GEOMATRIX

Right-of-Way Site Assessment

Titanium Station
Niagara Falls, New York

Prepared for:

Niagara Mohawk Power Corporation
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Geomatrix Consultants

GEOMATRIX

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11/8/01

#932027 NIHO Report

GLEN,

Reviewed Report, Generally Looks pretty thorough.

Nothing found that will/should change Site class. Additional info on ~~Chlor~~ chloropicrin.

Asked Jim Harrington to calculate soil cleanup # for chloropicrin. Sent him MSDS sheet.

~~After~~

NIHO Recomends Removing chloropicrin bottles. Suggest Limited Soil Removal IF Harrington gives us a number.

Mike

GEOMATRIX

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RIGHT-OF-WAY SITE ASSESSMENT
Titanium Substation
Niagara Falls, New York

1.0 INTRODUCTION

Niagara Mohawk Power Corporation (Niagara Mohawk) has implemented a pilot program to identify and evaluate potential environmental impacts to its right-of-way (ROW) properties. During a reconnaissance of the Titanium Substation right-of-way (ROW) in July 2000, fill piles consisting of what was described by a Niagara Mohawk field inspector as large quantities of an "ash-like substance" were observed along a portion of the Titanium Substation ROW on property between Delaware and Maryland Streets in the City of Niagara Falls, New York (Figure 1). The source of the fill piles is unknown to Niagara Mohawk.

The ROW property is located along a north-south trending 60-foot wide parcel bounded on the north by undeveloped property, on the south by Maryland Street, on the east by Kach's Auto (auto salvage yard) and on the west by Garlocks Auto, Inc. (auto salvage yard). Figure 2 identifies the property location relative to Niagara Mohawk's ROW network in the area.

1.1 BACKGROUND

After recognizing the presence of fill piles on the Niagara Mohawk ROW, Geomatrix Consultants, Inc. (Geomatrix) was retained by Niagara Mohawk to conduct a preliminary assessment of the ROW property that involved collecting and analyzing a limited number of samples from the fill piles (see Section 1.2 Previous Studies). The preliminary assessment identified chloropicrin (a volatile organic compound) in samples collected from the fill piles. As such, Geomatrix prepared an "Environmental Site Assessment Work Plan, Niagara Falls Right-of-Way, Niagara Falls, New York" (ESA Work Plan), in April 2001 to assess the distribution of chloropicrin and other volatile organic compounds (VOCs) at the ROW property. The Scope of Work identified in the ESA Work Plan was completed in June 2001. The results of the ROW Site Assessment are presented in this report.

1.2 PREVIOUS STUDIES

During a meeting held at NYSDEC Region 9 office on August 22, 2001 with Mr. Dan King (NYSDEC), Mr. Mike Hinton (NYSDEC), Mr. Mat Forcucci (NYSDOH), and members of Niagara Mohawk and Geomatrix, the NYSDEC indicated that the Niagara Mohawk Titanium

ROW property is included within the site boundary of a NYSDEC listed inactive hazardous waste site known as the Witmer Road Site (Site No. 932027). Information about the Witmer Road Site is presented in Section 1.2.1. Section 1.2.2 describes preliminary sampling and analysis conducted in October 2000 and March 2001 by Geomatrix that identified chloropicrin in the fill piles on the ROW property.

1.2.1 1993 PSA

ABB Environmental Services under contract to the NYSDEC conducted a Preliminary Site Assessment (PSA) in 1993 at the Witmer Road Site, Site No. 932027. The Site boundaries are not clearly defined but include and border several properties including the Niagara Mohawk ROW and Kach's Auto Scrap Yard. The Witmer Road Site was reportedly used as a disposal area for various types of waste including "lime baghouse clean-out and slag materials" from several local industries. Two burn pits also operated at the Site on property operated by Kach's Auto Scrap Yard (approximately 200 feet east of the Niagara Mohawk ROW).

The PSA identified waste piles, bottles labeled "poison larvicide", and unlabeled, decomposed containers within the boundaries of the Niagara Mohawk ROW. Beyond the eastern boundary of the ROW, a 55-gallon drum labeled 1,1,1-Trichloroethane, two burn pits, and a tire pile were identified. Surface and subsurface soil samples and groundwater samples were collected during the 1993 PSA and analyzed for TCL volatile organic compounds, TCL semi-volatile organic compounds, TCL pesticides and PCBs, and TAL metals. PSA sampling results indicate one soil sample analyzed from the fill pile exhibited characteristics of corrosivity (pH greater than 12.5). Levels of pH in all other samples were below 12.5. Organic compounds were not detected at elevated levels in soil samples, however, tetrachloroethene and select metals were detected in groundwater at a concentration above New York State Class GA water quality standards. Local groundwater flow directions were reported to be toward the southwest. Following the PSA, the PSA report indicates that the auto scrap yard is the source of groundwater contamination. The Site was reclassified from a Class 2a to a Class 3 (Site does not present a significant threat to the public health or the environment).

1.2.2 2000/2001 Preliminary Sampling and Analysis

Geomatrix completed preliminary sampling and analysis of the debris pile material along the Titanium Substation ROW. The sampling and analysis activities were conducted during two separate events and summarized in two letter reports, dated October 5, 2000 and March 20, 2001, prepared by Geomatrix and submitted to Niagara Mohawk.

Analytical results from the first sampling event (August 2000) indicated the presence of trace concentrations (below TAGM soil criteria) of several volatile organic compounds (VOCs) (acetone, carbon tetrachloride, chloroform, methylene chloride, and trichloroethene) in the single sample collected and analyzed for VOCs. During sample collection, bottles of a larvacide used as a soil fumigant containing chloropicrin were identified. Several of the bottles were empty while a few contained liquids.

Chloropicrin is a highly volatile compound and is toxic by ingestion and/or inhalation. The materials safety and data sheet (MSDS) for chloropicrin is provided in Appendix A. Acceptable risk-based concentrations of chloropicrin in soil or groundwater have not been established by the New York State Department of Environmental Conservation (NYSDEC) or United States Environmental Protection Agency (USEPA). Chloropicrin is a New York State listed hazardous substance.

Subsequent to receiving analytical data from the first sampling event, samples collected from the debris piles during the second sampling event (March 2001) were analyzed for chloropicrin by a laboratory capable of detecting that compound (Severn Trent Laboratories, North Canton, Ohio). Analytical results from the second sampling event indicated the presence of chloropicrin at a maximum concentration of 8,300 ug/kg in three of four fill pile samples.

Also during the preliminary sampling activities, five, 55-gallon drums were identified in the brush at the southwest corner of the Site. At the time of site inspection, it was unclear if these drums are located on Niagara Mohawk property. Two drums were empty, one drum was full and labeled "used anti-freeze," one drum was full with what appeared to be water with an oily residue, and one drum (open top) was approximately one-quarter full of liquid (likely rainwater).

2.0 LAND USE

2.1 SITE MAPPING

Geomatrix mobilized to the ROW property to map the approximate Niagara Mohawk property limits. Based on discussions with Niagara Mohawk, the centerline of the ROW is assumed to coincide with the center of the overhead power line alignment running in the north-south direction. Geomatrix flagged the ROW 30-feet in each direction from the centerline. During site mapping, Geomatrix mapped the extent of fill piles in the vicinity of the ROW property. The ROW boundary was flagged assuming the ROW centerline coincided with the center of the overhead power line alignment.

The approximate boundary of the ROW property and extent of fill piles is illustrated on Figure 3.

2.2 AERIAL PHOTOGRAPH REVIEW

Geomatrix obtained four historical aerial photographs (1951, 1958, 1977, and 1990) at Niagara County Soils Conservation District offices in Lockport, New York. The photograph review evaluated historic conditions to establish a time frame for deposition of the fill piles on the ROW.

The aerial photographs are included in Appendix B.

2.2.1. 1951 Aerial Photograph

The 1951 aerial photograph indicates that Maryland Avenue has not been constructed. The automotive salvage yard exists to the east (Kach's Auto) and appears to be fenced. There is no indication of the automotive salvage yard to the west (Garlock's Auto). Topographic features to the north of the ROW property suggest disposal of fill material. In general, the ROW property is surrounded by low-lying vegetation.

2.2.2 1958 Aerial Photograph

The 1958 aerial photograph indicates that Maryland Avenue is present. Traveled areas exist to the northeast of the ROW property and the automotive salvage yard to west is present (Garlock's Auto). Several small mounds appear to exist in the area of the ROW property along the western border of the Kach's automotive salvage yard. The vegetation is similar to that of the 1951 aerial photo.

2.2.3 1977 Aerial Photograph

The 1977 aerial photograph indicates overhead power lines are present. Access roads to the ROW property do not appear well developed however; the ROW property remains sparsely vegetated. The extent of white colored areas on the aerial appears to coincide with the current distribution of fill pile deposition. Therefore, it is assumed the fill piles were deposited between 1958 and 1977.

2.2.4 1990 Aerial Photograph

The 1990 aerial photograph indicates the ROW property is easily accessible from Maryland Avenue and the eastern and western automotive scrap yards. A fence has been installed on the western boundary of the ROW property, separating the ROW property from the scrap yard in the northwest corner. The extent of white colored areas is similar to the 1977 aerial photograph and current extent of fill pile deposition.

2.3 SITE ACCESS

Access to the ROW property is limited but not restricted and can be reached by an opening between fencing at Kach's Auto and Garlock's Auto on Maryland Street. However, public access does not appear to be frequent. Dense vegetative growth covers a large portion of the ROW property. Walking or ATV paths were not visible during any site inspections that have occurred since 1999. Public exposure to materials at the ROW property would occur at low frequency with short duration. Overhead power lines restrict development in this area.

3.0 WORK PERFORMED

Site investigation focused on characterization of the distribution of chloropicrin and other volatile organic compounds (VOCs) in and near the fill piles. Investigation activities were completed on June 4 and 5, 2001 in accordance with the April 2001 Work Plan. All field activities were conducted according to the project Health and Safety Plan.

Health and safety procedures included frequent air quality measurements for VOCs and chloropicrin using a photoionization detector and a Draeger pump/tube capable of indicating chloropicrin presence. Air quality monitoring did not detect the presence of VOCs in the breathing zone during intrusive activities.

Environmental samples collected during the investigation were placed in laboratory-supplied sample jars, stored in ice-chilled coolers and couriered under chain-of-custody procedures to Severn Trent Laboratories (Severn Trent) in North Canton, Ohio. Severn Trent is a NYSDOH ELAP-certified laboratory with chloropicrin detection analytical capabilities. Environmental samples collected include:

- liquid in two 55-gallon drums;
- surface soil;
- subsurface soil;
- non-native debris material in fill piles;
- groundwater

The following sections describe the methodologies used to collect samples from the ROW property.

3.1 DRUM SAMPLING

Two 55-gallon drums (D-1 and D-2) were located approximately 7-feet to the west of the Niagara Mohawk ROW (Figure 3). One of the drums was labeled "used antifreeze". At the request of Niagara Mohawk, the bung caps were removed and the contents of drums D-1 and D-2 were sampled using disposable bailers and sent to Severn Trent for analysis of VOCs (including chloropicrin) by Method 8260, semi-volatile organic compounds (SVOCs) by Method 8270, and ethylene glycol.

The liquid sample collected from drum D-1 did not indicate VOC presence when field screened with the PID. The liquid was slightly discolored and without odor. Field measured parameters (temperature, pH, specific conductivity, and dissolved oxygen) were collected and are provided in Table 2.

The sample collected from drum D-2 measured between 350 to 370 parts per million (ppm) of VOCs when field screened with the PID. As the bailer was withdrawn from the drum, approximately 11-inches of a yellowish phase separated liquid was observed in the bailer and a strong hydrocarbon odor was detected. No field measured parameters were collected since the sample appeared to be petroleum contaminated.

3.2 SURFACE SOIL SAMPLING

To assess potential impacts from the fill piles on adjacent surface soils, three discrete surface soil samples (SS-2, SS-3, and SS-4, Figure 3) were collected from 0 to 4-inches below ground surface (bgs). An additional surface soil sample (SS-5) was collected near the two 55-gallon drums to assess potential impact from drum leakage or spills.

To characterize the surface of the non-native debris material of the fill piles, three discrete surface soil samples (SS-6, SS-7, and SS-8, Figure 3) were collected from 0 to 4 inches below ground surface (bgs). Surface soil samples were collected using dedicated and disposable stainless steel sampling equipment and field screened with a PID for VOCs.

Severn Trent analyzed discrete surface soil samples for VOCs (including chloropicrin) by Method 8260. Soil sample SS-5 was also analyzed for SVOCs by Method 8270 and ethylene glycol.

3.3 NON-NATIVE DEBRIS MATERIAL SAMPLING

To evaluate the depth and distribution of the non-native debris material in the fill piles, 16 borings (B-1 through B-16) were advanced through the fill piles to native soil. At each location, boreholes were advanced utilizing direct push soil sampling technology (i.e. Geoprobe®) to collect in-situ soil/non-native debris material samples. Each soil boring was logged and field screened with a PID for VOC presence.

Two types of non-native debris material were observed in the fill piles. White to off-white colored, lime-rich bag house cleanout material mixed with slag and miscellaneous C&D debris was present in the upper portion of the borings. Intermixed within this material were bottles of

larvicide. Where present, a second layer was present beneath the layer containing the bag house cleanout material (see boring logs B-12, B-14, and B-15). This layer consists of fine-grained soil, intermixed with gravel, brick, glass, and plastic. A summary of the borings is provided in Table 1 and soil boring logs are included in Appendix C.

A total of 13 non-native debris material samples (B-2W, B-5W, B-6W, B-7W, B-8W, B-9W, B-10W, B-11W, B-12W, B-13W, B-14W, B-15W, and B-16W) were collected from Geoprobe boreholes advanced into the fill piles (Figure 3). A duplicate sample was collected at sample location B-16W (Dup-1) for quality assurance and quality control.

The non-native debris material samples were collected from 15 to 18-inches below ground surface using dedicated and disposable stainless steel sampling tools. Samples were sent to Severn Trent and analyzed for VOCs (including chloropicrin) by Method 8260.

3.4 NATIVE SOIL SAMPLING

To evaluate potential leaching of VOCs from the fill piles to the native soil below, seven native soil samples (B-2N, B-5N, B-9N, B-10N, B-12N, B-14N, and B-15N, Figure 3) were collected from borings advanced approximately 1 to 2 feet into native soil below the non-native debris material. Each soil boring sample was logged and field screened with a PID. Soil boring logs are included in Appendix C. Samples were sent to Severn Trent and analyzed for VOCs (including chloropicrin) by Method 8260.

3.5 GROUNDWATER SAMPLING

To assess the potential presence of VOCs in groundwater, two temporary well points (TMW-N and TMW-S, Figure 3) were installed on June 4, 2001 immediately adjacent to the north and south of the non-native debris material pile. Soil samples were collected continuously until the borehole was advanced to the top of bedrock. Upon completion of each boring, a temporary 1-inch diameter PVC well screen and riser was installed in the borehole. Boring logs are included in Appendix C.

During the field activities on June 4, 2001, two permanent monitoring wells, MW-102 and MW-103, were observed to the north and south of the non-native debris material pile, respectively (Figure 3). The wells were locked and appeared in good condition. Well caps indicated the wells were installed in October 1992 by E.C. Jordan Company (during the PSA described in Section 1.2.1).

what happened to MW-101?

The total depths of the wells were measured at 26.38 feet below top of riser (btor) and 26.69 feet btor for MW-102 and MW-103, respectively. Based on the depth to bedrock determined during temporary well point installation (approximately 11 feet bgs), the monitoring wells are assumed to monitor upper bedrock.

A total of three groundwater samples (MW-102, MW-103, and TMW-S) were collected on June 5, 2001 using disposable bailers. A duplicate sample was collected (Dupe-2) for quality assurance and quality control from groundwater monitoring well MW-103. The temporary well point, TMW-N, did not produce water and was abandoned. Field measured parameters (temperature, pH, specific conductivity, turbidity, and dissolved oxygen) are summarized on Table 2. Groundwater samples were sent to Severn Trent for analysis of VOCs (including chloropicrin) by Method 8260.

How?

Upon completion of groundwater sampling, the temporary well points were removed and the borehole was filled with soil cuttings.

4.0 INVESTIGATION RESULTS

The following sections provide a summary of findings from the investigation completed at the Titanium Substation ROW property. The laboratory analytical results are included in Appendix D. A review of quality assurance/quality control (QA/QC) sample and analytical data (blind duplicate analytical results, blank results and surrogate recoveres) indicate that the laboratory analytical results are valid and usable for the assessment.

4.1 DRUM AREA ANALYTICAL RESULTS

A summary of the analytical results for the drum contents is provided in Table 3A. The liquid contents of two drums (D-1 and D-2) were sampled and analyzed for VOCs (including chloropicrin) by Method 8260, SVOCs by Method 8270, and ethylene glycol. Figure 3 provides the location of the drums relative to the ROW property.

Analysis of the drum D-1 liquid detected relatively low concentrations of the following VOCs: methylene chloride (25J ug/l), acetone (150J ug/l), 2-butanone (76J ug/l), toluene (8.3J ug/l), ethylbenzene (180 ug/l), and total xylenes (2,500 ug/l). The SVOC analytical results detected estimated levels of the following: 4-methylphenol (170 ug/l quantified as a probable combination of 3-methylphenol and 4-methylphenol), naphthalene (400J ug/l) and 2-methylnaphthalene (270J ug/l), 2-methylphenol (4,300 ug/l) and 2,4-dimethylphenol (2,700 ug/l). No ethylene glycol was detected. These compounds are typically associated with low level petroleum contamination.

Analysis of the liquid in drum D-2 detected high concentrations of the following VOCs: acetone (8,800,000J ug/l), benzene (14,000,000 ug/l), toluene (64,000,000), ethylbenzene (16,000,000 ug/l), and total xylenes (89,000,000 ug/l). The following SVOCs were detected: 4-methylphenol (10,000J ug/l quantified as a probable combination of 3-methylphenol and 4-methylphenol), naphthalene (580,000 ug/l), 2-Methylnaphthalene (650,000 ug/l), and phenanthrene (11,000J ug/l). No ethylene glycol was detected. The presence of these compounds at these levels and the observance of phase separated liquid in the drum indicates the presence of a petroleum product (gasoline or diesel).

A discrete surface soil sample (SS-5, Figure 3) was collected adjacent to the drums and analyzed for VOCs (including chloropicrin) by Method 8260 and a composite sample was collected for analysis of SVOCs by Method 8270, and ethylene glycol.

A summary of the analytical results for surface soils adjacent to the drums is provided in Table 3B. The NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM) guidance values are provided for comparison.

No VOCs or ethylene glycol were detected in the surface soil. Analysis for SVOCs identified the presence of several poly-nuclear aromatic hydrocarbon (PAHs) compounds.

Only benzo(a)anthracene (1,200 ug/kg), chrysene (1,100 ug/kg), benzo(b)fluoranthene (1,900 ug/kg), benzo(a)pyrene (1,300 ug/kg), and dibenzo(a,h)anthracene (240 ug/kg, estimated) exceeded TAGM 4046 soil guidance values. The guidance values are 224 ug/kg, 400 ug/kg, 1,100 ug/kg, 61 ug/kg, and 14 ug/kg, respectively. The PAH concentrations detected in the soil samples are typical of many urban and industrialized environments. The ROW is in close proximity to several industries and most likely represents background PAH levels. The absence of petroleum aromatic hydrocarbons in the surface soil indicates a low potential for a spill of petroleum liquid to have occurred near the drum area.

4.2 CHEMICAL PRESENCE IN SURFACE SOILS

A summary of the analytical results for surface soil samples collected on the ROW property is provided in Table 4. The NYSDEC TAGM guidance values are provided for comparison. Surface soil sample locations are provided on Figure 3.

A total of three surface soil samples (SS-2, SS-3, and SS-4) were collected adjacent to the fill piles and analyzed for VOCs (including chloropicrin) by Method 8260. Toluene was detected at concentrations of 4.8 ug/kg and 1.2 ug/kg in samples SS-2 and SS-3, respectively well below the guidance value (1,500 ug/kg). No other VOCs were detected in sample SS-2 and SS-3. VOCs were not detected in surface soil sample SS-4.

A non-native debris material surface soil composite sample (Comp-1, locations A, B, C, and D on Figure 3) was collected during the preliminary sampling and analysis assessment (see Section 1.2.2). The samples were analyzed for VOCs (not including chloropicrin) by Method 8260 and SVOCs by Method 8270. Low levels of acetone (35 ug/kg), carbon tetrachloride (37 ug/kg), chloroform (14 ug/kg), methylene chloride (19 ug/kg), and trichloroethene (5 ug/kg) were detected. Concentrations of these compounds are well below the TAGM guidance values. SVOCs were not detected.

Surface soil samples were collected from three locations (SS-6, SS-7, and SS-8) on the fill piles and analyzed for VOCs (including chloropicrin) by Method 8260. Methylene chloride, a common laboratory contaminant, was detected at very low concentrations, well below the soil guidance value of 100 ug/kg. Toluene was detected in sample SS-8 at a concentration of 5 ug/kg; well below the soil guidance value (1,500 ug/kg). Chloropicrin was not detected in the surface soil.

A surface soil sample (SS-1) collected adjacent to the fill piles was collected for analysis of SVOCs on August 17, 2000 during the preliminary sampling site assessment of the ROW. SVOCs were not detected.

4.3 CHEMICAL PRESENCE IN SUBSURFACE FILL PILES

A summary of the analytical results for samples collected of the subsurface non-native debris material in the fill piles is provided in Table 5. The NYSDEC TAGM guidance values are provided for comparison. Subsurface soil sample locations are provided on Figure 3.

A total of 13 non-native debris material samples were collected at approximately 15 to 18-inches bgs and analyzed for VOCs (including chloropicrin) by Method 8260. Nine constituents were detected.

Chloropicrin was the compound detected at the highest frequency and at the highest concentration in the subsurface soil of the fill piles. Chloropicrin was detected in 8 of 13 samples (B-2W, B-6W, B-7W, B-9W, B-12W, B-14W, B-15W, and B-16W). Detected concentrations range from 440 ug/kg (B-2W, the east side of the northern end) to 34,000 ug/kg (B-12W, the southwest boundary). A soil guidance value has not been established for chloropicrin. The distribution of chloropicrin detected in the subsurface is shown on Figure 4.

Other VOCs detected at levels below TAGM soil guidance include: methylene chloride (seven samples with the maximum concentration of 28 ug/kg in sample B-15W); acetone (eight samples with the maximum concentration of 160 ug/kg in sample B-9W); 2-butanone (two samples with the maximum concentration of 48 ug/kg in sample B-9W); and trichlorocthene (seven samples with the maximum concentration of 40 ug/kg).

Chloroform was detected in ten samples with one sample (B-12W) exceeding the guidance value (300 ug/l) at a concentration of 320 ug/kg. Carbon tetrachloride was detected in eight samples with one sample (B-12W) exceeding the guidance value (600 ug/kg) at a concentration

of 670 ug/kg. Tetrachloroethene was detected in four samples with one sample (B-14W) exceeding the guidance value (1,400 ug/kg) at an estimated concentration of 5,000 ug/kg. Toluene was detected in five samples with one sample (B-2W) exceeding the guidance value (1,500 ug/kg) at an estimated concentration of 2,800 ug/kg.

No other VOCs were detected.

4.4 CHEMICAL PRESENCE IN NATIVE SOIL BELOW THE FILL PILES

A summary of the analytical results for subsurface native soil samples is provided in Table 6. The NYSDEC TAGM guidance values are provided for comparison. Subsurface soil sample locations are provided on Figure 3.

A total of seven subsurface native soil samples were collected and analyzed for VOCs (including chloropicrin) by Method 8260. Chloropicrin was not detected in subsurface soil below the fill piles (Figure 4). Seven VOCs were detected at low concentration in five samples (B-2N, B-5N, B9N, B-10N and B-15N) of seven soil samples. Excluding acetone, VOCs did not exceed soil guidance values. The detection of acetone was also associated with detection of the compound in the trip blank indicating laboratory contamination.

4.5 CHEMICAL PRESENCE IN GROUNDWATER

A summary of the analytical results for groundwater samples is provided in Table 7. The guidance values for class GA groundwater (drinking water source) as provided in Division of Water Technical and Operational Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations are provided for comparison. Figure 3 provides the sample locations.

A total of three samples (MW-102, MW-103, and TMW-S) were analyzed for VOCs (including chloropicrin) by Method 8260. Chloropicrin was not detected. Generally, low concentrations of petroleum aromatic hydrocarbons and chlorinated aliphatic hydrocarbons were identified in overburden and bedrock groundwater. Methylene chloride was estimated in samples MW-102 and MW-103 below the guidance value (5 ug/l) at concentrations of 2.7 ug/l and 2.4 ug/l, respectively. Acetone was estimated in samples MW-102 and MW-103 below the guidance value (50 ug/l) at concentrations (3.8 ug/l and 2.6 ug/l, respectively). The detection of acetone in samples MW-102 and MW-103 is likely a result of laboratory contamination since acetone was present in the method blank (2.0 mg/l).

The following constituents were each estimated below the guidance values in sample TMW-S: vinyl chloride (1.3 ug/l), 1,2-dichloroethene (1.8 ug/l), chloroform (1.2 ug/l), trichloroethene (3.6 ug/l), and tetrachloroethene (1.6 ug/l). Guidance values for these constituents are as follows: vinyl chloride (2 ug/l), 1,2-dichloroethene (5 ug/l), chloroform (7 ug/l), trichloroethene (5 ug/l), and tetrachloroethene (5 ug/l).

Benzene slightly exceeded the guidance value of 1.0 ug/l in sample TMW-S at a concentration of 1.3 ug/l. Toluene exceeded the guidance value of 5 ug/l in bedrock groundwater sample collected at MW-102 at a concentration of 13 ug/l and was estimated below the guidance value in samples MW-103 and TMW-S (0.94 ug/l and 2.9 ug/l, respectively). The following constituents were detected in sample TMW-S at concentrations above the guidance values: 1,1-dichloroethene (8 ug/l), 1,1-dichloroethane (27 ug/l), and 1,1,2-trichloroethane (45 ug/l). The guidance values for these constituents are as follows: 1,1-dichloroethene (5 ug/l), 1,1-dichloroethane (5 ug/l), and 1,1,2-trichloroethane (1 ug/l).

Localized groundwater flow directions presented in the 1993 PSA Report indicates groundwater flow occurs in a westerly to southwesterly direction. The presence of low concentrations of petroleum and chlorinated aliphatic hydrocarbons detected in groundwater is likely caused by chemical migration from historic disposal activities associated with the burn pits of Witmer Road Site.

5.0 CONCLUSIONS

The assessment of environmental conditions at the Niagara Mohawk ROW indicates that the fill piles identified by a Niagara Mohawk site inspector consist of lime-rich, bag house cleanout and slag materials disposed of by local industries in the Niagara Falls area prior to 1977. Bottles of lavicide are present on the surface and mixed with non-native debris material in the fill piles. VOCs, including chloropicrin, are present in subsurface samples collected from the fill piles. However, only three chemical constituents were detected at concentrations above soil guidance values in the fill piles. Soil guidance criteria do not exist for chloropicrin. No chemical constituents were detected above soil guidance criteria in native soil below the fill piles indicating natural attenuation of VOCs (including chloropicrin) in the fill piles. Chloropicrin rapidly photodegrades and hydrolizes under normal conditions and will not migrate from the fill piles.

can it be calculated by TAGM 4046?

Sent J. Harrington e-mail 11/8/01 Requesting calc of Soil Cleanup Number

Surface soil sample analytical results indicate VOCs are not present above soil criteria on the surface of the fill piles or surrounding native soils. Chloropicrin was not detected in surface soil. Therefore, human exposure to chemicals detected at the ROW is unlikely. The lack of substantial VOCs concentrations in the surface soil and infrequent visitation by the public due to limited access indicates that the ROW property poses negligible risk to human health. This conclusion is consistent with the current NYSDEC site classification of the Witmer Road Site.

Groundwater samples contain low concentrations of VOCs. The presence of VOCs in groundwater near the fill piles is likely related to migration of chemicals in groundwater from the Witmer Road Site burn pits. This is consistent with conclusions presented in the 1993 PSA Report.

Petroleum contaminated liquids are present in the two drums located on property in close proximity to the ROW. Preliminary sampling of surface soil in close proximity to the drums indicates significant leakage or spillage has not occurred.

6.0 RECOMMENDATIONS

Geomatrix recommends the following:

- The 55-gallon drums containing petroleum liquids should be removed from the property by the current land owner.
- Niagara Mohawk should utilize qualified personnel to remove and properly dispose of the visible bottles of lavicide containing chloropicrin from the ROW property.
- Vehicle access to the ROW should be restricted with bollards located at the entrance on Maryland Street.

Limited Soil Removal After Guidance value for chloropicrin is established.

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TABLE 1

FILL PILE THICKNESS

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Boring ID[1]	Depth to Native Soil (ft bgs)	Non-Native Debris Fill Pile Thickness	
		Shallow Lime Cleanout Material Layer (ft)	Misc. Fill Layer (ft)
B-1	0.6	0.6	0
B-2	2	2	0
B-3	1.3	1.3	0
B-4	1.8	1.8	0
B-5	4.3	4.3	0
B-6	2.6	2.6	0
B-7	>4	>4	ND
B-8	5.4	5.4	0
B-9	1	1	0
B-10	0.8	0.8	0
B-11	>4	>4	ND
B-12	4.1	2	2.1
B-13	>4	>4	ND
B-14	5	3	2
B-15	9	4	5
B-16	>4	>4	ND

Notes:
1. Boring locations provided on Figure 3.
ft bgs = feet below ground surface
ND = indicates not determined.

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TABLE 2

SUMMARY OF FIELD MEASURED PARAMETERS

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Sample ID[1]	Sample Date	pH (pH units)	Conductivity (uS/cm)	Temperature (°C)	Turbidity (NTU)	DO (ppm)
MW-102	06/05/2001	7.0	360	16.6	8.14	3
MW-103	06/05/2001	7.59	1080	19.3	0.87	3.81
TMW-N	06/05/2001	dry	dry	dry	dry	dry
TMW-S	06/05/2001	--	--	--	--	--
D-1	06/05/2001	7.78	120	19.3	>1990	1.75
D-2	06/05/2001	--	--	--	--	--

Notes:

(1) Sample locations are provided on Figure 3.

dry = indicates well was not sampled.

"--" indicates not measured.

uS/cm=microsiemens per centimeter at 25°C.

°C=degrees Celsius

NTU=Nephelometric Turbidity Unit

DO=dissolved oxygen

ppm=parts per million

GEOMATRIX

TABLE 3A

SUMMARY OF ANALYTICAL RESULTS ASSOCIATED WITH DRUM AREA
Drum Contents

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Sample Location[1] and Date	
	D-1 06/05/2001	D-2 06/05/2001
Volatile Organic Compounds, ug/l		
Methylene chloride	25 J	
Acetone	150 J, B	8,800,000 J, B
Benzene		14,000,000
2-Butanone	76 J	
Toluene	8.3 J	64,000,000 B
Ethylbenzne	180	16,000,000
Xylenes (total)	2500	89,000,000
Semi-Volatile Organic Compounds, ug/l		
2-Methylphenol	4300	
4-Methylphenol	170 J, #	10,000 J, #
2,4-Dimethylphenol	2700	
Naphthalene	400 J	580,000
2-Methylnaphthalene	270 J	650,000
Phenanthrene		11,000 J

Notes:
1. Sample locations provided on Figure 3.

VOCs = volatile organic compounds
ug/l = micrograms per liter
mg/l = milligrams per liter
J = indicates an estimated value.
B = constituent was also detected in the blank; possible contamination.
blank cells or ND = Not Detected
= indicates probable combination of 3-methylphenol and 4-methylphenol.

GEOMATRIX

TABLE 3B

SUMMARY OF ANALYTICAL RESULTS ASSOCIATED WITH DRUM AREA
Surface Soil Adjacent to Drums

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Guidance Value[2]	SS-5[1] 06/05/2001 0-4-inches
Volatile Organic Compounds, ug/kg		ND
Semi-Volatile Organic Compounds, ug/kg		
Phenanthrene	50,000	990
Anthracene	50,000	230 J
Carbazole	--	120 J
Fluoranthene	50,000	2,200
Pyrene	50,000	1,600
Butyl benzyl phthalate	50,000	180 J
Benzo(a)anthracene	224	1,200
Chrysene	400	1,100
bis(2-Ethylhexyl)phthalate	50,000	380 J
Benzo(b)fluoranthene	1,100	1,900
Benzo(k)fluoranthene	1,100	890
Benzo(a)pyrene	61	1,300
Indeno(1,2,3-cd)pyrene	3,200	790
Dibenzo(a,h)anthracene	14	240 J
Benzo(g,h,I)perylene	50,000	840
Other		
Ethylene Glycol, mg/kg	--	ND

Notes:
1. Sample locations provided on Figure 3.
2. Guidance values from New York State Department of Environmental Conservation, Division of Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM #4046).

VOCs = volatile organic compounds
ug/l = micrograms per liter
mg/l = milligrams per liter
J = indicates an estimated value.
B = constituent was also detected in the blank; possible contamination.
blank cells or ND = Not Detected
= indicates probable combination of 3-methylphenol and 4-methylphenol.

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR SURFACE SOIL SAMPLES

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Guidance Value[2]	Sample Location[1], Collection Date and Sample Depth							
		Adjacent Soil Samples				Non-Native Debris Material Samples			
		SS-1 08/17/2000 0-4-inches	SS-2 06/05/2001 0-4-inches	SS-3 06/05/2001 0-4-inches	SS-4 06/05/2001 0-4-inches	COMP-1 08/17/2000 0-4-inches	SS-6 06/05/2001 0-4-inches	SS-7 06/05/2001 0-4-inches	SS-8 06/05/2001 0-4-inches
Volatile Organic Compounds, ug/kg		NA			ND				
Acetone	200					35			
Carbon Tetrachloride	600					37			
Chloroform	300					14			
Methylene Chloride	100					19	2.7 J	3 J	2.6 J
Trichloroethene	700					5			
Toluene	1,500		4.8 J	1.2 J					5 J
Semi-Volatile Organic Compounds, ug/kg		ND	NA	NA	NA	ND	NA	NA	NA

Notes:

1. Sample locations provided on Figure 3.
2. Guidance values from New York State Department of Environmental Conservation, Division of Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM #4046).

ug/kg = micrograms per kilogram.
blank cells and ND = not detected.
NA = not analyzed
-- = guidance value does not exist.

GEOMATRIX

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR SUBSURFACE NON-NATIVE DEBRIS FILL PILE SAMPLES

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Guidance Value[2]	Sample Location[1], Collection Date, and Sample Depth (feet below ground surface)												
		B-2W 06/04/2001 1.5 ft bgs	B-5W 06/04/2001 1.5 ft bgs	B-6W 06/04/2001 1.5 ft bgs	B-7W 06/04/2001 1.5 ft bgs	B-8W 06/05/2001 1.5 ft bgs	B-9W 06/05/2001 1.5 ft bgs	B-10W 06/05/2001 1.5 ft bgs	B-11W 06/05/2001 1.5 ft bgs	B-12W 06/05/2001 1.5 ft bgs	B-13W 06/05/2001 1.5 ft bgs	B-14W 06/05/2001 1.5 ft bgs	B-15W 06/05/2001 1.5 ft bgs	B-16W 06/05/2001 1.5 ft bgs
Volatile Organic Compounds, ug/kg														
Chloropicrin	--	440		8,600	650		1,100			34,000		2,800	15,000	1,300
Methylene Chloride	100	6.6 J	2.8 J	11 J	5 J	1.8 J					2.1 J		28 J	
Acetone	200	34 J			10 J		160 B		8.2 J, B	110 J, B		63 B	84 J, B	18 J, B
Chloroform	300	4.3 J		18 J	8.5 J		76	2.5 J		320	14	94	270	9.9 J
2-Butanone	300						48					28 J		
Carbon Tetrachloride	600	22		130	16		56			670		95	460	45
Trichloroethene	700	2.8 J		9.3 J			2.4 J			36 J	40	3.8 J		2.6 J
Tetrachloroethene	1,400			4.4 J						18 J	5 J	5,000 J		
Toluene	1,500	2,800 J	3.8 J			2.5 J		1.3 J			7.5			

Notes:
1. Sample locations provided on Figure 3
2. Guidance values from New York State Department of Environmental Conservation, Division of Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM #4046).

ug/kg = micrograms per kilogram.
J = indicates an estimated value.
blank cells and ND = indicate non-detect.
B = constituent was also detected in the blank; possible contamination.
-- = guidance value does not exist.

GEOMATRIX

TABLE 6

SUMMARY OF ANALYTICAL RESULTS FOR SUBSURFACE SOIL BELOW THE FILL PILES

Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Guidance Value[2]	Sample Location[1], Collection Date and Sample Depth (feet below ground surface)						
		B-2N 06/04/2001 3.0 ft bgs	B-5N 06/04/2001 5.3 ft bgs	B-9N 06/05/2001 2 ft bgs	B-10N 06/05/2001 1.8 ft bgs	B-12N 06/05/2001 5.1 ft bgs	B-14N 06/05/2001 6.0 ft bgs	B-15N 06/05/2001 10.0 ft bgs
Volatile Organic Compounds, ug/kg						ND	ND	
Methylene Chloride	100	2 J	1.6 J	1.8 J	1.9 J			
Acetone	200							240 B
Carbon Disulfide	300							1.7 J
Chloroform	300			2.2 J				
2-Butanone	300							57
Tetrachloroethene	1,400	29						
Toluene	1,500	1 J		5.8 J				2.6 J

Notes:

1. Sample locations provided on Figure 3.
2. Guidance values from New York State Department of Environmental Conservation, Division of Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM #4046).

ug/kg = micrograms per kilogram.
J = indicates an estimated value.
blank cells and ND = indicate non-detect.
B = constituent was also detected in the blank; possible contamination.
-- = guidance value does not exist.

GEOMATRIX

TABLE 7

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

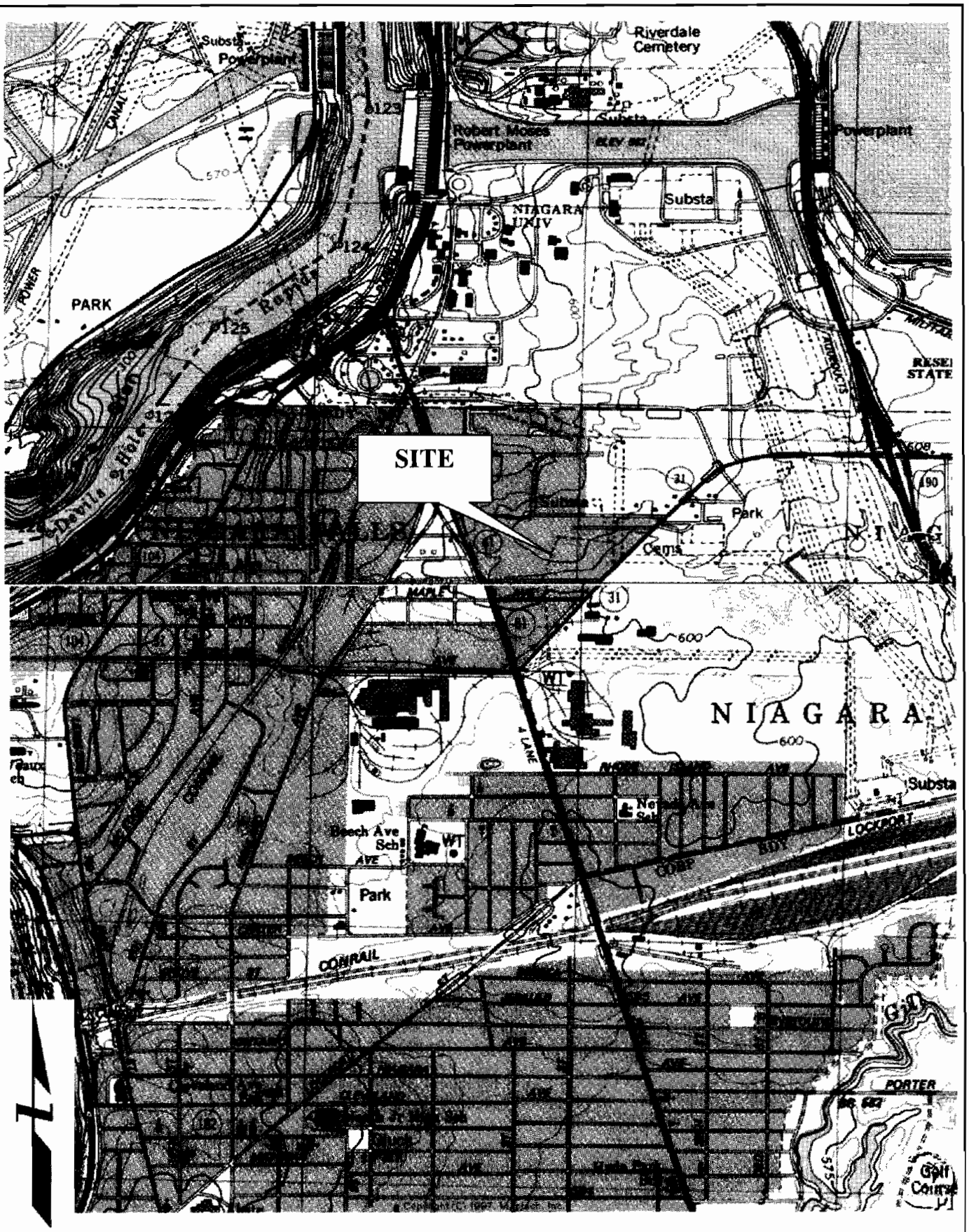
Right-of-Way Site Assessment
Titanium Substation
Niagara Falls, New York

Constituent	Guidance Value[2]	Sample Location[1] and Date		
		MW-102 06/05/2001	MW-103 06/05/2001	TMW-S 06/05/2001
Volatile Organic Compounds (ug/l)				
Vinyl Chloride	2			1.3 J
Methylene chloride	5	2.7 J	2.4 J	
Acetone	50	3.8 J, B	2.6 J, B	
1,1-Dichloroethene	5			8
1,1-Dichloroethane	5			27
1,2-Dichloroethene (total)	5			1.8 J
Chloroform	7			1.2 J
Trichloroethene	5			3.6 J
1,1,2-Trichloroethane	1			45
Benzene	1		0.68 J	1.3 J
Tetrachloroethene	5			1.6 J
Toluene	5	13	0.94 J	2.9 J

Notes:

1. Sample locations provided on Figure 3.
2. Groundwater critiera for Class GA groundwater as provided in Division of Water Technical and Operational Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, October 22, 1993, reissued June 1998.

ug/l = micrograms per liter
J = indicates an estimated value.
B = constituent was also detected in the blank; possible contamination.
blank cells = Not Detected



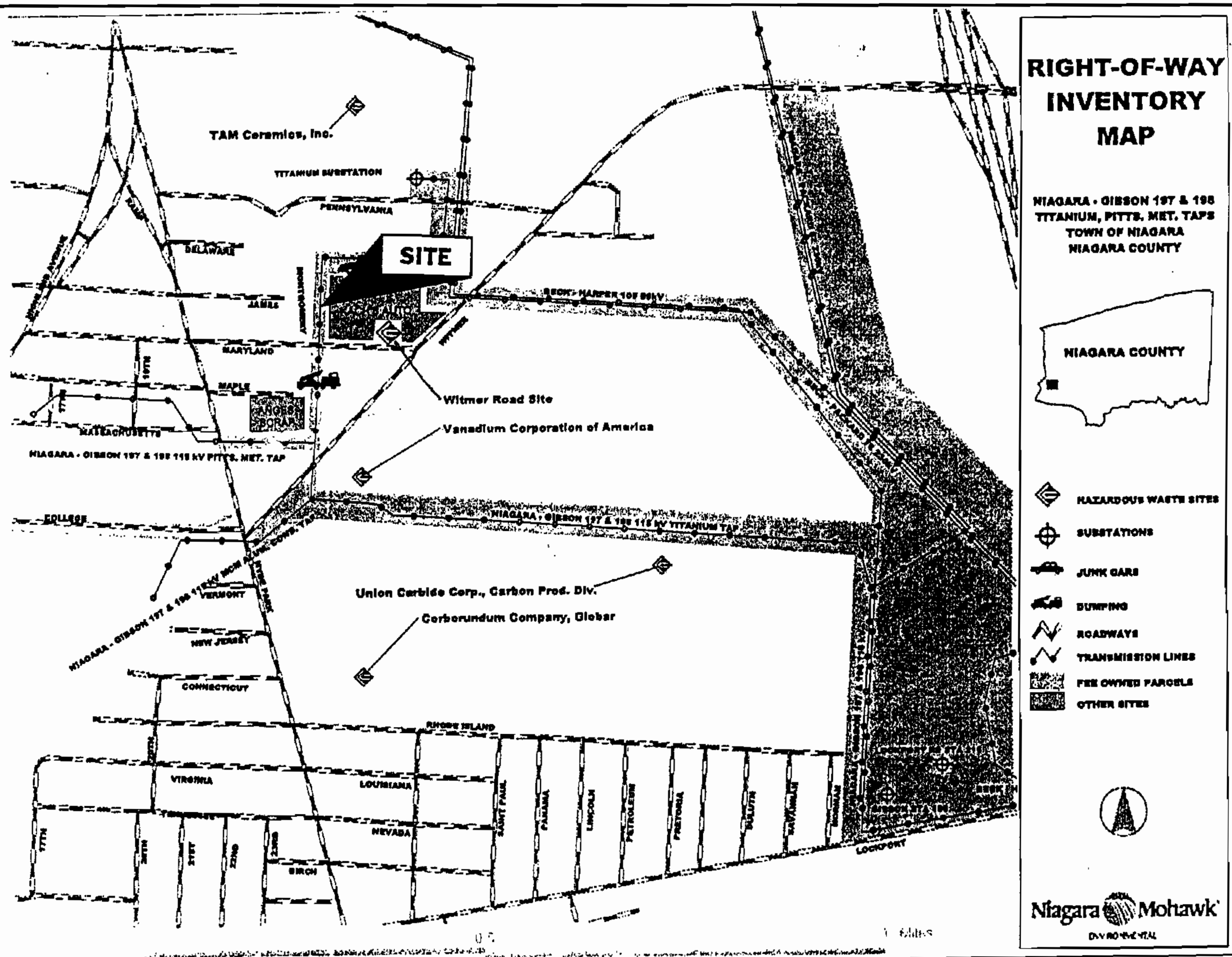
GEOMATRIX

SITE LOCATION MAP
Right-of-Way Site Assessment
Niagara Falls, New York
USGS Topographic Map
Lewiston/Niagara Falls Quadrangle

Project No.
7348

Figure
1

Non-GDS



GEOMATRIX	NIAGARA MOHAWK RIGHT-OF-WAY INVENTORY MAP Niagara Falls Right-of-Way Sampling Niagara Falls, New York	Project No. 7348 Figure 2

APPENDIX A

Chloropicrin Materials Safety and Data Sheet

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Chloropicrin, 98+% (GC)
Catalog Numbers:
AC405000000, AC405001000
Synonyms:
Methane, trichloronitro-; Chloroform, nitro-; Nitrochloroform; Nitrotrichloromethane; Trichloronitromethane
Company Identification (Europe): Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Company Identification (USA): Acros Organics
One Reagent Lane
Fairlawn, NJ 07410
For information in North America, call: 800-ACROS-01
For information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
76-06-2	Chloropicrin	98+	200-930-9

Hazard Symbols: T+
Risk Phrases: 22 26 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Harmful if swallowed. Very toxic by inhalation. Irritating to eyes, respiratory system and skin.Lachrymator.

Potential Health Effects

Eye:
Causes severe eye irritation. Lachrymator.

Skin:
Causes severe skin irritation. May cause sensitization by skin contact.

Ingestion:
Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion may cause colic and death.

Inhalation:
May be fatal if inhaled. May cause asthmatic attacks due to allergic sensitization of the respiratory tract. Causes irritation of the mucous membrane and upper respiratory tract. Inhalation may cause anemia, weak and irregular heart, recurrent asthmatic attacks, bronchitis, pulmonary edema, and possible death.

Chronic:
Chronic inhalation may cause effects similar to those of acute inhalation. Laboratory experiments have resulted in mutagenic effects.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:
Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:
Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:
Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY.

Notes to Physician:
Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Explosive decomposition may occur under fire conditions. Closed containers may rupture violently when heated.

Extinguishing Media:
Use water spray to cool fire-exposed containers. Use extinguishing media most appropriate for the surrounding fire. Use water spray, dry chemical, carbon dioxide, or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not breathe dust, vapor, mist, or gas. Keep container tightly closed. Do not ingest or inhale. Use only in a chemical fume hood. Do not use magnesium, aluminum or their alloys for handling equipment or containers.

Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR :1910.134 and ANSI Z88.2 requirements or European

Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Clear liquid
Appearance:	colorless or slight yellow - oily liquid
Odor:	Tear gas odor
pH:	Not available.
Vapor Pressure:	24 mm Hg @ 25 deg C
Vapor Density:	5.67
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	112 deg C
Freezing/Melting Point:	-64 deg C
Autoignition Temperature:	Not applicable.
Flash Point:	Not applicable.
Explosion Limits, lower:	Not available.
Explosion Limits, upper:	Not available.
Decomposition Temperature:	
Solubility:	Soluble.
Specific Gravity/Density:	1.6920g/cm3
Molecular Formula:	CCl3NO2
Molecular Weight:	164.37

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, excess heat.
Incompatibilities with Other Materials:
Strong bases, aluminum, amines, magnesium, sodium methoxide, aniline, aluminum alloys, magnesium alloys, 3-bromopropyne, alcoholic sodium hydroxide, propargyl bromide.
Hazardous Decomposition Products:
Hydrogen chloride, phosgene, carbon monoxide, oxides of nitrogen, irritating and toxic fumes and gases, carbon dioxide.
Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 76-06-2: PB6300000
LD50/LC50:
CAS# 76-06-2: Inhalation, mouse: LC50 = 66 mg/m3/4H; Inhalation, rabbit: LC50 = 800 mg/m3/20M; Inhalation, rat: LC50 = 14400 ppb/4H; Oral, rat: LD50 = 250 mg/kg.
Carcinogenicity:
Chloropicrin -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
Epidemiology:
Oral, mouse: TDLo = 26 gm/kg/78W-I (Tumorigenic - equivocal tumorigenic agent by RTECS criteria - Gastrointestinal - tumors).
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
Sister Chromatid Exchange: Human, Lymphocyte = 8 mg/L.
Other Studies:
No information available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
Fish: Fathead Minnow: LC50 = 3.72 mg/L; 96 Hr; UnspecifiedFish:
Rainbow trout: LC50 = 2.87 mg/L; 96 Hr; UnspecifiedFish:

Bluegill/Sunfish: LC50 = 2.82 mg/L; 96 Hr; UnspecifiedIf applied to soil as would be the case in its use as a soil sterilant, chloropicrin will both rapidly volatilize and leach. It should photolyze on the soils surface. It may degrade in soil by chemical or biological processes. However degradation rates are unknown. If released in water it would readily volatilize. It will photodegrade in the surface layers of water (half-life about 3 days). Chloropicrin would not be expected to adsorb to sediment or

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: CHLOROPICRIN
POISON INHALATION HAZARD ZONE B
Hazard Class: 6.1
UN Number: UN1580
Packing Group: I
Canadian TDG
Shipping Name: CHLOROPICRIN
Hazard Class: 6.1
UN Number: UN1580

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 76-06-2 is listed on the TSCA inventory.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
CAS# 76-06-2 is considered highly hazardous by OSHA.
STATE
Chloropicrin can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
California No Significant Risk Level:
None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: T+
Risk Phrases:
R 22 Harmful if swallowed.
R 26 Very toxic by inhalation.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 36/37 Wear suitable protective clothing and gloves.
S 38 In case of insufficient ventilation, wear suitable respiratory equipment.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
WGK (Water Danger/Protection)
CAS# 76-06-2: No information available.
United Kingdom Occupational Exposure Limits
CAS# 76-06-2: OES-United Kingdom, TWA 0.1 ppm TWA; 0.68 mg/m3 TWA
CAS# 76-06-2: OES-United Kingdom, STEL 0.3 ppm STEL; 2.1 mg/m3 STEL
Canada
CAS# 76-06-2 is listed on Canada's DSL List.

CAS# 76-06-2 is listed on Canada's Ingredient Disclosure List.

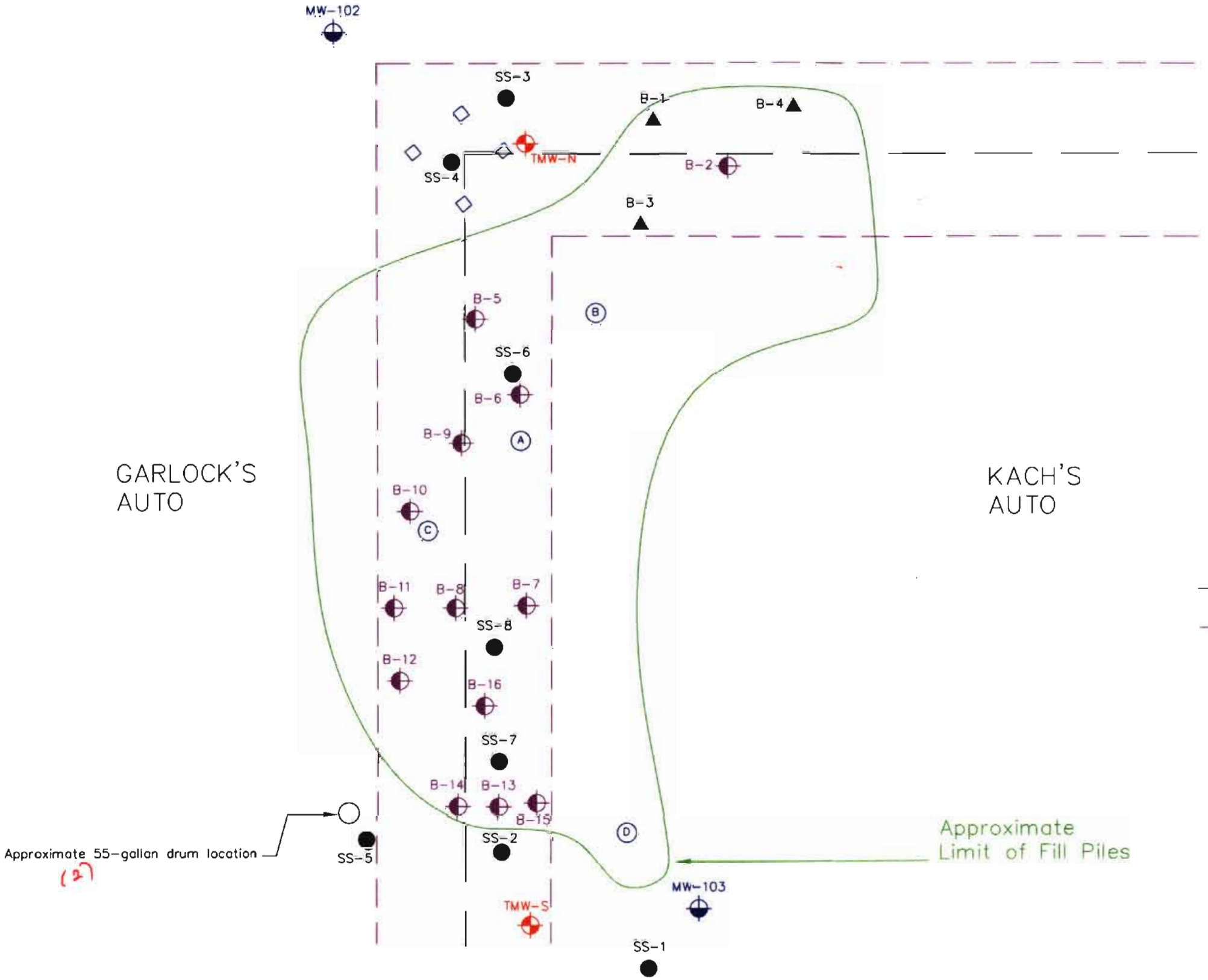
Exposure Limits

CAS# 76-06-2: OEL-AUSTRALIA:TWA 0.1 ppm (0.7 mg/m3);STEL 0.3 ppm (2 mg/m3)
OEL-AUSTRIA:TWA 0.1 ppm (0.7 mg/m3)
OEL-BELGIUM:TWA 0.1 ppm (0.67 mg/m3);STEL 0.3 ppm (2 mg/m3)
OEL-DENMARK:TWA 0.1 ppm (0.7 mg/m3)
OEL-FINLAND:TWA 0.1 ppm (0.7 mg/m3);STEL 0.3 ppm (2.1 mg/m3)
OEL-FRANCE:TWA 0.1 ppm (0.7 mg/m3)
OEL-GERMANY:TWA 0.1 ppm (0.7 mg/m3)
OEL-JAPAN:TWA 0.1 ppm (0.67 mg/m3)
OEL-THE NETHERLANDS:TWA 0.1 ppm (0.7 mg/m3)
OEL-THE PHILIPPINES:TWA 0.1 ppm (0.7 mg/m3)
OEL-RUSSIA:TWA 0.1 ppm
OEL-SWITZERLAND:TWA 0.1 ppm (0.7 mg/m3);STEL 0.2 ppm (1.4 mg/m3)
OEL-TURKEY:TWA 0.1 ppm (0.7 mg/m3)
OEL-UNITED KINGDOM:TWA 0.1 ppm (0.7 mg/m3);STEL 0.3 ppm
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/01/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.



EXPLANATION:

B-2	Soil Boring with Subsurface Soil Sample
B-4 ▲	Soil Boring for Depth of Debris Piles
SS-6 ●	Surface Soil Sample
TMW-N	Temporary Monitoring Well Point
MW-102	Existing Monitoring Well
□	Electrical Tower Footing
—— ——	Approximate ROW Centerline
– – – –	Approximate ROW Boundary
(A)	Subsurface Chloropicrin Sample Location (March 20, 2001)

Scale: Approximately 1" = 40'

SAMPLE LOCATIONS

Niagara Falls Right-of-Way
Niagara Falls, New York

GEOMATRIX

Project No.	Figure
7348	3

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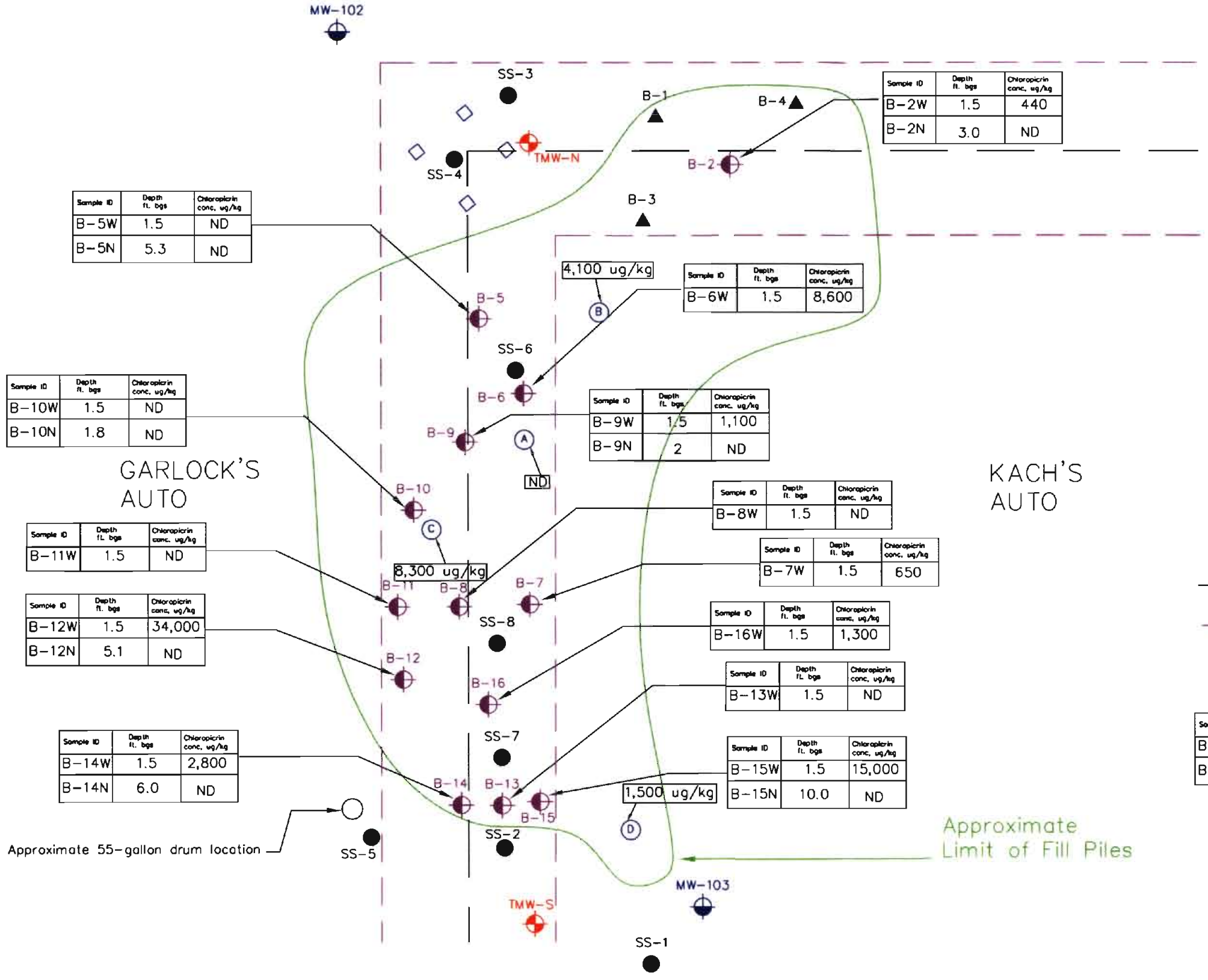


Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-2W	1.5	440
B-2N	3.0	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-5W	1.5	ND
B-5N	5.3	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-6W	1.5	8,600

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-10W	1.5	ND
B-10N	1.8	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-9W	1.5	1,100
B-9N	2	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-8W	1.5	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-11W	1.5	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-7W	1.5	650

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-12W	1.5	34,000
B-12N	5.1	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-16W	1.5	1,300

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-13W	1.5	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-14W	1.5	2,800
B-14N	6.0	ND

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-15W	1.5	15,000
B-15N	10.0	ND

EXPLANATION:

- B-2 — Soil Boring with Subsurface Soil Sample
- B-4 ▲ — Soil Boring for Depth of Debris Piles
- SS-6 ● — Surface Soil Sample
- TMW-N — Temporary Monitoring Well Point
- MW-102 — Existing Monitoring Well
- □ — Electrical Tower Footing
- ——— — Approximate ROW Centerline
- — — — — Approximate ROW Boundary
- (A) — Subsurface Chloropicrin Sample Location (March 20, 2001)

Sample ID	Depth ft. bgs	Chloropicrin conc. ug/kg
B-5W	1.5	ND
B-5N	5.3	ND

Analytical Results (June, 2001)

ND = Not Detected

Scale: Approximately 1" = 40'

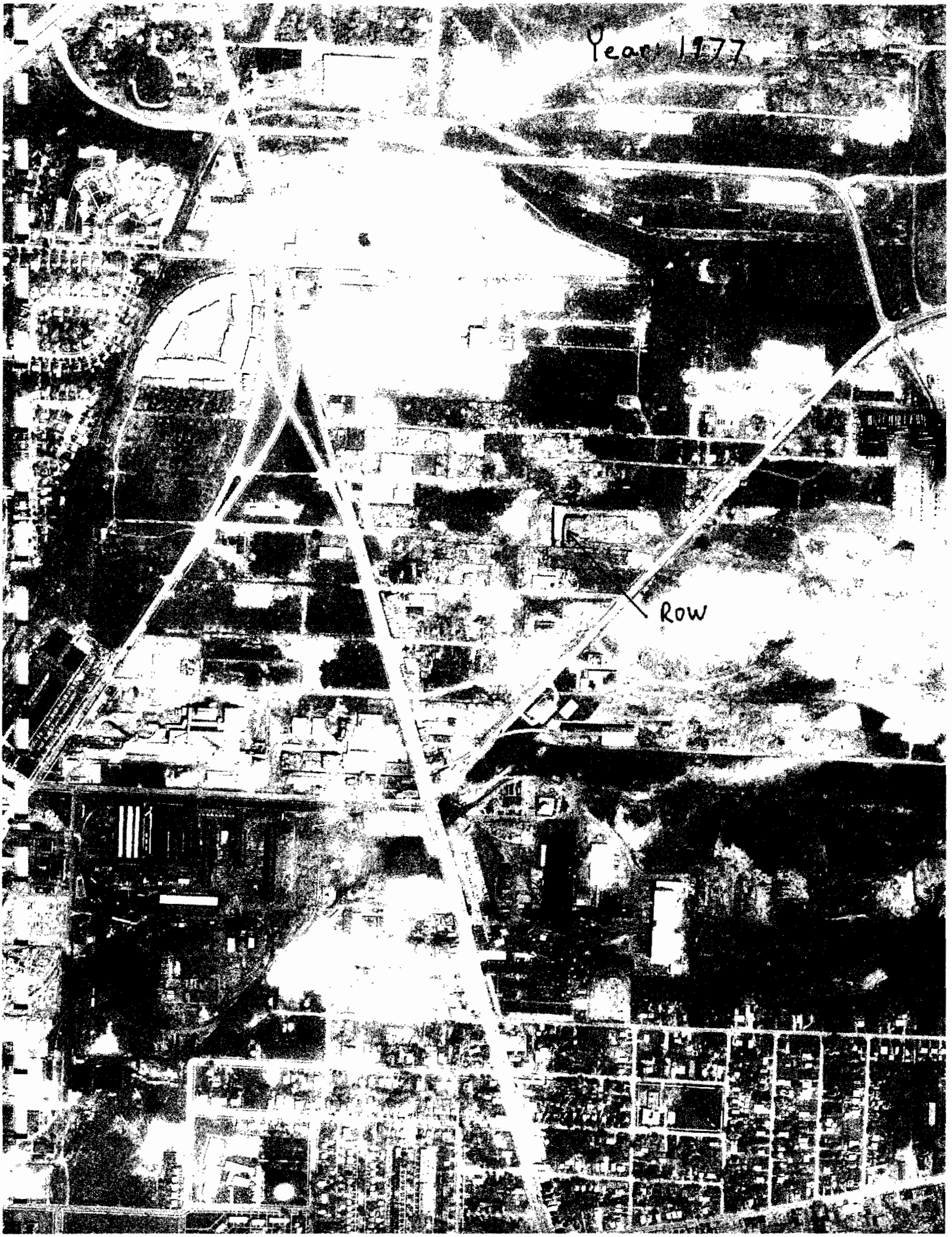
CHLOROPICRIN ANALYTICAL RESULTS

Niagara Falls Right-of-Way
Niagara Falls, New York

GEOMATRIX | Project No. 7348 | Figure 4

DATE: 7/9/01
FILEPATH: 7348\Figures\Figure 4: Chloropicrin Results
DRAFTED BY: LWH


Year: 1958
1958
Fusha
Row


Year 1977
ROW


ROW
Year: 1990

APPENDIX C
Soil Boring and Well Logs

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Well No. TMW-N**	
BORING LOCATION:		TOP OF RISER ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push		TOTAL DEPTH: 11.7 fbgs	SCREEN INTERVAL: 7.5-11.5 fbgs
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: FIRST 11.3 ft / COMPL.	CASING:
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: fmsl	
1					**SILT w/SAND (ML)** 70% fine sand, 25% silt, 5% wood pieces/rootlets, 2.5YR 4/1, dry, soft (NATIVE SOIL)	
2	1			0	grades to **SILT w/SAND (ML)** 60% silt, 40% fine sand, 2.5YR 5/3, soft to firm, dry	
3						
4						1" diameter PVC riser
5					grades to 5-10% fine, subrounded gravel, 50%silt, 35-40% fine sand, soft to firm, moist at 7.0' bgs	
6	2			0		
7						
8					**SILT w/SAND (ML)** 80% silt, 20% fine sand, firm, 2.5YR 5/3, moist	
9						1" diameter slotted PVC screen
10	3			0	grades to **SILT w/CLAY (ML)** 80% silt, 20% high plasticity fines, firm, wet at 11.3' bgs	
11						▽
12					**Poorly graded SAND w/SILT** 90% fine sand, 10% silt 2.5YR 5/3, soft, wet	2" diameter drive point
13					* Geoprobe meets refusal at 11.7 fbgs (bedrock)	
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York	**Log of Well No. TMW-S**		
BORING LOCATION:	TOP OF RISER ELEVATION: fmsl		DATUM:
DRILLING CONTRACTOR: SLC Environmental	DATE STARTED: 6/4/01		DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push	TOTAL DEPTH: 10.7 fbgs		SCREEN INTERVAL: 6.9-10.9 fbgs
DRILLING EQUIPMENT: Geoprobe 54LT	DEPTH TO WATER: FIRST 8.5 ft	COMPL.	CASING:
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves	LOGGED BY: MAC		
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa		REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: fmsl	
1					**FILL**, Silt w/clay, rootlets, concrete, slag, glass,dry	
2	1			0		
3					**SILT w/ SAND (ML)** 50-60% medium plasticity fines, 40-50% silt, 2.5YR 5/4, firm to hard, damp	
4						1" diameter PVC riser
5						
6	2			0		
7						
8					**SILT w/SAND (ML)** 70-80% high plasticity fines, 20-30% silt, 2.5YR 5/4, firm to hard, moist (wet at 8.5 fbgs)	1" diameter slotted PVC screen
9						
10	3			4.5		
11						2" diameter direct push drive point
12					*Geoprobe meets refusal at 10.9 fbgs (bedrock)	
13						
14						
15						

WELL_OVM TMW-S.GPJ (6/01)

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Boring No. B-2**	
BORING LOCATION:		ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct Push		TOTAL DEPTH: 4.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: | FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	DRILLING REMARKS
					Surface Elevation: fmsl	
1					**WASTE/FILL** white ash, cinders, dry	
2	1			0	**SILTY CLAY (CL)** 80% low plasticity fines, 20% silt, 5YR 2.5/1, firm to hard, moist (NATIVE SOIL)	
3					grades to 5YR 4/3, dry to damp	
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

BORING TMW-S.GPJ (6/01)

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Boring No. B-5**	
BORING LOCATION:		ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push		TOTAL DEPTH: 8.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: | FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. Surface Elevation: fmsl	DRILLING REMARKS
1					**WASTE/FILL** white ash, cinders, brick, glass, dry	
2	1			0		
3						
4					moist at 4.0' bgs	
5					**SILT w/CLAY (ML)** 80% silt, 20% high plasticity fines, 2.5 YR 4/3, firm, moist	
6	2			0		
7					**Poorly graded SAND w/ SILT (SP-SM)** 80% fine sand, 20% silt, 2.5YR 4/3, soft to firm, wet at 7.5' bgs	
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York	**Log of Boring No. B-8**	
BORING LOCATION:	ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental	DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push	TOTAL DEPTH: 5.6 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT	DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves	LOGGED BY: MAC	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. Surface Elevation: fmsl	DRILLING REMARKS
1					**WASTE/FILL** white cinders, ash, concrete, dry	
2	1			0		
3						
4						
5	2			0		
6					**Poorly graded SAND w/SILT (SP-SM)** 60% fine sand, 40% silt, 2.5YR 4/3, soft to firm, dry	
7					* Geoprobe meets refusal @ 5.6' bgs	
8						
9						
10						
11						
12						
13						
14						
15						

BORING TMW-S.GPJ (6/01)

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Boring No. B-9**	
BORING LOCATION:		ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push		TOTAL DEPTH: 8.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter. Surface Elevation: fmsl	DRILLING REMARKS
1					**WASTE/FILL** ash, cinders, slag/gravel, damp	
2	1			0	**SILT w/CLAY (ML)** 55-60% silt, 40% low plasticity fines, 0-5% gravel, 2.5YR 3/6, firm, damp to moist	
3						
4						
5						
6	2			0	grading to **SILT w/CLAY (ML)** 80-90% medium plasticity fines, 10-20% silt, 2.5YR 5/2, firm to hard, damp	
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Boring No. B-10**	
BORING LOCATION:		ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/5/01	DATE FINISHED: 6/5/01
DRILLING METHOD: Direct push		TOTAL DEPTH: 8.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: | FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist. % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	DRILLING REMARKS
					Surface Elevation: fmsl	
1					**WASTE/FILL** white ash, cinders, brick, damp	
2	1			0	**SILT w/CLAY (ML)** 55-60% silt, 40% medium plasticity fines 0-5% fine subrounded gravel, 2.5YR 5/2, firm, damp	
3						
4						
5						
6	2			0	grades to **SILTY CLAY (CL)** 80% medium plasticity fines, 20% silt, 5YR 4/3, firm, damp	
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York	**Log of Boring No. B-12**	
BORING LOCATION:	ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental	DATE STARTED: 6/4/01	DATE FINISHED: 6/4/01
DRILLING METHOD: Direct push	TOTAL DEPTH: 8.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT	DEPTH TO WATER: | FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves	LOGGED BY: MAC	
HAMMER WEIGHT: NA | DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	DRILLING REMARKS
					Surface Elevation: fmsl	
1					**WASTE/FILL** white ash, cinders, damp	
2	1			0		
3					fine sand, silt, gravel, brick, loose, dry **(FILL)**	
4						
5					**Poorly graded SAND w/SILT (SP-SM)** 70% fine sand, 30% silt, 2.5YR 4/2, soft, moist	
6	2			0		
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York		**Log of Boring No. B-14**	
BORING LOCATION:		ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental		DATE STARTED: 6/5/01	DATE FINISHED: 6/5/01
DRILLING METHOD: Direct push		TOTAL DEPTH: 8.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT		DEPTH TO WATER: | FIRST	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves		LOGGED BY: MAC	
HAMMER WEIGHT: NA	DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	DRILLING REMARKS
					Surface Elevation: fmsl	
1						
2	1			0	**WASTE/FILL** white ash, cinders, gravel, brick, wood, moist	
3						
4					fine sand w/ gravel, brick, glass, wood, damp **(FILL)**	
5						
6	2			0	**SILT w/CLAY (ML)** 90% high plasticity fines, 10% silt, 2.5YR 3/1, soft to firm, damp	
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Niagara Falls ROW Assessment Niagara Falls, New York	**Log of Boring No. B-15**	
BORING LOCATION:	ELEVATION: fmsl	DATUM:
DRILLING CONTRACTOR: SLC Environmental	DATE STARTED: 6/5/01	DATE FINISHED: 6/5/01
DRILLING METHOD: Direct push	TOTAL DEPTH: 12.0 fbgs	MEASURING POINT: ground surface
DRILLING EQUIPMENT: Geoprobe 54LT	DEPTH TO WATER: FIRST 8.5 feet	COMPL.
SAMPLING METHOD: Dedicated 2" diameter Teflon Sleeves	LOGGED BY: MAC	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: Richard H. Frappa	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/foot	OVM (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	DRILLING REMARKS
					Surface Elevation: fmsl	
1					**WASTE/FILL** white ash, cinders, gravel, damp	
2	1			0		
3						
4						
5					**FILL** clay, gravel, glass, wood, plastic, moist	
6	2			0		
7						
8					▽ wet at 8.5' bgs	
9						
10	3			0	**SILTY CLAY (CL)** 60% medium plasticity fines, 40% silt, 2.5YR 4/2, firm, damp	
11						
12						
13						
14						
15						

BORING TMW-S.GPJ (6/01)

APPENDIX D

Laboratory Analytical Data Sheets

SEVERN TRENT SERVICES

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Tel: 330 497 9396
Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

NIAGARA FALLS RIGHT-OF-WAY

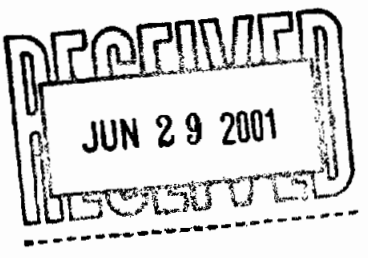
Lot #: A1F060239

Rick Frappa

Geomatrix Consultants
338 Harris Hill Road
Suite 201
Williamsville, NY 14221

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager



June 28, 2001

CASE NARRATIVE

A1F060239

The following report contains the analytical results for six water samples, twenty-eight solid samples, and one quality control sample submitted to STL North Canton by Geomatrix Consultants from the Niagara Falls Right-of-Way Site. The samples were received June 6, 2001, according to documented sample acceptance procedures.

Ethylene glycol analyses were performed at STL's Austin, Texas facility.

Only VOCs were requested for sample D-1 on the chain-of-custody; however, sample volume was provided for Ethylene glycol and BNAs. The sample was analyzed per the sample labels.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the analytical methods summary page in accordance with the methods indicated. Preliminary results were provided to Rick Frappa on June 27, 2001. A summary of QC data for these analyses is included at the rear of the report.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with laboratory protocol.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

Samples were received at temperatures of 10.3° C. and 11.1° C. with wet ice present.

GC/MS VOLATILES

Sample(s) which contain results between the MDL and the RL have been flagged with J. There is the possibility of false positive or misidentification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation will be performed only down to the standard reporting limit (SRL). The acceptance criteria for quality control criteria may not be met at these quantitation levels.

Sample(s) which contain concentrations of target analyte(s) at a reportable level in the associated method blank(s) have been flagged with B. All target analytes in the method blank must be below the reporting limits (RL) or the associated sample(s) must be ND with the exception of Methylene chloride, Acetone, and 2-Butanone. These are common laboratory contaminants and may be present in concentrations up to five times the reporting limits.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

** for analyses run on TJA Trace ICP or GFAA only*

ANALYTICAL METHODS SUMMARY

A1F060239

PARAMETER	ANALYTICAL METHOD
Nonhalogenated Organics Using GC/FID	SW846 8015B
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Total Residue as Percent Solids	MCAWW 160.3 MOD
Volatile Organics by GC/MS	SW846 8260B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A1F060239

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EEF2X	001	B-2N	06/04/01	14:00
EEF23	002	B-2W	06/04/01	14:00
EEF24	003	B-5W	06/04/01	14:40
EEF25	004	B-5N	06/04/01	14:41
EEF26	005	B-6W	06/04/01	15:15
EEF27	006	B-7W	06/04/01	08:42
EEF29	007	B-8W	06/05/01	08:55
EEF3C	008	B-9W	06/05/01	09:20
EEF3D	009	B-9N	06/05/01	09:22
EEF3L	010	B-10W	06/05/01	09:45
EEF3P	011	B-10N	06/05/01	09:48
EEF3R	012	DUP-1	06/05/01	12:00
EEF3V	013	SS-4	06/05/01	11:40
EEF3W	014	SS-3	06/05/01	11:15
EEF3X	015	SS-6	06/05/01	11:10
EEF30	016	SS-7	06/05/01	09:30
EEF34	017	SS-8	06/05/01	09:20
EEF35	018	SS-2	06/05/01	09:41
EEF36	019	B-11W	06/05/01	09:55
EEF37	020	B-12W	06/05/01	10:10
EEF39	021	B-12N	06/05/01	10:12
EEF4A	022	B-13W	06/05/01	10:30
EEF4C	023	B-14W	06/05/01	10:58
EEF4D	024	B-14N	06/05/01	10:55
EEF4G	025	B-15W	06/05/01	11:16
EEF4H	026	B-15N	06/05/01	11:15
EEF4J	027	B-16W	06/05/01	11:30
EEF4N	028	SS-5	06/05/01	12:30
EEF42	029	D-1	06/05/01	15:15
EEF45	030	D-2	06/05/01	15:30
EEF48	031	MW-103	06/05/01	14:45
EEF5A	032	MW-102	06/05/01	13:45
EEF5C	033	TMW-S	06/05/01	14:35
EEF5E	034	DUP-2	06/05/01	12:00
EEF5G	035	TRIP	06/05/01	

(Continued on next page)

GEOMATRIX CONSULTANTS

Client Sample ID: B-2N

GC/MS Volatiles

Lot-Sample #...: A1F060239-001 **Work Order #...:** EEF2X1AA **Matrix.....:** SO
Date Sampled...: 06/04/01 14:00 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**2.0 J**	**6.1**	**ug/kg**
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.1	ug/kg
1,1-Dichloroethene	ND	6.1	ug/kg
1,1-Dichloroethane	ND	6.1	ug/kg
1,2-Dichloroethene (total)	ND	6.1	ug/kg
Chloroform	ND	6.1	ug/kg
1,2-Dichloroethane	ND	6.1	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	6.1	ug/kg
Carbon tetrachloride	ND	6.1	ug/kg
Bromodichloromethane	ND	6.1	ug/kg
1,2-Dichloropropane	ND	6.1	ug/kg
cis-1,3-Dichloropropene	ND	6.1	ug/kg
Trichloroethene	ND	6.1	ug/kg
Dibromochloromethane	ND	6.1	ug/kg
1,1,2-Trichloroethane	ND	6.1	ug/kg
Benzene	ND	6.1	ug/kg
trans-1,3-Dichloropropene	ND	6.1	ug/kg
Bromoform	ND	6.1	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	**29**	**6.1**	**ug/kg**
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg
Toluene	**1.0 J**	**6.1**	**ug/kg**
Chlorobenzene	ND	6.1	ug/kg
Ethylbenzene	ND	6.1	ug/kg
Styrene	ND	6.1	ug/kg
Xylenes (total)	ND	6.1	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-2W

GC/MS Volatiles

Lot-Sample #...: A1F060239-002 **Work Order #...:** EEF231AA **Matrix.....:** SO
Date Sampled...: 06/04/01 14:00 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 65 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**440**	**280**	**ug/kg**
Chloromethane	ND	28	ug/kg
Bromomethane	ND	28	ug/kg
Vinyl chloride	ND	28	ug/kg
Chloroethane	ND	28	ug/kg
Methylene chloride	**6.6 J**	**14**	**ug/kg**
Acetone	**34 J**	**57**	**ug/kg**
Carbon disulfide	ND	14	ug/kg
1,1-Dichloroethene	ND	14	ug/kg
1,1-Dichloroethane	ND	14	ug/kg
1,2-Dichloroethene (total)	ND	14	ug/kg
Chloroform	**4.3 J**	**14**	**ug/kg**
1,2-Dichloroethane	ND	14	ug/kg
2-Butanone	ND	57	ug/kg
1,1,1-Trichloroethane	ND	14	ug/kg
Carbon tetrachloride	**22**	**14**	**ug/kg**
Bromodichloromethane	ND	14	ug/kg
1,2-Dichloropropane	ND	14	ug/kg
cis-1,3-Dichloropropene	ND	14	ug/kg
Trichloroethene	ND	14	ug/kg
Dibromochloromethane	ND	14	ug/kg
1,1,2-Trichloroethane	ND	14	ug/kg
Benzene	ND	14	ug/kg
trans-1,3-Dichloropropene	ND	14	ug/kg
Bromoform	ND	14	ug/kg
4-Methyl-2-pentanone	ND	57	ug/kg
2-Hexanone	ND	57	ug/kg
Tetrachloroethene	ND	14	ug/kg
1,1,2,2-Tetrachloroethane	ND	14	ug/kg
Toluene	**2.8 J**	**14**	**ug/kg**
Chlorobenzene	ND	14	ug/kg
Ethylbenzene	ND	14	ug/kg
Styrene	ND	14	ug/kg
Xylenes (total)	ND	14	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-5W

GC/MS Volatiles

Lot-Sample #...: A1F060239-003 **Work Order #...:** EEF241AA **Matrix.....:** SO
Date Sampled...: 06/04/01 14:40 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 39 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	160	ug/kg
Chloromethane	ND	16	ug/kg
Bromomethane	ND	16	ug/kg
Vinyl chloride	ND	16	ug/kg
Chloroethane	ND	16	ug/kg
Methylene chloride	**2.8 J**	**8.2**	**ug/kg**
Acetone	ND	33	ug/kg
Carbon disulfide	ND	8.2	ug/kg
1,1-Dichloroethene	ND	8.2	ug/kg
1,1-Dichloroethane	ND	8.2	ug/kg
1,2-Dichloroethene (total)	ND	8.2	ug/kg
Chloroform	ND	8.2	ug/kg
1,2-Dichloroethane	ND	8.2	ug/kg
2-Butanone	ND	33	ug/kg
1,1,1-Trichloroethane	ND	8.2	ug/kg
Carbon tetrachloride	ND	8.2	ug/kg
Bromodichloromethane	ND	8.2	ug/kg
1,2-Dichloropropane	ND	8.2	ug/kg
cis-1,3-Dichloropropene	ND	8.2	ug/kg
Trichloroethene	ND	8.2	ug/kg
Dibromochloromethane	ND	8.2	ug/kg
1,1,2-Trichloroethane	ND	8.2	ug/kg
Benzene	ND	8.2	ug/kg
trans-1,3-Dichloropropene	ND	8.2	ug/kg
Bromoform	ND	8.2	ug/kg
4-Methyl-2-pentanone	ND	33	ug/kg
2-Hexanone	ND	33	ug/kg
Tetrachloroethene	ND	8.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg
Toluene	**3.8 J**	**8.2**	**ug/kg**
Chlorobenzene	ND	8.2	ug/kg
Ethylbenzene	ND	8.2	ug/kg
Styrene	ND	8.2	ug/kg
Xylenes (total)	ND	8.2	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-5N

GC/MS Volatiles

Lot-Sample #...: A1F060239-004	**Work Order #...:** EEF251AA	**Matrix.....:** SO	
Date Sampled...: 06/04/01 14:41	**Date Received..:** 06/06/01		
Prep Date.....: 06/08/01	**Analysis Date..:** 06/08/01		
Prep Batch #...: 1159522			
Dilution Factor: 1			
% Moisture.....: 16	**Method.....:** SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**1.6 J**	**6.0**	**ug/kg**
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.0	ug/kg
1,1-Dichloroethene	ND	6.0	ug/kg
1,1-Dichloroethane	ND	6.0	ug/kg
1,2-Dichloroethene (total)	ND	6.0	ug/kg
Chloroform	ND	6.0	ug/kg
1,2-Dichloroethane	ND	6.0	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	6.0	ug/kg
Carbon tetrachloride	ND	6.0	ug/kg
Bromodichloromethane	ND	6.0	ug/kg
1,2-Dichloropropane	ND	6.0	ug/kg
cis-1,3-Dichloropropene	ND	6.0	ug/kg
Trichloroethene	ND	6.0	ug/kg
Dibromochloromethane	ND	6.0	ug/kg
1,1,2-Trichloroethane	ND	6.0	ug/kg
Benzene	ND	6.0	ug/kg
trans-1,3-Dichloropropene	ND	6.0	ug/kg
Bromoform	ND	6.0	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg
Toluene	ND	6.0	ug/kg
Chlorobenzene	ND	6.0	ug/kg
Ethylbenzene	ND	6.0	ug/kg
Styrene	ND	6.0	ug/kg
Xylenes (total)	ND	6.0	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-6W

GC/MS Volatiles

Lot-Sample #...: A1F060239-005 **Work Order #...:** EEF261AA **Matrix.....:** SO
Date Sampled...: 06/04/01 15:15 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 2
% Moisture.....: 60 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**8600**	**510**	**ug/kg**
Chloromethane	ND	51	ug/kg
Bromomethane	ND	51	ug/kg
Vinyl chloride	ND	51	ug/kg
Chloroethane	ND	51	ug/kg
Methylene chloride	**11 J**	**25**	**ug/kg**
Acetone	ND	100	ug/kg
Carbon disulfide	ND	25	ug/kg
1,1-Dichloroethene	ND	25	ug/kg
1,1-Dichloroethane	ND	25	ug/kg
1,2-Dichloroethene (total)	ND	25	ug/kg
Chloroform	**18 J**	**25**	**ug/kg**
1,2-Dichloroethane	ND	25	ug/kg
2-Butanone	ND	100	ug/kg
1,1,1-Trichloroethane	ND	25	ug/kg
Carbon tetrachloride	**130**	**25**	**ug/kg**
Bromodichloromethane	ND	25	ug/kg
1,2-Dichloropropane	ND	25	ug/kg
cis-1,3-Dichloropropene	ND	25	ug/kg
Trichloroethene	**9.3 J**	**25**	**ug/kg**
Dibromochloromethane	ND	25	ug/kg
1,1,2-Trichloroethane	ND	25	ug/kg
Benzene	ND	25	ug/kg
trans-1,3-Dichloropropene	ND	25	ug/kg
Bromoform	ND	25	ug/kg
4-Methyl-2-pentanone	ND	100	ug/kg
2-Hexanone	ND	100	ug/kg
Tetrachloroethene	**4.4 J**	**25**	**ug/kg**
1,1,2,2-Tetrachloroethane	ND	25	ug/kg
Toluene	ND	25	ug/kg
Chlorobenzene	ND	25	ug/kg
Ethylbenzene	ND	25	ug/kg
Styrene	ND	25	ug/kg
Xylenes (total)	ND	25	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-7W

GC/MS Volatiles

Lot-Sample #...:	A1F060239-006	**Work Order #...:**	EEF271AA	**Matrix.....:**	SO
Date Sampled...:	06/04/01 08:42	**Date Received..:**	06/06/01		
Prep Date.....:	06/08/01	**Analysis Date..:**	06/08/01		
Prep Batch #...:	1159522				
Dilution Factor:	1				
% Moisture.....:	60	**Method.....:**	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**650**	**250**	**ug/kg**
Chloromethane	ND	25	ug/kg
Bromomethane	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
Chloroethane	ND	25	ug/kg
Methylene chloride	**5.0 J**	**12**	**ug/kg**
Acetone	**10 J**	**50**	**ug/kg**
Carbon disulfide	ND	12	ug/kg
1,1-Dichloroethene	ND	12	ug/kg
1,1-Dichloroethane	ND	12	ug/kg
1,2-Dichloroethene (total)	ND	12	ug/kg
Chloroform	**8.5 J**	**12**	**ug/kg**
1,2-Dichloroethane	ND	12	ug/kg
2-Butanone	ND	50	ug/kg
1,1,1-Trichloroethane	ND	12	ug/kg
Carbon tetrachloride	**16**	**12**	**ug/kg**
Bromodichloromethane	ND	12	ug/kg
1,2-Dichloropropane	ND	12	ug/kg
cis-1,3-Dichloropropene	ND	12	ug/kg
Trichloroethene	ND	12	ug/kg
Dibromochloromethane	ND	12	ug/kg
1,1,2-Trichloroethane	ND	12	ug/kg
Benzene	ND	12	ug/kg
trans-1,3-Dichloropropene	ND	12	ug/kg
Bromoform	ND	12	ug/kg
4-Methyl-2-pentanone	ND	50	ug/kg
2-Hexanone	ND	50	ug/kg
Tetrachloroethene	ND	12	ug/kg
1,1,2,2-Tetrachloroethane	ND	12	ug/kg
Toluene	ND	12	ug/kg
Chlorobenzene	ND	12	ug/kg
Ethylbenzene	ND	12	ug/kg
Styrene	ND	12	ug/kg
Xylenes (total)	ND	12	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-8W

GC/MS Volatiles

Lot-Sample #...: A1F060239-007 **Work Order #...:** EEF291AA **Matrix.....:** SO
Date Sampled...: 06/05/01 08:55 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 24 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	130	ug/kg
Chloromethane	ND	13	ug/kg
Bromomethane	ND	13	ug/kg
Vinyl chloride	ND	13	ug/kg
Chloroethane	ND	13	ug/kg
Methylene chloride	**1.8 J**	**6.6**	**ug/kg**
Acetone	ND	26	ug/kg
Carbon disulfide	ND	6.6	ug/kg
1,1-Dichloroethene	ND	6.6	ug/kg
1,1-Dichloroethane	ND	6.6	ug/kg
1,2-Dichloroethene (total)	ND	6.6	ug/kg
Chloroform	ND	6.6	ug/kg
1,2-Dichloroethane	ND	6.6	ug/kg
2-Butanone	ND	26	ug/kg
1,1,1-Trichloroethane	ND	6.6	ug/kg
Carbon tetrachloride	ND	6.6	ug/kg
Bromodichloromethane	ND	6.6	ug/kg
1,2-Dichloropropane	ND	6.6	ug/kg
cis-1,3-Dichloropropene	ND	6.6	ug/kg
Trichloroethene	ND	6.6	ug/kg
Dibromochloromethane	ND	6.6	ug/kg
1,1,2-Trichloroethane	ND	6.6	ug/kg
Benzene	ND	6.6	ug/kg
trans-1,3-Dichloropropene	ND	6.6	ug/kg
Bromoform	ND	6.6	ug/kg
4-Methyl-2-pentanone	ND	26	ug/kg
2-Hexanone	ND	26	ug/kg
Tetrachloroethene	ND	6.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg
Toluene	**2.5 J**	**6.6**	**ug/kg**
Chlorobenzene	ND	6.6	ug/kg
Ethylbenzene	ND	6.6	ug/kg
Styrene	ND	6.6	ug/kg
Xylenes (total)	ND	6.6	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-9W

GC/MS Volatiles

Lot-Sample #...: A1F060239-008 **Work Order #...:** EEF3C1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:20 **Date Received..:** 06/06/01
Prep Date.....: 06/12/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1164550
Dilution Factor: 1
% Moisture.....: 47 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**1100**	**190**	**ug/kg**
Chloromethane	ND	19	ug/kg
Bromomethane	ND	19	ug/kg
Vinyl chloride	ND	19	ug/kg
Chloroethane	ND	19	ug/kg
Methylene chloride	ND	9.5	ug/kg
Acetone	**160 B**	**38**	**ug/kg**
Carbon disulfide	ND	9.5	ug/kg
1,1-Dichloroethene	ND	9.5	ug/kg
1,1-Dichloroethane	ND	9.5	ug/kg
1,2-Dichloroethene (total)	ND	9.5	ug/kg
Chloroform	**76**	**9.5**	**ug/kg**
1,2-Dichloroethane	ND	9.5	ug/kg
2-Butanone	**48**	**38**	**ug/kg**
1,1,1-Trichloroethane	ND	9.5	ug/kg
Carbon tetrachloride	**56**	**9.5**	**ug/kg**
Bromodichloromethane	ND	9.5	ug/kg
1,2-Dichloropropane	ND	9.5	ug/kg
cis-1,3-Dichloropropene	ND	9.5	ug/kg
Trichloroethene	**2.4 J**	**9.5**	**ug/kg**
Dibromochloromethane	ND	9.5	ug/kg
1,1,2-Trichloroethane	ND	9.5	ug/kg
Benzene	ND	9.5	ug/kg
trans-1,3-Dichloropropene	ND	9.5	ug/kg
Bromoform	ND	9.5	ug/kg
4-Methyl-2-pentanone	ND	38	ug/kg
2-Hexanone	ND	38	ug/kg
Tetrachloroethene	ND	9.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	9.5	ug/kg
Toluene	ND	9.5	ug/kg
Chlorobenzene	ND	9.5	ug/kg
Ethylbenzene	ND	9.5	ug/kg
Styrene	ND	9.5	ug/kg
Xylenes (total)	ND	9.5	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-9N

GC/MS Volatiles

Lot-Sample #...: A1F060239-009 **Work Order #...:** EEF3D1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:22 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**1.8 J**	**6.1**	**ug/kg**
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.1	ug/kg
1,1-Dichloroethene	ND	6.1	ug/kg
1,1-Dichloroethane	ND	6.1	ug/kg
1,2-Dichloroethene (total)	ND	6.1	ug/kg
Chloroform	**2.2 J**	**6.1**	**ug/kg**
1,2-Dichloroethane	ND	6.1	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	6.1	ug/kg
Carbon tetrachloride	ND	6.1	ug/kg
Bromodichloromethane	ND	6.1	ug/kg
1,2-Dichloropropane	ND	6.1	ug/kg
cis-1,3-Dichloropropene	ND	6.1	ug/kg
Trichloroethene	ND	6.1	ug/kg
Dibromochloromethane	ND	6.1	ug/kg
1,1,2-Trichloroethane	ND	6.1	ug/kg
Benzene	ND	6.1	ug/kg
trans-1,3-Dichloropropene	ND	6.1	ug/kg
Bromoform	ND	6.1	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg
Toluene	**5.8 J**	**6.1**	**ug/kg**
Chlorobenzene	ND	6.1	ug/kg
Ethylbenzene	ND	6.1	ug/kg
Styrene	ND	6.1	ug/kg
Xylenes (total)	ND	6.1	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-10W

GC/MS Volatiles

Lot-Sample #...: A1F060239-010 **Work Order #...:** EEF3L1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:45 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 27 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	140	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	14	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	ND	6.9	ug/kg
Acetone	ND	27	ug/kg
Carbon disulfide	ND	6.9	ug/kg
1,1-Dichloroethene	ND	6.9	ug/kg
1,1-Dichloroethane	ND	6.9	ug/kg
1,2-Dichloroethene (total)	ND	6.9	ug/kg
Chloroform	**2.5 J**	**6.9**	**ug/kg**
1,2-Dichloroethane	ND	6.9	ug/kg
2-Butanone	ND	27	ug/kg
1,1,1-Trichloroethane	ND	6.9	ug/kg
Carbon tetrachloride	ND	6.9	ug/kg
Bromodichloromethane	ND	6.9	ug/kg
1,2-Dichloropropane	ND	6.9	ug/kg
cis-1,3-Dichloropropene	ND	6.9	ug/kg
Trichloroethene	ND	6.9	ug/kg
Dibromochloromethane	ND	6.9	ug/kg
1,1,2-Trichloroethane	ND	6.9	ug/kg
Benzene	ND	6.9	ug/kg
trans-1,3-Dichloropropene	ND	6.9	ug/kg
Bromoform	ND	6.9	ug/kg
4-Methyl-2-pentanone	ND	27	ug/kg
2-Hexanone	ND	27	ug/kg
Tetrachloroethene	ND	6.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.9	ug/kg
Toluene	**1.3 J**	**6.9**	**ug/kg**
Chlorobenzene	ND	6.9	ug/kg
Ethylbenzene	ND	6.9	ug/kg
Styrene	ND	6.9	ug/kg
Xylenes (total)	ND	6.9	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-10N

GC/MS Volatiles

Lot-Sample #...: A1F060239-011 **Work Order #...:** EEF3P1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:48 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 17 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	**1.9 J**	**6.0**	**ug/kg**
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.0	ug/kg
1,1-Dichloroethene	ND	6.0	ug/kg
1,1-Dichloroethane	ND	6.0	ug/kg
1,2-Dichloroethene (total)	ND	6.0	ug/kg
Chloroform	ND	6.0	ug/kg
1,2-Dichloroethane	ND	6.0	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	6.0	ug/kg
Carbon tetrachloride	ND	6.0	ug/kg
Bromodichloromethane	ND	6.0	ug/kg
1,2-Dichloropropane	ND	6.0	ug/kg
cis-1,3-Dichloropropene	ND	6.0	ug/kg
Trichloroethene	ND	6.0	ug/kg
Dibromochloromethane	ND	6.0	ug/kg
1,1,2-Trichloroethane	ND	6.0	ug/kg
Benzene	ND	6.0	ug/kg
trans-1,3-Dichloropropene	ND	6.0	ug/kg
Bromoform	ND	6.0	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg
Toluene	ND	6.0	ug/kg
Chlorobenzene	ND	6.0	ug/kg
Ethylbenzene	ND	6.0	ug/kg
Styrene	ND	6.0	ug/kg
Xylenes (total)	ND	6.0	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: DUP-1 = B-16W

GC/MS Volatiles

Lot-Sample #...: A1F060239-012 **Work Order #...:** EEF3R1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 12:00 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 60 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**840**	**250**	**ug/kg**
Chloromethane	ND	25	ug/kg
Bromomethane	ND	25	ug/kg
Vinyl chloride	ND	25	ug/kg
Chloroethane	ND	25	ug/kg
Methylene chloride	ND	13	ug/kg
Acetone	**18 J,B**	**51**	**ug/kg**
Carbon disulfide	ND	13	ug/kg
1,1-Dichloroethene	ND	13	ug/kg
1,1-Dichloroethane	ND	13	ug/kg
1,2-Dichloroethene (total)	ND	13	ug/kg
Chloroform	**8.1 J**	**13**	**ug/kg**
1,2-Dichloroethane	ND	13	ug/kg
2-Butanone	ND	51	ug/kg
1,1,1-Trichloroethane	ND	13	ug/kg
Carbon tetrachloride	**35**	**13**	**ug/kg**
Bromodichloromethane	ND	13	ug/kg
1,2-Dichloropropane	ND	13	ug/kg
cis-1,3-Dichloropropene	ND	13	ug/kg
Trichloroethene	**4.0 J**	**13**	**ug/kg**
Dibromochloromethane	ND	13	ug/kg
1,1,2-Trichloroethane	ND	13	ug/kg
Benzene	ND	13	ug/kg
trans-1,3-Dichloropropene	ND	13	ug/kg
Bromoform	ND	13	ug/kg
4-Methyl-2-pentanone	ND	51	ug/kg
2-Hexanone	ND	51	ug/kg
Tetrachloroethene	ND	13	ug/kg
1,1,2,2-Tetrachloroethane	ND	13	ug/kg
Toluene	ND	13	ug/kg
Chlorobenzene	ND	13	ug/kg
Ethylbenzene	ND	13	ug/kg
Styrene	ND	13	ug/kg
Xylenes (total)	ND	13	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-4

GC/MS Volatiles

Lot-Sample #...: A1F060239-013 **Work Order #...:** EEF3V1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:40 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.2	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg
Toluene	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Xylenes (total)	ND	6.2	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-3

GC/MS Volatiles

Lot-Sample #...: A1F060239-014 **Work Order #...:** EEF3W1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:15 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.2	ug/kg
Acetone	ND	25	ug/kg
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg
Toluene	**1.2 J**	**6.2**	**ug/kg**
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Xylenes (total)	ND	6.2	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-6

GC/MS Volatiles

Lot-Sample #...: A1F060239-015 **Work Order #...:** EEF3X1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:10 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 47 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	190	ug/kg
Chloromethane	ND	19	ug/kg
Bromomethane	ND	19	ug/kg
Vinyl chloride	ND	19	ug/kg
Chloroethane	ND	19	ug/kg
Methylene chloride	**2.7 J**	**9.4**	**ug/kg**
Acetone	ND	38	ug/kg
Carbon disulfide	ND	9.4	ug/kg
1,1-Dichloroethene	ND	9.4	ug/kg
1,1-Dichloroethane	ND	9.4	ug/kg
1,2-Dichloroethene (total)	ND	9.4	ug/kg
Chloroform	ND	9.4	ug/kg
1,2-Dichloroethane	ND	9.4	ug/kg
2-Butanone	ND	38	ug/kg
1,1,1-Trichloroethane	ND	9.4	ug/kg
Carbon tetrachloride	ND	9.4	ug/kg
Bromodichloromethane	ND	9.4	ug/kg
1,2-Dichloropropane	ND	9.4	ug/kg
cis-1,3-Dichloropropene	ND	9.4	ug/kg
Trichloroethene	ND	9.4	ug/kg
Dibromochloromethane	ND	9.4	ug/kg
1,1,2-Trichloroethane	ND	9.4	ug/kg
Benzene	ND	9.4	ug/kg
trans-1,3-Dichloropropene	ND	9.4	ug/kg
Bromoform	ND	9.4	ug/kg
4-Methyl-2-pentanone	ND	38	ug/kg
2-Hexanone	ND	38	ug/kg
Tetrachloroethene	ND	9.4	ug/kg
1,1,2,2-Tetrachloroethane	ND	9.4	ug/kg
Toluene	ND	9.4	ug/kg
Chlorobenzene	ND	9.4	ug/kg
Ethylbenzene	ND	9.4	ug/kg
Styrene	ND	9.4	ug/kg
Xylenes (total)	ND	9.4	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-7

GC/MS Volatiles

Lot-Sample #...: A1F060239-016 **Work Order #...:** EEF301AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:30 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 38 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	160	ug/kg
Chloromethane	ND	16	ug/kg
Bromomethane	ND	16	ug/kg
Vinyl chloride	ND	16	ug/kg
Chloroethane	ND	16	ug/kg
Methylene chloride	**3.0 J**	**8.1**	**ug/kg**
Acetone	ND	32	ug/kg
Carbon disulfide	ND	8.1	ug/kg
1,1-Dichloroethene	ND	8.1	ug/kg
1,1-Dichloroethane	ND	8.1	ug/kg
1,2-Dichloroethene (total)	ND	8.1	ug/kg
Chloroform	ND	8.1	ug/kg
1,2-Dichloroethane	ND	8.1	ug/kg
2-Butanone	ND	32	ug/kg
1,1,1-Trichloroethane	ND	8.1	ug/kg
Carbon tetrachloride	ND	8.1	ug/kg
Bromodichloromethane	ND	8.1	ug/kg
1,2-Dichloropropane	ND	8.1	ug/kg
cis-1,3-Dichloropropene	ND	8.1	ug/kg
Trichloroethene	ND	8.1	ug/kg
Dibromochloromethane	ND	8.1	ug/kg
1,1,2-Trichloroethane	ND	8.1	ug/kg
Benzene	ND	8.1	ug/kg
trans-1,3-Dichloropropene	ND	8.1	ug/kg
Bromoform	ND	8.1	ug/kg
4-Methyl-2-pentanone	ND	32	ug/kg
2-Hexanone	ND	32	ug/kg
Tetrachloroethene	ND	8.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	8.1	ug/kg
Toluene	ND	8.1	ug/kg
Chlorobenzene	ND	8.1	ug/kg
Ethylbenzene	ND	8.1	ug/kg
Styrene	ND	8.1	ug/kg
Xylenes (total)	ND	8.1	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-8

GC/MS Volatiles

Lot-Sample #...: A1F060239-017 **Work Order #...:** EEF341AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:20 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 34 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	150	ug/kg
Chloromethane	ND	15	ug/kg
Bromomethane	ND	15	ug/kg
Vinyl chloride	ND	15	ug/kg
Chloroethane	ND	15	ug/kg
Methylene chloride	**2.6 J**	**7.6**	**ug/kg**
Acetone	ND	30	ug/kg
Carbon disulfide	ND	7.6	ug/kg
1,1-Dichloroethene	ND	7.6	ug/kg
1,1-Dichloroethane	ND	7.6	ug/kg
1,2-Dichloroethene (total)	ND	7.6	ug/kg
Chloroform	ND	7.6	ug/kg
1,2-Dichloroethane	ND	7.6	ug/kg
2-Butanone	ND	30	ug/kg
1,1,1-Trichloroethane	ND	7.6	ug/kg
Carbon tetrachloride	ND	7.6	ug/kg
Bromodichloromethane	ND	7.6	ug/kg
1,2-Dichloropropane	ND	7.6	ug/kg
cis-1,3-Dichloropropene	ND	7.6	ug/kg
Trichloroethene	ND	7.6	ug/kg
Dibromochloromethane	ND	7.6	ug/kg
1,1,2-Trichloroethane	ND	7.6	ug/kg
Benzene	ND	7.6	ug/kg
trans-1,3-Dichloropropene	ND	7.6	ug/kg
Bromoform	ND	7.6	ug/kg
4-Methyl-2-pentanone	ND	30	ug/kg
2-Hexanone	ND	30	ug/kg
Tetrachloroethene	ND	7.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	7.6	ug/kg
Toluene	**5.0 J**	**7.6**	**ug/kg**
Chlorobenzene	ND	7.6	ug/kg
Ethylbenzene	ND	7.6	ug/kg
Styrene	ND	7.6	ug/kg
Xylenes (total)	ND	7.6	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-2

GC/MS Volatiles

Lot-Sample #...: A1F060239-018 **Work Order #...:** EEF351AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:41 **Date Received..:** 06/06/01
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.1	ug/kg
Acetone	ND	24	ug/kg
Carbon disulfide	ND	6.1	ug/kg
1,1-Dichloroethene	ND	6.1	ug/kg
1,1-Dichloroethane	ND	6.1	ug/kg
1,2-Dichloroethene (total)	ND	6.1	ug/kg
Chloroform	ND	6.1	ug/kg
1,2-Dichloroethane	ND	6.1	ug/kg
2-Butanone	ND	24	ug/kg
1,1,1-Trichloroethane	ND	6.1	ug/kg
Carbon tetrachloride	ND	6.1	ug/kg
Bromodichloromethane	ND	6.1	ug/kg
1,2-Dichloropropane	ND	6.1	ug/kg
cis-1,3-Dichloropropene	ND	6.1	ug/kg
Trichloroethene	ND	6.1	ug/kg
Dibromochloromethane	ND	6.1	ug/kg
1,1,2-Trichloroethane	ND	6.1	ug/kg
Benzene	ND	6.1	ug/kg
trans-1,3-Dichloropropene	ND	6.1	ug/kg
Bromoform	ND	6.1	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	6.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg
Toluene	**4.8 J**	**6.1**	**ug/kg**
Chlorobenzene	ND	6.1	ug/kg
Ethylbenzene	ND	6.1	ug/kg
Styrene	ND	6.1	ug/kg
Xylenes (total)	ND	6.1	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-11W

GC/MS Volatiles

Lot-Sample #...: A1F060239-019 **Work Order #...:** EEF361AA **Matrix.....:** SO
Date Sampled...: 06/05/01 09:55 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	6.2	ug/kg
Acetone	**8.2 J,B**	**25**	**ug/kg**
Carbon disulfide	ND	6.2	ug/kg
1,1-Dichloroethene	ND	6.2	ug/kg
1,1-Dichloroethane	ND	6.2	ug/kg
1,2-Dichloroethene (total)	ND	6.2	ug/kg
Chloroform	ND	6.2	ug/kg
1,2-Dichloroethane	ND	6.2	ug/kg
2-Butanone	ND	25	ug/kg
1,1,1-Trichloroethane	ND	6.2	ug/kg
Carbon tetrachloride	ND	6.2	ug/kg
Bromodichloromethane	ND	6.2	ug/kg
1,2-Dichloropropane	ND	6.2	ug/kg
cis-1,3-Dichloropropene	ND	6.2	ug/kg
Trichloroethene	ND	6.2	ug/kg
Dibromochloromethane	ND	6.2	ug/kg
1,1,2-Trichloroethane	ND	6.2	ug/kg
Benzene	ND	6.2	ug/kg
trans-1,3-Dichloropropene	ND	6.2	ug/kg
Bromoform	ND	6.2	ug/kg
4-Methyl-2-pentanone	ND	25	ug/kg
2-Hexanone	ND	25	ug/kg
Tetrachloroethene	ND	6.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg
Toluene	ND	6.2	ug/kg
Chlorobenzene	ND	6.2	ug/kg
Ethylbenzene	ND	6.2	ug/kg
Styrene	ND	6.2	ug/kg
Xylenes (total)	ND	6.2	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-12W

GC/MS Volatiles

Lot-Sample #...: A1F060239-020 **Work Order #...:** EEF371AA **Matrix.....:** SO
Date Sampled...: 06/05/01 10:10 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 10
% Moisture.....: 58 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**34000**	**2400**	**ug/kg**
Chloromethane	ND	240	ug/kg
Bromomethane	ND	240	ug/kg
Vinyl chloride	ND	240	ug/kg
Chloroethane	ND	240	ug/kg
Methylene chloride	ND	120	ug/kg
Acetone	**110 J,B**	**480**	**ug/kg**
Carbon disulfide	ND	120	ug/kg
1,1-Dichloroethene	ND	120	ug/kg
1,1-Dichloroethane	ND	120	ug/kg
1,2-Dichloroethene (total)	ND	120	ug/kg
Chloroform	**320**	**120**	**ug/kg**
1,2-Dichloroethane	ND	120	ug/kg
2-Butanone	ND	480	ug/kg
1,1,1-Trichloroethane	ND	120	ug/kg
Carbon tetrachloride	**670**	**120**	**ug/kg**
Bromodichloromethane	ND	120	ug/kg
1,2-Dichloropropane	ND	120	ug/kg
cis-1,3-Dichloropropene	ND	120	ug/kg
Trichloroethene	**36 J**	**120**	**ug/kg**
Dibromochloromethane	ND	120	ug/kg
1,1,2-Trichloroethane	ND	120	ug/kg
Benzene	ND	120	ug/kg
trans-1,3-Dichloropropene	ND	120	ug/kg
Bromoform	ND	120	ug/kg
4-Methyl-2-pentanone	ND	480	ug/kg
2-Hexanone	ND	480	ug/kg
Tetrachloroethene	**18 J**	**120**	**ug/kg**
1,1,2,2-Tetrachloroethane	ND	120	ug/kg
Toluene	ND	120	ug/kg
Chlorobenzene	ND	120	ug/kg
Ethylbenzene	ND	120	ug/kg
Styrene	ND	120	ug/kg
Xylenes (total)	ND	120	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-12N

GC/MS Volatiles

Lot-Sample #...: A1F060239-021 **Work Order #...:** EEF391AA **Matrix.....:** SO
Date Sampled...: 06/05/01 10:12 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 11 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	110	ug/kg
Chloromethane	ND	11	ug/kg
Bromomethane	ND	11	ug/kg
Vinyl chloride	ND	11	ug/kg
Chloroethane	ND	11	ug/kg
Methylene chloride	ND	5.6	ug/kg
Acetone	ND	23	ug/kg
Carbon disulfide	ND	5.6	ug/kg
1,1-Dichloroethene	ND	5.6	ug/kg
1,1-Dichloroethane	ND	5.6	ug/kg
1,2-Dichloroethene (total)	ND	5.6	ug/kg
Chloroform	ND	5.6	ug/kg
1,2-Dichloroethane	ND	5.6	ug/kg
2-Butanone	ND	23	ug/kg
1,1,1-Trichloroethane	ND	5.6	ug/kg
Carbon tetrachloride	ND	5.6	ug/kg
Bromodichloromethane	ND	5.6	ug/kg
1,2-Dichloropropane	ND	5.6	ug/kg
cis-1,3-Dichloropropene	ND	5.6	ug/kg
Trichloroethene	ND	5.6	ug/kg
Dibromochloromethane	ND	5.6	ug/kg
1,1,2-Trichloroethane	ND	5.6	ug/kg
Benzene	ND	5.6	ug/kg
trans-1,3-Dichloropropene	ND	5.6	ug/kg
Bromoform	ND	5.6	ug/kg
4-Methyl-2-pentanone	ND	23	ug/kg
2-Hexanone	ND	23	ug/kg
Tetrachloroethene	ND	5.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg
Toluene	ND	5.6	ug/kg
Chlorobenzene	ND	5.6	ug/kg
Ethylbenzene	ND	5.6	ug/kg
Styrene	ND	5.6	ug/kg
Xylenes (total)	ND	5.6	ug/kg

(Continued on next page)

GEOMATRIX CONSULTANTS

Client Sample ID: B-13W

GC/MS Volatiles

Lot-Sample #...: A1F060239-022 **Work Order #...:** EEF4A1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 10:30 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 28 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	140	ug/kg
Chloromethane	ND	14	ug/kg
Bromomethane	ND	14	ug/kg
Vinyl chloride	ND	14	ug/kg
Chloroethane	ND	14	ug/kg
Methylene chloride	**2.1 J**	**6.9**	**ug/kg**
Acetone	ND	28	ug/kg
Carbon disulfide	ND	6.9	ug/kg
1,1-Dichloroethene	ND	6.9	ug/kg
1,1-Dichloroethane	ND	6.9	ug/kg
1,2-Dichloroethene (total)	ND	6.9	ug/kg
Chloroform	**14**	**6.9**	**ug/kg**
1,2-Dichloroethane	ND	6.9	ug/kg
2-Butanone	ND	28	ug/kg
1,1,1-Trichloroethane	ND	6.9	ug/kg
Carbon tetrachloride	ND	6.9	ug/kg
Bromodichloromethane	ND	6.9	ug/kg
1,2-Dichloropropane	ND	6.9	ug/kg
cis-1,3-Dichloropropene	ND	6.9	ug/kg
Trichloroethene	**40**	**6.9**	**ug/kg**
Dibromochloromethane	ND	6.9	ug/kg
1,1,2-Trichloroethane	ND	6.9	ug/kg
Benzene	ND	6.9	ug/kg
trans-1,3-Dichloropropene	ND	6.9	ug/kg
Bromoform	ND	6.9	ug/kg
4-Methyl-2-pentanone	ND	28	ug/kg
2-Hexanone	ND	28	ug/kg
Tetrachloroethene	**5.0 J**	**6.9**	**ug/kg**
1,1,2,2-Tetrachloroethane	ND	6.9	ug/kg
Toluene	**7.5**	**6.9**	**ug/kg**
Chlorobenzene	ND	6.9	ug/kg
Ethylbenzene	ND	6.9	ug/kg
Styrene	ND	6.9	ug/kg
Xylenes (total)	ND	6.9	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-14W

GC/MS Volatiles

Lot-Sample #...: A1F060239-023 **Work Order #...:** EEF4C1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 10:58 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 62 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**2800**	**260**	**ug/kg**
Chloromethane	ND	26	ug/kg
Bromomethane	ND	26	ug/kg
Vinyl chloride	ND	26	ug/kg
Chloroethane	ND	26	ug/kg
Methylene chloride	ND	13	ug/kg
Acetone	**63 B**	**52**	**ug/kg**
Carbon disulfide	ND	13	ug/kg
1,1-Dichloroethene	ND	13	ug/kg
1,1-Dichloroethane	ND	13	ug/kg
1,2-Dichloroethene (total)	ND	13	ug/kg
Chloroform	**94**	**13**	**ug/kg**
1,2-Dichloroethane	ND	13	ug/kg
2-Butanone	**28 J**	**52**	**ug/kg**
1,1,1-Trichloroethane	ND	13	ug/kg
Carbon tetrachloride	**95**	**13**	**ug/kg**
Bromodichloromethane	ND	13	ug/kg
1,2-Dichloropropane	ND	13	ug/kg
cis-1,3-Dichloropropene	ND	13	ug/kg
Trichloroethene	**3.8 J**	**13**	**ug/kg**
Dibromochloromethane	ND	13	ug/kg
1,1,2-Trichloroethane	ND	13	ug/kg
Benzene	ND	13	ug/kg
trans-1,3-Dichloropropene	ND	13	ug/kg
Bromoform	ND	13	ug/kg
4-Methyl-2-pentanone	ND	52	ug/kg
2-Hexanone	ND	52	ug/kg
Tetrachloroethene	**5.0 J**	**13**	**ug/kg**
1,1,2,2-Tetrachloroethane	ND	13	ug/kg
Toluene	ND	13	ug/kg
Chlorobenzene	ND	13	ug/kg
Ethylbenzene	ND	13	ug/kg
Styrene	ND	13	ug/kg
Xylenes (total)	ND	13	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-14N

GC/MS Volatiles

Lot-Sample #...: A1F060239-024 **Work Order #...:** EEF4D1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 10:55 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 13 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	110	ug/kg
Chloromethane	ND	11	ug/kg
Bromomethane	ND	11	ug/kg
Vinyl chloride	ND	11	ug/kg
Chloroethane	ND	11	ug/kg
Methylene chloride	ND	5.7	ug/kg
Acetone	ND	23	ug/kg
Carbon disulfide	ND	5.7	ug/kg
1,1-Dichloroethene	ND	5.7	ug/kg
1,1-Dichloroethane	ND	5.7	ug/kg
1,2-Dichloroethene (total)	ND	5.7	ug/kg
Chloroform	ND	5.7	ug/kg
1,2-Dichloroethane	ND	5.7	ug/kg
2-Butanone	ND	23	ug/kg
1,1,1-Trichloroethane	ND	5.7	ug/kg
Carbon tetrachloride	ND	5.7	ug/kg
Bromodichloromethane	ND	5.7	ug/kg
1,2-Dichloropropane	ND	5.7	ug/kg
cis-1,3-Dichloropropene	ND	5.7	ug/kg
Trichloroethene	ND	5.7	ug/kg
Dibromochloromethane	ND	5.7	ug/kg
1,1,2-Trichloroethane	ND	5.7	ug/kg
Benzene	ND	5.7	ug/kg
trans-1,3-Dichloropropene	ND	5.7	ug/kg
Bromoform	ND	5.7	ug/kg
4-Methyl-2-pentanone	ND	23	ug/kg
2-Hexanone	ND	23	ug/kg
Tetrachloroethene	ND	5.7	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg
Toluene	ND	5.7	ug/kg
Chlorobenzene	ND	5.7	ug/kg
Ethylbenzene	ND	5.7	ug/kg
Styrene	ND	5.7	ug/kg
Xylenes (total)	ND	5.7	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-15W

GC/MS Volatiles

Lot-Sample #...: A1F060239-025 **Work Order #...:** EEF4G1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:16 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 5
% Moisture.....: 67 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**15000**	**1500**	**ug/kg**
Chloromethane	ND	150	ug/kg
Bromomethane	ND	150	ug/kg
Vinyl chloride	ND	150	ug/kg
Chloroethane	ND	150	ug/kg
Methylene chloride	**28 J**	**76**	**ug/kg**
Acetone	**84 J,B**	**300**	**ug/kg**
Carbon disulfide	ND	76	ug/kg
1,1-Dichloroethene	ND	76	ug/kg
1,1-Dichloroethane	ND	76	ug/kg
1,2-Dichloroethene (total)	ND	76	ug/kg
Chloroform	**270**	**76**	**ug/kg**
1,2-Dichloroethane	ND	76	ug/kg
2-Butanone	ND	300	ug/kg
1,1,1-Trichloroethane	ND	76	ug/kg
Carbon tetrachloride	**460**	**76**	**ug/kg**
Bromodichloromethane	ND	76	ug/kg
1,2-Dichloropropane	ND	76	ug/kg
cis-1,3-Dichloropropene	ND	76	ug/kg
Trichloroethene	ND	76	ug/kg
Dibromochloromethane	ND	76	ug/kg
1,1,2-Trichloroethane	ND	76	ug/kg
Benzene	ND	76	ug/kg
trans-1,3-Dichloropropene	ND	76	ug/kg
Bromoform	ND	76	ug/kg
4-Methyl-2-pentanone	ND	300	ug/kg
2-Hexanone	ND	300	ug/kg
Tetrachloroethene	ND	76	ug/kg
1,1,2,2-Tetrachloroethane	ND	76	ug/kg
Toluene	ND	76	ug/kg
Chlorobenzene	ND	76	ug/kg
Ethylbenzene	ND	76	ug/kg
Styrene	ND	76	ug/kg
Xylenes (total)	ND	76	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-15N

GC/MS Volatiles

Lot-Sample #...: A1F060239-026 **Work Order #...:** EEF4H1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:15 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 16 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	5.9	ug/kg
Acetone	**240 B**	**24**	**ug/kg**
Carbon disulfide	**1.7 J**	**5.9**	**ug/kg**
1,1-Dichloroethene	ND	5.9	ug/kg
1,1-Dichloroethane	ND	5.9	ug/kg
1,2-Dichloroethene (total)	ND	5.9	ug/kg
Chloroform	ND	5.9	ug/kg
1,2-Dichloroethane	ND	5.9	ug/kg
2-Butanone	**57**	**24**	**ug/kg**
1,1,1-Trichloroethane	ND	5.9	ug/kg
Carbon tetrachloride	ND	5.9	ug/kg
Bromodichloromethane	ND	5.9	ug/kg
1,2-Dichloropropane	ND	5.9	ug/kg
cis-1,3-Dichloropropene	ND	5.9	ug/kg
Trichloroethene	ND	5.9	ug/kg
Dibromochloromethane	ND	5.9	ug/kg
1,1,2-Trichloroethane	ND	5.9	ug/kg
Benzene	ND	5.9	ug/kg
trans-1,3-Dichloropropene	ND	5.9	ug/kg
Bromoform	ND	5.9	ug/kg
4-Methyl-2-pentanone	ND	24	ug/kg
2-Hexanone	ND	24	ug/kg
Tetrachloroethene	ND	5.9	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg
Toluene	**2.6 J**	**5.9**	**ug/kg**
Chlorobenzene	ND	5.9	ug/kg
Ethylbenzene	ND	5.9	ug/kg
Styrene	ND	5.9	ug/kg
Xylenes (total)	ND	5.9	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: B-16W

GC/MS Volatiles

Lot-Sample #...: A1F060239-027 **Work Order #...:** EEF4J1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 11:30 **Date Received..:** 06/06/01
Prep Date.....: 06/12/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1164550
Dilution Factor: 1
% Moisture.....: 55 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	**1300**	**220**	**ug/kg**
Chloromethane	ND	22	ug/kg
Bromomethane	ND	22	ug/kg
Vinyl chloride	ND	22	ug/kg
Chloroethane	ND	22	ug/kg
Methylene chloride	ND	11	ug/kg
Acetone	**18 J,B**	**45**	**ug/kg**
Carbon disulfide	ND	11	ug/kg
1,1-Dichloroethene	ND	11	ug/kg
1,1-Dichloroethane	ND	11	ug/kg
1,2-Dichloroethene (total)	ND	11	ug/kg
Chloroform	**9.9 J**	**11**	**ug/kg**
1,2-Dichloroethane	ND	11	ug/kg
2-Butanone	ND	45	ug/kg
1,1,1-Trichloroethane	ND	11	ug/kg
Carbon tetrachloride	**45**	**11**	**ug/kg**
Bromodichloromethane	ND	11	ug/kg
1,2-Dichloropropane	ND	11	ug/kg
cis-1,3-Dichloropropene	ND	11	ug/kg
Trichloroethene	**2.6 J**	**11**	**ug/kg**
Dibromochloromethane	ND	11	ug/kg
1,1,2-Trichloroethane	ND	11	ug/kg
Benzene	ND	11	ug/kg
trans-1,3-Dichloropropene	ND	11	ug/kg
Bromoform	ND	11	ug/kg
4-Methyl-2-pentanone	ND	45	ug/kg
2-Hexanone	ND	45	ug/kg
Tetrachloroethene	ND	11	ug/kg
1,1,2,2-Tetrachloroethane	ND	11	ug/kg
Toluene	ND	11	ug/kg
Chlorobenzene	ND	11	ug/kg
Ethylbenzene	ND	11	ug/kg
Styrene	ND	11	ug/kg
Xylenes (total)	ND	11	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-5

GC/MS Volatiles

Lot-Sample #...: A1F060239-028 **Work Order #...:** EEF4N1AA **Matrix.....:** SO
Date Sampled...: 06/05/01 12:30 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/11/01
Prep Batch #...: 1162558
Dilution Factor: 1
% Moisture.....: 14 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	120	ug/kg
Chloromethane	ND	12	ug/kg
Bromomethane	ND	12	ug/kg
Vinyl chloride	ND	12	ug/kg
Chloroethane	ND	12	ug/kg
Methylene chloride	ND	5.8	ug/kg
Acetone	ND	23	ug/kg
Carbon disulfide	ND	5.8	ug/kg
1,1-Dichloroethene	ND	5.8	ug/kg
1,1-Dichloroethane	ND	5.8	ug/kg
1,2-Dichloroethene (total)	ND	5.8	ug/kg
Chloroform	ND	5.8	ug/kg
1,2-Dichloroethane	ND	5.8	ug/kg
2-Butanone	ND	23	ug/kg
1,1,1-Trichloroethane	ND	5.8	ug/kg
Carbon tetrachloride	ND	5.8	ug/kg
Bromodichloromethane	ND	5.8	ug/kg
1,2-Dichloropropane	ND	5.8	ug/kg
cis-1,3-Dichloropropene	ND	5.8	ug/kg
Trichloroethene	ND	5.8	ug/kg
Dibromochloromethane	ND	5.8	ug/kg
1,1,2-Trichloroethane	ND	5.8	ug/kg
Benzene	ND	5.8	ug/kg
trans-1,3-Dichloropropene	ND	5.8	ug/kg
Bromoform	ND	5.8	ug/kg
4-Methyl-2-pentanone	ND	23	ug/kg
2-Hexanone	ND	23	ug/kg
Tetrachloroethene	ND	5.8	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
Toluene	ND	5.8	ug/kg
Chlorobenzene	ND	5.8	ug/kg
Ethylbenzene	ND	5.8	ug/kg
Styrene	ND	5.8	ug/kg
Xylenes (total)	ND	5.8	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-5

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-028 **Work Order #...:** EEF4N1AC **Matrix.....:** SO
Date Sampled...: 06/05/01 12:30 **Date Received..:** 06/06/01
Prep Date.....: 06/06/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1157365
Dilution Factor: 1
% Moisture.....: 14 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Phenol	ND	390	ug/kg
bis(2-Chloroethyl)-ether	ND	390	ug/kg
2-Chlorophenol	ND	390	ug/kg
1,3-Dichlorobenzene	ND	390	ug/kg
1,4-Dichlorobenzene	ND	390	ug/kg
1,2-Dichlorobenzene	ND	390	ug/kg
2-Methylphenol	ND	390	ug/kg
2,2'-oxybis(1-Chloro-propane)	ND	390	ug/kg
4-Methylphenol	ND	390	ug/kg
N-Nitrosodi-n-propyl-amine	ND	390	ug/kg
Hexachloroethane	ND	390	ug/kg
Nitrobenzene	ND	390	ug/kg
Isophorone	ND	390	ug/kg
2-Nitrophenol	ND	390	ug/kg
2,4-Dimethylphenol	ND	390	ug/kg
bis(2-Chloroethoxy) methane	ND	390	ug/kg
2,4-Dichlorophenol	ND	390	ug/kg
1,2,4-Trichloro-benzene	ND	390	ug/kg
Naphthalene	ND	390	ug/kg
4-Chloroaniline	ND	390	ug/kg
Hexachlorobutadiene	ND	390	ug/kg
4-Chloro-3-methylphenol	ND	390	ug/kg
2-Methylnaphthalene	ND	390	ug/kg
Hexachlorocyclopenta-diene	ND	1900	ug/kg
2,4,6-Trichloro-phenol	ND	390	ug/kg
2,4,5-Trichloro-phenol	ND	390	ug/kg
2-Chloronaphthalene	ND	390	ug/kg
2-Nitroaniline	ND	1900	ug/kg
Dimethyl phthalate	ND	390	ug/kg
Acenaphthylene	ND	390	ug/kg

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GEOMATRIX CONSULTANTS

Client Sample ID: SS-5

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-028 **Work Order #...:** EEF4N1AC **Matrix.....:** SO

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	105	(42 - 110)
2-Fluorobiphenyl	86	(43 - 110)
Terphenyl-d14	77	(37 - 137)
Phenol-d5	72	(25 - 115)
2-Fluorophenol	69	(11 - 116)
2,4,6-Tribromophenol	70	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

GEOMATRIX CONSULTANTS

Client Sample ID: D-1

GC/MS Volatiles

Lot-Sample #...: A1F060239-029 **Work Order #...:** EEF421AA **Matrix.....:** WG
Date Sampled...: 06/05/01 15:15 **Date Received..:** 06/06/01
Prep Date.....: 06/10/01 **Analysis Date..:** 06/10/01
Prep Batch #...: 1162557
Dilution Factor: 10 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	1000	ug/L
Chloromethane	ND	100	ug/L
Bromomethane	ND	100	ug/L
Vinyl chloride	ND	100	ug/L
Chloroethane	ND	100	ug/L
Methylene chloride	**25 J**	**50**	**ug/L**
Acetone	**150 J,B**	**200**	**ug/L**
Carbon disulfide	ND	50	ug/L
1,1-Dichloroethene	ND	50	ug/L
1,1-Dichloroethane	ND	50	ug/L
1,2-Dichloroethene (total)	ND	50	ug/L
Chloroform	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
2-Butanone	**76 J**	**200**	**ug/L**
1,1,1-Trichloroethane	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
Bromodichloromethane	ND	50	ug/L
1,2-Dichloropropane	ND	50	ug/L
cis-1,3-Dichloropropene	ND	50	ug/L
Trichloroethene	ND	50	ug/L
Dibromochloromethane	ND	50	ug/L
1,1,2-Trichloroethane	ND	50	ug/L
Benzene	ND	50	ug/L
trans-1,3-Dichloropropene	ND	50	ug/L
Bromoform	ND	50	ug/L
4-Methyl-2-pentanone	ND	200	ug/L
2-Hexanone	ND	200	ug/L
Tetrachloroethene	ND	50	ug/L
1,1,2,2-Tetrachloroethane	ND	50	ug/L
Toluene	**8.3 J**	**50**	**ug/L**
Chlorobenzene	ND	50	ug/L
Ethylbenzene	**180**	**50**	**ug/L**
Styrene	ND	50	ug/L
Xylenes (total)	**2500**	**50**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(77 - 120)
Toluene-d8	102	(78 - 111)
4-Bromofluorobenzene	96	(80 - 114)
Dibromofluoromethane	98	(78 - 110)

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GEOMATRIX CONSULTANTS

Client Sample ID: D-1

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-029 **Work Order #...:** EEF421AC **Matrix.....:** WG
Date Sampled...: 06/05/01 15:15 **Date Received..:** 06/06/01
Prep Date.....: 06/06/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1157345
Dilution Factor: 50 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Phenol	ND	500	ug/L
bis(2-Chloroethyl)-ether	ND	500	ug/L
2-Chlorophenol	ND	500	ug/L
1,3-Dichlorobenzene	ND	500	ug/L
1,4-Dichlorobenzene	ND	500	ug/L
1,2-Dichlorobenzene	ND	500	ug/L
2-Methylphenol	**4300**	**500**	**ug/L**
2,2'-oxybis(1-Chloro-propane)	ND	500	ug/L
4-Methylphenol	**170 J,#**	**500**	**ug/L**
N-Nitrosodi-n-propyl-amine	ND	500	ug/L
Hexachloroethane	ND	500	ug/L
Nitrobenzene	ND	500	ug/L
Isophorone	ND	500	ug/L
2-Nitrophenol	ND	500	ug/L
2,4-Dimethylphenol	**2700**	**500**	**ug/L**
bis(2-Chloroethoxy) methane	ND	500	ug/L
2,4-Dichlorophenol	ND	500	ug/L
1,2,4-Trichloro-benzene	ND	500	ug/L
Naphthalene	**400 J**	**500**	**ug/L**
4-Chloroaniline	ND	500	ug/L
Hexachlorobutadiene	ND	500	ug/L
4-Chloro-3-methylphenol	ND	500	ug/L
2-Methylnaphthalene	**270 J**	**500**	**ug/L**
Hexachlorocyclopenta-diene	ND	2500	ug/L
2,4,6-Trichloro-phenol	ND	500	ug/L
2,4,5-Trichloro-phenol	ND	500	ug/L
2-Chloronaphthalene	ND	500	ug/L
2-Nitroaniline	ND	2500	ug/L
Dimethyl phthalate	ND	500	ug/L
Acenaphthylene	ND	500	ug/L
2,6-Dinitrotoluene	ND	500	ug/L

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GEOMATRIX CONSULTANTS

Client Sample ID: D-1

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-029 Work Order #...: EEF421AC Matrix.....: WG

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

- This value represents a probable combination of 3-Methylphenol (m- cresol) and 4-methylphenol (p-cresol).

GEOMATRIX CONSULTANTS

Client Sample ID: D-2

GC/MS Volatiles

Lot-Sample #...: A1F060239-030 **Work Order #...:** EEF451AA **Matrix.....:** WG
Date Sampled...: 06/05/01 15:30 **Date Received..:** 06/06/01
Prep Date.....: 06/11/01 **Analysis Date..:** 06/13/01
Prep Batch #...: 1171515
Dilution Factor: 3575.9
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	**8800000 J,B**	**8900000**	**ug/L**
Benzene	**14000000**	**2200000**	**ug/L**
Bromodichloromethane	ND	2200000	ug/L
Bromoform	ND	2200000	ug/L
Bromomethane	ND	4500000	ug/L
2-Butanone	ND	8900000	ug/L
Carbon disulfide	ND	2200000	ug/L
Carbon tetrachloride	ND	2200000	ug/L
Chlorobenzene	ND	2200000	ug/L
Dibromochloromethane	ND	2200000	ug/L
Chloroethane	ND	4500000	ug/L
Chloroform	ND	2200000	ug/L
Chloromethane	ND	4500000	ug/L
1,1-Dichloroethane	ND	2200000	ug/L
1,2-Dichloroethane	ND	2200000	ug/L
1,1-Dichloroethene	ND	2200000	ug/L
1,2-Dichloroethene (total)	ND	2200000	ug/L
1,2-Dichloropropane	ND	2200000	ug/L
cis-1,3-Dichloropropene	ND	2200000	ug/L
trans-1,3-Dichloropropene	ND	2200000	ug/L
Ethylbenzene	**16000000**	**2200000**	**ug/L**
2-Hexanone	ND	8900000	ug/L
Methylene chloride	ND	2200000	ug/L
4-Methyl-2-pentanone	ND	8900000	ug/L
Styrene	ND	2200000	ug/L
1,1,2,2-Tetrachloroethane	ND	2200000	ug/L
Tetrachloroethene	ND	2200000	ug/L
Toluene	**64000000 B**	**2200000**	**ug/L**
1,1,1-Trichloroethane	ND	2200000	ug/L
1,1,2-Trichloroethane	ND	2200000	ug/L
Trichloroethene	ND	2200000	ug/L
Vinyl chloride	ND	4500000	ug/L
Xylenes (total)	**89000000**	**2200000**	**ug/L**
Chloropicrin	ND	45000000	ug/L

(Continued on next page)

GEOMATRIX CONSULTANTS

Client Sample ID: D-2

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-030 **Work Order #...:** EEF451AC **Matrix.....:** WG
Date Sampled...: 06/05/01 15:30 **Date Received..:** 06/06/01
Prep Date.....: 06/06/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1157345
Dilution Factor: 250 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Phenol	ND	68000	ug/L
bis(2-Chloroethyl)-ether	ND	68000	ug/L
2-Chlorophenol	ND	68000	ug/L
1,3-Dichlorobenzene	ND	68000	ug/L
1,4-Dichlorobenzene	ND	68000	ug/L
1,2-Dichlorobenzene	ND	68000	ug/L
2-Methylphenol	ND	68000	ug/L
2,2'-oxybis(1-Chloro-propane)	ND	68000	ug/L
4-Methylphenol	**10000 J,#**	**68000**	**ug/L**
N-Nitrosodi-n-propyl-amine	ND	68000	ug/L
Hexachloroethane	ND	68000	ug/L
Nitrobenzene	ND	68000	ug/L
Isophorone	ND	68000	ug/L
2-Nitrophenol	ND	68000	ug/L
2,4-Dimethylphenol	ND	68000	ug/L
bis(2-Chloroethoxy) methane	ND	68000	ug/L
2,4-Dichlorophenol	ND	68000	ug/L
1,2,4-Trichloro-benzene	ND	68000	ug/L
Naphthalene	**580000**	**68000**	**ug/L**
4-Chloroaniline	ND	68000	ug/L
Hexachlorobutadiene	ND	68000	ug/L
4-Chloro-3-methylphenol	ND	68000	ug/L
2-Methylnaphthalene	**650000**	**68000**	**ug/L**
Hexachlorocyclopenta-diene	ND	340000	ug/L
2,4,6-Trichloro-phenol	ND	68000	ug/L
2,4,5-Trichloro-phenol	ND	68000	ug/L
2-Chloronaphthalene	ND	68000	ug/L
2-Nitroaniline	ND	340000	ug/L
Dimethyl phthalate	ND	68000	ug/L
Acenaphthylene	ND	68000	ug/L
2,6-Dinitrotoluene	ND	68000	ug/L

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GEOMATRIX CONSULTANTS

Client Sample ID: D-2

GC/MS Semivolatiles

Lot-Sample #...: A1F060239-030 **Work Order #...:** EEF451AC **Matrix.....:** WG

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

- This value represents a probable combination of 3-Methylphenol (m- cresol) and 4-methylphenol (p-cresol).

GEOMATRIX CONSULTANTS

Client Sample ID: MW-103

GC/MS Volatiles

Lot-Sample #...: A1F060239-031 **Work Order #...:** EEF481AA **Matrix.....:** WG
Date Sampled...: 06/05/01 14:45 **Date Received..:** 06/06/01
Prep Date.....: 06/10/01 **Analysis Date..:** 06/10/01
Prep Batch #...: 1162557
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	100	ug/L
Chloromethane	ND	10	ug/L
Bromomethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Chloroethane	ND	10	ug/L
Methylene chloride	**2.4 J**	**5.0**	**ug/L**
Acetone	**2.6 J,B**	**20**	**ug/L**
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	20	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Benzene	**0.68 J**	**5.0**	**ug/L**
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Toluene	**0.94 J**	**5.0**	**ug/L**
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	98	(77 - 120)
Toluene-d8	101	(78 - 111)
4-Bromofluorobenzene	96	(80 - 114)
Dibromofluoromethane	96	(78 - 110)

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GEOMATRIX CONSULTANTS

Client Sample ID: MW-102

GC/MS Volatiles

Lot-Sample #...: A1F060239-032 **Work Order #...:** EEF5A1AA **Matrix.....:** WG
Date Sampled...: 06/05/01 13:45 **Date Received..:** 06/06/01
Prep Date.....: 06/10/01 **Analysis Date..:** 06/10/01
Prep Batch #...: 1162557
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	100	ug/L
Chloromethane	ND	10	ug/L
Bromomethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Chloroethane	ND	10	ug/L
Methylene chloride	**2.7 J**	**5.0**	**ug/L**
Acetone	**3.8 J,B**	**20**	**ug/L**
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	20	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	**13**	**5.0**	**ug/L**
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	100	(77 - 120)
Toluene-d8	101	(78 - 111)
4-Bromofluorobenzene	95	(80 - 114)
Dibromofluoromethane	96	(78 - 110)

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GEOMATRIX CONSULTANTS

Client Sample ID: TMW-S

GC/MS Volatiles

Lot-Sample #...: A1F060239-033 **Work Order #...:** EEF5C1AA **Matrix.....:** WG
Date Sampled...: 06/05/01 14:35 **Date Received..:** 06/06/01
Prep Date.....: 06/09/01 **Analysis Date..:** 06/09/01
Prep Batch #...: 1161119
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	100	ug/L
Chloromethane	ND	10	ug/L
Bromomethane	ND	10	ug/L
Vinyl chloride	**1.3 J**	**10**	**ug/L**
Chloroethane	ND	10	ug/L
Methylene chloride	ND	5.0	ug/L
Acetone	ND	20	ug/L
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethene	**7.8**	**5.0**	**ug/L**
1,1-Dichloroethane	**27**	**5.0**	**ug/L**
1,2-Dichloroethene (total)	**1.8 J**	**5.0**	**ug/L**
Chloroform	**1.2 J**	**5.0**	**ug/L**
1,2-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	20	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Trichloroethene	**3.6 J**	**5.0**	**ug/L**
Dibromochloromethane	ND	5.0	ug/L
1,1,2-Trichloroethane	**45**	**5.0**	**ug/L**
Benzene	**1.3 J**	**5.0**	**ug/L**
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	**1.6 J**	**5.0**	**ug/L**
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Toluene	**2.9 J**	**5.0**	**ug/L**
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	80	(77 - 120)
Toluene-d8	99	(78 - 111)
4-Bromofluorobenzene	93	(80 - 114)
Dibromofluoromethane	85	(78 - 110)

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GEOMATRIX CONSULTANTS

Client Sample ID: DUP-2=MW-103

GC/MS Volatiles

Lot-Sample #...: A1F060239-034 **Work Order #...:** EEF5E1AA **Matrix.....:** WG
Date Sampled...: 06/05/01 12:00 **Date Received..:** 06/06/01
Prep Date.....: 06/09/01 **Analysis Date..:** 06/09/01
Prep Batch #...: 1161119
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	100	ug/L
Chloromethane	ND	10	ug/L
Bromomethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Chloroethane	ND	10	ug/L
Methylene chloride	ND	5.0	ug/L
Acetone	ND	20	ug/L
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	20	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Toluene	**1.2 J**	**5.0**	**ug/L**
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	81	(77 - 120)
Toluene-d8	102	(78 - 111)
4-Bromofluorobenzene	94	(80 - 114)
Dibromofluoromethane	88	(78 - 110)

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GEOMATRIX CONSULTANTS

Client Sample ID: TRIP

GC/MS Volatiles

Lot-Sample #...: A1F060239-035 **Work Order #...:** EEF5G1AA **Matrix.....:** WQ
Date Sampled...: 06/05/01 **Date Received..:** 06/06/01
Prep Date.....: 06/09/01 **Analysis Date..:** 06/09/01
Prep Batch #...: 1161119
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Chloropicrin	ND	100	ug/L
Chloromethane	ND	10	ug/L
Bromomethane	ND	10	ug/L
Vinyl chloride	ND	10	ug/L
Chloroethane	ND	10	ug/L
Methylene chloride	ND	5.0	ug/L
Acetone	ND	20	ug/L
Carbon disulfide	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,2-Dichloroethene (total)	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
2-Butanone	ND	20	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Trichloroethene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
trans-1,3-Dichloropropene	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
4-Methyl-2-pentanone	ND	20	ug/L
2-Hexanone	ND	20	ug/L
Tetrachloroethene	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	84	(77 - 120)
Toluene-d8	105	(78 - 111)
4-Bromofluorobenzene	96	(80 - 114)
Dibromofluoromethane	90	(78 - 110)

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEMX11AA **Matrix.....:** SOLID
MB Lot-Sample #: A1F080000-522

Prep Date.....: 06/08/01
Analysis Date..: 06/08/01 **Prep Batch #...:** 1159522
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chloropicrin	ND	100	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	90	(61 - 130)
Toluene-d8	98	(60 - 143)
4-Bromofluorobenzene	101	(47 - 158)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEWJJ1AA **Matrix.....:** SOLID
MB Lot-Sample #: A1F130000-550

Prep Date.....: 06/11/01
Analysis Date..: 06/11/01 **Prep Batch #...:** 1164550
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chloropicrin	ND	100	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**2.2 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	98	(61 - 130)
Toluene-d8	102	(60 - 143)
4-Bromofluorobenzene	94	(47 - 158)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEP481AA **Matrix.....:** SOLID
MB Lot-Sample #: A1F110000-558

Prep Date.....: 06/10/01
Analysis Date..: 06/10/01 **Prep Batch #...:** 1162558
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chloropicrin	ND	100	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Acetone	**2.0 J**	**20**	**ug/kg**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	100	(61 - 130)
Toluene-d8	101	(60 - 143)
4-Bromofluorobenzene	96	(47 - 158)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEP471AA **Matrix.....:** WATER
MB Lot-Sample #: A1F110000-557

Prep Date.....: 06/10/01
Analysis Date..: 06/10/01 **Prep Batch #...:** 1162557
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chloropicrin	ND	100	ug/L	SW846 8260B
Chloromethane	ND	10	ug/L	SW846 8260B
Bromomethane	ND	10	ug/L	SW846 8260B
Vinyl chloride	ND	10	ug/L	SW846 8260B
Chloroethane	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
Acetone	**2.0 J**	**20**	**ug/L**	**SW846 8260B**
Carbon disulfide	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
2-Butanone	ND	20	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Trichloroethene	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Benzene	ND	5.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Bromoform	ND	5.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/L	SW846 8260B
2-Hexanone	ND	20	ug/L	SW846 8260B
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	SW846 8260B
Toluene	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Ethylbenzene	ND	5.0	ug/L	SW846 8260B
Styrene	ND	5.0	ug/L	SW846 8260B
Xylenes (total)	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	100	(77 - 120)
Toluene-d8	101	(78 - 111)
4-Bromofluorobenzene	96	(80 - 114)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EE89J1AA **Matrix.....:** WASTE
MB Lot-Sample #: A1F200000-515

Prep Date.....: 06/11/01
Analysis Date..: 06/12/01 **Prep Batch #...:** 1171515
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	**240 J**	**2500**	**ug/L**	**SW846 8260B**
Benzene	ND	620	ug/L	SW846 8260B
Bromodichloromethane	ND	620	ug/L	SW846 8260B
Bromoform	ND	620	ug/L	SW846 8260B
Bromomethane	ND	1200	ug/L	SW846 8260B
2-Butanone	ND	2500	ug/L	SW846 8260B
Carbon disulfide	ND	620	ug/L	SW846 8260B
Carbon tetrachloride	ND	620	ug/L	SW846 8260B
Chlorobenzene	ND	620	ug/L	SW846 8260B
Dibromochloromethane	ND	620	ug/L	SW846 8260B
Chloroethane	ND	1200	ug/L	SW846 8260B
Chloroform	ND	620	ug/L	SW846 8260B
Chloromethane	ND	1200	ug/L	SW846 8260B
1,1-Dichloroethane	ND	620	ug/L	SW846 8260B
1,2-Dichloroethane	ND	620	ug/L	SW846 8260B
1,1-Dichloroethene	ND	620	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	620	ug/L	SW846 8260B
1,2-Dichloropropane	ND	620	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	620	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	620	ug/L	SW846 8260B
Ethylbenzene	ND	620	ug/L	SW846 8260B
2-Hexanone	ND	2500	ug/L	SW846 8260B
Methylene chloride	**310 J**	**620**	**ug/L**	**SW846 8260B**
4-Methyl-2-pentanone	ND	2500	ug/L	SW846 8260B
Styrene	ND	620	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	620	ug/L	SW846 8260B
Tetrachloroethene	ND	620	ug/L	SW846 8260B
Toluene	**27 J**	**620**	**ug/L**	**SW846 8260B**
1,1,1-Trichloroethane	ND	620	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	620	ug/L	SW846 8260B
Trichloroethene	ND	620	ug/L	SW846 8260B
Vinyl chloride	ND	1200	ug/L	SW846 8260B
Xylenes (total)	ND	620	ug/L	SW846 8260B
Chloropicrin	ND	12000	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	109	(61 - 130)
Toluene-d8	100	(60 - 143)
4-Bromofluorobenzene	98	(47 - 158)

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EENVC1AA **Matrix.....:** WATER
MB Lot-Sample #: A1F100000-119

Prep Date.....: 06/08/01
Analysis Date..: 06/08/01 **Prep Batch #...:** 1161119
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Chloropicrin	ND	100	ug/L	SW846 8260B
Chloromethane	ND	10	ug/L	SW846 8260B
Bromomethane	ND	10	ug/L	SW846 8260B
Vinyl chloride	ND	10	ug/L	SW846 8260B
Chloroethane	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
Acetone	ND	20	ug/L	SW846 8260B
Carbon disulfide	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/L	SW846 8260B
2-Butanone	ND	20	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/L	SW846 8260B
Bromodichloromethane	ND	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Trichloroethene	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/L	SW846 8260B
Benzene	ND	5.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/L	SW846 8260B
Bromoform	ND	5.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/L	SW846 8260B
2-Hexanone	ND	20	ug/L	SW846 8260B
Tetrachloroethene	ND	5.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	SW846 8260B
Toluene	ND	5.0	ug/L	SW846 8260B
Chlorobenzene	ND	5.0	ug/L	SW846 8260B
Ethylbenzene	ND	5.0	ug/L	SW846 8260B
Styrene	ND	5.0	ug/L	SW846 8260B
Xylenes (total)	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	88	(77 - 120)
Toluene-d8	102	(78 - 111)
4-Bromofluorobenzene	99	(80 - 114)

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF0R1AA **Matrix.....:** SOLID
MB Lot-Sample #: A1F060000-365

Prep Date.....: 06/06/01
Analysis Date..: 06/08/01 **Prep Batch #...:** 1157365
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Phenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloro-propane)	ND	330	ug/kg	SW846 8270C
4-Methylphenol	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF0R1AA **Matrix.....:** SOLID

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEFRW1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachlorophenol	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Carbazole	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**5.2 J**	**10**	**ug/L**	**SW846 8270C**
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	87	(32 - 112)
2-Fluorobiphenyl	83	(30 - 110)
Terphenyl-d14	108	(10 - 144)
Phenol-d5	86	(10 - 113)
2-Fluorophenol	73	(13 - 110)
2,4,6-Tribromophenol	80	(21 - 122)

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METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EE1FV1AA **Matrix.....:** SOLID
MB Lot-Sample #: I1F150000-251

Prep Date.....: 06/18/01
Analysis Date..: 06/18/01 **Prep Batch #...:** 1166251
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Ethylene glycol	ND	25	mg/kg	SW846 8015B

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEMX11AC **Matrix.....:** SOLID
LCS Lot-Sample#: A1F080000-522
Prep Date.....: 06/08/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1159522
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Chloropicrin	**76**	**(50 - 150)**	**SW846 8260B**
1,1-Dichloroethene	**94**	**(60 - 119)**	**SW846 8260B**
Trichloroethene	**109**	**(74 - 115)**	**SW846 8260B**
Benzene	**98**	**(83 - 118)**	**SW846 8260B**
Toluene	**97**	**(87 - 118)**	**SW846 8260B**
Chlorobenzene	**97**	**(85 - 116)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	91	(61 - 130)
Toluene-d8	100	(60 - 143)
4-Bromofluorobenzene	99	(47 - 158)
Dibromofluoromethane	90	(59 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEP481AC **Matrix.....:** SOLID
LCS Lot-Sample#: A1F110000-558
Prep Date.....: 06/10/01 **Analysis Date..:** 06/10/01
Prep Batch #...: 1162558
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Chloropicrin	**88**	**(50 - 150)**	**SW846 8260B**
1,1-Dichloroethene	**101**	**(60 - 119)**	**SW846 8260B**
Trichloroethene	**109**	**(74 - 115)**	**SW846 8260B**
Benzene	**99**	**(83 - 118)**	**SW846 8260B**
Toluene	**97**	**(87 - 118)**	**SW846 8260B**
Chlorobenzene	**97**	**(85 - 116)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	95	(61 - 130)
Toluene-d8	103	(60 - 143)
4-Bromofluorobenzene	100	(47 - 158)
Dibromofluoromethane	99	(59 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EE89J1AC-LCS **Matrix.....:** WASTE
LCS Lot-Sample#: A1F200000-515 EE89J1AD-LCSD
Prep Date.....: 06/11/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1171515
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**95**	**(83 - 118)**			**SW846 8260B**
	96	**(83 - 118)**	**1.1**	**(0-17)**	**SW846 8260B**
Chlorobenzene	**91**	**(85 - 116)**			**SW846 8260B**
	93	**(85 - 116)**	**2.6**	**(0-18)**	**SW846 8260B**
1,1-Dichloroethene	**92**	**(60 - 119)**			**SW846 8260B**
	90	**(60 - 119)**	**2.4**	**(0-20)**	**SW846 8260B**
Toluene	**91**	**(87 - 118)**			**SW846 8260B**
	92	**(87 - 118)**	**1.2**	**(0-24)**	**SW846 8260B**
Trichloroethene	**91**	**(74 - 115)**			**SW846 8260B**
	94	**(74 - 115)**	**2.8**	**(0-22)**	**SW846 8260B**
Chloropicrin	**74**	**(50 - 150)**			**SW846 8260B**
	76	**(50 - 150)**	**3.0**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	100	(61 - 130)
	103	(61 - 130)
Toluene-d8	94	(60 - 143)
	97	(60 - 143)
4-Bromofluorobenzene	93	(47 - 158)
	96	(47 - 158)
Dibromofluoromethane	98	(59 - 138)
	99	(59 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF0R1AC **Matrix.....:** SOLID
LCS Lot-Sample#: A1F060000-365
Prep Date.....: 06/06/01 **Analysis Date..:** 06/08/01
Prep Batch #...: 1157365
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Phenol	**78**	**(35 - 110)**	**SW846 8270C**
2-Chlorophenol	**73**	**(43 - 110)**	**SW846 8270C**
1,4-Dichlorobenzene	**72**	**(38 - 100)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**99**	**(38 - 110)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**85**	**(45 - 110)**	**SW846 8270C**
4-Chloro-3-methylphenol	**81**	**(43 - 110)**	**SW846 8270C**
Acenaphthene	**78**	**(44 - 108)**	**SW846 8270C**
4-Nitrophenol	**98**	**(22 - 128)**	**SW846 8270C**
2,4-Dinitrotoluene	**77**	**(48 - 111)**	**SW846 8270C**
Pentachlorophenol	**77**	**(10 - 123)**	**SW846 8270C**
Pyrene	**69**	**(42 - 122)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	85	(42 - 110)
2-Fluorobiphenyl	84	(43 - 110)
Terphenyl-d14	82	(37 - 137)
Phenol-d5	80	(25 - 115)
2-Fluorophenol	70	(11 - 116)
2,4,6-Tribromophenol	77	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEFRW1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A1F060000-345 EEFRW1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EE1GK1AC **Matrix.....:** WATER
LCS Lot-Sample#: I1F150000-258
Prep Date.....: 06/18/01 **Analysis Date..:** 06/19/01
Prep Batch #...: 1166258
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
n-Butanol	**98**	**(77 - 119)**	**SW846 8015B**
1-Butanol	**98**	**(77 - 119)**	**SW846 8015B**
Ethylene glycol	**195 a**	**(74 - 121)**	**SW846 8015B**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Ethylene glycol co-elutes with hexylene glycol - ethylene glycol %recovery is bias high.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF4J1AD-MS **Matrix.....:** SO
MS Lot-Sample #: A1F060239-027 EEF4J1AE-MSD
Date Sampled...: 06/05/01 11:30 **Date Received..:** 06/06/01
Prep Date.....: 06/12/01 **Analysis Date..:** 06/12/01
Prep Batch #...: 1164550
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chloropicrin	**22 a**	**(50 - 150)**			**SW846 8260B**
	0.0 a	**(50 - 150)**	**0.0**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**152**	**(10 - 234)**			**SW846 8260B**
	152	**(10 - 234)**	**0.47**	**(0-27)**	**SW846 8260B**
Trichloroethene	**150**	**(71 - 157)**			**SW846 8260B**
	144	**(71 - 157)**	**3.8**	**(0-20)**	**SW846 8260B**
Benzene	**87**	**(37 - 151)**			**SW846 8260B**
	85	**(37 - 151)**	**2.1**	**(0-21)**	**SW846 8260B**
Toluene	**82**	**(47 - 150)**			**SW846 8260B**
	83	**(47 - 150)**	**0.70**	**(0-15)**	**SW846 8260B**
Chlorobenzene	**79**	**(37 - 160)**			**SW846 8260B**
	80	**(37 - 160)**	**1.1**	**(0-19)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(61 - 130)
	91	(61 - 130)
Toluene-d8	101	(60 - 143)
	104	(60 - 143)
4-Bromofluorobenzene	97	(47 - 158)
	100	(47 - 158)
Dibromofluoromethane	31 *	(59 - 138)
	31 *	(59 - 138)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

* Surrogate recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF5A1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1F060239-032 EEF5A1AD-MSD
Date Sampled...: 06/05/01 13:45 **Date Received..:** 06/06/01
Prep Date.....: 06/10/01 **Analysis Date..:** 06/10/01
Prep Batch #...: 1162557
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chloropicrin	**75**	**(50 - 150)**			**SW846 8260B**
	79	**(50 - 150)**	**4.6**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**98**	**(57 - 138)**			**SW846 8260B**
	102	**(57 - 138)**	**3.8**	**(0-15)**	**SW846 8260B**
Trichloroethene	**96**	**(58 - 141)**			**SW846 8260B**
	98	**(58 - 141)**	**1.4**	**(0-17)**	**SW846 8260B**
Benzene	**100**	**(73 - 123)**			**SW846 8260B**
	100	**(73 - 123)**	**0.48**	**(0-11)**	**SW846 8260B**
Toluene	**96**	**(67 - 129)**			**SW846 8260B**
	98	**(67 - 129)**	**1.8**	**(0-14)**	**SW846 8260B**
Chlorobenzene	**97**	**(70 - 122)**			**SW846 8260B**
	97	**(70 - 122)**	**0.58**	**(0-14)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	95	(77 - 120)
	93	(77 - 120)
Toluene-d8	102	(78 - 111)
	103	(78 - 111)
4-Bromofluorobenzene	99	(80 - 114)
	97	(80 - 114)
Dibromofluoromethane	97	(78 - 110)
	98	(78 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1F060239 **Work Order #...:** EEF5E1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A1F060239-034 EEF5E1AD-MSD
Date Sampled...: 06/05/01 12:00 **Date Received..:** 06/06/01
Prep Date.....: 06/09/01 **Analysis Date..:** 06/09/01
Prep Batch #...: 1161119
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Chloropicrin	**66**	**(50 - 150)**			**SW846 8260B**
	69	**(50 - 150)**	**5.3**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**91**	**(57 - 138)**			**SW846 8260B**
	89	**(57 - 138)**	**2.1**	**(0-15)**	**SW846 8260B**
Trichloroethene	**93**	**(58 - 141)**			**SW846 8260B**
	94	**(58 - 141)**	**1.4**	**(0-17)**	**SW846 8260B**
Benzene	**98**	**(73 - 123)**			**SW846 8260B**
	98	**(73 - 123)**	**0.20**	**(0-11)**	**SW846 8260B**
Toluene	**95**	**(67 - 129)**			**SW846 8260B**
	94	**(67 - 129)**	**0.71**	**(0-14)**	**SW846 8260B**
Chlorobenzene	**95**	**(70 - 122)**			**SW846 8260B**
	96	**(70 - 122)**	**1.2**	**(0-14)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	80	(77 - 120)
	80	(77 - 120)
Toluene-d8	103	(78 - 111)
	103	(78 - 111)
4-Bromofluorobenzene	96	(80 - 114)
	96	(80 - 114)
Dibromofluoromethane	85	(78 - 110)
	87	(78 - 110)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEFHD1AE-MS **Matrix.....:** SOLID
MS Lot-Sample #: A1F060181-009 EEFHD1AF-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	74	(35 - 116)
	71	(35 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: A1F060239 **Work Order #...:** EEK4C1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: D1F080174-002 EEK4C1AV-MSD
Date Sampled...: 06/06/01 10:30 **Date Received..:** 06/07/01
Prep Date.....: 06/18/01 **Analysis Date..:** 06/19/01
Prep Batch #...: 1166258
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
n-Butanol	100	(85 - 115)			SW846 8015B
	96	(85 - 115)	3.6	(0-6.0)	SW846 8015B
1-Butanol	100	(85 - 115)			SW846 8015B
	96	(85 - 115)	3.6	(0-6.0)	SW846 8015B
Ethylene glycol	170 a	(70 - 130)			SW846 8015B
	165 a	(70 - 130)	2.8	(0-19)	SW846 8015B

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

Ethylene glycol co-elutes with hexylene glycol - Ethylene glycol %recovery is bias high.

Chain-of-Custody Record

0078

Date: 6-5-01

Project No: ROW

Samplers (Signatures): Jennifer Hagen

ANALYSES

REMARKS

Date	Time	Sample Number	Soil (S), Water (W), Vapor (V), or Other	EPA Method 8010	EPA Method 8020	EPA Method 8240	EPA Method 8270	TPHg by	TPHd by	EPA Method 8020 (BTEX)	TPH	VOCs 8260	SVOCs 8270	Ethylene Glycol						Acidified	No. of containers
6-5-01	9:30	~~SS~~ SS-7	S									X								1	1
6-5-01	9:20	SS-8																			1
6-5-01	9:41	SS-2																			1
6-5-01	9:55	B-11W																			1
6-5-01	10:10	B-12W																			1
6-5-01	10:12	B-12N																			1
6-5-01	10:30	B-13W																			1
6-5-01	10:58	B-14W																			1
6-5-01	10:55	B-14N																			1
6-5-01	11:16	B-15W																			1
6-5-01	11:15	B-15N																			1
6-5-01	11:30	B-16W																			1
6-5-01	12:30	SS-5										X	X	X						1	4

All VOCs analysis to include chloroprene

Additional Comments

Turnaround time: STANDARD

Results to: JENNIFER HAGEN

Total No. of containers: 16

Relinquished by (signature): Jennifer Hagen	Date: 6-5-01	Relinquished by (signature):	Date:	Relinquished by (signature):	Date:	Method of shipment: FED EX	
Printed name: JENNIFER HAGEN	Time: 17:00	Printed name:	Time:	Printed name:	Time:	Laboratory comments and Log No.:	
Company: GEOMATRIX		Company:		Company:			
Received (signature): MRussell	Date: 6/5/01	Received by (signature):	Date:	Received by (signature):	Date:		
Printed Name: Margaret Russell	Time: 1900	Printed Name:	Time:	Printed Name	Time:		
Company: STL		Company		Company			

Geomatrix Consultants
338 Harris Hill Road, Suite 201
Williamsville, New York 14221
(716) 565-0624

Chain-of-Custody Record

0077

Date: 6-5-01

Page 1 of 1

Project No. RCW

Samplers (Signatures): [illegible]

Date	Time	Sample Number	Soil (S), Water (W), Vapor (V), or Other	EPA Method 8010	EPA Method 8020	EPA Method 8240	EPA Method 8270	TPHg by:	TPHd by:	EPA Method 8020 (BTEX)	TPH:	[illegible] VOCs *	[illegible] **	[illegible]							Acidified	No. of containers
6-5-01	1515	D-1	W									X	X	X							*	6
↓	15:30	D-2	W									X	X	X								6
↓	1445	MW-103	W									X	*	[illegible]								2
↓	145	MW-102	W									X										2
↓	1425	TMW-5	W									X										2
↓	1200	DUP-2	W									X										2
		TRIP	W									X										1

REMARKS

Additional Comments

*8260 [illegible] Chloroform

SVOCs Base neutrals only

*** VOCs w/ HCl

Turnaround time: STANDARD

Results to: JENNIFER HAGEN

Total No. of containers: 20

Relinquished by (signature): [illegible]	Date: 6-5-01	Relinquished by (signature):	Date:	Relinquished by (signature):	Date:
Printed name: JENNIFER HAGEN	Time: 1310	Printed name:	Time:	Printed name:	Time:
Company: GEOMATRIX		Company:		Company:	
Received (signature):	Date:	Received by (signature):	Date:	Received by (signature):	Date:
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Company		Company:		Company:	

Method of shipment: FEDEX

Laboratory comments and Log No.:

Geomatrix Consultants
338 Harris Hill Road, Suite 201
Williamsville, New York 14221
(716) 565-0624

Chain-of-Custody Record

0076

Date: 6-5-01 | Page 2 of

Project No: RAW

Samplers (Signatures): [illegible]

Date	Time	Sample Number	Soil (S), Water (W), Vapor (V), or Other	EPA Method 8010	EPA Method 8020	EPA Method 8240	EPA Method 8270	TPHg by:	TPHd by:	EPA Method 8020 (BTEX)	TPH:	VOCs 8260	SVOCs 8270	[illegible]	Acidified	No. of containers
6-5-01	9:30	~~SS~~ SS-7	S									X			—	1
6-5-01	9:20	SS-8														1
6-5-01	9:41	SS-2														1
6-5-01	9:55	B-11W														1
6-5-01	10:10	B-12W														1
6-5-01	10:12	B-12N														1
6-5-01	10:30	B-13W														1
6-5-01	10:58	B-14W														1
6-5-01	10:55	B-14N														1
6-5-01	11:16	B-15W														1
6-5-01	11:15	B-15N														1
6-5-01	11:30	B-16W														1
6-5-01	[illegible]	SS-5										X	X	X	—	4

Turnaround time: STANDARD

Results to: JENNIFER HAGAN

Total No. of containers: 16

REMARKS

Additional Comments

All VOCs [illegible] [illegible] [illegible]

Relinquished by (signature): [illegible]	Date: 6-5-01	Relinquished by (signature):	Date:	Relinquished by (signature):	Date:
Printed name: JENNIFER HAGAN	Time: 17:00	Printed name:	Time:	Printed name:	Time:
Company: GEOMATRIX		Company:		Company:	
Received (signature):	Date:	Received by (signature):	Date:	Received by (signature):	Date:
Printed Name	Time:	Printed Name:	Time	Printed Name:	Time:
Company:		Company		Company:	

Method of shipment: FED EX

Laboratory comments and Log No.:

Geomatrix Consultants
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