8.66	87	75 - 125		
INTERNAL STANDARD AREA		RT	REF AREA	REF RT	Q	

1803189

8298842

3753505

Bromochloromethane

1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits

Laboratory:

Spectrum Analytical, Inc. - Agawam, MA

SDG:

72249

Client:

Environmental Resources Management - Dewitt, NY

Project:

Greif - Tunawanda, NY

Project Number:

0070448

Received:

12/13/07 10:48

Matrix:

Air

Laboratory ID:

SA72249-08

File ID:

B22047.D

Sampled:

Prepared:

12/20/07 08:50

Analyzed:

12/20/07 23:26

% Solids:

12/12/07 08:58

Preparation:

General Air Prep

Initial/Final:

200 ml / 200 ml

Batch:

7121541

Sequence:

S801746

Calibration:

0801024

Instrument:

	Air2
_	-

CAS NO.	COMPOUND		DILUTION	CONC. (ppbv)	CONC. (ug/m3)	Q
75-01-4	Vinyl chloride		20	2.76	7.1	UID
75-00-3	Chloroethane		20	3.16	8.3	UI
67-64-1	Acetone		20	8.20	19.5	Л
75-35-4	1,1-Dichloroethene		20	2.48	9.8	UD
75-09-2	Methylene chloride		20	2.20	7.6	UD
156-60-5	trans-1,2-Dichloroethene		20	1.40	5.6	UID
75-34-3	1,1-Dichloroethane		20	3.32	13.4	UI
78-93-3	2-Butanone (MEK)		20	2.10	6.2	UI
156-59-2	cis-1,2-Dichloroethene		20	2.42	9.6	UI
67-66-3	Chloroform		20	4.42	21.5	UD
107-06-2	1,2-Dichloroethane		20	4.98	20.2	UD
71-55-6	1,1,1-Trichloroethane		20	7.00	38.2	JID
71-43-2	Benzene		20	2.48	7.9	UD
56-23-5	Carbon tetrachloride		20	4.42	27.8	UD
79-01-6	Trichloroethene		20	41.8	224.6	D
108-10-1	4-Methyl-2-pentanone (MIBK)		20	6.78	27.8	UD
79-00-5	1,1,2-Trichloroethane		20	3.20	17.5	UD
108-88-3	Toluene		20	2.44	9.2	UD
127-18-4	Tetrachloroethene		20	2.86	19.4	UD
100-41-4	Ethylbenzene		20	2.82	12.2	UID
1330-20-7	m,p-Xylene		20	4.92	21.3	UD
95-47-6	o-Xylene		20	2.32	10.1	UI
79-34-5	1,1,2,2-Tetrachloroethane		20	5.06	34.7	UD
95-63-6	1,2,4-Trimethylbenzene		20	2.88	14.2	UD
SYSTEM MON	NITORING COMPOUND A	DDED (ppbv)	CONC (ppbv)	% REC	QC LIMITS	Q
-Bromofluorobenzene 10.0		10.0	8.94	89	75 - 125	

AREA

1136083

5405350

2578612

RT

9.54

11.78

17.38

REF AREA

1431251

6818820

3258375

REF RT

9.55

11.79

17.38

Q

INTERNAL STANDARD

Bromochloromethane 1,4-Difluorobenzene

Chlorobenzene-d5

^{*} Values outside of QC limits