



- CONSULTANTS
- ENVIRONMENTAL
 - GEOTECHNICAL
 - MATERIALS
 - FORENSICS

PHASE II INVESTIGATION

Ramsey County Riverfront Properties

12/14 & 50 Kellogg Boulevard W.

St. Paul, Minnesota 55102

MPCA File No. VP [yet to be assigned]

AET Report No. 02-02098

Date:

August 11, 2014

Prepared for:

Loucks Associates
7200 Hemlock Lane, Suite 300
Maple Grove, Minnesota 55369





- CONSULTANTS
- ENVIRONMENTAL
 - GEOTECHNICAL
 - MATERIALS
 - FORENSICS

August 11, 2014

Loucks Associates
7200 Hemlock Lane, Suite 300
Maple Grove, Minnesota 55369
Attn: Chad Lockwood

RE: Phase II Investigation
Ramsey County Riverfront Properties
12/14& 50 Kellogg Boulevard W, St. Paul, Ramsey County, Minnesota 55102
AET Report No. 02-02098
MPCA File No. VP [yet to be assigned]

Dear Mr. Lockwood:

American Engineering Testing, Inc. has completed the enclosed report of Phase II Investigation services for the Ramsey County Riverfront Properties Site. This investigation was performed in accordance with our Phase II Work Plan which the Minnesota Pollution Control Agency authorized on July 3, 2014.

The report is being forwarded to the MPCA for their review. We appreciate the opportunity to have been of service to you on this project. If you have any questions regarding the information presented in this Phase II Investigation Report or if we can be of additional assistance, please contact us.

Sincerely,
American Engineering Testing, Inc.

A handwritten signature in black ink, appearing to read 'Camilla Pederson', written in a cursive style.

Camilla Pederson, P.E.
Senior Engineer

Phone: 651-659-1318
E-mail: cpederson@amengtest.com

CC: Mr. Andrew Nichols, MPCA



TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CONTENTS.....	i
EXECUTIVE SUMMARY	iii
1.0 INTRODUCTION	1
1.1 Site and User Identification	1
1.2 Purpose.....	1
2.0 BACKGROUND	2
2.1 Site Description and Features	2
2.2 Physical Setting.....	2
2.3 History of Site and Vicinity	3
2.4 Previous Environmental Reports	3
3.0 PHASE II INVESTIGATION ACTIVITIES	3
3.1 Scope of Services.....	3
3.2 Additional Research and Data Reviewed	4
3.3 Environmental Sampling Rationale	4
3.4 Environmental Sampling Methods	5
3.5 Reference Standards.....	6
4.0 PROJECT RESULTS	8
4.1 Field Observations	8
4.2 Soil Boring Observations.....	8
4.3 Field Screening Results.....	9
4.4 Laboratory Analysis.....	9
5.0 DISCUSSION AND OPINIONS.....	11
5.1 Soil	11
5.2 Water.....	11
5.3 Soil Gas/Sub-Slab Vapor	12
5.4 Site Contamination Summary	12
6.0 CONCLUSIONS.....	12
7.0 RECOMMENDATIONS	13
8.0 REPORT CLOSURE	13
9.0 SIGNATURES.....	14

Phase II Investigation

Ramsey County Riverfront Properties, St. Paul, Minnesota

August 11, 2014

AET Report No. 02-02098

AMERICAN
ENGINEERING
TESTING, INC.

TABLES

1. Soil Analytical Results
2. Groundwater Analytical Results
3. Soil Gas Analytical Results

FIGURES

1. Site Location Map
2. Site Layout Map
3. Site Detail Map
4. Soil Exceedances Map
5. Soil Gas & Sub-Slab Vapor Exceedances Map
6. Impacted Areas Map

APPENDICES

- A. Acronyms and Abbreviations
- B. Environmental Sampling Methods
- C. Subsurface Boring Logs and Sealing Records
- D. Laboratory Analytical Reports and Chains-of-Custody

EXECUTIVE SUMMARY

American Engineering Testing, Inc. (AET) was authorized by Loucks Associates to conduct a Phase II Investigation for the Ramsey County Riverfront Properties located at 12/14 & 50 Kellogg Boulevard West in St. Paul, Minnesota.

Findings and Opinions

This Phase II Investigation has revealed the following information regarding the potential environmental conditions assessed in connection with the Site:

- There were diesel range organics (DRO) and semi-volatile organic compounds (SVOCs) detections exceeding Minnesota Pollution Control Agency (MPCA) unregulated fill criteria and MPCA Industrial Soil Reference Values (SRVs) measured in the fill and/or natural soil samples analyzed. No other analyzed parameters were found at levels exceeding the MPCA criteria for soil.
- Detections for DRO in groundwater samples exceeded the Minnesota Department of Health (MDH) Health Based Value (HBV) for total petroleum hydrocarbons, possibly from a petroleum contamination source in the soil.
- Dichlorodifluoromethane, tetrachloroethene, and trichlorofluoromethane were the only compounds detected at concentrations exceeding either ten-times the Residential Intrusion Screening Value (ISV) or ten-times the Industrial ISV. Since VOCs were not detected in soils or groundwater, the source of the detection is unknown.

Based on the information gathered and our professional experience, AET has identified three areas of soil contamination at the Ramsey County Riverfront Properties, one with SVOCs and all three with DRO.

Recommendations

The following recommendations are based on the findings and opinions above:

1. The presence of contamination above SRVs warrants a Response Action Plan (RAP) to manage associated risks;
2. DRO impacts above regulated fill criteria warrants specialized management or disposal during site preparation;
3. The discovery of petroleum impacts possibly associated with a tank system should be reported to the State in accordance with Statute 115C;
4. Vapor mitigation controls may need to be incorporated during future construction activities depending upon planned use of the Site.

1.0 INTRODUCTION

1.1 Site and User Identification

American Engineering Testing, Inc. (AET) was authorized by Loucks Associates to conduct a Phase II Investigation for the site located at 12/14 & 50 Kellogg Boulevard West in St. Paul, Minnesota. Hereafter, the assessed property will be referred to as the “Site.”

Figure 1 shows the Site location. Appendix A contains a list of the acronyms and abbreviations used in this report.

1.2 Purpose

We have performed a Phase II Investigation to determine if contamination is present at the Site due to recognized environmental conditions (RECs) identified in a previous Phase I Environmental Site Assessment (ESA), with the following objectives:

- To assess the recognized environmental conditions (RECs) identified at the Site, and to evaluate if a release of hazardous substances or petroleum products has occurred as a result of the following;
 - Potential releases to soil from underground storage tanks (USTs) closed in place located in the western building on the Site;
 - Potential soil impacts from the historic rail lines located at the south end of the Site and the adjacent rail lines to the south of the Site;
 - Potential releases to soil from the former printing facility (currently the former West Publishing building) from the use of solvents, oils, and inks;
 - Potential releases to soil from two active aboveground storage tanks (ASTs) holding fuel oil;
- To document the nature and degree of contaminant impacts to environmental media (soil, groundwater, and soil gas media);
- To assess the potential risks to human health or the environment resulting from the detected contaminant impacts under the existing conditions at the Site;

These objectives are based on AET’s understanding of Loucks Associates’ needs and on the Phase II Investigation Work Plan approved by the Minnesota Pollution Control Agency (MPCA).

2.0 BACKGROUND

2.1 Site Description and Features

The Site address is 12/14 & 50 Kellogg Blvd W, St Paul, Ramsey County, Minnesota 55102, as well as part of one parcel without a street address. The Site is located in Section 6, Township 28, Range 22. Figure 2 shows the configuration of the Site.

The Site comprises approximately 3.8 acres located in a commercially developed area of St Paul, MN. It is roughly a wedge shape occupied by two connected structures, both of which are currently vacant. The west building is up to 10 stories high and is made up of six structures built over a period of several decades. It was formerly the corporate headquarters of West Publishing, which left in 1991. Since then it has been used as offices for Ramsey County. The east building is 7 stories high and was the county adult detention center and administrative offices. The east building was constructed in 1979 and vacated in 2004. A mostly paved parking lot extends along the south side of both buildings.

At present, neighboring property uses include:

- North: Kellogg Boulevard West runs along the north Site boundary, with downtown mid- and high-rise buildings beyond.
- East: The Wabasha Street bridge abutment is immediately east of the Site, with parkland and parking lots beyond. The land slopes steeply southward along the face of a river bluff.
- South: Union Pacific railroad main lines and a parking lot run along the south Site boundary, with Shepard Road, parkland and the Mississippi River beyond.
- West: The St. Paul District Energy heating/cooling plant is situated immediately west of the Site. The land slopes steeply southward along the face of a river bluff.
- General Vicinity: The Site is located in the heart of downtown St. Paul. As such, previous land uses in the vicinity have included a broad and evolving range of industrial, commercial, and residential purposes.

2.2 Physical Setting

The physical setting of the Site was described in a previous Phase I ESA (AET Project No.02-02098, April 28, 2014).

2.3 History of Site and Vicinity

The site has been occupied by stores, a grain elevator and mill, rail lines, a printing and publishing house, a concert and beer garden, a theater, cold storage for meat, fish, and produce, an open market, a stone cutter, a hotel, a detention center with courtrooms, and an office building. The buildings have been associated with coal, underground and above ground storage tanks, and printing inks/solvents. Adjacent property has been occupied by streets, rail lines, and a heating plant.

2.4 Previous Environmental Reports

The results of AET's previous Phase I ESA indicated that there were potential RECs at the Site and that additional assessment of the Site was warranted. The potential RECs included the following:

- The former underground storage tanks because their contents and the dates of their closure are unknown. If they were closed in place prior to concerns regarding leaks from underground tanks, the soils may not have been sampled when the tanks were closed or contamination may have been disregarded.
- The former on-Site rail lines and the adjacent rail lines because, historically, emissions from coal used as fuel in trains have resulted in arsenic, mercury, lead, and semivolatile compound contamination in soils.
- The former printing facility, associated with solvents, oils, and inks, because the trench and floor drains lead to sewer lines that invariably leak and because there is a potential for direct disposal to exposed ground surfaces prior to current environmental practices.
- The current above ground storage tanks because, although they are diked and there are no visible indications of leaks, not all of the containment area is observable.

3.0 PHASE II INVESTIGATION ACTIVITIES

3.1 Scope of Services

The scope of this Phase II Investigation was defined in AET's Phase II Investigation Work Plan which the MPCA approved on July 3, 2014, and includes the following:

- 17 hand-auger soil borings to assess the RECs identified in the AET Phase I ESA and to characterize subsurface conditions inside the buildings at the Site;
 - Per the MPCA's request, two hand-auger soil borings were added to the 15 originally planned;

- 6 push-probe soil borings to assess the RECs and to characterize general subsurface conditions outside of the buildings at the Site;
 - Because the accompanying geotechnical exploration was removed from the scope at client request, plans for hollow-stem auger soil borings were modified to use push-probe soil borings instead;
- 3 temporary monitoring wells to characterize potential groundwater impacts at the Site;
 - Because the accompanying geotechnical exploration was removed from the scope at client request, plans for installing permanent monitoring wells were modified to use temporary wells that were sealed after sampling;
- 7 sub-slab vapor port locations (inside) to assess the potential for vapor intrusion risks;
 - Per the MPCA's request, an additional vapor port location was added to the 6 originally planned inside the building;
- 6 vapor probes (outside) to assess the potential for vapor migration risks;
- Perform photoionization detector (PID) field screening of soil and soil-gas samples, and note obvious indications of contamination;
- Collect soil, water and soil-gas samples for laboratory analysis; sample collection depths and parameters depended on the subsurface conditions identified and the concerns being assessed;
- Prepare this Phase II Investigation Report containing the results of the field and laboratory analyses, along with AET's conclusions and recommendations pertaining to the findings.

3.2 Additional Research and Data Reviewed

Additional environmental assessment documents were not available for AET to review during performance of this Phase II Investigation.

3.3 Environmental Sampling Rationale

The Phase II Investigation environmental sample locations were selected to focus on potential contaminant sources as described in Section 2.4 and to achieve a distribution of sampling locations encompassing potential contamination across the Site. Figure 3 shows the Phase II Investigation sampling locations. The sampling methods, depths and analytical parameters were selected to generate data which AET considers useful to achieve the objectives described in the Purpose section of this report.

3.4 Environmental Sampling Methods

Appendix B contains information sheets which detail AET's standard environmental sampling methods. Site-specific considerations or variations from the standard approaches are described in the sections below.

3.4.1 Field Exploration Technologies

The field exploration for this Phase II Investigation included Geoprobe borings and vapor probes, hand auger borings, temporary monitoring wells, and sub-slab vapor sampling. Because of significant physical obstructions, the sampling locations were recorded using a hand-held distance measuring wheel to locate points relative to mapped Site features.

Temporary monitoring wells were installed and sampled in accordance with the Minnesota Department of Health (MDH) rules relating to wells and borings. The temporary monitoring well details are on the sealing records in Appendix C.

Temporary vapor probes and sub-slab vapor samples were conducted and sampled in accordance with MPCA guidance document c-s4-06, "Risk-Based Guidance for the Vapor Intrusion Pathway."

3.4.2 Field Screening Techniques

Soil samples were screened in the field with a PID equipped with a 10.6 electron volt (eV) lamp to measure organic vapors in parts-per-million (ppm). AET also noted obvious odors and observed the samples for visual evidence of contamination.

3.4.3 Laboratory Analytical Methods

AET submitted the soil and groundwater samples to Legend Technical Services, Inc. (Legend) and the vapor samples to Pace Analytical Services, Inc. (Pace) for laboratory analysis. The laboratory analytical reports and chain-of-custody records are provided in Appendix D.

Soil

Soil samples were analyzed for the chemical parameters below by the methods referenced:

- Diesel range organics (DRO): Wisconsin Department of Natural Resources (WDNR) modified DRO method/United States Environmental Protection Agency (EPA) method 8015D
- Gasoline range organics (GRO): WDNR modified GRO method/EPA method 8015D
- Volatile organic compounds (VOCs): EPA method 8260B

Phase II Investigation

Ramsey County Riverfront Properties, St. Paul, Minnesota

August 11, 2014

AET Report No. 02-02098

AMERICAN
ENGINEERING
TESTING, INC.

- Semi-volatile organic compounds (SVOCs): EPA method 8270D
- Polychlorinated biphenyls (PCBs): EPA method 8082A
- The eight metals of the Resource Conservation and Recovery Act (RCRA) list: EPA methods 6010C and 7471B

Groundwater

Groundwater samples were analyzed for the chemical parameters below by the methods referenced:

- DRO: WDNR modified DRO method/EPA method 8015D
- GRO: WDNR modified GRO method/EPA method 8015D
- VOCs: EPA method 8260B
- SVOCs: EPA method 8270D
- The eight metals of the RCRA list: EPA methods 6010C (Dissolved) and EPA 7470A (Dissolved) with field filtered samples

Soil Gas and Sub-Slab Vapors

Soil gas and sub-slab vapor samples were analyzed for VOCs using EPA Method TO-15.

3.4.4 QA/QC Sampling

Additional samples were collected in accordance with AET's Quality Assurance/Quality Control (QA/QC) guidelines. The results of the QA/QC sample analyses are included in the results tables.

AET collected three blind duplicate soil samples from among the 24 testing locations and one blind duplicate groundwater sample among the 3 testing locations to achieve a minimum frequency of 10% duplicates. The laboratory provided trip blanks for VOCs (soil and water sample) and GRO (water sample).

3.5 Reference Standards

In this Phase II Investigation, AET compares the analytical results to the baseline environmental regulatory standards in use by the MPCA. The reference standards are included in the results tables for comparison with assessment results. The media-specific standards are described in the sections below.

3.5.1 Soil Standards

The following reference standards apply to potential contaminant exposures in soils:

- MPCA Tier 1 Residential Soil Reference Values (SRVs): Compound-specific values for long-term soil exposure in unrestricted-use settings (i.e., residential) above which an unacceptable risk to human health is predicted to exist.
- MPCA Tier 2 Industrial SRVs: Compound-specific values for long-term soil exposure in industrial/commercial-use settings.
- MPCA Tier 1 Soil Leaching Values (SLVs): Compound-specific values in unsaturated soils above which an unacceptable risk of leaching to groundwater and/or receptors is predicted to exist.
- DRO and GRO Criterion: SRVs do not exist for DRO and GRO soil impacts. Instead the MPCA Remediation Division applies the guidance document “Best Management Practices for the Off-Site Reuse of Unregulated Fill,” which states that petroleum-impacted soil exhibiting measured DRO or GRO concentrations over 100 milligrams-per-kilogram (mg/kg) or PID screening results over 10 ppm is considered “regulated” for reuse. Stricter standards may apply based on the intended property use, soil management considerations, or local solid waste ordinances.
- PID Screening Criterion: The practical detection limit of a PID is considered to be 1 ppm, although field conditions during sampling may result in higher background measurements.

3.5.2 Groundwater Standards

The following reference standards apply to groundwater:

- MDH Health Risk Limits (HRLs): Compound-specific values for drinking water in various exposure scenarios above which an unacceptable risk to human health is predicted to exist. AET references the lowest value for a given compound because the MPCA applies the lowest value in risk assessment for groundwater as a potential drinking water source.
- MDH Health Based Values (HBVs) or Risk Assessment Advice (RAAs): Where toxicity data is sufficient to suggest human health risks yet insufficient to set a HRL value, the MPCA applies the provisional HBVs and RAAs.
- EPA Maximum Contaminant Levels (MCLs): Compound-specific values for drinking water “at the tap” above which an unacceptable risk to human health is predicted to exist. AET references the MCLs for compounds with no assigned HRLs, HBVs, or RAAs.

3.5.3 Soil Gas and Sub-Slab Vapor Standards

The following reference standards apply to the potential inhalation of vapors by intrusion from contaminated soil gas to indoor air environments:

- MPCA Residential Intrusion Screening Values (ISVs): Compound-specific inhalation risk screening values for VOCs in residential settings due to vapor intrusion. A multiple factor of 10 to 100 times is applied to ISVs to reflect attenuation during vapor intrusion from soils, sub-slab spaces, or groundwater. This report references ten-times the ISV.
- MPCA Industrial ISVs: Compound-specific inhalation risk screening values for VOCs in industrial/commercial settings due to vapor intrusion. A multiple factor of 10 to 100 times is applied to ISVs to reflect attenuation during vapor intrusion from soils, sub-slab spaces, or groundwater. This report references ten-times the ISV.
- PID Screening Criterion: The practical detection limit of a PID is considered to be 1 ppm, although field conditions during sampling may result in higher background measurements.

4.0 PROJECT RESULTS

4.1 Field Observations

AET performed the field exploration and sampling for this Phase II Investigation on July 7-10, 2014. The observational data collected during field exploration activities at the Site are included on the logs in Appendix C.

4.2 Soil Boring Observations

Fill soils were identified in ten borings, ranging from 2 inches to 5.5 feet thick. The observed fill materials generally consisted of silty sand with gravel. Glass was noted in borings B-5 and B-6. Obvious indications of potential environmental impacts such as staining or odor were not noted except for the following:

- Faint petroleum odor noted in B-4
- Solvent-like odor noted in HA-1

Natural alluvial deposits were observed in all six outside borings beneath the fill and/or asphalt. The alluvium consisted of silty sand, some swamp deposits and pieces of limestone. Natural, weathered St. Peter Sandstone bedrock was observed at depths ranging from 0.5 feet below ground surface (bgs) to 20 feet bgs in 18 of the boring and hand-auger locations. Except boring B-3 which did not encounter groundwater, soils appeared wet at 8 feet bgs, and the water levels in borings were measured at 7 to 9 feet bgs.

4.3 Field Screening Results

The screening data collected during field exploration activities at the Site are included on the logs Appendix C. PID screening results ranged from 0.0 to 162.8 ppm. The results did not exceed 1 ppm, except in soil borings B-2, B-4, B-5 and HA-1. The results slightly exceeded 10 ppm in B-2 and B-5. In boring B-4, PID screening exceeding 10 ppm ranged from 17.2 ppm to 162.8 ppm.

4.4 Laboratory Analysis

Appendix D includes the laboratory analytical reports and chains-of-custody for this Phase II Investigation. The sections below summarize the laboratory results.

4.4.1 Soil Analytical Results

Table 1 summarizes the results of laboratory analyses performed on soil samples. The soil results are reported in milligrams-per-kilogram (mg/kg), which is equivalent to ppm. The reference standards are included on the table for comparison and evaluation of impacts.

DRO

Laboratory analyses detected DRO in 12 of 24 soil samples analyzed. Detected results ranged from 6.7 to 470 mg/kg in samples B-1(4'-8'), B-2(8'-12'), B-3(4'-8'), B-4(0'-4'), B-5(0'-4'), HA-1(0'-4'), HA-7(0'-1'), HA-8(2'-3'), HA-9(0'-1'), HA-11(0'-1'), HA-13(0'-1'), and HA-16(2'-3'). The measured concentrations of DRO exceeded 100 mg/kg in samples B-3(4'-8'), HA-1(0'-4'), and HA-9(0'-1').

GROs

Laboratory analyses detected GROs in 2 of 19 soil samples analyzed. The measured results were 43 mg/kg B-2(8'-12') and 5.8 mg/kg B-5(0'-4') which do not exceed the MPCA criterion for unregulated fill (100 mg/kg).

VOCs

Laboratory analyses detected VOCs in 2 of 24 soil samples analyzed. The measured results did not exceed the MPCA Tier 1 Residential SRVs.

SVOCs

Environmental laboratories report the analytical results for each SVOC compound separately. In accordance with MPCA guidance, AET normalizes the results for the sub-family of carcinogenic polynuclear aromatic hydrocarbons (cPAHs) to the toxicity of benzo(a)pyrene by applying a

designated “potency equivalency factor” to each compound and calculating the weighted sum as total cPAHs (also known as “BaP equivalents”).

Laboratory analyses detected various SVOCs in 4 of 16 soil samples analyzed. The measured results did not exceed the MPCA criteria, except for the following:

- Total cPAHs greater than the Tier 2 Industrial SRV in sample HA-8(2’-3’) and HA-9(0’-1’).

RCRA Metals

Laboratory analyses detected various RCRA metals in 15 of 15 soil samples analyzed. The measured results did not exceed the MPCA criteria, except for the following:

- Selenium greater than the Tier 1 SLV in sample HA-14(1’-2’).

PCBs

Laboratory analyses reported no detections for PCBs above the reporting limits for each of the 6 soil samples analyzed.

4.4.2 Groundwater Analytical Results

Table 2 lists the results of laboratory analyses performed on groundwater samples. The water results are reported in micrograms-per-liter ($\mu\text{g/L}$), which is equivalent to parts-per-billion (ppb), or milligrams-per-liter (mg/L), which is equivalent to ppm. The reference standards are included on the table for comparison and evaluation of impacts. No detections were measured in groundwater samples except for the following:

DRO

Laboratory analyses detected DRO in 3 of 3 groundwater samples analyzed. Detected results ranged from 170 to 590 $\mu\text{g/L}$ in samples B-1, B-2, and B-6. Results for B-2 (230 $\mu\text{g/L}$) and B-6 (590 $\mu\text{g/L}$) exceeded the MDH HBV of 200 $\mu\text{g/L}$ for Total Petroleum Hydrocarbons (TPH).

RCRA Metals, Dissolved

Laboratory analyses detected barium metal in 3 of 3 groundwater samples analyzed. The measured results did not exceed the MDH HRLs.

4.4.3 Soil Gas and Sub-Slab Vapor Analytical Results

Table 3 lists the results of laboratory analyses performed on soil gas and sub-slab vapor samples. The vapor results are reported in micrograms-per-cubic-meter ($\mu\text{g/m}^3$); this is not directly

equivalent to parts-per-billion by volume (ppbv). The reference standards are included on the table for comparison and evaluation of impacts.

VOCs – Soil Gas and/or Sub-Slab Vapor

Laboratory analyses detected various VOCs in 13 of 13 soil gas and sub-slab vapor samples analyzed. The measured results did not exceed ten-times the MPCA Residential ISVs, except for the following:

- Dichlorodifluoromethane greater than ten-times the Residential ISV in sample VP-5 and greater than ten-times the Industrial ISV in sample VP-6;
- Tetrachloroethene greater than ten-times the Residential ISV in samples VP-7 and VP-9;
- Trichlorofluoromethane greater than ten-times the Residential ISV in sample VP-9;

5.0 DISCUSSION AND OPINIONS

5.1 Soil

Subsurface sampling during this Phase II Investigation identified cPAHs greater than the Tier 2 Industrial SRV in sample HA-8(2'-3') and HA-9(0'-1'). In addition, DRO concentrations exceeding the MPCA criterion for unregulated fill were measured in three samples: B-3(4'-8'), HA-1(0'-4'), and HA-9(0'-1'). Figure 4 depicts the soil exceedances for the Site. Based on these measured results, three impacted areas (1, 2, and 3) were identified for the Site and are shown on Figure 6.

Area 1 has cPAH concentrations of 3.6 mg/kg and 27.3 mg/kg that are greater than the MPCA Industrial SRV of 3 mg/kg and would need to be remediated. Areas 1, 2, and 3 contain DRO concentrations greater than the MPCA criterion for unregulated fill (100 mg/kg) with measured results of 470 mg/kg, 140 mg/kg, and 120 mg/kg, respectively. The areas with DRO exceedances would not necessarily need to be remediated unless excavated and removed from the Site.

5.2 Water

DRO and RCRA metals were detected in groundwater samples from borings B-1, B-2 and B-6. In samples B-2 and B-6 results exceeded the MDH HBVs for total petroleum hydrocarbons. Contamination is possibly from a petroleum source in the soil.

5.3 Soil Gas/Sub-Slab Vapor

The measured VOC concentrations in soil gas and sub-slab vapor samples were greater than ten-times the Residential ISV for dichlorodifluoromethane (VP-5), tetrachloroethene (VP-7, VP-9), and trichlorofluoromethane (VP-9). The results exceeded ten-times the Industrial ISV for dichlorodifluoromethane in VP-6. These exceedances are shown in Figure 5.

5.4 Site Contamination Summary

Based on analytical results for soil, groundwater, soil gas and sub-slab vapor, AET has identified three impacted areas:

- Area 1: cPAH concentrations above the Industrial SRV and DRO concentrations above regulated fill criteria;
- Area 2: DRO concentrations and PID screening results above regulated fill criteria;
- Area 3: DRO concentrations above regulated fill criteria.

Figures 4 and 5 show the contaminants associated with the borings in these areas. Figure 6 shows the designated impact areas.

6.0 CONCLUSIONS

This Phase II Investigation has confirmed the presence of soil, groundwater and soil gas impacts by hazardous substances and petroleum products at the Site under conditions that indicate disposal or release. Within the limitations of the approved scope and Work Plan, this Phase II Investigation has delineated the approximate extent of the identified impacts and evaluated the associated environmental risks based on State regulatory criteria. AET concluded that three impacted areas have been identified:

- Area 1 is impacted with cPAH concentrations above the Industrial SRV and DRO concentrations above regulated fill criteria. The area is located in the portion of the western building known as River Print and is assumed depth of four feet bgs.
- Area 2 is impacted with DRO concentrations and PID screening results above regulated fill criteria. The area is located in the southwest region of the western building, both inside and outside. The assumed depth for the area is eight feet bgs.
- Area 3 is impacted with DRO concentrations above regulated fill criteria, located in the portion of the parking lot just east of where the western and eastern buildings meet. The assumed depth for the area is nine feet bgs.

7.0 RECOMMENDATIONS

Based on the observations, findings, and discussion above, AET recommends the following actions be conducted during the planned Site development:

1. The presence of contamination above SRVs warrants a Response Action Plan (RAP) to manage associated risks;
2. DRO impacts above regulated fill criteria warrants specialized management or disposal during site preparation;
3. The discovery of petroleum impacts possibly associated with a tank system should be reported to the State in accordance with Statute 115C;
4. Vapor mitigation controls may need to be incorporated during future construction activities depending upon planned use of the Site.

Please contact AET if assistance is needed to implement the recommendations above.

8.0 REPORT CLOSURE

AET has prepared this Phase II Investigation for the exclusive use of Loucks Associates and Ramsey County Property Management for specific application to the Site.

AET has endeavored to perform services for this project in a manner consistent with the level of skill and care ordinarily exercised by other members of the profession currently practicing in this area, under similar budgetary and time constraints. No warranty, express or implied, is made.

This report is based on our current understanding of the project and conditions at the Site. If conditions differing from our original understanding or findings are identified, AET should be consulted to determine if there are material impacts on our conclusions or recommendations.

The data derived through this Phase II Investigation has been used to develop professional opinions about the subsurface and environmental conditions at the Site. However, we recognize that not all critical information may have become known to AET and that no exploration program can fully reveal what is in the subsurface. As a result, there may be impacted locations or media that were not detected, and there may be contaminants present other than those for which we tested given the Purpose and Scope of Services for this Phase II Investigation.

Phase II Investigation

Ramsey County Riverfront Properties, St. Paul, Minnesota

August 11, 2014

AET Report No. 02-02098

AMERICAN
ENGINEERING
TESTING, INC.

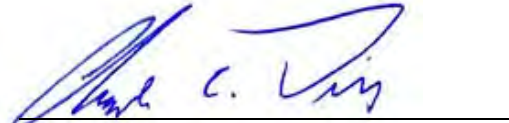
9.0 SIGNATURES

Report Authored By:



Calista Timmerman
Environmental Engineer

Report Reviewed By:



Charles C. Tiller, P.G.
Senior Geologist

Report Reviewed By:



Camilla Pederson, PE
Senior Engineer

Tables

Legend

 Result exceeds MPCA Unregulated Fill Criteria (DRO/GRO) Res = Residential
 Result exceeds MPCA Industrial SRVs Ind = Industrial
Bold text indicated results are greater than laboratory reporting limits SLV = Soil Leaching Value
 < = Value does not exceed laboratory reporting limit SRV = Soil Reference Value
 mg/kg = milligrams per kilogram NA = Not analyzed or Not Applicable
 MPCA = Minnesota Pollution Control Agency ND = Not detected

Table 1
Soil Analytical Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

Analyte	MPCA Soil Cleanup Goals			Sample Depth	B-1	B-2	B-3	B-4	B-4	B-5	B-6	HA-1	HA-2	HA-3	HA-4	HA-5	HA-6	HA-7	
	Tier I	Res	Ind		4-8	8-12	4-8	0-4	16-20	0-4	8-10	0-4	2-3	1-2	1-2	3-4	2-3	0-1	
	SLV	SRV	SRV		07/07/14	07/08/14	07/08/14	07/07/14	07/07/14	07/08/14	07/08/14	07/09/14	07/07/14	07/07/14	07/09/14	07/09/14	07/09/14	07/09/14	
Petroleum	Diesel Range Organics	MPCA Unregulated Fill Criteria = 100 mg/kg			mg/kg	25	24	120	38	<9.4	68	<6.4	140	<7.0	<6.9	<6.5	<6.3	<6.6	17
	Gasoline Range Organics	MPCA Unregulated Fill Criteria = 100 mg/kg			mg/kg	<5.6	43	<5.5	<5.2	<6.9	5.8	<5.6	<4.8	<5.4	<5.2	NA	<4.9	<5.2	<5.3
VOCs	1,1,1,2-Tetrachloroethane	0.41	31	51	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1,1-Trichloroethane	56	140	472	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1,2-Tetrachloroethane	0.012	3.5	6.5	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1,2-Trichloroethane	0.014	9	14	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1,2-Trichlorotrifluoroethane	17000	3745	5430	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1-Dichloroethane	0.41	34	55	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1-Dichloroethane	1.7	20	60	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,1-Dichloropropene	NA	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2,3-Trichlorobenzene	NA	NA	NA	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
	1,2,3-Trichloropropane	0.27	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2,4-Trichlorobenzene	0.23	200	985	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
	1,2,4-Trimethylbenzene	2.7	8	25	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2-Dibromo-3-chloropropane	NA	NA	NA	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
	1,2-Dibromoethane (EDB)	0.000015	0.3	0.5	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2-Dichlorobenzene	11	26	75	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2-Dichloroethane	0.0038	4	6	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,2-Dichloropropane	0.024	4	6	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,3,5-Trimethylbenzene	2.7	8	10	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,3-Dichlorobenzene	10	26	200	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,3-Dichloropropane	NA	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	1,4-Dichlorobenzene	0.17	30	50	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	2,2-Dichloropropane	NA	NA	NA	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
	2-Butanone	8.8	5500	19000	mg/kg	<2.2	<2.7	<2.2	<2.1	<2.8	<2.2	<2.2	<1.9	<2.2	<2.1	<2.2	<2.0	<2.1	<2.1
	2-Chlorotoluene	NA	436	436	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	4-Chlorotoluene	NA	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	Acetone	8.4	340	1000	mg/kg	<2.2	<2.7	<2.2	<2.1	<2.8	<2.2	<2.2	<1.9	<2.2	<2.1	<2.2	<2.0	<2.1	<2.1
	Allyl chloride	0.15	NA	NA	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
	Benzene	0.017	6	10	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	Bromobenzene	NA	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	Bromochloromethane	0.28	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	Bromodichloromethane	0.21	10	17	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27
	Bromoform	0.13	370	650	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53
Bromomethane	0.036	0.7	2	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53	
Carbon tetrachloride	0.0077	0.3	0.9	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Chlorobenzene	1.2	11	32	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Chloroethane	NA	1000	3000	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Chloroform	0.11	2.5	4	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Chloromethane	0.11	8	23	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
cis-1,2-Dichloroethene	0.21	8	22	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
cis-1,3-Dichloropropene	0.011	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Dibromochloromethane	0.034	12	20	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Dibromomethane	NA	97	1860	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	
Dichlorodifluoromethane	37	16	50	mg/kg	<0.56	<0.68	<0.55	<0.52	<0.69	<0.54	<0.56	<0.48	<0.54	<0.52	<0.54	<0.49	<0.52	<0.53	
Dichlorofluoromethane	NA	NA	NA	mg/kg	<0.28	<0.34	<0.27	<0.26	<0.35	<0.27	<0.28	<0.24	<0.27	<0.26	<0.27	<0.24	<0.26	<0.27	

Legend

Result exceeds MPCA Unregulated Fill Criteria (DRO/GRO) Res = Residential
 Result exceeds MPCA Industrial SRVs Ind = Industrial
Bold text indicated results are greater than laboratory reporting limits SLV = Soil Leaching Value
 < = Value does not exceed laboratory reporting limit SRV = Soil Reference Value
 mg/kg = milligrams per kilogram NA = Not analyzed or Not Applicable
 MPCA = Minnesota Pollution Control Agency ND = Not detected

Table 1
Summary of Soil Sample Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

Analyte		MPCA Soil Cleanup Goals			Sample Depth Date	HA-8	HA-9	HA-10	HA-11	HA-12	HA-13	HA-14	HA-15	HA-16	HA-17	Dup-2	Dup-3	Dup-4
		Tier I	Res	Ind		2-3	0-1	0-1	0-1	2-2.75	0-1	1-2	3-4	2-3	1-2			
		SLV	SRV	SRV		07/09/14	07/09/14	07/09/14	07/09/14	07/09/14	07/09/14	07/08/14	07/08/14	07/08/14	07/09/14	07/09/14		
Petroleum	Diesel Range Organics	MPCA Unregulated Fill Criteria = 100 mg/kg			mg/kg	41	470	<6.2	6.7	<6.3	10	<6.5	<6.7	14	<5.0	46	<6.7	12
	Gasoline Range Organics	MPCA Unregulated Fill Criteria = 100 mg/kg			mg/kg	<5.3	<5.2	<5.3	<4.9	NA	NA	NA	<4.7	NA	<5.1	<5.2	NA	NA
VOCs	1,1,1,2-Tetrachloroethane	0.41	31	51	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1,1-Trichloroethane	56	140	472	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1,2-Tetrachloroethane	0.012	3.5	6.5	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1,2-Trichloroethane	0.014	9	14	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1,2-Trichlorotrifluoroethane	17000	3745	5430	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1-Dichloroethane	0.41	34	55	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1-Dichloroethane	1.7	20	60	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,1-Dichloropropene	NA	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2,3-Trichlorobenzene	NA	NA	NA	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
	1,2,3-Trichloropropane	0.27	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2,4-Trichlorobenzene	0.23	200	985	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
	1,2,4-Trimethylbenzene	2.7	8	25	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2-Dibromo-3-chloropropane	NA	NA	NA	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
	1,2-Dibromoethane (EDB)	0.000015	0.3	0.5	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2-Dichlorobenzene	11	26	75	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2-Dichloroethane	0.0038	4	6	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,2-Dichloropropane	0.024	4	6	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,3,5-Trimethylbenzene	2.7	8	10	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,3-Dichlorobenzene	10	26	200	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,3-Dichloropropane	NA	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	1,4-Dichlorobenzene	0.17	30	50	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	2,2-Dichloropropane	NA	NA	NA	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
	2-Butanone	8.8	5500	19000	mg/kg	<2.1	<2.1	<2.1	<2.0	<1.9	<2.0	<2.0	<1.9	<2.2	<2.0	<2.1	<2.0	<1.9
	2-Chlorotoluene	NA	436	436	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	4-Chlorotoluene	NA	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	Acetone	8.4	340	1000	mg/kg	<2.1	<2.1	<2.1	<2.0	<1.9	<2.0	<2.0	<1.9	<2.2	<2.0	<2.1	<2.0	<1.9
	Allyl chloride	0.15	NA	NA	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
	Benzene	0.017	6	10	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	Bromobenzene	NA	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	Bromochloromethane	0.28	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	Bromodichloromethane	0.21	10	17	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23
	Bromoform	0.13	370	650	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47
Bromomethane	0.036	0.7	2	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47	
Carbon tetrachloride	0.0077	0.3	0.9	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Chlorobenzene	1.2	11	32	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Chloroethane	NA	1000	3000	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Chloroform	0.11	2.5	4	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Chloromethane	0.11	8	23	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
cis-1,2-Dichloroethene	0.21	8	22	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
cis-1,3-Dichloropropene	0.011	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Dibromochloromethane	0.034	12	20	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Dibromomethane	NA	97	1860	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	
Dichlorodifluoromethane	37	16	50	mg/kg	<0.53	<0.52	<0.53	<0.49	<0.47	<0.51	<0.51	<0.47	<0.54	<0.51	<0.52	<0.51	<0.47	
Dichlorofluoromethane	NA	NA	NA	mg/kg	<0.27	<0.26	<0.27	<0.25	<0.24	<0.26	<0.25	<0.24	<0.27	<0.25	<0.26	<0.25	<0.23	

Legend

MDH: Minnesota Department of Health
 HRL: Health Risk Limits
 * Value represents the Maximum Contaminant Level (MCL)
 ** Value represents the Action Level (AL) at the tap
 ^ Value represents the Health Based Value (HBV)
 -- : Not available or applicable
 µg/L: microgram per liter
 mg/L: milligram per liter
 < : Non detect; value does not exceed the laboratory reporting limit
Bold indicates value exceeds the laboratory reporting limit
Bold indicates value exceeds the reference standard

Table 2
Groundwater Analytical Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

Analyte		MDH	Sample	B-1	B-2	B-6	Dup-1
		HRLs	Date	7/7/14	7/8/14	7/8/14	
Petroleum	Diesel Range Organics	200^	µg/L	170	230	590	<120
	Gasoline Range Organics		µg/L	<100	<100	<100	<100
VOCs	1,1,1,2-Tetrachloroethane	70	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1,1-Trichloroethane	9,000	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1,2,2-Tetrachloroethane	5	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1,2-Trichloroethane	3	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1,2-Trichlorotrifluoroethane	200,000	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethane	500	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloroethene	200	µg/L	<1.0	<1.0	<1.0	<1.0
	1,1-Dichloropropene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	1,2,3-Trichlorobenzene	--	µg/L	<5.0	<5.0	<5.0	<5.0
	1,2,3-Trichloropropane	40	µg/L	<2.5	<2.5	<2.5	<2.5
	1,2,4-Trichlorobenzene	100	µg/L	<5.0	<5.0	<5.0	<5.0
	1,2,4-Trimethylbenzene	100	µg/L	<1.0	<1.0	<1.0	<1.0
	1,2-Dibromo-3-chloropropane	--	µg/L	<5.0	<5.0	<5.0	<5.0
	1,2-Dibromoethane (EDB)	0.004	µg/L	<2.5	<2.5	<2.5	<2.5
	1,2-Dichlorobenzene	600	µg/L	<1.0	<1.0	<1.0	<1.0
	1,2-Dichloroethane	500	µg/L	<1.0	<1.0	<1.0	<1.0
	1,2-Dichloropropane	5	µg/L	<1.0	<1.0	<1.0	<1.0
	1,3,5-Trimethylbenzene	100	µg/L	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	1,3-Dichloropropane	--	µg/L	<1.0	<1.0	<1.0	<1.0
	1,4-Dichlorobenzene	10	µg/L	<1.0	<1.0	<1.0	<1.0
	2,2-Dichloropropane	--	µg/L	<5.0	<5.0	<5.0	<5.0
	2-Butanone	--	µg/L	<20	<20	<20	<20
	2-Chlorotoluene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	4-Chlorotoluene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Acetone	300	µg/L	<20	<20	<20	<20
	Allyl chloride	30	µg/L	<5.0	<5.0	<5.0	<5.0
	Benzene	10	µg/L	<1.0	<1.0	<1.0	<1.0
	Bromobenzene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Bromochloromethane	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Bromodichloromethane	6	µg/L	<1.0	<1.0	<1.0	<1.0
	Bromoform	40	µg/L	<5.0	<5.0	<5.0	<5.0
Bromomethane	10	µg/L	<5.0	<5.0	<5.0	<5.0	
Carbon tetrachloride	100	µg/L	<1.0	<1.0	<1.0	<1.0	
Chlorobenzene	100	µg/L	<1.0	<1.0	<1.0	<1.0	
Chloroethane	--	µg/L	<2.5	<2.5	<2.5	<2.5	
Chloroform	30	µg/L	<1.0	<1.0	<1.0	<1.0	
Chloromethane	--	µg/L	<2.5	<2.5	<2.5	<2.5	
cis-1,2-Dichloroethene	70	µg/L	<1.0	<1.0	<1.0	<1.0	
cis-1,3-Dichloropropene	2	µg/L	<1.0	<1.0	<1.0	<1.0	
Dibromochloromethane	10	µg/L	<2.5	<2.5	<2.5	<2.5	

Legend

MDH: Minnesota Department of Health
 HRL: Health Risk Limits
 * Value represents the Maximum Contaminant Level (MCL)
 ** Value represents the Action Level (AL) at the tap
 ^ Value represents the Health Based Value (HBV)
 -- : Not available or applicable
 µg/L: microgram per liter
 mg/L: milligram per liter
 < : Non detect; value does not exceed the laboratory reporting limit
Bold indicates value exceeds the laboratory reporting limit
Bold indicates value exceeds the reference standard

Table 2
Groundwater Analytical Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

	Analyte	MDH	Sample	B-1	B-2	B-6	Dup-1
		HRLs	Date	7/7/14	7/8/14	7/8/14	
VOCs	Dibromomethane	--	µg/L	<2.5	<2.5	<2.5	<2.5
	Dichlorodifluoromethane	700	µg/L	<5.0	<5.0	<5.0	<5.0
	Dichlorofluoromethane	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Ethyl ether	200	µg/L	<5.0	<5.0	<5.0	<5.0
	Ethylbenzene	50	µg/L	<1.0	<1.0	<1.0	<1.0
	Hexachlorobutadiene	1	µg/L	<10	<10	<10	<10
	Isopropylbenzene	300	µg/L	<1.0	<1.0	<1.0	<1.0
	m,p-Xylene	300	µg/L	<2.0	<2.0	<2.0	<2.0
	Methyl isobutyl ketone	300	µg/L	<5.0	<5.0	<5.0	<5.0
	Methyl tert-butyl ether	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Methylene chloride	--	µg/L	<5.0	<5.0	<5.0	<5.0
	Naphthalene	300	µg/L	<5.0	<5.0	<5.0	<5.0
	n-Butylbenzene	--	µg/L	<2.5	<2.5	<2.5	<2.5
	n-Propylbenzene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	o-Xylene	300	µg/L	<1.0	<1.0	<1.0	<1.0
	p-Isopropyltoluene	--	µg/L	<2.5	<2.5	<2.5	<2.5
	sec-Butylbenzene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Styrene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	tert-Butylbenzene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	Tetrachloroethene	2	µg/L	<1.0	<1.0	<1.0	<1.0
	Tetrahydrofuran	--	µg/L	<20	<20	<20	<20
	Toluene	200	µg/L	<1.0	<1.0	<1.0	<1.0
	trans-1,2-Dichloroethene	--	µg/L	<1.0	<1.0	<1.0	<1.0
	trans-1,3-Dichloropropene	--	µg/L	<1.0	<1.0	<1.0	<1.0
Trichloroethene	--	µg/L	<1.0	<1.0	<1.0	<1.0	
Trichlorofluoromethane	10	µg/L	<1.0	2	<1.0	<1.0	
Vinyl chloride	--	µg/L	<1.0	<1.0	<1.0	<1.0	
Dissolved Metals	Arsenic, dissolved	10*	mg/L	<0.010	<0.010	<0.010	<0.010
	Barium, dissolved	2,000	mg/L	0.29	0.053	0.15	0.25
	Cadmium, dissolved	4	mg/L	<0.0010	<0.0010	<0.0010	<0.0010
	Chromium, dissolved	100*	mg/L	<0.010	<0.010	<0.010	<0.010
	Lead, dissolved	15**	mg/L	<0.0030	<0.0030	<0.0030	<0.0030
	Mercury, dissolved	2*	mg/L	<0.00020	<0.00020	<0.00020	<0.00020
	Selenium, dissolved	30	mg/L	<0.020	<0.020	<0.020	<0.020
	Silver, dissolved	30	mg/L	<0.0050	<0.0050	<0.0050	<0.0050
	1,2,4-Trichlorobenzene	100	µg/L	<15	<12	<13	<11
	1,2 - Dichlorobenzene	600	µg/L	<15	<12	<13	<11
	1,2-Diphenylhydrazine as Azobenzene	--	µg/L	<15	<12	<13	<11
	1,3 - Dichlorobenzene	--	µg/L	<15	<12	<13	<11
	1,4 - Dichlorobenzene	10	µg/L	<15	<12	<13	<11
	2,3,4,6-Tetrachlorophenol	--	µg/L	<15	<12	<13	<11
	2,4,5-Trichlorophenol	--	µg/L	<15	<12	<13	<11
2,4,6-Trichlorophenol	30	µg/L	<15	<12	<13	<11	

Legend

MDH: Minnesota Department of Health
 HRL: Health Risk Limits
 * Value represents the Maximum Contaminant Level (MCL)
 ** Value represents the Action Level (AL) at the tap
 ^ Value represents the Health Based Value (HBV)
 -- : Not available or applicable
 µg/L: microgram per liter
 mg/L: milligram per liter
 < : Non detect; value does not exceed the laboratory reporting limit
Bold indicates value exceeds the laboratory reporting limit
Bold indicates value exceeds the reference standard

Table 2
Groundwater Analytical Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

	Analyte	MDH	Sample	B-1	B-2	B-6	Dup-1
		HRLs	Date	7/7/14	7/8/14	7/8/14	
SVOCs	2,4-Dichlorophenol	20	µg/L	<15	<12	<13	<11
	2,4-Dimethylphenol	100	µg/L	<15	<12	<13	<11
	2,4-Dinitrophenol	10	µg/L	<15	<12	<13	<11
	2,4-Dinitrotoluene	--	µg/L	<15	<12	<13	<11
	2,6-Dichlorophenol	--	µg/L	<15	<12	<13	<11
	2,6-Dinitrotoluene	--	µg/L	<15	<12	<13	<11
	2-Chloronaphthalene	--	µg/L	<15	<12	<13	<11
	2-Chlorophenol	30	µg/L	<15	<12	<13	<11
	2-Methyl naphthalene	--	µg/L	<15	<12	<13	<11
	2-Methylphenol	30	µg/L	<15	<12	<13	<11
	2-Nitroaniline	--	µg/L	<15	<12	<13	<11
	2-Nitrophenol	--	µg/L	<15	<12	<13	<11
	3&4-Methylphenol	3	µg/L	<15	<12	<13	<11
	3,3' - Dichlorobenzidine	0.8	µg/L	<38	<30	<33	<28
	3-Nitroaniline	--	µg/L	<15	<12	<13	<11
	4,6-Dinitro-2-methylphenol	--	µg/L	<15	<12	<13	<11
	4-Bromophenyl phenyl ether	--	µg/L	<15	<12	<13	<11
	4-Chloro-3-methylphenol	--	µg/L	<15	<12	<13	<11
	4-Chloroaniline	--	µg/L	<15	<12	<13	<11
	4-Chlorophenyl phenyl ether	--	µg/L	<15	<12	<13	<11
	4-Nitroaniline	--	µg/L	<15	<12	<13	<11
	4-Nitrophenol	--	µg/L	<15	<12	<13	<11
	Acenaphthene	200	µg/L	<15	<12	<13	<11
	Acenaphthylene	--	µg/L	<15	<12	<13	<11
	Aniline	10	µg/L	<15	<12	<13	<11
	Anthracene	2,000	µg/L	<15	<12	<13	<11
	Benidine	--	µg/L	<150	<120	<130	<110
	Benzo(a)anthracene	--	µg/L	<15	<12	<13	<11
	Benzo(a)pyrene	0.3	µg/L	<15	<12	<13	<11
	Benzo(b)fluoranthene	--	µg/L	<15	<12	<13	<11
	Benzo(g,h,i)perylene	--	µg/L	<15	<12	<13	<11
	Benzo(k)fluoranthene	--	µg/L	<15	<12	<13	<11
	Benzoic acid	30,000	µg/L	<15	<12	<13	<11
	Benzyl alcohol	--	µg/L	<15	<12	<13	<11
	Bis(2-chloroethoxy)methane	--	µg/L	<15	<12	<13	<11
	Bis (2 - chloroethyl)ether	--	µg/L	<15	<12	<13	<11
	Bis(2-chloroisopropyl)ether	--	µg/L	<15	<12	<13	<11
	Di(2 - ethylhexyl)phthalate (<i>bis-ethylhexy</i>)	--	µg/L	<15	<12	<13	<11
	Butyl benzylphthalate	100	µg/L	<15	<12	<13	<11
	Carbazole	--	µg/L	<15	<12	<13	<11
Chrysene	--	µg/L	<15	<12	<13	<11	
Dibenz(a,h)anthracene	--	µg/L	<15	<12	<13	<11	
Dibenzofuran	--	µg/L	<15	<12	<13	<11	

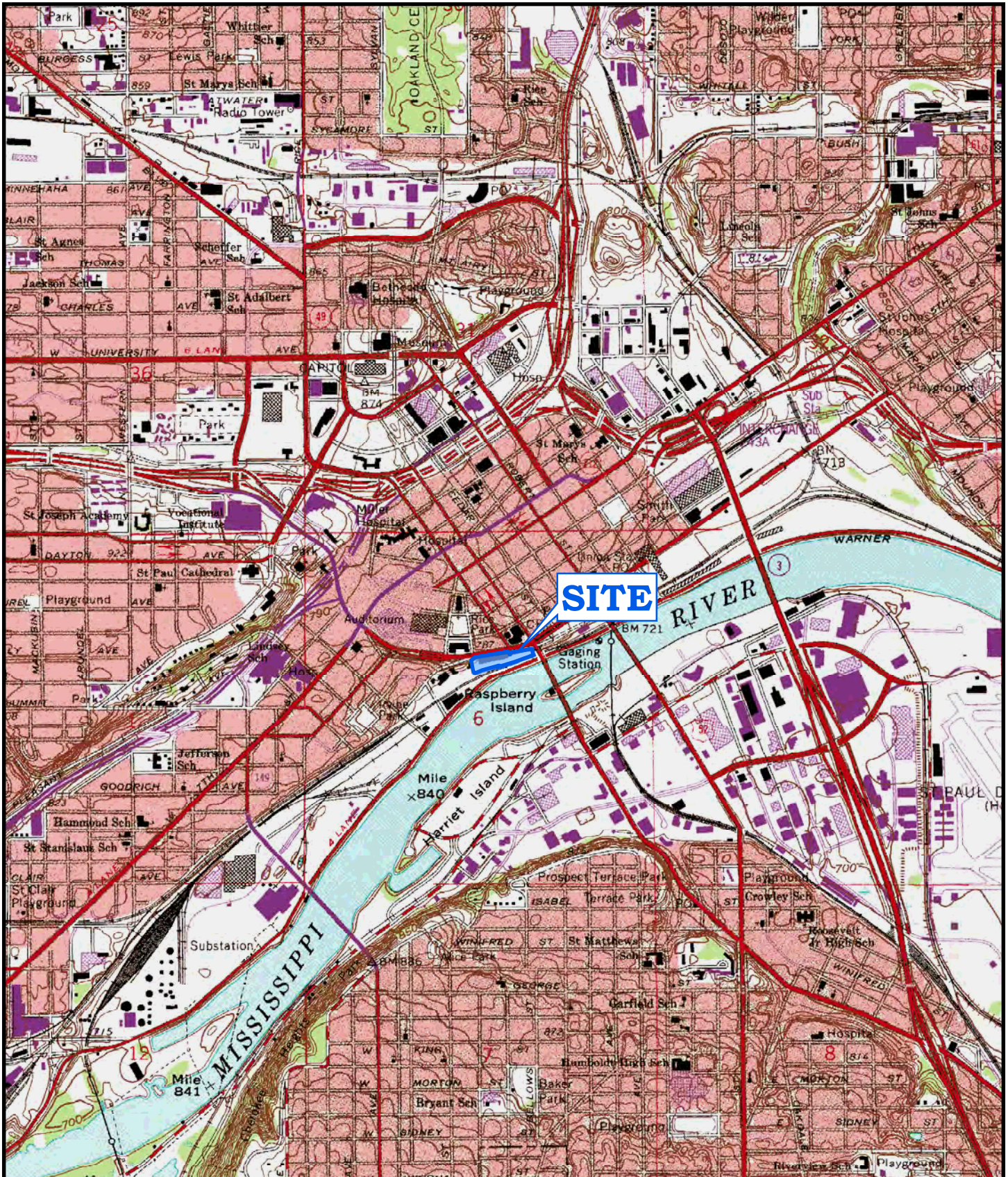
Legend

MDH: Minnesota Department of Health
 HRL: Health Risk Limits
 * Value represents the Maximum Contaminant Level (MCL)
 ** Value represents the Action Level (AL) at the tap
 ^ Value represents the Health Based Value (HBV)
 -- : Not available or applicable
 µg/L: microgram per liter
 mg/L: milligram per liter
 < : Non detect; value does not exceed the laboratory reporting limit
Bold indicates value exceeds the laboratory reporting limit
Bold indicates value exceeds the reference standard

Table 2
Groundwater Analytical Results
Ramsey County Riverfront Properties
St. Paul, Minnesota
AET Project No. 02-02098

	Analyte	MDH	Sample	B-1	B-2	B-6	Dup-1
		HRLs	Date	7/7/14	7/8/14	7/8/14	
SVOCs	Diethyl phthalate	6,000	µg/L	<15	<12	<13	<11
	Dimethyl phthalate	70,000	µg/L	<15	<12	<13	<11
	Di-n-butyl phthalate	--	µg/L	<15	<12	<13	<11
	Di - n - octyl phthalate	--	µg/L	<15	<12	<13	<11
	Fluoranthene	300	µg/L	<15	<12	<13	<11
	Fluorene	300	µg/L	<15	<12	<13	<11
	Hexachlorobenzene	0.2	µg/L	<15	<12	<13	<11
	Hexachlorobutadiene	1	µg/L	<15	<12	<13	<11
	Hexachlorocyclopentadiene	--	µg/L	<15	<12	<13	<11
	Hexachloroethane	--	µg/L	<15	<12	<13	<11
	Indeno (1,2,3-cd) pyrene	--	µg/L	<15	<12	<13	<11
	Isophorone	100	µg/L	<15	<12	<13	<11
	Naphthalene - see Volatile Organics	70	µg/L	<15	<12	<13	<11
	Nitrobenzene	--	µg/L	<15	<12	<13	<11
	N-Nitrosodimethylamine	--	µg/L	<15	<12	<13	<11
	N-Nitrosodi-N-propylamine	--	µg/L	<15	<12	<13	<11
	N-Nitrosodiphenylamine	70	µg/L	<15	<12	<13	<11
	Pentachlorophenol	1	µg/L	<15	<12	<13	<11
	Phenanthrene	--	µg/L	<15	<12	<13	<11
	Phenol	4,000	µg/L	<15	<12	<13	<11
Pyrene	200	µg/L	<15	<12	<13	<11	

Figures



Map Reference: USGS 7.5" Quadrangle,
Saint Paul East, Minnesota

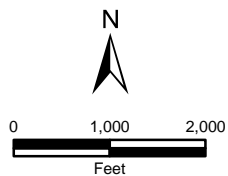



Figure 1
Site Location Map

Phase II Investigation
Ramsey County Riverfront Properties
12/14 & 50 Kellogg Blvd W
St. Paul, Minnesota

Date: 05/08/2014

AET Project No. 02-02098



Legend
 Site Boundary



**AMERICAN
 ENGINEERING
 TESTING, INC**

Map Reference:
 U.S. Geological Survey and Digital Aerial
 Solutions, LLC: USGS High Resolution
 Orthoimagery, Minneapolis-St. Paul,
 Minnesota, Spring 2012

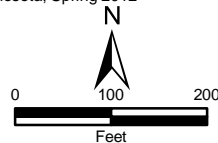


Figure 2
 Site Layout Map

Phase II Investigation

Ramsey County Riverfront Properties
 12/14 & 50 Kellogg Blvd W
 St. Paul, Minnesota

Date: 08/11/2014

AET Project No. 02-02098





- Legend**
- Result exceeds MPCA Unregulated Fill Criteria (DRO/GRO) or MPCA Industrial SRVs
 - ⊙ Hand Auger Boring
 - Soil Boring
 - ▲ Vapor Port/Probe
 - Site Boundary

Sample ID	MPCA Cleanup Goals	
	Res SRV	Ind SRV
Depth in feet		
Diesel Range Organics	MPCA Unregulated Fill Criteria = 100 mg/kg	
Benzo[a]pyrene equivalents	2	3

Results in mg/kg



Map Reference:
 U.S. Geological Survey and Digital Aerial Solutions, LLC: USGS High Resolution Orthoimagery, Minneapolis-St. Paul, Minnesota, Spring 2012

Figure 4
 Soil Exceedances
 Phase II Investigation
 Ramsey County Riverfront Properties
 12/14 & 50 Kellogg Blvd W
 St. Paul, Minnesota
 Date: 08/11/2014 AET Project No. 02-02098



Legend

- Exceeds MPCA PRP 10X Residential ISVs or MPCA PRP 10X Industrial ISVs
- ⊙ Hand Auger Boring
- Soil Boring
- ▲ Vapor Port/Probe
- Site Boundary

Sample ID	MPCA PRP	
	10X Res ISVs	10X Ind ISVs
Dichlorodifluoromethane	2,000	6,000
Tetrachloroethene	200	600
Trichlorofluoromethane	7,000	20,000

Results in $\mu\text{g}/\text{m}^3$



Map Reference:
 U.S. Geological Survey and Digital Aerial Solutions, LLC: USGS High Resolution Orthoimagery, Minneapolis-St. Paul, Minnesota, Spring 2012

Figure 5
 Soil Gas & Sub-Slab Vapor Exceedances
 Phase II Investigation
 Ramsey County Riverfront Properties
 12/14 & 50 Kellogg Blvd W
 St. Paul, Minnesota
 Date: 08/11/2014 AET Project No. 02-02098

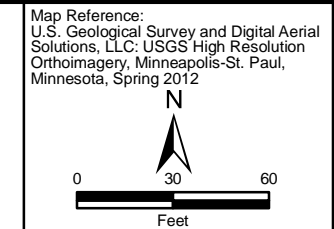


Figure 6
 Impact Areas
 Phase II Investigation
 Ramsey County Riverfront Properties
 12/14 & 50 Kellogg Blvd W
 St. Paul, Minnesota
 Date: 08/11/2014 AET Project No. 02-02098

Appendix A

Acronyms and Abbreviations

ACRONYMS AND ABBREVIATIONS

AET Standard List

°C	degrees Celsius
°F	degrees Fahrenheit
%	percent
AAI	EPA All Appropriate Inquiry (§312.10 of 40 CFR 312)
ACM	asbestos containing material
ACWM	asbestos containing waste material
AET	American Engineering Testing, Inc.
AHERA	Asbestos Hazard Emergency Response Act
AST	aboveground storage tank
ASTM	American Society for Testing and Materials (now known only by acronym)
AUL	activity and use limitation
BaPs	benzo(a)pyrene equivalents
BETX	benzene, ethlybenzene, toluene, xylene
bgs	below ground surface
CAP	Corrective Action Plan
CCP	Construction Contingency Plan
CERCLA	Comprehensive Environmental Response, Compensation, Liability Act (Superfund)
CERCLIS	Comprehensive Environmental Response, Compensation, Liability Information System
CESQG	RCRA Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CG	cleanup goal
CGI	combustible gas indicator
COC	MPCA Certificate of Completion
CoC	contaminant of concern
c.o.c.	chain of custody
CORRACTS	RCRA Corrective Actions Information System
cPAH	carcinogenic polynuclear aromatic hydrocarbon
CVOC	chlorinated volatile organic compound
cy or CY	cubic yards
DML	MPCA Dredge Management Level
DRO	diesel range organics ("-Si" indicates silica-gel pretreatment)
EA/EAW	Environmental Assessment [Worksheet]
EC	engineering control
ECP	Emissions Control Plan
ECR	Environmental Construction Report
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EP	Environmental Professional (§312.10 of 40 CFR 312)
EPA	Environmental Protection Agency (also USEPA)
ERNS	Emergency Response Notification System (federal)

ACRONYMS AND ABBREVIATIONS

AET Standard List

ESA	Environmental Site Assessment
EWP	Environmental Work Plan
f/cc	fibers-per-cubic-centimeter
ft	feet
GEN	RCRA Generator
GIS	geographic information system
GPS	global positioning system
GRO	gasoline range organics
HASP	Health and Safety Plan
HBV	MDH Health Based Value
HIG	Historical Information Gatherers, Inc.
HREC	historical recognized environmental condition
HRL	MDH Health Risk Limit
IC	institutional control
ISV	MPCA Intrusion Screening Value
LAST	leaking aboveground storage tank
LEL	lower explosion limit
lf or LF	lineal feet
LIMS	laboratory information management system
LLP	landowner liability protection
LQG	RCRA Large Quantity Generator
LSI	MPCA Limited Site Investigation
LUST	leaking underground storage tank
MCES	Metropolitan Council Environmental Services
MCL	EPA Maximum Contaminant Level
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MDL	method detection limit.
mg/kg	milligrams-per-kilogram
mg/L	milligrams-per-liter
MGS	Minnesota Geological Survey
MMP	Materials Management Plan
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
MS/MSD	matrix spike/matrix spike duplicate
MSDS	material safety data sheet
MTBE	methyl tert-butyl ether
NA	not assigned or not applicable
NAD	MPCA No Association Determination
ND	no detection

ACRONYMS AND ABBREVIATIONS

AET Standard List

NEPA	National Environmental Protection Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFA	MPCA No Further Action
NFRAP	No Further Remedial Action Planned
NLR	RCRA No Longer Regulated Information System
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List (federal Superfund)
NR	not recorded
ODI	EPA Open Dump Inventory
OSHA	Occupational Safety and Health Administration
PAH	polynuclear aromatic hydrocarbon
PEL	OSHA Permissible Exposure Limit
PBP	MPCA Petroleum Brownfield Program
PCB	polychlorinated biphenyl
pcm	point count method
PCM	phase-contrast microscopy
PE	Professional Engineer
PEF	potency equivalency factor
PG	Professional Geologist
PID	photoionization detector
PLM	polarized light microscopy
PLP	Permanent List of Priorities (state Superfund)
ppb	parts-per-billion
ppbv	parts-per-billion by volume
PPE	personal protective equipment
ppm	parts-per-million
ppmv	parts-per-million by volume
PRP	MPCA Petroleum Remediation Program
PVOC	petroleum volatile organic compound
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RACM	regulated asbestos containing material
RAI	Response Action Implementation
RAP	Response Action Plan
RCRA	Resource Conservation Recovery Act
REC	recognized environmental condition
RI	MPCA or MDA Remedial Investigation
RL	laboratory reporting limit
ROD	EPA Record of Decision

ACRONYMS AND ABBREVIATIONS

AET Standard List

SHOP	Special Handling Operations Plan
SLV	MPCA Soil Leaching Value
SMP	Soil Management Plan
SOP	standard operating procedure
SPILLS	MPCA Spills inventory
SQG	RCRA Small Quantity Generator
SREC	suspect recognized environmental condition
SRV	MPCA Soil Reference Value
SSP	Site Safety Plan
SVOC	semi-volatile organic compound
SWF/LF	MPCA Solid Waste Facilities/Landfill Sites
TCLP	Toxicity Characteristic Leaching Procedure
TPH	total petroleum hydrocarbons
TRIS	EPA Toxic Release Inventory System
TSCA	Toxic Substances Control Act
TSD	RCRA Transportation Storage and Disposal inventory
TWA	time-weighted average
µg/kg	micrograms-per-kilogram
µg/l or µg/L	micrograms-per-liter
µg/m ³	micrograms-per-cubic-meter
USEPA	United States Environmental Protection Agency (also EPA)
USGS	United States Geological Survey
UST	underground storage tank
VIC	MPCA Voluntary Investigation and Cleanup Program
VOC	volatile organic compound
WCA	Wetland Conservation Act
XRF	x-ray fluorescence

Appendix B

Environmental Sampling Methods

**ENVIRONMENTAL SAMPLING METHODS – GENERAL:
EXCAVATIONS/TEST PITS, HAND AUGERS, SURFICIAL SOILS, STOCKPILES**

Site Safety Issues

Safety is of paramount importance on construction, demolition, or other high-traffic sites with potentially unstable ground. Frequent visual and verbal contact is maintained with operators of heavy equipment in the sampling vicinity. Care is taken not to enter depressions or scale mounds that would constitute confined spaces, where engulfment, immersion, or falls are possible, or where harmful vapors may collect. Most observations and soil collection are performed from a stable and level ground surface with the help of heavy equipment operated by an excavation contractor.

Contamination Reduction

Sampling devices (except heavy equipment in most cases) are cleaned between sampling points to minimize cross contamination. The cleaning procedure may consist of an alconox detergent-water wash using a brush, followed by a tap water rinse. Certain types of projects may entail more or less stringent decontamination procedures.

Soil Collection

Most soil samples from excavations or test pits are collected directly from heavy equipment (e.g., excavation bucket, loader, or bulldozer), giving preference to soils that have not touched the equipment. A hand auger is used to complete shallow soil borings in locations of limited vehicle access. Hand auger borings are advanced manually, typically in 6" to 12" depth intervals. Soils are collected directly from the hollow auger barrel. A spade shovel is used to collect surficial soils (i.e., up to 6" depth). In many cases, soil samples can be collected by hand without added equipment.

Impacted soils or buried debris may be present in the ground that are not observed due to the spacing and depths of sampling points. Best judgment determinations, based on known site conditions and past experience in similar situations, do not guarantee identification or removal of all impacts.

Soil Classification

As the samples are obtained in the field, they are visually and manually classified by the field staff. Representative portions of the samples may be returned to the laboratory for further examination and for verification of the field classification. Soil classifications, visual/odor observations, and information on any groundwater encountered are reported on the Soil Screening Data Sheet or other field notes.

Soil Sample Vapor Screening

Soil samples collected directly or from equipment are screened with a photoionization detector (PID) for the presence of organic vapors with ionization potentials less than the lamp voltage. The PID is calibrated for direct reading in parts-per-million-volume (PPMv) of a benzene equivalent. Soil samples are collected and screened according to the bag-headspace field screening procedure, which consists of placing freshly collected soil into a polyethylene Whirl-Pak or freezer "baggie" (i.e., bag), sealing the bag to contain an air pocket (i.e., headspace), and allowing 10 to 20 minutes for vapors to disperse from the soil to the headspace. The highest reading upon inserting the PID probe into the bag headspace – typically attained within two to five seconds of probe insertion – is recorded on the Soil Screening Data Sheet or other field notes. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

Other Field Screening

For certain sites, field screening may be conducted for additional parameters in accordance with AET's Field Screening Methods Supplemental information sheet.

Soil Sampling for Chemical Analysis

Soil samples obtained for chemical analysis are collected directly or from the sampling device into laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

ENVIRONMENTAL SAMPLING METHODS – FIELD SCREENING METHODS SUPPLEMENTAL

Soil Sample Vapor Screening

Soil samples collected directly from the field extraction device are screened with a photoionization detector (PID) for the presence of organic vapors with ionization potentials less than the lamp voltage. The PID is calibrated for direct reading in parts-per-million-volume (PPMv) of a benzene equivalent. Soil samples are collected and screened according to the bag-headspace field screening procedure, which consists of placing freshly collected soil into a polyethylene Whirl-Pak or freezer “baggie” (i.e., bag), sealing the bag to contain an air pocket (i.e., headspace), and allowing 10 to 20 minutes for vapors to disperse from the soil to the headspace. The highest reading upon inserting the PID probe into the bag headspace – typically attained within two to five seconds of probe insertion – is recorded on the Soil Screening Data Sheet or other field notes. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

Soil Sample Lead Screening

Lead screening is performed in accordance with EPA Method 6010A. Soil samples are collected in 1-mil polyethylene bags and screened with a Niton X-Ray Fluorescence analyzer (XRF). The XRF is calibrated for reading in parts-per-million (ppm) of total lead, according to manufacturer’s specifications. For analysis with the XRF, samples are homogenized within the bags and placed on a flat surface with a minimum 1-cm thickness of soil sample beneath the XRF test guard and shutter. Samples are typically analyzed for approximately 30 seconds – or longer if necessary – to allow stabilization of the measurement. Due to bag interference, XRF screening results may be lower than results obtained by other testing methods for lead content of soils.

Soil Vapor or Air Sample Screening

Soil vapor or air samples collected directly into tedlar bags or summa canisters may be screened with a PID, flame ionization detector (FID), or combustible gas indicator (CGI) for the presence of organic and combustible vapors. The PID is calibrated as above. The FID is calibrated for reading in PPMv of a methane equivalent. The CGI is calibrated for reading in percent of lower explosive limit (%LEL) of a methane equivalent. The CGI also analyzes oxygen in percent (%O₂). A multi-gas CGI meter may be used to measure %LEL, %O₂, carbon monoxide in PPMv, and hydrogen sulfide in PPMv. For screening with the PID, FID, or CGI, polyethylene tubing is used to connect the probe to the release valve of the sample bag or canister. The highest reading upon opening the valve – typically attained within two to five seconds – is recorded. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results. In particular, low %O₂ measurements will result in unreliable FID results because oxygen is required for combustion. The CGI instrument is also unreliable in low %O₂ environments unless it utilizes infrared technology for measurement of %LEL.

Ambient Air Quality Screening

Ambient air quality may be screened with a PID, FID, or CGI for the presence of organic and/or combustible vapors. The instruments are calibrated as above. The probe is held in open air; the reported screening result is the highest reading – typically attained within five to ten seconds. Often screening is conducted at different heights to confirm vapors are not accumulating in the breathing zone, at ground level, or other levels. Some fluctuation in readings is expected due to air currents. In addition, excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

Field Laboratories

On certain types of sites (e.g., remedial excavations or groundwater investigations), field laboratories may be used to permit rapid decision-making. All field laboratory services are sub-contracted and conducted in accordance with the sub-contractor’s QA/QC procedures. In our experience, regulatory authorities are usually hesitant to rely on field laboratory data alone. Therefore, field laboratory results are typically treated as field screening data. In most cases, a proportion of field samples (typically 10% to 20%) are also submitted to a fixed-base laboratory for confirmation analysis.

Contamination Reduction

The push-probe down hole tooling is steam cleaned prior to mobilization. New clear plastic liners are used for each drive, and the tooling is cleaned between borings to minimize cross contamination. The cleaning procedure consists of analconox detergent-water wash using a brush, followed by a tapwater rinse. Thealconox wash and rinse water are changed regularly – typically between borings. Certain types of projects may entail more stringent decontamination procedures.

Soil Boring Advancement and Limitations

Soil sampling in the soil borings is performed using a Geoprobe® system. Soil borings are advanced using a vehicle-mounted, hydraulically-powered, soil probing machine, which uses static force (vehicle weight) and percussion to advance small-diameter sampling tools into the subsurface for collecting soil core, soil gas, or groundwater samples. Using this system, a 2" outer-diameter (OD) MacroCore® soil sampler containing a 1.75" OD clear plastic liner is driven into the soil in distinct 48" depth intervals, except where subsurface conditions limit the equipment to shorter drive lengths. In cases where soil recovery is poor, typically due to grain-size or moisture, a smaller “discrete” soil sampler (1.5" OD containing a 1.0" OD clear plastic liner) with a retractable piston tip may be used to collect soil in distinct 24" depth intervals. Probe rods are added to extend borings deeper beneath the surface. The plastic liner is removed from the sampler and cut lengthwise to expose discrete sections of soil for classification and sampling.

Unless actually observed, contacts between soil layers are estimated based on the spacing of samples and the action of the push-probe system. Cobbles, boulders, and other large objects generally cannot be recovered from push-probe soil borings, and may be present in the ground even if they are not noted on the boring logs. Impacted soils or buried debris may be present that are not observed due to the spacing and depths of sampling points. Best judgment determinations, based on known site conditions and past experience in similar situations, do not guarantee identification of all impacts.

Soil Classification

As the samples are obtained in the field, they are visually and manually classified by the field staff. Representative portions of the samples may be returned to the laboratory for further observation and for verification of the field classification. Logs of the borings are prepared indicating the depth and identification of the various strata, water level information, and other pertinent information regarding the method of advancing the borings. A chart illustrating the descriptive terminology and symbols used on the borings logs is also provided.

Boring logs include judgments of the geologic depositional origin. This judgment is primarily based on observations of the soil samples, which can be limited. Observations of the surrounding topography, vegetation, and development can sometimes aid this judgment. Visual/odor observations may aid in assessing impacts but are not relied on exclusively.

Soil Sample Vapor Screening

Soil samples collected directly from the sampling liner are screened with a photoionization detector (PID) for the presence of organic vapors with ionization potentials less than the lamp voltage. The PID is calibrated for direct reading in parts-per-million-volume (PPMv) of a benzene equivalent. Soil samples are collected and screened according to the bag-headspace field screening procedure, which consists of placing freshly collected soil into a polyethylene Whirl-Pak or freezer “baggie” (i.e., bag), sealing the bag to contain an air pocket (i.e., headspace), and allowing 10 to 20 minutes for vapors to disperse from the soil to the headspace. The highest reading upon inserting the PID probe into the bag headspace – typically attained within two to five seconds of probe insertion – is recorded on the boring log. Excessive moisture, temperature extremes, ambient vapors, or other unusual field circumstances can affect screening results.

Other Field Screening

For certain sites, field screening may be conducted for additional parameters in accordance with AET’s Field Screening Methods Supplemental information sheet.

Soil Sampling for Chemical Analysis

Soil samples obtained for chemical analysis are collected directly from the sampling liner and placed into laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

Water Level Measurements

The groundwater level measurements are shown at the bottom of the boring logs. The following information appears under Water Level Measurements on the logs:

- Date and time of measurement
- Sampled Depth: greatest depth of soil sampling at the time of measurement
- Cave-in Depth: tape-measured depth of borehole
- Water Level: tape-measured depth of free water in the borehole

The true depth of the water table at the boring locations may be different from the water levels measured in the boreholes. This is possible because several factors can affect the water level measurements in the borehole such as permeability of each soil layer in profile, presence of perched water, amount of time between water-level readings, and weather conditions.

Groundwater Sampling for Chemical Analysis

Groundwater sampling in the boreholes/temporary monitoring wells is performed using a Geoprobe® system. Using this system, a 1.5" OD groundwater sampler with a 41" stainless-steel or PVC screen is driven into the soil to the desired sampling depth using static and percussive forces. The operation of extension rods through the hollow interior of the probe rods enables advancement of the screen beyond the depth of the probe rods while maintaining a closed system above the desired sampling depth.

Using a peristaltic pump or check-valve assembly, samples are pumped directly from the screen through new polyethylene tubing extended to depth through the probe rods. Samples are collected in laboratory-prepared containers with appropriate preservatives, according to laboratory protocols. For analyses in which field-filtering is performed, samples are vacuum-filtered through a new dedicated plastic filter with 0.45- μ m pores. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

Because boreholes are not typically in equilibrium with ambient groundwater, results provide qualitative groundwater data. Purging additional water prior to sampling may improve the data representativeness somewhat. Monitoring wells are necessary to obtain more accurate quantitative groundwater data.

Soil Vapor Probes

For assessment of vapor encroachment or intrusion into structures, soil vapor sampling is performed using a Geoprobe® system. A 1.25" OD retractable rod with soil vapor adaptor tip is driven into the soil to the desired sampling depth (typically basement floor or base-of-foundation) using static and percussive forces. New polyethylene tubing is attached to the tip, and the rods are retracted approximately 6", creating a closed system. Air samples are pumped through the tubing, and collected in either summa canisters or tedlar bags, as approved by regulatory authorities. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

As appropriate, bore holes are stabilized in relative equilibrium with air in soil void spaces by removing a minimum of two borehole volumes of air as measured by a flow gauge. Due to the actions of push-probe tools, potential surface leakage, and diffusion from surrounding soils, air samples may not attain equilibrium with the air in soil void spaces; this method is considered a screening measurement.

Boring Elevations, Locations, and Abandonment

Following sampling, ground surface elevations at boring locations are typically measured to the nearest 0.1 foot. If a permanent benchmark of known elevation is unavailable, the measurement is referenced to a nearby temporary benchmark given the arbitrary reference elevation of 100.0 feet. Horizontal location control is typically based on tape measurements from fixed site features. Certain types of projects may entail more stringent measures such as global positioning systems (GPS) or contracting registered surveyors.

Boreholes/temporary monitoring wells are abandoned using appropriate grouting materials and methods. Licensed well contractors on staff ensure compliance with state and local standards.

ENVIRONMENTAL SAMPLING METHODS – MONITORING WELLS

Contamination Reduction

The sampling downrigger and electronic water-level indicator are cleaned prior to sampling and between sampling from different monitoring wells. The cleaning procedure consists of an alconox detergent-water wash and distilled water rinse from spray dispensers. New dedicated teflon bailers are used for each well.

A submersible sampling pump, if used, is steam cleaned prior to mobilization, and decontaminated between sampling from different monitoring wells by pumping through an alconox detergent-water wash and distilled water rinse for several minutes. The alconox wash and rinse water are changed between wells. New dedicated polyethylene tubing is used for each well. Certain types of projects may entail more stringent decontamination procedures.

Monitoring Well Installation and Development

Licensed well contractors on staff ensure that monitoring well construction features comply with the requirements of appropriate state and local agencies. The Monitoring Well/Piezometer Log sheet includes construction and installation details for each well. Typically, monitoring wells are installed in hollow-stem auger (HSA) soil boreholes that have been sampled for environmental parameters. Further information can be found on the information sheet entitled Hollow-Stem Auger Soil Boring Environmental Sampling Methods.

Monitoring wells are developed by removing a minimum of three to five borehole volumes, until water appears clear.

Groundwater Elevation Measurements

Following monitoring well installation, the top-of-riser elevations are surveyed to the nearest 0.01 feet. If a permanent benchmark of known elevation is unavailable, the survey is referenced to a nearby temporary benchmark given the arbitrary reference elevation of 100.00 feet.

Groundwater elevations are determined by using an electronic water-level indicator. Measurements are obtained by lowering the probe into each well until the groundwater surface is encountered. Measurements, referenced to the top-of-riser elevations, are reported on the Groundwater Monitoring Data Sheet to the nearest 0.01 feet.

Monitoring Well Stabilization

Prior to sampling, monitoring wells are stabilized in equilibrium with ambient groundwater by removing a minimum of three to five water-column volumes, until measurements of temperature, pH, specific conductivity, dissolved oxygen (DO), and/or oxidation-reduction potential (ORP) stabilize. Stabilization measurements are recorded on the Groundwater Monitoring Data Sheet.

In addition, water-level measurements may be collected during and after the stabilization process to assess whether the monitoring well is providing water representative of aquifer conditions and to identify deficiencies which may affect recovery rates, static water levels, and representative sampling. Should the water level be drawn down to the bottom of a monitoring well, water-level recovery rates are measured in lieu of stabilization measurements.

Groundwater Sampling for Chemical Analysis

Groundwater samples obtained for chemical analysis are collected directly from each monitoring well using a new dedicated teflon bailer lowered down the well with new nylon rope or decontaminated downrigger cable. Samples are decanted directly from the bailer into laboratory-prepared containers with appropriate preservatives. Alternatively, samples may be drawn directly from the submersible pump discharge tubing. For analyses in which field-filtering is required, samples are vacuum-filtered through a new dedicated plastic filter with 0.45- μ m pores. The samples are delivered to the analytical laboratory within prescribed holding times, accompanied by proper chain-of-custody forms.

When field measurements are required (e.g., nitrate-nitrogen, dissolved iron, hydrous sulfide, residual chlorine), brand-name field testing kits are used in accordance with manufacturers' specifications and state agency requirements.

BORING LOG NOTES – PUSH PROBES & GENERAL SAMPLING METHODS

PUSH-PROBE AND GENERAL SAMPLING SYMBOLS

Symbol	Definition
D:	Dry
DR:	Driller (initials)
DS:	Geoprobe MacroCore® discrete interval sampler
F:	Frozen
FT:	Feet
GP:	Geoprobe® push-probe subsurface sampling system
HA:	Hand auger
HSA:	Hollow stem auger
IN:	Inches
LG:	Field logger (initials)
M:	Moist
MC:	Column used to describe moisture condition of samples and for the ground water level symbols
MC:	Geoprobe MacroCore® continuous sampler
N (BPF):	Standard penetration resistance (N-value) in blows per foot
NR:	No recovery
REC:	The recovered length (in inches) of sample
SS:	Standard split-spoon sampler
TP:	Test pit
W:	Wet/waterbearing
▼:	Water level directly measured in boring
▽:	Estimated water level based solely on sample appearance

USC* SOIL TYPE DESIGNATIONS

Symbol	Definition
CH:	Fat clay
CL:	Lean clay
GC:	Clayey gravel
GM:	Silty gravel
GP:	Poorly graded gravel
GW:	Well graded gravel
MH:	Elastic silt
ML:	Silt
OH:	Organic clay or silt (fat)
OL:	Organic clay or silt (lean)
PT:	Peat
SC:	Clayey sand
SM:	Silty sand
SP:	Poorly graded sand
SW:	Well graded sand

*USC: Unified Soil Classification System (ASTM: D2488)

TEST SYMBOLS

Symbol	Definition
CGI:	Combustible gas indicator
DEN:	Dry density, pcf
FID:	Flame ionization detector
HYD:	Hydrometer analysis
LL:	Liquid Limit, %
ND:	Not detected
OC:	Organic Content, %
PID:	Photoionization detector measurement of headspace organic vapors
PL:	Plastic Limit, %
PPM:	Parts per million
or PPMv:	Parts per million by volume
SA:	Sieve analysis
XRF:	X-ray fluorescence measurement of total lead
WC:	Water content, as percent of dry weight
%-200:	Percent of material finer than #200 sieve

Appendix C

Subsurface Boring Logs and Sealing Records



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-1 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	ASPHALT FILL, sandstone, yellow SILTY SAND, dark brownish gray (SM)	FILL COARSE ALLUVIUM		M	MC						0.0
2	SANDSTONE, light tannish to yellow (SANDSTONE)	ST. PETER FORMATION		M	MC						0.0
3											
4											
5	SILTY SAND, dark brownish black (SM)	COARSE ALLUVIUM		M	MC						0.0
6	SANDSTONE, tannish yellow, moist (SANDSTONE)	ST. PETER FORMATION		▼	MC						0.0
7											
8											
9	SANDSTONE, tannish yellow, wet (SANDSTONE)			W	MC						0.0
10	SANDSTONE, grey to white, wet (SANDSTONE)			W	MCD						0.0
11											
12	LIMESTONE, gray, wet (LIMESTONE)			W	MCD						0.0
13											
14											
15				W	MCD						0.0
16	END OF BORING REFUSAL AT 16'										

AET_CORP GEOPROBE 02-02098.GPJ AET+OPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-16'	Geoprobe	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
		7/7/14		11'-16'				7'	
BORING COMPLETED: 7/7/14									
DR:	LG:	Rig:							



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-2 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS												
							WC	DEN	LL	PL	PID (ppm)								
1	ASPHALT	FILL																	
2	FILL, silty sand with some gravel, brown			M	MC														0.5
3	WEATHERED SANDSTONE, yellow and tan (SANDSTONE)	ST. PETER FORMATION		M	MC														0.1
4																			
5	MIXED ALLUVIUM	MIXED ALLUVIUM		M	MC														2.6
6																			
7				▼	MC														0.6
8	SANDSTONE, yellow, tan and gray (SANDSTONE)	ST. PETER FORMATION																	
9	SANDSTONE, yellow, tan and gray, wet (SANDSTONE)			W	MC														0.8
10	MIXED ALLUVIUM, wood, wet, some odor	MIXED ALLUVIUM																	
11				W	MCD														10.9
12																			
13	WEATHERED SANDSTONE, gray, wet (SANDSTONE)	ST. PETER FORMATION		W	MCD														2.3
14	ORGANIC RIVER DEPOSIT, dark brown																		
15				W	MCD														0.0
16	SAND AND ORGANIC RIVER DEPOSIT, brownish gray, some organic odor (SP)																		
17				W	MCD														0.0
18																			
19				W	MCD														0.0
20	END OF BORING																		

AET_CORP_GEOPROBE_02-02098.GPJ AET+OPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-20'	Geoprobe	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
		7/8/14		7'-12'				7'	
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-3 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS							
							WC	DEN	LL	PL	PID (ppm)			
1	ASPHALT AND CONCRETE	FILL												
2	WEATHERED SANDSTONE, with some rocks with layer of concrete, yellow (SANDSTONE)	ST. PETER FORMATION		M	MC									0.0
3	SILTY SAND WITH SOME PEBBLES, black (SM)	COARSE ALLUVIUM		M	MC									0.0
4	SILTY SAND WITH LIMESTONE, brown (SM)			M	MC									0.0
5	WEATHERED SANDSTONE, yellow, layer of black silty sand (SANDSTONE)	ST. PETER FORMATION		M	MC									0.5
6				M	MC									0.0
7														
8														
9	END OF BORING REFUSAL AT 9'													

AET_CORP GEOPROBE 02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-9'	Geoprobe			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/8/14									
DR: _____	LG: _____	Rig: _____							



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-4 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
	ASPHALT	FILL										
1	FILL, silty sand with some gravel, brown, some petroleum odor			M	MC							162.8
2	FILL, silty sand, brown and tan and dark brown with layers of dark gray bedrock, some petroleum odor			M	MC							100.3
3				M	MC							26.0
4				M	MC							
5				M	MC							
6	WEATHERED SANDSTONE, gray, moist, bedrock (SANDSTONE)	ST. PETER FORMATION		M	MC							25.2
7				M	MC							
8	WEATHERED SANDSTONE, gray, wet, bedrock (SANDSTONE)			W	MC							0.0
9				W	MC							
10	SILTY SAND, dark gray to black, wet (SM)	MIXED ALLUVIUM		W	MCD							8.4
11				W	MCD							
12	WEATHERED SANDSTONE, gray, wet (SANDSTONE)	ST. PETER FORMATION		W	MCD							17.2
13	RIVER SEDIMENT WITH SOME ORGANICS, dark gray, wet			W	MCD							
14	CLAY, dark gray, wet (CL)			W	MCD							9.4
15	WEATHERED SANDSTONE, gray, wet (SANDSTONE)	ST. PETER FORMATION		W	MCD							
16	CLAY, dark gray, wet (CL)			W	MCD							0.0
17	SWAMP DEPOSIT	MIXED ALLUVIUM OR SWAMP DEPOSIT		W	MCD							
18				W	MCD							0.0
19				W	MCD							
20	END OF BORING											

AET_CORP_GEOPROBE_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-20'	Geoprobe	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
				None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/7/14									
DR:	LG:	Rig:							



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-5 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	ASPHALT CONCRETE ASPHALT	FILL		M	MC						2.8
2	SILTY SAND WITH GLASS, black, layers of yellow weathered sandstone	ST. PETER FORMATION OR FILL									
3	SILTY SAND, tan, layer of black silty sand (SM)	COARSE ALLUVIUM		M	MC						10.5
4											
5				M	MC						0.1
6	SANDSTONE WITH SAND, yellowish brown, moist (SANDSTONE)	ST. PETER FORMATION		M	MC						0.0
7											
8											
9	SILTY SAND, dark brownish black, moist (SM)	COARSE ALLUVIUM		W	MC						0.1
10	SANDY SANDSTONE, yellow, wet (SANDSTONE)	ST. PETER FORMATION									
11	SANDY SANDSTONE, yellow, tan, orange, moist (SANDSTONE)			W	MC						0.0
12	NO RECOVERY										
13				W	MCD						
14	COLLUVIUM SILTY SAND WITH LIMESTONE, brown, wet (SM)	COARSE ALLUVIUM		W	MCD						0.0
15											
16	WEATHERED SANDSTONE, beige, moist (SANDSTONE)	ST. PETER FORMATION		W	MCD						0.0
17	WEATHERED SANDSTONE, yellow, wet (SANDSTONE)										
18	WEATHERED SANDSTONE, gray, wet (SANDSTONE)										
19				W	MCD						0.0
20	END OF BORING										

AET_CORP_GEOPROBE_02-02098.GPJ AET+OPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-20'	Geoprobe	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
				None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



GEOPROBE SUBSURFACE BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **B-6 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS								
							WC	DEN	LL	PL	PID (ppm)				
1	ASPHALT AND CONCRETE	FILL													
1	WEATHERED SANDSTONE, yellowish brown (SANDSTONE)	ST. PETER FORMATION		M	MC										0.0
2	SILTY SAND WITH LIMESTONE, some glass, dark brownish black (SM)	COARSE ALLUVIUM		M	MC										0.0
3															
4	WEATHERED SANDSTONE, tan, some yellow and brown, moist (SANDSTONE)	ST. PETER FORMATION		M	MC										0.1
5															
6															
7				M	MC										0.0
8															
9	WEATHERED SANDSTONE, tan, some yellow and brown, wet (SANDSTONE)			▼	MCD										0.0
10	END OF BORING REFUSAL AT 10'														

AET_CORP GEOPROBE 02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
0-10'	Geoprobe	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
		7/8/14		9'-10'					9'
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-1 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M	HAB						6.1
2	WEATHERED SANDSTONE, yellow, some solvent odor (SANDSTONE)	ST. PETER FORMATION		M	HAB						3.6
3				M	HAB						1.5
4				M	HAB						0.4
4	END OF BORING										

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
0-4'	Hand Auger			None	Taken	Refer To	"MC"		Column
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-2 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1 2 3	CONCRETE	FILL		M	HAB						0.0
	WEATHERED SANDSTONE, yellowish tan (SANDSTONE)	ST. PETER FORMATION		M	HAB						0.0
				M	HAB						0.1
3	END OF BORING REFUSAL AT 3'										

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
0-3'	Hand Auger			None	Taken	Refer To	"MC"		Column
BORING COMPLETED: 7/7/14									
DR: _____	LG: _____	Rig: _____							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-3 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
1	CONCRETE	FILL										
	WEATHERED SANDSTONE, yellowish tan (SANDSTONE)	ST. PETER FORMATION		M	HAB							0.0
2				M	HAB							0.1
	END OF BORING REFUSAL AT 2'											

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
0-2'	Hand Auger			None	Taken	Refer To	"MC"		Column
BORING COMPLETED: 7/7/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-4 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M							0.2
	WEATHERED SANDSTONE, yellow (SANDSTONE)	ST. PETER FORMATION		M							0.6
2	END OF BORING REFUSAL AT 2'										

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____	LG: _____	Rig: _____							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-5 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M	HAB						0.2
2	FILL, silty sand with some limestone, brown		M	HAB							0.2
3			M	HAB							0.1
4			M	HAB							0.1
4	END OF BORING										

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-4'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____ LG: _____ Rig: _____									



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-6 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M	HAB						0.3
2	FILL, silty sand with some rocks, brown		M	HAB							0.4
3			M	HAB							0.5
			M	HAB							0.2
END OF BORING REFUSAL AT 3½'											

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3½'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____ LG: _____ Rig: _____									



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-7 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1 2	CONCRETE	FILL		M	HAB						0.1
	SILTY SAND WITH SOME ROCKS, WOOD AND WEATHERED SANDSTONE, brown (SM)	ST. PETER FORMATION OR FILL		M	HAB						0.1
				M	HAB						0.1
END OF BORING REFUSAL AT 2½'											

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2½'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____	LG: _____	Rig: _____							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-8 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M	HAB						0.2
	FILL, poorly graded sand, a little silt, medium grained, pieces of brick, brown			M	HAB						0.2
	WEATHERED SANDSTONE, yellow (SANDSTONE)		ST. PETER FORMATION		M	HAB					0.2
3	FILL, sand with some silt, pieces of brick and some rocks, brown END OF BORING REFUSAL AT 3'	FILL									

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____ LG: _____ Rig: _____									



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-9 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
	CONCRETE	FILL		M	HAB						0.5
	FILL, silty sand, coarse grained, brown, some odor										
	END OF BORING REFUSAL AT .67'										

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-.67'	Hand Auger	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
				None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-10 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
	CONCRETE	FILL		M	HAB						0.0
	FILL, silty sand, coarse grained, brown										
	END OF BORING REFUSAL AT .67'										

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
0-.67'	Hand Auger			None	Taken	Refer To	"MC"		Column
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-11 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
	CONCRETE	FILL		M	HAB						0.0
	FILL, silty sand, coarse grained, brown										
	END OF BORING REFUSAL AT .67'										

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-.67'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-12 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
1 2	CONCRETE	FILL ST. PETER FORMATION										
	WEATHERED SANDSTONE, yellow (SANDSTONE)		M								0.2	
			M								0.1	
	END OF BORING REFUSAL AT 2¾'											

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-2¾'	Hand Auger	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
				None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-13 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
1	CONCRETE	FILL ST. PETER FORMATION			HAB							0.0
	WEATHERED SANDSTONE, yellow (SANDSTONE)											HAB
2	END OF BORING REFUSAL AT 2'											

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-2'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-14 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
1 2 3	CONCRETE	FILL ST. PETER FORMATION										
	WEATHERED SANDSTONE, yellow (SANDSTONE)		M	HAB							0.0	
			M	HAB							0.0	
			M	HAB							0.0	
	END OF BORING REFUSAL AT 3½'											

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3½'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-15 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
1	CONCRETE	FILL		M	HAB						0.0
2	WEATHERED SANDSTONE, yellow (SANDSTONE)	ST. PETER FORMATION		M	HAB						0.0
3				M	HAB						0.0
4	END OF BORING			M	HAB						0.0

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-4'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/8/14									
DR:	LG:	Rig:							



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-16 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
							WC	DEN	LL	PL	PID (ppm)
	CONCRETE	FILL		M	HAB						0.1
1	WEATHERED SANDSTONE, yellow (SANDSTONE)	ST. PETER FORMATION		M	HAB						0.2
2	SILTY SAND WITH SOME ROCKS, brown (SM)	COARSE ALLUVIUM		M	HAB						0.1
3	WEATHERED SANDSTONE, tannish yellow (SANDSTONE)	ST. PETER FORMATION		M	HAB						0.1
END OF BORING REFUSAL AT 3½'											

AET_CORP_02-02098.GPJ_AET+CPT+WELL.GDT_8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
0-3½'	Hand Auger			None	Taken	Refer To	"MC"	Column	
BORING COMPLETED: 7/9/14									
DR: _____ LG: _____ Rig: _____									



HAND AUGER BORING LOG

AET JOB NO: **02-02098**

LOG OF BORING NO. **HA-17 (p. 1 of 1)**

PROJECT: **Ramsey County Government Center; St. Paul, MN**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	PID (ppm)	
1	CONCRETE	FILL										
	WEATHERED SANDSTONE, yellow (SANDSTONE)	ST. PETER FORMATION		M	HAB							0.2
2	END OF BORING REFUSAL AT 2'			M	HAB							0.2

AET_CORP_02-02098.GPJ AET+CPT+WELL.GDT 8/7/14

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL		WATER LEVEL
0-2'	Hand Auger			None	Taken	Refer To	"MC"		Column
BORING COMPLETED: 7/9/14									
DR:	LG:	Rig:							

**MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING SEALING RECORD**
Minnesota Statutes, Chapter 103I

Minnesota Well and Boring Sealing No.
Minnesota Unique Well No. or W-series No.
(Leave blank if not known)

H: 316474

WELL OR BORING LOCATION
County Name
RAMSEY

Township Name: **—** Township No.: **28** Range No.: **22** Section No.: **6** Fraction (sm. → lg.): **NWSW NE** Date Sealed: **7/8/14** Date Well or Boring Constructed: **7/7/14**

GPS LOCATION: Latitude **44** degrees **56** minutes **35.03** seconds Longitude **93** degrees **05** minutes **43.02** seconds
Depth Before Sealing: **15'** ft. Original Depth: **15 1/2** ft.

Numerical Street Address or Fire Number and City of Well or Boring Location: **1214, So Kellogg Blvd W. ST PAUL, MN 55102**
Show exact location of well or boring in section grid with "X." Sketch map of well or boring location, showing property lines, roads, and buildings.
AQUIFER(S): Single Aquifer Multi-aquifer
WELL/BORING: Water-Supply Well Monit. Well Env. Bore Hole Other **TEMP Well**
STATIC WATER LEVEL: Measured Estimated Date Measured: **7/7/14**
CASING TYPE(S): Steel Plastic Tile Other
Well/Boring Depth: **8** ft. below above land surface

PROPERTY OWNER'S NAME/COMPANY NAME: **RAMSEY COUNTY PROPERTY MANAGEMENT**
Property owner's mailing address if different than well location address indicated above:
**121 7th Pl E
Ste 2200
St. Paul, MN 55101**
WELL OWNER'S NAME/COMPANY NAME: **RAMSEY COUNTY PROPERTY MANAGEMENT**
Well owner's mailing address if different than property owner's address indicated above:
**Attn:
James Homolka**
SCREEN/OPEN HOLE: Screen from **10** to **15** ft. Open Hole from _____ to _____ ft.
OBSTRUCTIONS: Rods/Drop Pipe Check Valve(s) Debris Fill No Obstruction
Type of Obstructions (Describe): **N/A**
Obstructions removed? Yes No Describe: _____

CASING(S): Diameter _____ in. from **0** to **15'** ft. Set in oversize hole? Yes No Annular space initially grouted? Yes No Unknown
_____ in. from _____ to _____ ft. Yes No Yes No Unknown
_____ in. from _____ to _____ ft. Yes No Yes No Unknown

WELL OWNER'S NAME/COMPANY NAME: **RAMSEY COUNTY PROPERTY MANAGEMENT**
Well owner's mailing address if different than property owner's address indicated above:
**Attn:
James Homolka**
SCREEN/OPEN HOLE: Screen from **10** to **15** ft. Open Hole from _____ to _____ ft.
OBSTRUCTIONS: Rods/Drop Pipe Check Valve(s) Debris Fill No Obstruction
Type of Obstructions (Describe): **N/A**
Obstructions removed? Yes No Describe: _____

GEOLOGICAL MATERIAL	COLOR	HARDNESS OR FORMATION	FROM	TO	PUMP
Fill silt/sand	Brown		0	6'	Type: N/A <input type="checkbox"/> Removed <input type="checkbox"/> Not Present <input type="checkbox"/> Other: _____
Mixed Alluvium	Grey		6	15.5'	
Weitzhard bedrock		St. Peter Sandstone			
					METHOD USED TO SEAL ANNULAR SPACE BETWEEN 2 CASINGS, OR CASING AND BORE HOLE: <input type="checkbox"/> No Annular Space Exists <input type="checkbox"/> Annular Space Grouted with Tremie Pipe <input type="checkbox"/> Casing Perforation/Removal _____ in. from _____ to _____ ft. <input type="checkbox"/> Perforated <input type="checkbox"/> Removed _____ in. from _____ to _____ ft. <input type="checkbox"/> Perforated <input type="checkbox"/> Removed Type of Perforator: N/A <input type="checkbox"/> Other
					GROUTING MATERIAL(S) (One bag of cement = 94 lbs., one bag of bentonite = 50 lbs.) Grouting Material: Bentonite from 0 to 15.5 ft. _____ yards 2 bags _____ from _____ to _____ ft. _____ yards _____ bags _____ from _____ to _____ ft. _____ yards _____ bags

REMARKS, SOURCE OF DATA, DIFFICULTIES IN SEALING: _____
Other unsealed and unused well or boring on property? Yes No How many? _____

LICENSED OR REGISTERED CONTRACTOR CERTIFICATION
This well or boring was sealed in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.
AET, INC Licensee Business Name License or Registration No. **1795**
Kathryn Jklata Certified Representative Signature Certified Rep. No. **996** Date **8-7-14**
Tomczyk Name of Person Sealing Well or Boring

MINN. DEPT. OF HEALTH COPY **H 316474**

Appendix D

Laboratory Analytical Reports and Chains-of-Custody



88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

July 18, 2014

Ms. Camilla Pederson
American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

REVIEWED

By Calista Timmerman at 1:50 pm, Aug 11, 2014

Work Order Number: 1403007
RE: 02-02098 Ramsey County-Loucks

Enclosed are the results of analyses for samples received by the laboratory on 07/10/14. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

All test results and QC meet requirements of the 2003 NELAC standard.

MDH (NELAP) Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

A handwritten signature in blue ink, appearing to read "Samantha Jaworski".

Samantha Jaworski
Organic Department Manager
sjaworski@legend-group.com

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HA-5 (3-4)	1403007-01	Soil	07/09/14 10:25	07/10/14 09:10
HA-10 (0-1)	1403007-02	Soil	07/09/14 11:45	07/10/14 09:10
HA-17 (1-2)	1403007-03	Soil	07/09/14 11:10	07/10/14 09:10
HA-1 (0-4)	1403007-04	Soil	07/09/14 12:25	07/10/14 09:10
HA-11 (0-1)	1403007-05	Soil	07/09/14 11:50	07/10/14 09:10
HA-8 (2-3)	1403007-06	Soil	07/09/14 11:30	07/10/14 09:10
HA-12 (2-2.75)	1403007-07	Soil	07/09/14 12:00	07/10/14 09:10
HA-9 (0-1)	1403007-08	Soil	07/09/14 11:35	07/10/14 09:10
HA-6 (2-3)	1403007-09	Soil	07/09/14 10:15	07/10/14 09:10
HA-4 (1-2)	1403007-10	Soil	07/09/14 10:00	07/10/14 09:10
HA-7 (0-1)	1403007-11	Soil	07/09/14 10:40	07/10/14 09:10
HA-16 (2-3)	1403007-12	Soil	07/09/14 11:00	07/10/14 09:10
HA-15 (3-4)	1403007-13	Soil	07/08/14 15:40	07/10/14 09:10
HA-13 (0-1)	1403007-14	Soil	07/08/14 16:05	07/10/14 09:10
HA-14 (1-2)	1403007-15	Soil	07/08/14 15:55	07/10/14 09:10
B-2 (8-12)	1403007-16	Soil	07/08/14 10:20	07/10/14 09:10
B-6 (8-10)	1403007-17	Soil	07/08/14 13:40	07/10/14 09:10
B-5 (0-4)	1403007-18	Soil	07/08/14 11:20	07/10/14 09:10
B-3 (4-8)	1403007-19	Soil	07/08/14 12:50	07/10/14 09:10
B-4 (0-4)	1403007-20	Soil	07/07/14 13:30	07/10/14 09:10
B-1 (4-8)	1403007-21	Soil	07/07/14 15:00	07/10/14 09:10
B-4 (16-20)	1403007-22	Soil	07/07/14 13:45	07/10/14 09:10
HA-3 (1-2)	1403007-23	Soil	07/07/14 12:30	07/10/14 09:10
HA-2 (2-3)	1403007-24	Soil	07/07/14 12:15	07/10/14 09:10
B-1	1403007-25	Water	07/07/14 15:15	07/10/14 09:10
B-2	1403007-26	Water	07/08/14 09:15	07/10/14 09:10
B-6	1403007-27	Water	07/08/14 13:50	07/10/14 09:10
Trip Blank Water	1403007-28	Water	07/07/14 00:00	07/10/14 09:10
Trip Blank Soil	1403007-29	Methanol	07/07/14 00:00	07/10/14 09:10

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

Shipping Container Information

Cooler 1	Temperature (°C): -0.3		
Received on ice: Yes	Temperature blank was present	Received on ice pack: No	
Received on melt water: No	Ambient: No	Acceptable (IH/ISO only): No	
Custody seals: No			
Cooler 2	Temperature (°C): 5.8		
Received on ice: Yes	Temperature blank was present	Received on ice pack: No	
Received on melt water: No	Ambient: No	Acceptable (IH/ISO only): No	
Custody seals: No			

Case Narrative:

The DRO surrogate recovery exceeded laboratory limits for Sample HA-9(0-1) due to matrix interferences and sample dilution required from high analyte concentration.

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
Diesel Range Organics	<6.3	6.3	1.0	mg/kg dry	1	B4G1103	07/11/14	07/11/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	78.1			70-130 %		"	"	"	"	
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
Diesel Range Organics	<6.2	6.2	1.0	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	82.3			70-130 %		"	"	"	"	
HA-17 (1-2) (1403007-03) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
Diesel Range Organics	<5.0	5.0	0.82	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	74.6			70-130 %		"	"	"	"	
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
Diesel Range Organics	140	6.7	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	80.0			70-130 %		"	"	"	"	
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
Diesel Range Organics	6.7	6.6	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	83.9			70-130 %		"	"	"	"	
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Diesel Range Organics	41	7.5	1.2	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	97.1			70-130 %		"	"	"	"	
HA-12 (2-2.75) (1403007-07) Soil Sampled: 07/09/14 12:00 Received: 07/10/14 9:10										
Diesel Range Organics	<6.3	6.3	1.0	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	83.2			70-130 %		"	"	"	"	
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Diesel Range Organics	470	33	5.3	mg/kg dry	5	B4G1103	07/11/14	07/12/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	138			70-130 %		"	"	"	"	S-04
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
Diesel Range Organics	<6.6	6.6	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	81.7			70-130 %		"	"	"	"	
HA-4 (1-2) (1403007-10) Soil Sampled: 07/09/14 10:00 Received: 07/10/14 9:10										
Diesel Range Organics	<6.5	6.5	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	84.8			70-130 %		"	"	"	"	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Diesel Range Organics	17	6.7	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	80.3			70-130 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-16 (2-3) (1403007-12) Soil Sampled: 07/09/14 11:00 Received: 07/10/14 9:10										
Diesel Range Organics	14	6.3	1.0	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	82.7			70-130 %		"	"	"	"	
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
Diesel Range Organics	<6.7	6.7	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacotane (C-30)	82.5			70-130 %		"	"	"	"	
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
Diesel Range Organics	10	7.0	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	91.7			70-130 %		"	"	"	"	
HA-14 (1-2) (1403007-15) Soil Sampled: 07/08/14 15:55 Received: 07/10/14 9:10										
Diesel Range Organics	<6.5	6.5	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacotane (C-30)	79.6			70-130 %		"	"	"	"	
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
Diesel Range Organics	24	7.0	1.1	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	M
Surrogate: Triacotane (C-30)	80.5			70-130 %		"	"	"	"	
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
Diesel Range Organics	<6.4	6.4	1.0	mg/kg dry	1	B4G1103	07/11/14	07/12/14	WI(95) DRO	
Surrogate: Triacotane (C-30)	90.6			70-130 %		"	"	"	"	
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
Diesel Range Organics	68	7.5	1.2	mg/kg dry	1	B4G1403	07/14/14	07/14/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	86.9			70-130 %		"	"	"	"	
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
Diesel Range Organics	120	14	2.2	mg/kg dry	2	B4G1403	07/14/14	07/14/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	105			70-130 %		"	"	"	"	
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Diesel Range Organics	38	13	2.1	mg/kg dry	2	B4G1403	07/14/14	07/15/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	97.8			70-130 %		"	"	"	"	
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
Diesel Range Organics	25	6.4	1.0	mg/kg dry	1	B4G1403	07/14/14	07/15/14	WI(95) DRO	L1
Surrogate: Triacotane (C-30)	91.7			70-130 %		"	"	"	"	
B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
Diesel Range Organics	<9.4	9.4	1.5	mg/kg dry	1	B4G1403	07/14/14	07/14/14	WI(95) DRO	
Surrogate: Triacotane (C-30)	87.8			70-130 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
Diesel Range Organics	<6.9	6.9	1.1	mg/kg dry	1	B4G1403	07/14/14	07/14/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	97.4			70-130 %		"	"	"	"	
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
Diesel Range Organics	<7.0	7.0	1.1	mg/kg dry	1	B4G1403	07/14/14	07/14/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	88.0			70-130 %		"	"	"	"	
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Diesel Range Organics	170	120	25	ug/L	1	B4G1102	07/11/14	07/15/14	WI(95) DRO	L1, PH2
Surrogate: Triacontane (C-30)	97.2			70-130 %		"	"	"	"	
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
Diesel Range Organics	230	110	22	ug/L	1	B4G1102	07/11/14	07/15/14	WI(95) DRO	L1, PH2
Surrogate: Triacontane (C-30)	106			70-130 %		"	"	"	"	
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
Diesel Range Organics	590	110	22	ug/L	1	B4G1102	07/11/14	07/15/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	91.3			70-130 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
Gasoline range organics	<4.9	4.9	0.53	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.0			80-150 %		"	"	"	"	
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
Gasoline range organics	<5.3	5.3	0.57	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.5			80-150 %		"	"	"	"	
HA-17 (1-2) (1403007-03) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
Gasoline range organics	<5.1	5.1	0.55	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.8			80-150 %		"	"	"	"	
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
Gasoline range organics	<4.8	4.8	0.52	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.8			80-150 %		"	"	"	"	
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
Gasoline range organics	<4.9	4.9	0.53	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.0			80-150 %		"	"	"	"	
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Gasoline range organics	<5.3	5.3	0.57	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.1			80-150 %		"	"	"	"	
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Gasoline range organics	<5.2	5.2	0.56	mg/kg dry	1	B4G1013	07/10/14	07/11/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.5			80-150 %		"	"	"	"	
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
Gasoline range organics	<5.2	5.2	0.56	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.3			80-150 %		"	"	"	"	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Gasoline range organics	<5.3	5.3	0.57	mg/kg dry	1	B4G1013	07/10/14	07/10/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.5			80-150 %		"	"	"	"	
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
Gasoline range organics	<4.7	4.7	0.51	mg/kg dry	1	B4G1013	07/10/14	07/11/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.5			80-150 %		"	"	"	"	
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
Gasoline range organics	43	6.8	0.73	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	H
Surrogate: 4-Fluorochlorobenzene	95.8			80-150 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
Gasoline range organics	<5.6	5.6	0.61	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.9			80-150 %		"	"	"	"	
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
Gasoline range organics	5.8	5.4	0.59	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	96.4			80-150 %		"	"	"	"	
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
Gasoline range organics	<5.5	5.5	0.59	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.9			80-150 %		"	"	"	"	
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Gasoline range organics	<5.2	5.2	0.56	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.9			80-150 %		"	"	"	"	
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
Gasoline range organics	<5.6	5.6	0.61	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.0			80-150 %		"	"	"	"	
B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
Gasoline range organics	<6.9	6.9	0.75	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.1			80-150 %		"	"	"	"	
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
Gasoline range organics	<5.2	5.2	0.56	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	94.0			80-150 %		"	"	"	"	
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
Gasoline range organics	<5.4	5.4	0.58	mg/kg dry	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.8			80-150 %		"	"	"	"	
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Gasoline range organics	<100	100	14	ug/L	1	B4G1105	07/11/14	07/12/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	96.4			80-150 %		"	"	"	"	
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
Gasoline range organics	<100	100	14	ug/L	1	B4G1105	07/11/14	07/12/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	95.3			80-150 %		"	"	"	"	
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
Gasoline range organics	<100	100	14	ug/L	1	B4G1105	07/11/14	07/12/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	96.0			80-150 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Water (1403007-28) Water Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
Gasoline range organics	<100	100	14	ug/L	1	B4G1105	07/11/14	07/11/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.7			80-150 %		"	"	"	"	
Trip Blank Soil (1403007-29) Methanol Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
Gasoline range organics	<5.0	5.0	0.54	mg/kg wet	1	B4G1406	07/14/14	07/14/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.3			80-150 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DISSOLVED METAL ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Arsenic	<0.010	0.010	0.0014	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Barium	0.29	0.020	0.0021	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00015	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00015	mg/L	1	"	"	"	"	"
Lead	<0.0030	0.0030	0.00058	mg/L	1	"	"	07/17/14	"	"
Mercury	<0.00020	0.00020	0.000052	mg/L	1	B4G1407	07/14/14	07/18/14	EPA 7470A (Dissolved)	
Selenium	<0.020	0.020	0.0040	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Silver	<0.0050	0.0050	0.00031	mg/L	1	"	"	"	"	"
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
Arsenic	<0.010	0.010	0.0014	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Barium	0.053	0.020	0.0021	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00015	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00015	mg/L	1	"	"	"	"	"
Lead	<0.0030	0.0030	0.00058	mg/L	1	"	"	07/17/14	"	"
Mercury	<0.00020	0.00020	0.000052	mg/L	1	B4G1407	07/14/14	07/18/14	EPA 7470A (Dissolved)	
Selenium	<0.020	0.020	0.0040	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Silver	<0.0050	0.0050	0.00031	mg/L	1	"	"	"	"	"
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
Arsenic	<0.010	0.010	0.0014	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Barium	0.15	0.020	0.0021	mg/L	1	"	"	"	"	"
Cadmium	<0.0010	0.0010	0.00015	mg/L	1	"	"	"	"	"
Chromium	<0.010	0.010	0.00015	mg/L	1	"	"	"	"	"
Lead	<0.0030	0.0030	0.00058	mg/L	1	"	"	07/17/14	"	"
Mercury	<0.00020	0.00020	0.000052	mg/L	1	B4G1407	07/14/14	07/18/14	EPA 7470A (Dissolved)	
Selenium	<0.020	0.020	0.0040	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Silver	<0.0050	0.0050	0.00031	mg/L	1	"	"	"	"	"

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
Arsenic	1.7	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	29	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	11	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	2.9	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.028	mg/kg dry	1	"	"	"	"	
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
Arsenic	1.1	0.53	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	25	1.1	0.059	mg/kg dry	1	"	"	"	"	
Cadmium	<0.27	0.27	0.035	mg/kg dry	1	"	"	"	"	
Chromium	9.5	0.53	0.14	mg/kg dry	1	"	"	"	"	
Lead	2.8	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	<0.11	0.11	0.028	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	1.1	0.27	0.029	mg/kg dry	1	"	"	"	"	
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
Arsenic	<0.52	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	4.6	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	1.1	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	2.1	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.028	mg/kg dry	1	"	"	"	"	
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
Arsenic	1.0	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	25	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	7.7	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	2.6	1.0	0.15	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	1.9	0.26	0.029	mg/kg dry	1	"	"	"	"	
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Arsenic	2.4	0.53	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Barium	32	1.1	0.059	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Cadmium	<0.27	0.27	0.035	mg/kg dry	1	"	"	"	"	
Chromium	9.3	0.53	0.14	mg/kg dry	1	"	"	"	"	
Lead	4.1	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	<0.11	0.11	0.028	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.27	0.27	0.029	mg/kg dry	1	"	"	"	"	
HA-12 (2-2.75) (1403007-07) Soil Sampled: 07/09/14 12:00 Received: 07/10/14 9:10										
Arsenic	<0.51	0.51	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	5.0	1.0	0.056	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	2.1	0.51	0.14	mg/kg dry	1	"	"	"	"	
Lead	5.6	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.028	mg/kg dry	1	"	"	"	"	
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Arsenic	1.1	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	49	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	8.6	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	2.2	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	0.41	0.26	0.028	mg/kg dry	1	"	"	"	"	
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
Arsenic	2.0	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	36	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	14	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	4.4	1.0	0.15	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.029	mg/kg dry	1	"	"	"	"	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Arsenic	2.2	0.53	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	27	1.1	0.059	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Cadmium	<0.27	0.27	0.035	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Chromium	8.6	0.53	0.14	mg/kg dry	1	"	"	"	"	
Lead	30	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	0.23	0.11	0.028	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.27	0.27	0.029	mg/kg dry	1	"	"	"	"	
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
Arsenic	1.6	0.68	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	21	1.4	0.074	mg/kg dry	1	"	"	"	"	
Cadmium	<0.34	0.34	0.045	mg/kg dry	1	"	"	"	"	
Chromium	5.8	0.68	0.18	mg/kg dry	1	"	"	"	"	
Lead	36	1.4	0.19	mg/kg dry	1	"	"	"	"	
Mercury	0.88	0.14	0.035	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.4	1.4	0.22	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	14	0.34	0.037	mg/kg dry	1	"	"	"	"	
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
Arsenic	5.8	0.54	0.14	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	32	1.1	0.060	mg/kg dry	1	"	"	"	"	
Cadmium	<0.27	0.27	0.036	mg/kg dry	1	"	"	"	"	
Chromium	7.5	0.54	0.15	mg/kg dry	1	"	"	"	"	
Lead	72	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	1.4	0.22	0.057	mg/kg dry	2	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.27	0.27	0.030	mg/kg dry	1	"	"	"	"	
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
Arsenic	2.0	0.55	0.14	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	46	1.1	0.060	mg/kg dry	1	"	"	"	"	
Cadmium	<0.27	0.27	0.036	mg/kg dry	1	"	"	"	"	
Chromium	6.3	0.55	0.15	mg/kg dry	1	"	"	"	"	
Lead	110	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	1.7	0.22	0.057	mg/kg dry	2	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	0.57	0.27	0.030	mg/kg dry	1	"	"	"	"	
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Arsenic	2.5	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	22	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Chromium	8.0	0.52	0.14	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Lead	21	1.0	0.15	mg/kg dry	1	"	"	"	"	
Mercury	0.16	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.029	mg/kg dry	1	"	"	"	"	
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
Arsenic	0.92	0.56	0.14	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	9.0	1.1	0.062	mg/kg dry	1	"	"	"	"	
Cadmium	<0.28	0.28	0.037	mg/kg dry	1	"	"	"	"	
Chromium	5.6	0.56	0.15	mg/kg dry	1	"	"	"	"	
Lead	14	1.1	0.16	mg/kg dry	1	"	"	"	"	
Mercury	0.12	0.11	0.029	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.19	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.28	0.28	0.031	mg/kg dry	1	"	"	"	"	
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
Arsenic	<0.52	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	2.3	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	1.2	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	1.7	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.028	mg/kg dry	1	"	"	"	"	
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
Arsenic	<0.54	0.54	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	3.5	1.1	0.059	mg/kg dry	1	"	"	"	"	
Cadmium	<0.27	0.27	0.035	mg/kg dry	1	"	"	"	"	
Chromium	1.7	0.54	0.14	mg/kg dry	1	"	"	"	"	
Lead	3.1	1.1	0.15	mg/kg dry	1	"	"	"	"	
Mercury	<0.11	0.11	0.028	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.1	1.1	0.18	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.27	0.27	0.030	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PCB 8082A
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
Aroclor 1016	<0.21	0.21	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.21	0.21	0.031	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.21	0.21	0.025	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	89.5			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	88.5			60.9-138 %		"	"	"	"	
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Aroclor 1016	<0.21	0.21	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.21	0.21	0.031	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.21	0.21	0.025	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	116			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	82.0			60.9-138 %		"	"	"	"	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Aroclor 1016	<0.21	0.21	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.21	0.21	0.032	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.21	0.21	0.026	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	97.0			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	88.0			60.9-138 %		"	"	"	"	
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
Aroclor 1016	<0.20	0.20	0.017	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.20	0.20	0.020	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.20	0.20	0.030	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.20	0.20	0.020	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.20	0.20	0.022	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.20	0.20	0.024	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.20	0.20	0.022	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	86.5			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	85.0			60.9-138 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PCB 8082A
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
Aroclor 1016	<0.22	0.22	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.22	0.22	0.022	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.22	0.22	0.033	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.22	0.22	0.022	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.22	0.22	0.024	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.22	0.22	0.026	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.22	0.22	0.024	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	93.0			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	89.5			60.9-138 %		"	"	"	"	

B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Aroclor 1016	<0.21	0.21	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.21	0.21	0.031	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.21	0.21	0.025	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	88.0			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	90.0			60.9-138 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
% Solids	97			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
% Solids	94			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-17 (1-2) (1403007-03) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
% Solids	99			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
% Solids	97			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
% Solids	96			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
% Solids	94			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-12 (2-2.75) (1403007-07) Soil Sampled: 07/09/14 12:00 Received: 07/10/14 9:10										
% Solids	98			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
% Solids	97			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
% Solids	96			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-4 (1-2) (1403007-10) Soil Sampled: 07/09/14 10:00 Received: 07/10/14 9:10										
% Solids	93			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
% Solids	94			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-16 (2-3) (1403007-12) Soil Sampled: 07/09/14 11:00 Received: 07/10/14 9:10										
% Solids	92			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
% Solids	99			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
% Solids	98			%	1	B4G1711	07/17/14	07/17/14	% calculation	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-14 (1-2) (1403007-15) Soil Sampled: 07/08/14 15:55 Received: 07/10/14 9:10										
% Solids	99			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
% Solids	74			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
% Solids	89			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
% Solids	92			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
% Solids	91			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
% Solids	96			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
% Solids	89			%	1	B4G1711	07/17/14	07/17/14	% calculation	
B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
% Solids	72			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
% Solids	97			%	1	B4G1711	07/17/14	07/17/14	% calculation	
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
% Solids	93			%	1	B4G1711	07/17/14	07/17/14	% calculation	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.077	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.69	0.69	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.69	0.69	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.6	1.6	0.46	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.69	0.69	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.69	0.69	0.069	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.69	0.69	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Aniline	<0.69	0.69	0.068	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.45	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.072	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Phenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	92.5			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	79.4			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	64.3			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	74.1			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	75.4			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	79.1			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.35	0.35	0.080	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.35	0.35	0.062	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.71	0.71	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.71	0.71	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.48	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.71	0.71	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.71	0.71	0.071	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.71	0.71	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Aniline	<0.71	0.71	0.070	mg/kg dry	1	"	"	"	"	
Anthracene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.47	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-10 (0-1) (1403007-02) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.35	0.35	0.074	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.35	0.35	0.086	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
Carbazole	<0.35	0.35	0.081	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.35	0.35	0.084	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.35	0.35	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
Fluorene	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.35	0.35	0.066	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
Isophorone	<0.35	0.35	0.081	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.35	0.35	0.078	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.35	0.35	0.070	mg/kg dry	1	"	"	"	"	
Phenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	84.1			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	71.1			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	60.1			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	65.2			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	67.1			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	75.2			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.077	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.69	0.69	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.69	0.69	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.6	1.6	0.46	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.69	0.69	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.69	0.69	0.069	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.69	0.69	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Aniline	<0.69	0.69	0.068	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.45	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.072	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Phenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	82.0			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	82.0			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	59.4			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	72.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	76.2			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	78.9			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.078	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.70	0.70	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.70	0.70	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.47	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.70	0.70	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.70	0.70	0.070	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.70	0.70	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Aniline	<0.70	0.70	0.069	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.46	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.073	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.076	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Phenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	90.7			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	70.5			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	59.8			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	65.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	67.6			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	79.0			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.35	0.35	0.080	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.35	0.35	0.062	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.71	0.71	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.71	0.71	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.48	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.71	0.71	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.71	0.71	0.071	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.71	0.71	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	0.96	0.35	0.067	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Aniline	<0.71	0.71	0.070	mg/kg dry	1	"	"	"	"	
Anthracene	1.8	0.35	0.073	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.47	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	3.0	0.35	0.069	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	2.5	0.35	0.074	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	3.2	0.35	0.063	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	1.5	0.35	0.076	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	1.2	0.35	0.074	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.35	0.35	0.086	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
Carbazole	1.2	0.35	0.081	mg/kg dry	1	"	"	"	"	T-1
Chrysene	3.4	0.35	0.068	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	0.38	0.35	0.087	mg/kg dry	1	"	"	"	"	
Dibenzofuran	0.82	0.35	0.072	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.35	0.35	0.084	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.35	0.35	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	6.7	0.35	0.072	mg/kg dry	1	"	"	"	"	
Fluorene	0.89	0.35	0.069	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.35	0.35	0.066	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	1.5	0.35	0.077	mg/kg dry	1	"	"	"	"	
Isophorone	<0.35	0.35	0.081	mg/kg dry	1	"	"	"	"	
Naphthalene	0.47	0.35	0.076	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.35	0.35	0.078	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	8.6	0.35	0.070	mg/kg dry	1	"	"	"	"	
Phenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	6.5	0.35	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	97.6			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	81.5			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	67.2			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	73.3			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	76.4			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	85.9			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.077	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.69	0.69	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	5.5	0.34	0.082	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.69	0.69	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.6	1.6	0.46	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.69	0.69	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.69	0.69	0.069	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.69	0.69	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	14	6.8	1.3	mg/kg dry	20	"	"	07/16/14	"	
Acenaphthylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	07/15/14	"	
Aniline	<0.69	0.69	0.068	mg/kg dry	1	"	"	"	"	
Anthracene	18	6.8	1.4	mg/kg dry	20	"	"	07/16/14	"	
Benzidine	<2.6	2.6	0.45	mg/kg dry	1	"	"	07/15/14	"	
Benzo(a)anthracene	24	6.8	1.3	mg/kg dry	20	"	"	07/16/14	"	
Benzo(a)pyrene	20	6.8	1.4	mg/kg dry	20	"	"	"	"	
Benzo(b)fluoranthene	20	6.8	1.2	mg/kg dry	20	"	"	"	"	
Benzo(g,h,i)perylene	7.1	0.34	0.073	mg/kg dry	1	"	"	07/15/14	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	5.4	0.34	0.072	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	5.4	0.34	0.078	mg/kg dry	1	"	"	"	"	T-1
Chrysene	25	6.8	1.3	mg/kg dry	20	"	"	07/16/14	"	
Dibenz(a,h)anthracene	2.4	0.34	0.085	mg/kg dry	1	"	"	07/15/14	"	
Dibenzofuran	4.1	0.34	0.070	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	48	6.8	1.4	mg/kg dry	20	"	"	07/16/14	"	
Fluorene	9.6	0.34	0.067	mg/kg dry	1	"	"	07/15/14	"	
Hexachlorobenzene	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	7.9	0.34	0.074	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	
Naphthalene	7.5	0.34	0.073	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	87	6.8	1.4	mg/kg dry	20	"	"	07/16/14	"	
Phenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	07/15/14	"	
Pyrene	58	6.8	1.2	mg/kg dry	20	"	"	07/16/14	"	
Surrogate: 2,4,6-Tribromophenol	91.0			53-107 %		"	"	07/15/14	"	
Surrogate: 2-Fluorobiphenyl	80.5			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	63.3			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	73.5			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	75.6			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	83.3			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.078	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.70	0.70	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.70	0.70	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.47	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.70	0.70	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.70	0.70	0.070	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.70	0.70	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Aniline	<0.70	0.70	0.069	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.46	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.073	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.076	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Phenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	88.3			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	73.1			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	59.9			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	67.8			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	69.4			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	79.4			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.35	0.35	0.080	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.35	0.35	0.062	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.71	0.71	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.71	0.71	0.076	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.71	0.71	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.71	0.71	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.71	0.71	0.087	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.48	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.71	0.71	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.71	0.71	0.071	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.71	0.71	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Aniline	<0.71	0.71	0.070	mg/kg dry	1	"	"	"	"	
Anthracene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.47	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.35	0.35	0.074	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.71	0.71	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.35	0.35	0.086	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
Carbazole	<0.35	0.35	0.081	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.35	0.35	0.084	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.35	0.35	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
Fluorene	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.35	0.35	0.066	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
Isophorone	<0.35	0.35	0.081	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.35	0.35	0.078	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.71	0.71	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.35	0.35	0.070	mg/kg dry	1	"	"	"	"	
Phenol	<0.71	0.71	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	88.1			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	74.2			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	59.5			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	64.8			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	70.9			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	78.3			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.077	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.059	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.68	0.68	0.19	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.68	0.68	0.072	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.68	0.68	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.68	0.68	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.68	0.68	0.13	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.68	0.68	0.072	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.68	0.68	0.13	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.68	0.68	0.15	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.68	0.68	0.084	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.68	0.68	0.18	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.68	0.68	0.084	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.6	1.6	0.46	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.68	0.68	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.68	0.68	0.14	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.68	0.68	0.068	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.68	0.68	0.17	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Aniline	<0.68	0.68	0.067	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.45	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.071	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.68	0.68	0.15	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.063	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.68	0.68	0.19	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Phenol	<0.68	0.68	0.14	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	86.4			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	67.7			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	48.8			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	56.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	60.3			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	76.2			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.45	0.45	0.10	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.45	0.45	0.091	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.45	0.45	0.078	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.91	0.91	0.26	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.91	0.91	0.096	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.91	0.91	0.22	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.91	0.91	0.20	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.91	0.91	0.18	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.91	0.91	0.096	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.91	0.91	0.18	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.45	0.45	0.10	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.91	0.91	0.20	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.91	0.91	0.11	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.91	0.91	0.24	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.91	0.91	0.11	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<2.2	2.2	0.61	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.45	0.45	0.097	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.91	0.91	0.15	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.91	0.91	0.19	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.91	0.91	0.091	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.91	0.91	0.23	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.45	0.45	0.085	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.45	0.45	0.096	mg/kg dry	1	"	"	"	"	
Aniline	<0.91	0.91	0.089	mg/kg dry	1	"	"	"	"	
Anthracene	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
Benzidine	<3.4	3.4	0.59	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.45	0.45	0.088	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.45	0.45	0.095	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.45	0.45	0.080	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.45	0.45	0.096	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.45	0.45	0.095	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.45	0.45	0.086	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.91	0.91	0.20	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.45	0.45	0.10	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Carbazole	<0.45	0.45	0.10	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.45	0.45	0.086	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.45	0.45	0.085	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.45	0.45	0.14	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.45	0.45	0.092	mg/kg dry	1	"	"	"	"	
Fluorene	<0.45	0.45	0.088	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.45	0.45	0.084	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.45	0.45	0.10	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.45	0.45	0.093	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.45	0.45	0.097	mg/kg dry	1	"	"	"	"	
Isophorone	<0.45	0.45	0.10	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.45	0.45	0.096	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.45	0.45	0.11	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.45	0.45	0.095	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.45	0.45	0.099	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.45	0.45	0.091	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.91	0.91	0.26	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.45	0.45	0.089	mg/kg dry	1	"	"	"	"	
Phenol	<0.91	0.91	0.19	mg/kg dry	1	"	"	"	"	
Pyrene	<0.45	0.45	0.080	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	87.4			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	66.2			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	61.2			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	61.1			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	67.0			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	67.9			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.36	0.36	0.082	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.36	0.36	0.073	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.36	0.36	0.063	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.73	0.73	0.21	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.73	0.73	0.077	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.73	0.73	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.73	0.73	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.73	0.73	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.73	0.73	0.077	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.73	0.73	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.36	0.36	0.084	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.73	0.73	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.36	0.36	0.087	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.73	0.73	0.089	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.73	0.73	0.20	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.73	0.73	0.089	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.49	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.36	0.36	0.078	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.73	0.73	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.73	0.73	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.73	0.73	0.073	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.36	0.36	0.090	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.73	0.73	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.068	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.077	mg/kg dry	1	"	"	"	"	
Aniline	<0.73	0.73	0.072	mg/kg dry	1	"	"	"	"	
Anthracene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.48	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.36	0.36	0.071	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.36	0.36	0.064	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.36	0.36	0.077	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.36	0.36	0.076	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.36	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.73	0.73	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.36	0.36	0.084	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.36	0.36	0.085	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.36	0.36	0.088	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.36	0.36	0.090	mg/kg dry	1	"	"	"	"	
Carbazole	<0.36	0.36	0.083	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.36	0.36	0.070	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.089	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.36	0.36	0.068	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.36	0.36	0.086	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.36	0.36	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
Fluorene	<0.36	0.36	0.071	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.36	0.36	0.067	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.36	0.36	0.084	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.36	0.36	0.089	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.36	0.36	0.078	mg/kg dry	1	"	"	"	"	
Isophorone	<0.36	0.36	0.083	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.077	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.36	0.36	0.087	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.36	0.36	0.079	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.36	0.36	0.073	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.73	0.73	0.21	mg/kg dry	1	"	"	"	"	
Phenanthrene	0.37	0.36	0.072	mg/kg dry	1	"	"	"	"	
Phenol	<0.73	0.73	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.36	0.36	0.064	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	72.2			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	64.2			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	41.3			42.5-94.9 %		"	"	"	"	S-GC
Surrogate: Nitrobenzene-d5	51.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	52.9			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	65.1			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.36	0.36	0.082	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.36	0.36	0.064	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.74	0.74	0.21	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.74	0.74	0.078	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.74	0.74	0.18	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.74	0.74	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.74	0.74	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.74	0.74	0.078	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.74	0.74	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.36	0.36	0.085	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.74	0.74	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.36	0.36	0.088	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.74	0.74	0.090	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.74	0.74	0.20	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.74	0.74	0.090	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.8	1.8	0.49	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.36	0.36	0.079	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.74	0.74	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.74	0.74	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.74	0.74	0.074	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.36	0.36	0.091	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.74	0.74	0.19	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.36	0.36	0.069	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.36	0.36	0.078	mg/kg dry	1	"	"	"	"	
Aniline	<0.74	0.74	0.073	mg/kg dry	1	"	"	"	"	
Anthracene	0.77	0.36	0.076	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.48	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	1.6	0.36	0.071	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	1.5	0.36	0.077	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	1.8	0.36	0.065	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	0.67	0.36	0.078	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	0.73	0.36	0.077	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.36	0.36	0.070	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.74	0.74	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.36	0.36	0.085	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.36	0.36	0.086	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.36	0.36	0.089	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.36	0.36	0.091	mg/kg dry	1	"	"	"	"	
Carbazole	0.36	0.36	0.084	mg/kg dry	1	"	"	"	"	T-1
Chrysene	1.5	0.36	0.070	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.36	0.36	0.090	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.36	0.36	0.075	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.36	0.36	0.069	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.36	0.36	0.087	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.36	0.36	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	3.3	0.36	0.075	mg/kg dry	1	"	"	"	"	
Fluorene	<0.36	0.36	0.071	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.36	0.36	0.068	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.36	0.36	0.085	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.36	0.36	0.076	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.36	0.36	0.090	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.81	0.36	0.079	mg/kg dry	1	"	"	"	"	
Isophorone	<0.36	0.36	0.084	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.36	0.36	0.078	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.36	0.36	0.088	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.36	0.36	0.077	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.36	0.36	0.080	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.36	0.36	0.074	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.74	0.74	0.21	mg/kg dry	1	"	"	"	"	
Phenanthrene	3.0	0.36	0.073	mg/kg dry	1	"	"	"	"	
Phenol	<0.74	0.74	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	2.8	0.36	0.065	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	91.3			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	76.8			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	66.3			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	65.7			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	72.7			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	68.2			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.078	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.70	0.70	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.70	0.70	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.47	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.70	0.70	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.70	0.70	0.070	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.70	0.70	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Aniline	<0.70	0.70	0.069	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.46	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.073	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.076	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Phenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	84.2			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	69.6			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	54.1			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	51.2			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	65.7			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	65.9			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.37	0.37	0.084	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
1,2-Dichlorobenzene	<0.37	0.37	0.075	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.37	0.37	0.065	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.75	0.75	0.21	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.75	0.75	0.080	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.75	0.75	0.18	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.75	0.75	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.75	0.75	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.75	0.75	0.080	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.75	0.75	0.15	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.37	0.37	0.087	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.75	0.75	0.17	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.37	0.37	0.090	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.75	0.75	0.092	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.75	0.75	0.20	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.75	0.75	0.092	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.8	1.8	0.51	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.37	0.37	0.081	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.75	0.75	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.75	0.75	0.16	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.75	0.75	0.075	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.37	0.37	0.093	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.75	0.75	0.19	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.37	0.37	0.071	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.37	0.37	0.080	mg/kg dry	1	"	"	"	"	
Aniline	<0.75	0.75	0.074	mg/kg dry	1	"	"	"	"	
Anthracene	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
Benzidine	<2.8	2.8	0.49	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.37	0.37	0.073	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.37	0.37	0.079	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.37	0.37	0.080	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.37	0.37	0.079	mg/kg dry	1	B4G1502	07/15/14	07/15/14	EPA 8270D	
Benzoic acid	<0.37	0.37	0.072	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.75	0.75	0.17	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.37	0.37	0.087	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.37	0.37	0.088	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.37	0.37	0.091	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.37	0.37	0.093	mg/kg dry	1	"	"	"	"	
Carbazole	<0.37	0.37	0.085	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.37	0.37	0.072	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.37	0.37	0.092	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.37	0.37	0.071	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.37	0.37	0.089	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.37	0.37	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.37	0.37	0.076	mg/kg dry	1	"	"	"	"	
Fluorene	<0.37	0.37	0.073	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.37	0.37	0.070	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.37	0.37	0.087	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.37	0.37	0.078	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.37	0.37	0.092	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.37	0.37	0.081	mg/kg dry	1	"	"	"	"	
Isophorone	<0.37	0.37	0.085	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.37	0.37	0.080	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.37	0.37	0.090	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.37	0.37	0.079	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.37	0.37	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.37	0.37	0.075	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.75	0.75	0.21	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.37	0.37	0.074	mg/kg dry	1	"	"	"	"	
Phenol	<0.75	0.75	0.16	mg/kg dry	1	"	"	"	"	
Pyrene	<0.37	0.37	0.066	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	83.9			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	74.0			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	68.9			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	65.8			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	72.1			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	66.5			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.34	0.34	0.077	mg/kg dry	1	B4G1502	07/15/14	07/16/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.69	0.69	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.69	0.69	0.073	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.69	0.69	0.13	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.69	0.69	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.69	0.69	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.6	1.6	0.46	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.69	0.69	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.69	0.69	0.069	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.69	0.69	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Aniline	<0.69	0.69	0.068	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.45	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.34	0.34	0.072	mg/kg dry	1	B4G1502	07/15/14	07/16/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.69	0.69	0.15	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.064	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.078	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.69	0.69	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Phenol	<0.69	0.69	0.14	mg/kg dry	1	"	"	"	"	
Pyrene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	83.6			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	68.1			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	68.5			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	65.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	67.3			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	71.0			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<0.35	0.35	0.081	mg/kg dry	1	B4G1502	07/15/14	07/16/14	EPA 8270D	
1,2-Dichlorobenzene	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.35	0.35	0.062	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.72	0.72	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.72	0.72	0.076	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.72	0.72	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.72	0.72	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.72	0.72	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.72	0.72	0.076	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.72	0.72	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.72	0.72	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.35	0.35	0.086	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.72	0.72	0.088	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.72	0.72	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.72	0.72	0.088	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.48	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.72	0.72	0.12	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.72	0.72	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.72	0.72	0.072	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.35	0.35	0.089	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.72	0.72	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Aniline	<0.72	0.72	0.071	mg/kg dry	1	"	"	"	"	
Anthracene	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Benzidine	<2.7	2.7	0.47	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.35	0.35	0.070	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.35	0.35	0.075	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<0.35	0.35	0.075	mg/kg dry	1	B4G1502	07/15/14	07/16/14	EPA 8270D	
Benzoic acid	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.72	0.72	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.35	0.35	0.084	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.35	0.35	0.087	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.35	0.35	0.089	mg/kg dry	1	"	"	"	"	
Carbazole	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.35	0.35	0.069	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.35	0.35	0.068	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.35	0.35	0.085	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.35	0.35	0.11	mg/kg dry	1	"	"	"	"	
Fluoranthene	<0.35	0.35	0.073	mg/kg dry	1	"	"	"	"	
Fluorene	<0.35	0.35	0.070	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.35	0.35	0.067	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.35	0.35	0.083	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.35	0.35	0.074	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.35	0.35	0.088	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.35	0.35	0.077	mg/kg dry	1	"	"	"	"	
Isophorone	<0.35	0.35	0.082	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.35	0.35	0.076	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.35	0.35	0.086	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.35	0.35	0.075	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.35	0.35	0.078	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.35	0.35	0.072	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.72	0.72	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.35	0.35	0.071	mg/kg dry	1	"	"	"	"	
Phenol	<0.72	0.72	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	<0.35	0.35	0.063	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	74.1			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	52.4			53.9-97.9 %		"	"	"	"	S-GC
Surrogate: 2-Fluorophenol	51.5			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	49.5			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	51.8			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	65.2			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<15	15	0.82	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
1,2-Dichlorobenzene	<15	15	0.80	ug/L	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<15	15	1.4	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<15	15	0.68	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<15	15	0.46	ug/L	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<15	15	2.6	ug/L	1	"	"	"	"	
2,4,5-Trichlorophenol	<15	15	2.2	ug/L	1	"	"	"	"	
2,4,6-Trichlorophenol	<15	15	1.8	ug/L	1	"	"	"	"	
2,4-Dichlorophenol	<15	15	1.7	ug/L	1	"	"	"	"	
2,4-Dimethylphenol	<15	15	2.2	ug/L	1	"	"	"	"	
2,4-Dinitrophenol	<15	15	2.6	ug/L	1	"	"	"	"	
2,4-Dinitrotoluene	<15	15	1.2	ug/L	1	"	"	"	"	
2,6-Dichlorophenol	<15	15	1.7	ug/L	1	"	"	"	"	
2,6-Dinitrotoluene	<15	15	1.3	ug/L	1	"	"	"	"	
2-Chloronaphthalene	<15	15	0.94	ug/L	1	"	"	"	"	
2-Chlorophenol	<15	15	1.7	ug/L	1	"	"	"	"	
2-Methylnaphthalene	<15	15	1.8	ug/L	1	"	"	"	"	
2-Methylphenol	<15	15	1.8	ug/L	1	"	"	"	"	
2-Nitroaniline	<15	15	2.6	ug/L	1	"	"	"	"	
2-Nitrophenol	<15	15	2.3	ug/L	1	"	"	"	"	
3&4-Methylphenol	<15	15	2.0	ug/L	1	"	"	"	"	
3,3'-Dichlorobenzidine	<38	38	9.1	ug/L	1	"	"	"	"	
3-Nitroaniline	<15	15	2.3	ug/L	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<15	15	3.1	ug/L	1	"	"	"	"	
4-Bromophenyl phenyl ether	<15	15	1.1	ug/L	1	"	"	"	"	
4-Chloro-3-methylphenol	<15	15	2.2	ug/L	1	"	"	"	"	
4-Chloroaniline	<15	15	4.2	ug/L	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<15	15	1.0	ug/L	1	"	"	"	"	
4-Nitroaniline	<15	15	2.0	ug/L	1	"	"	"	"	
4-Nitrophenol	<15	15	2.9	ug/L	1	"	"	"	"	
Acenaphthene	<15	15	1.1	ug/L	1	"	"	"	"	
Acenaphthylene	<15	15	1.1	ug/L	1	"	"	"	"	
Aniline	<15	15	3.2	ug/L	1	"	"	"	"	
Anthracene	<15	15	1.1	ug/L	1	"	"	"	"	
Benzidine	<150	150	17	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<15	15	1.0	ug/L	1	"	"	"	"	
Benzo(a)pyrene	<15	15	0.95	ug/L	1	"	"	"	"	
Benzo(b)fluoranthene	<15	15	0.98	ug/L	1	"	"	"	"	
Benzo(g,h,i)perylene	<15	15	1.0	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<15	15	0.98	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
Benzoic acid	<15	15	3.5	ug/L	1	"	"	"	"	
Benzyl alcohol	<15	15	2.3	ug/L	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<15	15	1.0	ug/L	1	"	"	"	"	
Bis(2-chloroethyl)ether	<15	15	1.1	ug/L	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<15	15	1.3	ug/L	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<15	15	0.98	ug/L	1	"	"	"	"	
Butyl benzyl phthalate	<15	15	1.5	ug/L	1	"	"	"	"	
Carbazole	<15	15	1.2	ug/L	1	"	"	"	"	T-1
Chrysene	<15	15	0.95	ug/L	1	"	"	"	"	
Dibenz(a,h)anthracene	<15	15	0.82	ug/L	1	"	"	"	"	
Dibenzofuran	<15	15	2.0	ug/L	1	"	"	"	"	
Diethyl phthalate	<15	15	1.1	ug/L	1	"	"	"	"	
Dimethyl phthalate	<15	15	1.1	ug/L	1	"	"	"	"	
Di-n-butyl phthalate	<15	15	1.2	ug/L	1	"	"	"	"	
Di-n-octyl phthalate	<15	15	1.1	ug/L	1	"	"	"	"	
Fluoranthene	<15	15	1.2	ug/L	1	"	"	"	"	
Fluorene	<15	15	1.1	ug/L	1	"	"	"	"	
Hexachlorobenzene	<15	15	1.0	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<15	15	0.80	ug/L	1	"	"	"	"	
Hexachlorocyclopentadiene	<15	15	0.83	ug/L	1	"	"	"	"	
Hexachloroethane	<15	15	0.72	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<15	15	0.88	ug/L	1	"	"	"	"	
Isophorone	<15	15	1.1	ug/L	1	"	"	"	"	
Naphthalene	<15	15	0.91	ug/L	1	"	"	"	"	
Nitrobenzene	<15	15	1.1	ug/L	1	"	"	"	"	
N-Nitrosodimethylamine	<15	15	0.86	ug/L	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<15	15	1.2	ug/L	1	"	"	"	"	
N-Nitrosodiphenylamine	<15	15	1.2	ug/L	1	"	"	"	"	
Pentachlorophenol	<15	15	3.7	ug/L	1	"	"	"	"	
Phenanthrene	<15	15	1.1	ug/L	1	"	"	"	"	
Phenol	<15	15	1.5	ug/L	1	"	"	"	"	
Pyrene	<15	15	1.1	ug/L	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	96.3			30-122 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	75.6			39.2-104 %		"	"	"	"	
Surrogate: 2-Fluorophenol	58.8			30-80.1 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	73.4			51.2-103 %		"	"	"	"	
Surrogate: Phenol-d6	68.1			30-75.3 %		"	"	"	"	
Surrogate: Terphenyl-d14	77.0			30-116 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<12	12	0.64	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
1,2-Dichlorobenzene	<12	12	0.63	ug/L	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<12	12	1.1	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<12	12	0.53	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<12	12	0.36	ug/L	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<12	12	2.0	ug/L	1	"	"	"	"	
2,4,5-Trichlorophenol	<12	12	1.7	ug/L	1	"	"	"	"	
2,4,6-Trichlorophenol	<12	12	1.4	ug/L	1	"	"	"	"	
2,4-Dichlorophenol	<12	12	1.3	ug/L	1	"	"	"	"	
2,4-Dimethylphenol	<12	12	1.7	ug/L	1	"	"	"	"	
2,4-Dinitrophenol	<12	12	2.0	ug/L	1	"	"	"	"	
2,4-Dinitrotoluene	<12	12	0.90	ug/L	1	"	"	"	"	
2,6-Dichlorophenol	<12	12	1.3	ug/L	1	"	"	"	"	
2,6-Dinitrotoluene	<12	12	1.0	ug/L	1	"	"	"	"	
2-Chloronaphthalene	<12	12	0.73	ug/L	1	"	"	"	"	
2-Chlorophenol	<12	12	1.3	ug/L	1	"	"	"	"	
2-Methylnaphthalene	<12	12	1.4	ug/L	1	"	"	"	"	
2-Methylphenol	<12	12	1.4	ug/L	1	"	"	"	"	
2-Nitroaniline	<12	12	2.0	ug/L	1	"	"	"	"	
2-Nitrophenol	<12	12	1.8	ug/L	1	"	"	"	"	
3&4-Methylphenol	<12	12	1.6	ug/L	1	"	"	"	"	
3,3'-Dichlorobenzidine	<30	30	7.1	ug/L	1	"	"	"	"	
3-Nitroaniline	<12	12	1.8	ug/L	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<12	12	2.4	ug/L	1	"	"	"	"	
4-Bromophenyl phenyl ether	<12	12	0.89	ug/L	1	"	"	"	"	
4-Chloro-3-methylphenol	<12	12	1.7	ug/L	1	"	"	"	"	
4-Chloroaniline	<12	12	3.3	ug/L	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<12	12	0.82	ug/L	1	"	"	"	"	
4-Nitroaniline	<12	12	1.6	ug/L	1	"	"	"	"	
4-Nitrophenol	<12	12	2.3	ug/L	1	"	"	"	"	
Acenaphthene	<12	12	0.89	ug/L	1	"	"	"	"	
Acenaphthylene	<12	12	0.83	ug/L	1	"	"	"	"	
Aniline	<12	12	2.5	ug/L	1	"	"	"	"	
Anthracene	<12	12	0.88	ug/L	1	"	"	"	"	
Benzidine	<120	120	13	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<12	12	0.78	ug/L	1	"	"	"	"	
Benzo(a)pyrene	<12	12	0.75	ug/L	1	"	"	"	"	
Benzo(b)fluoranthene	<12	12	0.77	ug/L	1	"	"	"	"	
Benzo(g,h,i)perylene	<12	12	0.78	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<12	12	0.77	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
Benzoic acid	<12	12	2.8	ug/L	1	"	"	"	"	
Benzyl alcohol	<12	12	1.8	ug/L	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<12	12	0.80	ug/L	1	"	"	"	"	
Bis(2-chloroethyl)ether	<12	12	0.84	ug/L	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<12	12	1.0	ug/L	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<12	12	0.77	ug/L	1	"	"	"	"	
Butyl benzyl phthalate	<12	12	1.2	ug/L	1	"	"	"	"	
Carbazole	<12	12	0.93	ug/L	1	"	"	"	"	T-1
Chrysene	<12	12	0.75	ug/L	1	"	"	"	"	
Dibenz(a,h)anthracene	<12	12	0.64	ug/L	1	"	"	"	"	
Dibenzofuran	<12	12	1.6	ug/L	1	"	"	"	"	
Diethyl phthalate	<12	12	0.89	ug/L	1	"	"	"	"	
Dimethyl phthalate	<12	12	0.83	ug/L	1	"	"	"	"	
Di-n-butyl phthalate	<12	12	0.95	ug/L	1	"	"	"	"	
Di-n-octyl phthalate	<12	12	0.86	ug/L	1	"	"	"	"	
Fluoranthene	<12	12	0.92	ug/L	1	"	"	"	"	
Fluorene	<12	12	0.89	ug/L	1	"	"	"	"	
Hexachlorobenzene	<12	12	0.82	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<12	12	0.63	ug/L	1	"	"	"	"	
Hexachlorocyclopentadiene	<12	12	0.65	ug/L	1	"	"	"	"	
Hexachloroethane	<12	12	0.57	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<12	12	0.69	ug/L	1	"	"	"	"	
Isophorone	<12	12	0.84	ug/L	1	"	"	"	"	
Naphthalene	<12	12	0.71	ug/L	1	"	"	"	"	
Nitrobenzene	<12	12	0.86	ug/L	1	"	"	"	"	
N-Nitrosodimethylamine	<12	12	0.67	ug/L	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<12	12	0.90	ug/L	1	"	"	"	"	
N-Nitrosodiphenylamine	<12	12	0.93	ug/L	1	"	"	"	"	
Pentachlorophenol	<12	12	2.9	ug/L	1	"	"	"	"	
Phenanthrene	<12	12	0.89	ug/L	1	"	"	"	"	
Phenol	<12	12	1.2	ug/L	1	"	"	"	"	
Pyrene	<12	12	0.83	ug/L	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	99.7			30-122 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	79.6			39.2-104 %		"	"	"	"	
Surrogate: 2-Fluorophenol	61.3			30-80.1 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	78.0			51.2-103 %		"	"	"	"	
Surrogate: Phenol-d6	66.3			30-75.3 %		"	"	"	"	
Surrogate: Terphenyl-d14	82.6			30-116 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
1,2,4-Trichlorobenzene	<13	13	0.71	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
1,2-Dichlorobenzene	<13	13	0.69	ug/L	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<13	13	1.2	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<13	13	0.59	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<13	13	0.40	ug/L	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<13	13	2.3	ug/L	1	"	"	"	"	
2,4,5-Trichlorophenol	<13	13	1.9	ug/L	1	"	"	"	"	
2,4,6-Trichlorophenol	<13	13	1.6	ug/L	1	"	"	"	"	
2,4-Dichlorophenol	<13	13	1.5	ug/L	1	"	"	"	"	
2,4-Dimethylphenol	<13	13	1.9	ug/L	1	"	"	"	"	
2,4-Dinitrophenol	<13	13	2.3	ug/L	1	"	"	"	"	
2,4-Dinitrotoluene	<13	13	1.0	ug/L	1	"	"	"	"	
2,6-Dichlorophenol	<13	13	1.5	ug/L	1	"	"	"	"	
2,6-Dinitrotoluene	<13	13	1.2	ug/L	1	"	"	"	"	
2-Chloronaphthalene	<13	13	0.81	ug/L	1	"	"	"	"	
2-Chlorophenol	<13	13	1.5	ug/L	1	"	"	"	"	
2-Methylnaphthalene	<13	13	1.6	ug/L	1	"	"	"	"	
2-Methylphenol	<13	13	1.6	ug/L	1	"	"	"	"	
2-Nitroaniline	<13	13	2.3	ug/L	1	"	"	"	"	
2-Nitrophenol	<13	13	2.0	ug/L	1	"	"	"	"	
3&4-Methylphenol	<13	13	1.7	ug/L	1	"	"	"	"	
3,3'-Dichlorobenzidine	<33	33	7.9	ug/L	1	"	"	"	"	
3-Nitroaniline	<13	13	2.0	ug/L	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<13	13	2.7	ug/L	1	"	"	"	"	
4-Bromophenyl phenyl ether	<13	13	0.99	ug/L	1	"	"	"	"	
4-Chloro-3-methylphenol	<13	13	1.9	ug/L	1	"	"	"	"	
4-Chloroaniline	<13	13	3.6	ug/L	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<13	13	0.91	ug/L	1	"	"	"	"	
4-Nitroaniline	<13	13	1.7	ug/L	1	"	"	"	"	
4-Nitrophenol	<13	13	2.5	ug/L	1	"	"	"	"	
Acenaphthene	<13	13	0.99	ug/L	1	"	"	"	"	
Acenaphthylene	<13	13	0.92	ug/L	1	"	"	"	"	
Aniline	<13	13	2.8	ug/L	1	"	"	"	"	
Anthracene	<13	13	0.97	ug/L	1	"	"	"	"	
Benzidine	<130	130	15	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<13	13	0.87	ug/L	1	"	"	"	"	
Benzo(a)pyrene	<13	13	0.83	ug/L	1	"	"	"	"	
Benzo(b)fluoranthene	<13	13	0.85	ug/L	1	"	"	"	"	
Benzo(g,h,i)perylene	<13	13	0.87	ug/L	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
Benzo(k)fluoranthene	<13	13	0.85	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
Benzoic acid	<13	13	3.1	ug/L	1	"	"	"	"	
Benzyl alcohol	<13	13	2.0	ug/L	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<13	13	0.88	ug/L	1	"	"	"	"	
Bis(2-chloroethyl)ether	<13	13	0.93	ug/L	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<13	13	1.1	ug/L	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<13	13	0.85	ug/L	1	"	"	"	"	
Butyl benzyl phthalate	<13	13	1.3	ug/L	1	"	"	"	"	
Carbazole	<13	13	1.0	ug/L	1	"	"	"	"	T-1
Chrysene	<13	13	0.83	ug/L	1	"	"	"	"	
Dibenz(a,h)anthracene	<13	13	0.71	ug/L	1	"	"	"	"	
Dibenzofuran	<13	13	1.7	ug/L	1	"	"	"	"	
Diethyl phthalate	<13	13	0.99	ug/L	1	"	"	"	"	
Dimethyl phthalate	<13	13	0.92	ug/L	1	"	"	"	"	
Di-n-butyl phthalate	<13	13	1.1	ug/L	1	"	"	"	"	
Di-n-octyl phthalate	<13	13	0.95	ug/L	1	"	"	"	"	
Fluoranthene	<13	13	1.0	ug/L	1	"	"	"	"	
Fluorene	<13	13	0.99	ug/L	1	"	"	"	"	
Hexachlorobenzene	<13	13	0.91	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<13	13	0.69	ug/L	1	"	"	"	"	
Hexachlorocyclopentadiene	<13	13	0.72	ug/L	1	"	"	"	"	
Hexachloroethane	<13	13	0.63	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<13	13	0.76	ug/L	1	"	"	"	"	
Isophorone	<13	13	0.93	ug/L	1	"	"	"	"	
Naphthalene	<13	13	0.79	ug/L	1	"	"	"	"	
Nitrobenzene	<13	13	0.95	ug/L	1	"	"	"	"	
N-Nitrosodimethylamine	<13	13	0.75	ug/L	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<13	13	1.0	ug/L	1	"	"	"	"	
N-Nitrosodiphenylamine	<13	13	1.0	ug/L	1	"	"	"	"	
Pentachlorophenol	<13	13	3.2	ug/L	1	"	"	"	"	
Phenanthrene	<13	13	0.99	ug/L	1	"	"	"	"	
Phenol	<13	13	1.3	ug/L	1	"	"	"	"	
Pyrene	<13	13	0.92	ug/L	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	94.4			30-122 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	78.4			39.2-104 %		"	"	"	"	
Surrogate: 2-Fluorophenol	62.1			30-80.1 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	77.5			51.2-103 %		"	"	"	"	
Surrogate: Phenol-d6	69.2			30-75.3 %		"	"	"	"	
Surrogate: Terphenyl-d14	76.1			30-116 %		"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01RE1) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.24	0.24	0.0050	mg/kg dry	1	B4G1427	07/14/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.24	0.24	0.0055	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.24	0.24	0.0056	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.24	0.24	0.0071	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.24	0.24	0.0089	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.24	0.24	0.0057	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.49	0.49	0.0050	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.24	0.24	0.0045	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.49	0.49	0.0053	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.49	0.49	0.0081	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.24	0.24	0.0070	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.24	0.24	0.0037	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.24	0.24	0.0049	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.49	0.49	0.0085	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.24	0.24	0.0021	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.24	0.24	0.0035	mg/kg dry	1	"	"	"	"	
Acetone	<2.0	2.0	0.098	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.49	0.49	0.0081	mg/kg dry	1	"	"	"	"	
Benzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.24	0.24	0.0051	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.24	0.24	0.0072	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.24	0.24	0.0042	mg/kg dry	1	"	"	"	"	
Bromoform	<0.49	0.49	0.0068	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.49	0.49	0.0059	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.24	0.24	0.0059	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.24	0.24	0.0070	mg/kg dry	1	"	"	"	"	
Chloroform	<0.24	0.24	0.0022	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.24	0.24	0.0065	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.24	0.24	0.0018	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-5 (3-4) (1403007-01RE1) Soil Sampled: 07/09/14 10:25 Received: 07/10/14 9:10										
cis-1,3-Dichloropropene	<0.24	0.24	0.0048	mg/kg dry	1	B4G1427	07/14/14	07/14/14	EPA 8260B	
Dibromochloromethane	<0.24	0.24	0.0045	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.24	0.24	0.0045	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.49	0.49	0.0092	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.24	0.24	0.0077	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.49	0.49	0.0049	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.98	0.98	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.24	0.24	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.49	0.49	0.0095	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.49	0.49	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.98	0.98	0.0038	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.49	0.49	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.24	0.24	0.0030	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.24	0.24	0.0038	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.24	0.24	0.0029	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.24	0.24	0.0034	mg/kg dry	1	"	"	"	"	
Styrene	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.24	0.24	0.0049	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.031	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.24	0.24	0.0034	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.24	0.24	0.0044	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.24	0.24	0.0061	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.24	0.24	0.0037	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.24	0.24	0.0060	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.24	0.24	0.0059	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.1			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.8			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	89.9			78.1-125 %		"	"	"	"	

HA-10 (0-1) (1403007-02RE1) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0054	mg/kg dry	1	B4G1427	07/14/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0097	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-10 (0-1) (1403007-02RE1) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
1,1-Dichloroethene	<0.27	0.27	0.0062	mg/kg dry	1	B4G1427	07/14/14	07/14/14	EPA 8260B	
1,1-Dichloropropene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.53	0.53	0.0054	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.53	0.53	0.0057	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.53	0.53	0.0093	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0055	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0046	mg/kg dry	1	"	"	"	"	
Bromoform	<0.53	0.53	0.0074	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.53	0.53	0.0064	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0064	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0071	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0084	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.53	0.53	0.0053	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-10 (0-1) (1403007-02RE1) Soil Sampled: 07/09/14 11:45 Received: 07/10/14 9:10										
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	B4G1427	07/14/14	07/14/14	EPA 8260B	
Hexachlorobutadiene	<1.1	1.1	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.53	0.53	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.53	0.53	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0032	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.034	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0048	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.8			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.1			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	92.2			78.1-125 %		"	"	"	"	

HA-17 (1-2) (1403007-03RE1) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.25	0.25	0.0052	mg/kg dry	1	B4G1431	07/12/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.25	0.25	0.0057	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.25	0.25	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.25	0.25	0.0074	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.25	0.25	0.0092	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.25	0.25	0.0059	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.51	0.51	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.51	0.51	0.0055	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-17 (1-2) (1403007-03RE1) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
1,2-Dibromo-3-chloropropane	<0.51	0.51	0.0084	mg/kg dry	1	B4G1431	07/12/14	07/15/14	EPA 8260B	
1,2-Dibromoethane (EDB)	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.25	0.25	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.25	0.25	0.0048	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.25	0.25	0.0025	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.51	0.51	0.0088	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.25	0.25	0.0022	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.25	0.25	0.0036	mg/kg dry	1	"	"	"	"	
Acetone	<2.0	2.0	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.51	0.51	0.0084	mg/kg dry	1	"	"	"	"	
Benzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.25	0.25	0.0053	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.25	0.25	0.0075	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.25	0.25	0.0043	mg/kg dry	1	"	"	"	"	
Bromoform	<0.51	0.51	0.0071	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.51	0.51	0.0061	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.25	0.25	0.0061	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
Chloroform	<0.25	0.25	0.0023	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.25	0.25	0.0068	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.25	0.25	0.0018	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.25	0.25	0.0049	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.51	0.51	0.0095	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.25	0.25	0.0080	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.51	0.51	0.0051	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.25	0.25	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.51	0.51	0.0098	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.51	0.51	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-17 (1-2) (1403007-03RE1) Soil Sampled: 07/09/14 11:10 Received: 07/10/14 9:10										
Methylene chloride	<1.0	1.0	0.0039	mg/kg dry	1	B4G1431	07/12/14	07/15/14	EPA 8260B	
Naphthalene	<0.51	0.51	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.25	0.25	0.0031	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.25	0.25	0.0039	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.25	0.25	0.0030	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
Styrene	<0.25	0.25	0.0055	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.032	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.25	0.25	0.0064	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.25	0.25	0.0063	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.25	0.25	0.0062	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	91.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.5			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.0			78.1-125 %		"	"	"	"	
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.24	0.24	0.0049	mg/kg dry	1	B4G1430	07/13/14	07/13/14	EPA 8260B	
1,1,1-Trichloroethane	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.24	0.24	0.0055	mg/kg dry	1	"	"	"	"	M2
1,1,2-Trichloroethane	<0.24	0.24	0.0070	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.24	0.24	0.0088	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.24	0.24	0.0056	mg/kg dry	1	"	"	"	"	M2
1,1-Dichloropropene	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.48	0.48	0.0049	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.24	0.24	0.0044	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.48	0.48	0.0052	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.48	0.48	0.0080	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.24	0.24	0.0069	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.24	0.24	0.0046	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
1,3-Dichlorobenzene	<0.24	0.24	0.0037	mg/kg dry	1	B4G1430	07/13/14	07/13/14	EPA 8260B	
1,3-Dichloropropane	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.24	0.24	0.0048	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.48	0.48	0.0084	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.9	1.9	0.013	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.24	0.24	0.0021	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.24	0.24	0.0035	mg/kg dry	1	"	"	"	"	
Acetone	<1.9	1.9	0.096	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.48	0.48	0.0080	mg/kg dry	1	"	"	"	"	
Benzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.24	0.24	0.0050	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.24	0.24	0.0071	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.24	0.24	0.0041	mg/kg dry	1	"	"	"	"	
Bromoform	<0.48	0.48	0.0067	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.48	0.48	0.0058	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.24	0.24	0.0058	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.24	0.24	0.0069	mg/kg dry	1	"	"	"	"	
Chloroform	<0.24	0.24	0.0022	mg/kg dry	1	"	"	"	"	M2
Chloromethane	<0.24	0.24	0.0064	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.24	0.24	0.0017	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.24	0.24	0.0044	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.24	0.24	0.0044	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.48	0.48	0.0090	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.24	0.24	0.0076	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.48	0.48	0.0048	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.96	0.96	0.17	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.24	0.24	0.0016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.48	0.48	0.0093	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.48	0.48	0.013	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.96	0.96	0.0038	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.48	0.48	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.24	0.24	0.0030	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.24	0.24	0.0038	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.24	0.24	0.0029	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-1 (0-4) (1403007-04) Soil Sampled: 07/09/14 12:25 Received: 07/10/14 9:10										
sec-Butylbenzene	<0.24	0.24	0.0034	mg/kg dry	1	B4G1430	07/13/14	07/13/14	EPA 8260B	
Styrene	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.24	0.24	0.0048	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.9	1.9	0.031	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.24	0.24	0.0034	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.24	0.24	0.0061	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.24	0.24	0.0037	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.24	0.24	0.0060	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.24	0.24	0.0059	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	91.7			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.7			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	87.2			78.1-125 %		"	"	"	"	

HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.25	0.25	0.0050	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.25	0.25	0.0055	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.25	0.25	0.0072	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.25	0.25	0.0090	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.25	0.25	0.0057	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.25	0.25	0.0054	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.49	0.49	0.0050	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.49	0.49	0.0053	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.49	0.49	0.0082	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.25	0.25	0.0071	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.25	0.25	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.25	0.25	0.0054	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.25	0.25	0.0047	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.25	0.25	0.0025	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.25	0.25	0.0037	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.25	0.25	0.0054	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.25	0.25	0.0049	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.49	0.49	0.0086	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.25	0.25	0.0022	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
4-Chlorotoluene	<0.25	0.25	0.0036	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Acetone	<2.0	2.0	0.099	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.49	0.49	0.0082	mg/kg dry	1	"	"	"	"	
Benzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.25	0.25	0.0042	mg/kg dry	1	"	"	"	"	
Bromoform	<0.49	0.49	0.0069	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.49	0.49	0.0059	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.25	0.25	0.0059	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.25	0.25	0.0071	mg/kg dry	1	"	"	"	"	
Chloroform	<0.25	0.25	0.0023	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.25	0.25	0.0066	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.25	0.25	0.0018	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.25	0.25	0.0048	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.49	0.49	0.0093	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.25	0.25	0.0078	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.49	0.49	0.0049	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.99	0.99	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.25	0.25	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.49	0.49	0.0096	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.49	0.49	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.25	0.25	0.0054	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.99	0.99	0.0038	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.49	0.49	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.25	0.25	0.0054	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.25	0.25	0.0031	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.25	0.25	0.0030	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
Styrene	<0.25	0.25	0.0053	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.25	0.25	0.0049	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.032	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-11 (0-1) (1403007-05) Soil Sampled: 07/09/14 11:50 Received: 07/10/14 9:10										
trans-1,2-Dichloroethene	<0.25	0.25	0.0044	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
trans-1,3-Dichloropropene	<0.25	0.25	0.0062	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.25	0.25	0.0037	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.25	0.25	0.0061	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.25	0.25	0.0060	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.3			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	91.7			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	88.8			78.1-125 %		"	"	"	"	
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0054	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0097	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.53	0.53	0.0054	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.53	0.53	0.0057	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.53	0.53	0.0093	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0055	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Bromodichloromethane	<0.27	0.27	0.0046	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Bromoform	<0.53	0.53	0.0074	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.53	0.53	0.0064	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0064	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0071	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0084	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.53	0.53	0.0053	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.53	0.53	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.53	0.53	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0032	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.034	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0048	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	90.7			80-124 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-8 (2-3) (1403007-06) Soil Sampled: 07/09/14 11:30 Received: 07/10/14 9:10										
Surrogate: Dibromofluoromethane	90.3		77.1-123	%		B4G1430	07/13/14	07/14/14	EPA 8260B	
Surrogate: Toluene-d8	88.8		78.1-125	%		"	"	"	"	
HA-12 (2-2.75) (1403007-07) Soil Sampled: 07/09/14 12:00 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.24	0.24	0.0048	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
1,1,1,2-Tetrachloroethane	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.24	0.24	0.0069	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.24	0.24	0.0086	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.24	0.24	0.0031	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.24	0.24	0.0055	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.47	0.47	0.0048	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.47	0.47	0.0051	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.24	0.24	0.0031	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.24	0.24	0.0068	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.24	0.24	0.0045	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.24	0.24	0.0036	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.47	0.47	0.0082	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.9	1.9	0.013	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.24	0.24	0.0021	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.24	0.24	0.0034	mg/kg dry	1	"	"	"	"	
Acetone	<1.9	1.9	0.094	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
Benzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.24	0.24	0.0049	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.24	0.24	0.0070	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.24	0.24	0.0041	mg/kg dry	1	"	"	"	"	
Bromoform	<0.47	0.47	0.0066	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.47	0.47	0.0057	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.24	0.24	0.0057	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.24	0.24	0.0068	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-12 (2-2.75) (1403007-07) Soil Sampled: 07/09/14 12:00 Received: 07/10/14 9:10										
Chloroform	<0.24	0.24	0.0022	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Chloromethane	<0.24	0.24	0.0063	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.24	0.24	0.0017	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.24	0.24	0.0046	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.47	0.47	0.0089	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.24	0.24	0.0075	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.47	0.47	0.0047	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.94	0.94	0.17	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.24	0.24	0.0016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.47	0.47	0.0092	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.47	0.47	0.013	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.94	0.94	0.0037	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.47	0.47	0.011	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.24	0.24	0.0029	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.24	0.24	0.0037	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.24	0.24	0.0028	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
Styrene	<0.24	0.24	0.0051	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.24	0.24	0.0026	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.9	1.9	0.030	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.24	0.24	0.0060	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.24	0.24	0.0036	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.24	0.24	0.0059	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.24	0.24	0.0058	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	90.2			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	90.4			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	87.9			78.1-125 %		"	"	"	"	

HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10

1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0053	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
1,1,2-Trichloroethane	<0.26	0.26	0.0075	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0094	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.26	0.26	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.52	0.52	0.0053	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.52	0.52	0.0056	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0074	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.26	0.26	0.0049	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.52	0.52	0.0090	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0037	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0054	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0044	mg/kg dry	1	"	"	"	"	
Bromoform	<0.52	0.52	0.0072	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.52	0.52	0.0062	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0074	mg/kg dry	1	"	"	"	"	
Chloroform	<0.26	0.26	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.26	0.26	0.0069	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-9 (0-1) (1403007-08) Soil Sampled: 07/09/14 11:35 Received: 07/10/14 9:10										
Dichlorodifluoromethane	<0.52	0.52	0.0097	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Dichlorofluoromethane	<0.26	0.26	0.0081	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.52	0.52	0.0052	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.52	0.52	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.52	0.52	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0040	mg/kg dry	1	"	"	"	"	
Naphthalene	2.6	0.52	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0046	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0065	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0063	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.1			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	87.5			78.1-125 %		"	"	"	"	

HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0053	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0095	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.26	0.26	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.52	0.52	0.0053	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
1,2,3-Trichloropropane	<0.26	0.26	0.0048	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,2,4-Trichlorobenzene	<0.52	0.52	0.0056	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.26	0.26	0.0050	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.52	0.52	0.0091	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0054	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0077	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0045	mg/kg dry	1	"	"	"	"	
Bromoform	<0.52	0.52	0.0073	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.52	0.52	0.0062	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
Chloroform	<0.26	0.26	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.26	0.26	0.0070	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.52	0.52	0.0098	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.26	0.26	0.0082	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.52	0.52	0.0052	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-6 (2-3) (1403007-09) Soil Sampled: 07/09/14 10:15 Received: 07/10/14 9:10										
m,p-Xylene	<0.52	0.52	0.010	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Methyl isobutyl ketone	<0.52	0.52	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.52	0.52	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.26	0.26	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0066	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0065	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.0			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	88.5			78.1-125 %		"	"	"	"	
HA-4 (1-2) (1403007-10) Soil Sampled: 07/09/14 10:00 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0055	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0098	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.54	0.54	0.0055	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.54	0.54	0.0058	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.54	0.54	0.0089	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-4 (1-2) (1403007-10) Soil Sampled: 07/09/14 10:00 Received: 07/10/14 9:10										
1,2-Dichloroethane	<0.27	0.27	0.0059	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,2-Dichloropropane	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.54	0.54	0.0094	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0039	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.54	0.54	0.0089	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0056	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0080	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0046	mg/kg dry	1	"	"	"	"	
Bromoform	<0.54	0.54	0.0075	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.54	0.54	0.0065	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0025	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0072	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0085	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.54	0.54	0.0054	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.54	0.54	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0042	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.54	0.54	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-4 (1-2) (1403007-10) Soil Sampled: 07/09/14 10:00 Received: 07/10/14 9:10										
n-Propylbenzene	<0.27	0.27	0.0033	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
o-Xylene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0032	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0058	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.034	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0048	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0068	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.6			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	87.8			78.1-125 %		"	"	"	"	
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0054	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0097	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.53	0.53	0.0054	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.53	0.53	0.0057	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
2,2-Dichloropropane	<0.53	0.53	0.0093	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.53	0.53	0.0088	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0055	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0046	mg/kg dry	1	"	"	"	"	
Bromoform	<0.53	0.53	0.0074	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.53	0.53	0.0064	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0064	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0071	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0084	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.53	0.53	0.0053	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.53	0.53	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.53	0.53	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.53	0.53	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0032	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-7 (0-1) (1403007-11) Soil Sampled: 07/09/14 10:40 Received: 07/10/14 9:10										
Tetrachloroethene	<0.27	0.27	0.0053	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Tetrahydrofuran	<2.1	2.1	0.034	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0048	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.5			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	91.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	88.6			78.1-125 %		"	"	"	"	

HA-16 (2-3) (1403007-12) Soil Sampled: 07/09/14 11:00 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0055	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0099	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0063	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.54	0.54	0.0055	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.54	0.54	0.0059	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.54	0.54	0.0090	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.54	0.54	0.0095	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0039	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.54	0.54	0.0090	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-16 (2-3) (1403007-12) Soil Sampled: 07/09/14 11:00 Received: 07/10/14 9:10										
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Bromobenzene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0080	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0047	mg/kg dry	1	"	"	"	"	
Bromoform	<0.54	0.54	0.0076	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.54	0.54	0.0065	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0025	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0073	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0020	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0086	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.54	0.54	0.0054	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.20	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.54	0.54	0.011	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.54	0.54	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0042	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.54	0.54	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0034	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.035	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0068	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-16 (2-3) (1403007-12) Soil Sampled: 07/09/14 11:00 Received: 07/10/14 9:10										
Trichlorofluoromethane	<0.27	0.27	0.0067	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Vinyl chloride	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.3			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.5			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.1			78.1-125 %		"	"	"	"	
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.24	0.24	0.0048	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.24	0.24	0.0053	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.24	0.24	0.0054	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.24	0.24	0.0069	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.24	0.24	0.0086	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.24	0.24	0.0031	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.24	0.24	0.0055	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.47	0.47	0.0048	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.47	0.47	0.0051	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.24	0.24	0.0031	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.24	0.24	0.0068	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.24	0.24	0.0032	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.24	0.24	0.0045	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.24	0.24	0.0036	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.47	0.47	0.0082	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.9	1.9	0.013	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.24	0.24	0.0021	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.24	0.24	0.0034	mg/kg dry	1	"	"	"	"	
Acetone	<1.9	1.9	0.094	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
Benzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.24	0.24	0.0049	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.24	0.24	0.0070	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.24	0.24	0.0040	mg/kg dry	1	"	"	"	"	
Bromoform	<0.47	0.47	0.0066	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.47	0.47	0.0056	mg/kg dry	1	"	"	"	"	



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-15 (3-4) (1403007-13) Soil Sampled: 07/08/14 15:40 Received: 07/10/14 9:10										
Carbon tetrachloride	<0.24	0.24	0.0056	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Chlorobenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.24	0.24	0.0068	mg/kg dry	1	"	"	"	"	
Chloroform	<0.24	0.24	0.0022	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.24	0.24	0.0063	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.24	0.24	0.0017	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.24	0.24	0.0046	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.24	0.24	0.0043	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.47	0.47	0.0088	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.24	0.24	0.0074	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.47	0.47	0.0047	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.24	0.24	0.0024	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.94	0.94	0.17	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.24	0.24	0.0016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.47	0.47	0.0091	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.47	0.47	0.013	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.94	0.94	0.0037	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.47	0.47	0.011	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.24	0.24	0.0052	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.24	0.24	0.0029	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.24	0.24	0.0037	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.24	0.24	0.0028	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
Styrene	<0.24	0.24	0.0051	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.24	0.24	0.0025	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.24	0.24	0.0047	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.9	1.9	0.030	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.24	0.24	0.0033	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.24	0.24	0.0042	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.24	0.24	0.0059	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.24	0.24	0.0036	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.24	0.24	0.0058	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.24	0.24	0.0057	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.6			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	89.2			78.1-125 %		"	"	"	"	

HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0052	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.26	0.26	0.0074	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0093	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.51	0.51	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.51	0.51	0.0055	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.51	0.51	0.0085	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0073	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.26	0.26	0.0049	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.51	0.51	0.0089	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0022	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0037	mg/kg dry	1	"	"	"	"	
Acetone	<2.0	2.0	0.10	mg/kg dry	1	"	"	0.10	"	
Allyl chloride	<0.51	0.51	0.0085	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0053	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0044	mg/kg dry	1	"	"	"	"	
Bromoform	<0.51	0.51	0.0071	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.51	0.51	0.0061	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0061	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0073	mg/kg dry	1	"	"	"	"	
Chloroform	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.26	0.26	0.0068	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-13 (0-1) (1403007-14) Soil Sampled: 07/08/14 16:05 Received: 07/10/14 9:10										
cis-1,3-Dichloropropene	<0.26	0.26	0.0050	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Dibromochloromethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.51	0.51	0.0096	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.26	0.26	0.0081	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.51	0.51	0.0051	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.51	0.51	0.0099	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.51	0.51	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0040	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.51	0.51	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0055	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0046	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0063	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.0			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.2			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.1			78.1-125 %		"	"	"	"	

HA-14 (1-2) (1403007-15) Soil Sampled: 07/08/14 15:55 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.25	0.25	0.0052	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1,1-Trichloroethane	<0.25	0.25	0.0057	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.25	0.25	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.25	0.25	0.0074	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.25	0.25	0.0092	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-14 (1-2) (1403007-15) Soil Sampled: 07/08/14 15:55 Received: 07/10/14 9:10										
1,1-Dichloroethene	<0.25	0.25	0.0059	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
1,1-Dichloropropene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.51	0.51	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.51	0.51	0.0055	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.51	0.51	0.0084	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.25	0.25	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.25	0.25	0.0048	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.25	0.25	0.0025	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.51	0.51	0.0088	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.25	0.25	0.0022	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.25	0.25	0.0036	mg/kg dry	1	"	"	"	"	
Acetone	<2.0	2.0	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.51	0.51	0.0084	mg/kg dry	1	"	"	"	"	
Benzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.25	0.25	0.0053	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.25	0.25	0.0075	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.25	0.25	0.0043	mg/kg dry	1	"	"	"	"	
Bromoform	<0.51	0.51	0.0071	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.51	0.51	0.0061	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.25	0.25	0.0061	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
Chloroform	<0.25	0.25	0.0023	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.25	0.25	0.0068	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.25	0.25	0.0018	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.25	0.25	0.0049	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.51	0.51	0.0095	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.25	0.25	0.0080	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.51	0.51	0.0051	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-14 (1-2) (1403007-15) Soil Sampled: 07/08/14 15:55 Received: 07/10/14 9:10										
Ethylbenzene	<0.25	0.25	0.0026	mg/kg dry	1	B4G1430	07/13/14	07/14/14	EPA 8260B	
Hexachlorobutadiene	<1.0	1.0	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.25	0.25	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.51	0.51	0.0098	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.51	0.51	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0039	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.51	0.51	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.25	0.25	0.0031	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.25	0.25	0.0039	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.25	0.25	0.0030	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
Styrene	<0.25	0.25	0.0055	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.032	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.25	0.25	0.0064	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.25	0.25	0.0063	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.25	0.25	0.0062	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	91.2			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	88.5			78.1-125 %		"	"	"	"	

B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.34	0.34	0.0069	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.34	0.34	0.0076	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.34	0.34	0.0077	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.34	0.34	0.0099	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.34	0.34	0.012	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.34	0.34	0.0045	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.34	0.34	0.0078	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.34	0.34	0.0074	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.68	0.68	0.0069	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.34	0.34	0.0062	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.68	0.68	0.0073	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.34	0.34	0.0045	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
1,2-Dibromo-3-chloropropane	<0.68	0.68	0.011	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,2-Dibromoethane (EDB)	<0.34	0.34	0.0097	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.34	0.34	0.0046	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.34	0.34	0.0074	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.34	0.34	0.0065	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.34	0.34	0.0034	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.0051	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.34	0.34	0.0074	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.0068	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.68	0.68	0.012	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.7	2.7	0.019	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.34	0.34	0.0030	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.34	0.34	0.0049	mg/kg dry	1	"	"	"	"	
Acetone	<2.7	2.7	0.14	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.68	0.68	0.011	mg/kg dry	1	"	"	"	"	
Benzene	<0.34	0.34	0.0036	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.34	0.34	0.0070	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.34	0.34	0.010	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.34	0.34	0.0058	mg/kg dry	1	"	"	"	"	
Bromoform	<0.68	0.68	0.0095	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.68	0.68	0.0081	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.34	0.34	0.0081	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.34	0.34	0.0035	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.34	0.34	0.0097	mg/kg dry	1	"	"	"	"	
Chloroform	<0.34	0.34	0.0031	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.34	0.34	0.0091	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.34	0.34	0.0024	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.34	0.34	0.0066	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.34	0.34	0.0062	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.34	0.34	0.0062	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.68	0.68	0.013	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.34	0.34	0.011	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.68	0.68	0.0068	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.34	0.34	0.0035	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.4	1.4	0.24	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.34	0.34	0.0023	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.68	0.68	0.013	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.68	0.68	0.019	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.34	0.34	0.0074	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (8-12) (1403007-16) Soil Sampled: 07/08/14 10:20 Received: 07/10/14 9:10										
Methylene chloride	<1.4	1.4	0.0053	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Naphthalene	<0.68	0.68	0.016	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.34	0.34	0.0074	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.34	0.34	0.0042	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.34	0.34	0.0053	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.34	0.34	0.0041	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.34	0.34	0.0047	mg/kg dry	1	"	"	"	"	
Styrene	<0.34	0.34	0.0073	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.34	0.34	0.0036	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.34	0.34	0.0068	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.7	2.7	0.043	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.34	0.34	0.0047	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.34	0.34	0.0061	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.34	0.34	0.0085	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.34	0.34	0.0051	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.34	0.34	0.0084	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.34	0.34	0.0082	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.0			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	89.4			78.1-125 %		"	"	"	"	
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.28	0.28	0.0057	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.28	0.28	0.0063	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.28	0.28	0.0064	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.28	0.28	0.0082	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.28	0.28	0.010	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.28	0.28	0.0037	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.28	0.28	0.0065	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.0061	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.28	0.28	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.0093	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.28	0.28	0.0081	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.28	0.28	0.0038	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.28	0.28	0.0054	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.28	0.28	0.0028	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
1,3-Dichlorobenzene	<0.28	0.28	0.0043	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,3-Dichloropropane	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.28	0.28	0.0056	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.56	0.56	0.0098	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.016	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.28	0.28	0.0025	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.28	0.28	0.0040	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.56	0.56	0.0093	mg/kg dry	1	"	"	"	"	
Benzene	<0.28	0.28	0.0030	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.28	0.28	0.0058	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.28	0.28	0.0083	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.28	0.28	0.0048	mg/kg dry	1	"	"	"	"	
Bromoform	<0.56	0.56	0.0079	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.56	0.56	0.0067	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.28	0.28	0.0067	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.28	0.28	0.0029	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.28	0.28	0.0081	mg/kg dry	1	"	"	"	"	
Chloroform	<0.28	0.28	0.0026	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.28	0.28	0.0075	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.28	0.28	0.0020	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.28	0.28	0.0055	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.56	0.56	0.011	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.28	0.28	0.0089	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.56	0.56	0.0056	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.28	0.28	0.0029	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.20	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.28	0.28	0.0019	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.56	0.56	0.011	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.56	0.56	0.016	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0044	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.56	0.56	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.28	0.28	0.0035	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.28	0.28	0.0044	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.28	0.28	0.0034	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (8-10) (1403007-17) Soil Sampled: 07/08/14 13:40 Received: 07/10/14 9:10										
sec-Butylbenzene	<0.28	0.28	0.0039	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Styrene	<0.28	0.28	0.0061	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.28	0.28	0.0030	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.28	0.28	0.0056	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.036	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.28	0.28	0.0039	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.28	0.28	0.0051	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.28	0.28	0.0071	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.28	0.28	0.0043	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.28	0.28	0.0070	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.28	0.28	0.0069	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.6			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	91.2			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	91.2			78.1-125 %		"	"	"	"	
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0055	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0099	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0063	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.54	0.54	0.0055	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.54	0.54	0.0059	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.54	0.54	0.0090	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.54	0.54	0.0095	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
4-Chlorotoluene	<0.27	0.27	0.0039	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.54	0.54	0.0090	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0080	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0047	mg/kg dry	1	"	"	"	"	
Bromoform	<0.54	0.54	0.0076	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.54	0.54	0.0065	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0025	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0073	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0020	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0050	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0086	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.54	0.54	0.0054	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.20	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.54	0.54	0.011	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.54	0.54	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0042	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.54	0.54	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0034	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.035	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5 (0-4) (1403007-18) Soil Sampled: 07/08/14 11:20 Received: 07/10/14 9:10										
trans-1,2-Dichloroethene	<0.27	0.27	0.0049	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
trans-1,3-Dichloropropene	<0.27	0.27	0.0068	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.0			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.4			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.8			78.1-125 %		"	"	"	"	
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0056	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0063	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0080	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.010	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0064	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.55	0.55	0.0056	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.55	0.55	0.0059	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0036	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.55	0.55	0.0091	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0055	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.55	0.55	0.0096	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0040	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.55	0.55	0.0091	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0030	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0057	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0081	mg/kg dry	1	"	"	"	"	



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10										
Bromodichloromethane	<0.27	0.27	0.0047	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Bromoform	<0.55	0.55	0.0077	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.55	0.55	0.0066	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0079	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0025	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0074	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0020	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0051	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.55	0.55	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0087	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.55	0.55	0.0055	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.20	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.55	0.55	0.011	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.55	0.55	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0043	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.55	0.55	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0034	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0043	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0030	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.27	0.27	0.0055	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.035	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0069	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0068	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.3			80-124 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	----	-----	-------	----------	-------	----------	----------	--------	-------

B-3 (4-8) (1403007-19) Soil Sampled: 07/08/14 12:50 Received: 07/10/14 9:10

Surrogate: Dibromofluoromethane	92.1			77.1-123 %		B4G1431	07/14/14	07/15/14	EPA 8260B	
Surrogate: Toluene-d8	90.0			78.1-125 %		"	"	"	"	

B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10

1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0053	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0095	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.26	0.26	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.52	0.52	0.0053	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.52	0.52	0.0056	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.26	0.26	0.0050	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.52	0.52	0.0091	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0054	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0077	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0045	mg/kg dry	1	"	"	"	"	
Bromoform	<0.52	0.52	0.0073	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.52	0.52	0.0062	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (0-4) (1403007-20) Soil Sampled: 07/07/14 13:30 Received: 07/10/14 9:10										
Chloroform	<0.26	0.26	0.0024	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Chloromethane	<0.26	0.26	0.0070	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.52	0.52	0.0098	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.26	0.26	0.0082	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.52	0.52	0.0052	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.52	0.52	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.52	0.52	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.52	0.52	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.26	0.26	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	0.33	0.26	0.0052	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0066	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0065	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	93.6			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.2			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	88.8			78.1-125 %		"	"	"	"	

B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10

1,1,1,2-Tetrachloroethane	<0.28	0.28	0.0057	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.28	0.28	0.0063	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.28	0.28	0.0064	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
1,1,2-Trichloroethane	<0.28	0.28	0.0082	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,2-Trichlorotrifluoroethane	<0.28	0.28	0.010	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.28	0.28	0.0037	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.28	0.28	0.0065	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.56	0.56	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.56	0.56	0.0061	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.28	0.28	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.56	0.56	0.0093	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.28	0.28	0.0081	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.28	0.28	0.0038	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.28	0.28	0.0054	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.28	0.28	0.0028	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.28	0.28	0.0043	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.28	0.28	0.0056	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.56	0.56	0.0098	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.2	2.2	0.016	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.28	0.28	0.0025	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.28	0.28	0.0040	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.56	0.56	0.0093	mg/kg dry	1	"	"	"	"	
Benzene	<0.28	0.28	0.0030	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.28	0.28	0.0058	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.28	0.28	0.0083	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.28	0.28	0.0048	mg/kg dry	1	"	"	"	"	
Bromoform	<0.56	0.56	0.0079	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.56	0.56	0.0067	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.28	0.28	0.0067	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.28	0.28	0.0029	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.28	0.28	0.0081	mg/kg dry	1	"	"	"	"	
Chloroform	<0.28	0.28	0.0026	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.28	0.28	0.0075	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.28	0.28	0.0020	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.28	0.28	0.0055	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.28	0.28	0.0052	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (4-8) (1403007-21) Soil Sampled: 07/07/14 15:00 Received: 07/10/14 9:10										
Dichlorodifluoromethane	<0.56	0.56	0.011	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Dichlorofluoromethane	<0.28	0.28	0.0089	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.56	0.56	0.0056	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.28	0.28	0.0029	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.20	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.28	0.28	0.0019	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.56	0.56	0.011	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.56	0.56	0.016	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0044	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.56	0.56	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.28	0.28	0.0062	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.28	0.28	0.0035	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.28	0.28	0.0044	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.28	0.28	0.0034	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.28	0.28	0.0039	mg/kg dry	1	"	"	"	"	
Styrene	<0.28	0.28	0.0061	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.28	0.28	0.0030	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.28	0.28	0.0056	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.2	2.2	0.036	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.28	0.28	0.0039	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.28	0.28	0.0051	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.28	0.28	0.0071	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.28	0.28	0.0043	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.28	0.28	0.0070	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.28	0.28	0.0069	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.5			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.8			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.1			78.1-125 %		"	"	"	"	

B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.35	0.35	0.0071	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.35	0.35	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.35	0.35	0.0079	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.35	0.35	0.010	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.35	0.35	0.013	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.35	0.35	0.0046	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.35	0.35	0.0081	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.35	0.35	0.0076	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.69	0.69	0.0071	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
1,2,3-Trichloropropane	<0.35	0.35	0.0064	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,2,4-Trichlorobenzene	<0.69	0.69	0.0075	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.35	0.35	0.0046	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.69	0.69	0.012	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.35	0.35	0.010	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.35	0.35	0.0047	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.35	0.35	0.0076	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.35	0.35	0.0067	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.35	0.35	0.0035	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.35	0.35	0.0053	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.35	0.35	0.0076	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.35	0.35	0.0069	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.69	0.69	0.012	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.8	2.8	0.019	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.35	0.35	0.0031	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.35	0.35	0.0050	mg/kg dry	1	"	"	"	"	
Acetone	<2.8	2.8	0.14	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.69	0.69	0.012	mg/kg dry	1	"	"	"	"	
Benzene	<0.35	0.35	0.0038	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.35	0.35	0.0072	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.35	0.35	0.010	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.35	0.35	0.0060	mg/kg dry	1	"	"	"	"	
Bromoform	<0.69	0.69	0.0097	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.69	0.69	0.0083	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.35	0.35	0.0083	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.35	0.35	0.0036	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.35	0.35	0.010	mg/kg dry	1	"	"	"	"	
Chloroform	<0.35	0.35	0.0032	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.35	0.35	0.0093	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.35	0.35	0.0025	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.35	0.35	0.0068	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.35	0.35	0.0064	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.35	0.35	0.0064	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.69	0.69	0.013	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.35	0.35	0.011	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.69	0.69	0.0069	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.35	0.35	0.0036	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.4	1.4	0.25	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.35	0.35	0.0024	mg/kg dry	1	"	"	"	"	



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4 (16-20) (1403007-22) Soil Sampled: 07/07/14 13:45 Received: 07/10/14 9:10										
m,p-Xylene	<0.69	0.69	0.013	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Methyl isobutyl ketone	<0.69	0.69	0.019	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.35	0.35	0.0076	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.4	1.4	0.0054	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.69	0.69	0.017	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.35	0.35	0.0076	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.35	0.35	0.0043	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.35	0.35	0.0054	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.35	0.35	0.0042	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.35	0.35	0.0049	mg/kg dry	1	"	"	"	"	
Styrene	<0.35	0.35	0.0075	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.35	0.35	0.0038	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.35	0.35	0.0069	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.8	2.8	0.044	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.35	0.35	0.0049	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.35	0.35	0.0062	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.35	0.35	0.0088	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.35	0.35	0.0053	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.35	0.35	0.0086	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.35	0.35	0.0085	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.9			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.1			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	89.9			78.1-125 %		"	"	"	"	

HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0053	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0094	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.26	0.26	0.0060	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.52	0.52	0.0053	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.52	0.52	0.0056	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0074	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	

Legend Technical Services, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
1,2-Dichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,2-Dichloropropane	<0.26	0.26	0.0049	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.52	0.52	0.0090	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0037	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0054	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0044	mg/kg dry	1	"	"	"	"	
Bromoform	<0.52	0.52	0.0072	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.52	0.52	0.0062	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0074	mg/kg dry	1	"	"	"	"	
Chloroform	<0.26	0.26	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.26	0.26	0.0069	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.52	0.52	0.0097	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.26	0.26	0.0081	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.52	0.52	0.0052	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.52	0.52	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.52	0.52	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0040	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.52	0.52	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-3 (1-2) (1403007-23) Soil Sampled: 07/07/14 12:30 Received: 07/10/14 9:10										
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
o-Xylene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0046	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0065	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0039	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0063	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.9			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	90.4			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.8			78.1-125 %		"	"	"	"	

HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.27	0.27	0.0055	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.27	0.27	0.0060	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.27	0.27	0.0061	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.27	0.27	0.0078	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.27	0.27	0.0098	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.27	0.27	0.0062	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.54	0.54	0.0055	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.54	0.54	0.0058	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.27	0.27	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.54	0.54	0.0089	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.27	0.27	0.0037	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.27	0.27	0.0052	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.27	0.27	0.0027	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.27	0.27	0.0054	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
2,2-Dichloropropane	<0.54	0.54	0.0094	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
2-Butanone	<2.2	2.2	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.27	0.27	0.0024	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.27	0.27	0.0039	mg/kg dry	1	"	"	"	"	
Acetone	<2.2	2.2	0.11	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.54	0.54	0.0089	mg/kg dry	1	"	"	"	"	
Benzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.27	0.27	0.0056	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.27	0.27	0.0080	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.27	0.27	0.0046	mg/kg dry	1	"	"	"	"	
Bromoform	<0.54	0.54	0.0075	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.54	0.54	0.0065	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.27	0.27	0.0065	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.27	0.27	0.0077	mg/kg dry	1	"	"	"	"	
Chloroform	<0.27	0.27	0.0025	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.27	0.27	0.0072	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.27	0.27	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.27	0.27	0.0053	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.27	0.27	0.0049	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.27	0.27	0.0085	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.54	0.54	0.0054	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.27	0.27	0.0028	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.1	1.1	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.27	0.27	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.54	0.54	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.54	0.54	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.1	1.1	0.0042	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.54	0.54	0.013	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.27	0.27	0.0059	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.27	0.27	0.0033	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.27	0.27	0.0042	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.27	0.27	0.0032	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
Styrene	<0.27	0.27	0.0058	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.27	0.27	0.0029	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
HA-2 (2-3) (1403007-24) Soil Sampled: 07/07/14 12:15 Received: 07/10/14 9:10										
Tetrachloroethene	<0.27	0.27	0.0054	mg/kg dry	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Tetrahydrofuran	<2.2	2.2	0.034	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.27	0.27	0.0038	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.27	0.27	0.0048	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.27	0.27	0.0068	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.27	0.27	0.0041	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.27	0.27	0.0067	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.27	0.27	0.0066	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.9			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.7			78.1-125 %		"	"	"	"	

B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Benzene	<1.0	1.0	0.048	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (1403007-25) Water Sampled: 07/07/14 15:15 Received: 07/10/14 9:10										
Trichlorofluoromethane	<1.0	1.0	0.069	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.1			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.9			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	95.7			80-120 %		"	"	"	"	

B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 (1403007-26) Water Sampled: 07/08/14 09:15 Received: 07/10/14 9:10										
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	
Trichlorofluoromethane	2.0	1.0	0.069	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.1			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.8			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	97.7			80-120 %		"	"	"	"	

B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6 (1403007-27) Water Sampled: 07/08/14 13:50 Received: 07/10/14 9:10										
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.069	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.3			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	96.2			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	96.4			80-120 %		"	"	"	"	

Trip Blank Water (1403007-28) Water Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Water (1403007-28) Water Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Water (1403007-28) Water Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	B4G1017	07/10/14	07/10/14	EPA 8260B	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.069	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.9			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	96.5			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	95.5			80-120 %		"	"	"	"	

Trip Blank Soil (1403007-29) Methanol Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
1,1,1,2-Tetrachloroethane	<0.25	0.25	0.0051	mg/kg wet	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.25	0.25	0.0056	mg/kg wet	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.25	0.25	0.0057	mg/kg wet	1	"	"	"	"	
1,1,2-Trichloroethane	<0.25	0.25	0.0073	mg/kg wet	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.25	0.25	0.0091	mg/kg wet	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.25	0.25	0.0033	mg/kg wet	1	"	"	"	"	
1,1-Dichloroethene	<0.25	0.25	0.0058	mg/kg wet	1	"	"	"	"	
1,1-Dichloropropene	<0.25	0.25	0.0055	mg/kg wet	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.50	0.50	0.0051	mg/kg wet	1	"	"	"	"	
1,2,3-Trichloropropane	<0.25	0.25	0.0046	mg/kg wet	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.50	0.50	0.0054	mg/kg wet	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.25	0.25	0.0033	mg/kg wet	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Soil (1403007-29) Methanol Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
1,2-Dibromo-3-chloropropane	<0.50	0.50	0.0083	mg/kg wet	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
1,2-Dibromoethane (EDB)	<0.25	0.25	0.0072	mg/kg wet	1	"	"	"	"	
1,2-Dichlorobenzene	<0.25	0.25	0.0034	mg/kg wet	1	"	"	"	"	
1,2-Dichloroethane	<0.25	0.25	0.0055	mg/kg wet	1	"	"	"	"	
1,2-Dichloropropane	<0.25	0.25	0.0048	mg/kg wet	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.25	0.25	0.0025	mg/kg wet	1	"	"	"	"	
1,3-Dichlorobenzene	<0.25	0.25	0.0038	mg/kg wet	1	"	"	"	"	
1,3-Dichloropropane	<0.25	0.25	0.0055	mg/kg wet	1	"	"	"	"	
1,4-Dichlorobenzene	<0.25	0.25	0.0050	mg/kg wet	1	"	"	"	"	
2,2-Dichloropropane	<0.50	0.50	0.0087	mg/kg wet	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg wet	1	"	"	"	"	
2-Chlorotoluene	<0.25	0.25	0.0022	mg/kg wet	1	"	"	"	"	
4-Chlorotoluene	<0.25	0.25	0.0036	mg/kg wet	1	"	"	"	"	
Acetone	<2.0	2.0	0.10	mg/kg wet	1	"	"	"	"	
Allyl chloride	<0.50	0.50	0.0083	mg/kg wet	1	"	"	"	"	
Benzene	<0.25	0.25	0.0027	mg/kg wet	1	"	"	"	"	
Bromobenzene	<0.25	0.25	0.0052	mg/kg wet	1	"	"	"	"	
Bromochloromethane	<0.25	0.25	0.0074	mg/kg wet	1	"	"	"	"	
Bromodichloromethane	<0.25	0.25	0.0043	mg/kg wet	1	"	"	"	"	
Bromoform	<0.50	0.50	0.0070	mg/kg wet	1	"	"	"	"	
Bromomethane	<0.50	0.50	0.0060	mg/kg wet	1	"	"	"	"	
Carbon tetrachloride	<0.25	0.25	0.0060	mg/kg wet	1	"	"	"	"	
Chlorobenzene	<0.25	0.25	0.0026	mg/kg wet	1	"	"	"	"	
Chloroethane	<0.25	0.25	0.0072	mg/kg wet	1	"	"	"	"	
Chloroform	<0.25	0.25	0.0023	mg/kg wet	1	"	"	"	"	
Chloromethane	<0.25	0.25	0.0067	mg/kg wet	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.25	0.25	0.0018	mg/kg wet	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.25	0.25	0.0049	mg/kg wet	1	"	"	"	"	
Dibromochloromethane	<0.25	0.25	0.0046	mg/kg wet	1	"	"	"	"	
Dibromomethane	<0.25	0.25	0.0046	mg/kg wet	1	"	"	"	"	
Dichlorodifluoromethane	<0.50	0.50	0.0094	mg/kg wet	1	"	"	"	"	
Dichlorofluoromethane	<0.25	0.25	0.0079	mg/kg wet	1	"	"	"	"	T-1
Ethyl ether	<0.50	0.50	0.0050	mg/kg wet	1	"	"	"	"	
Ethylbenzene	<0.25	0.25	0.0026	mg/kg wet	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.18	mg/kg wet	1	"	"	"	"	
Isopropylbenzene	<0.25	0.25	0.0017	mg/kg wet	1	"	"	"	"	
m,p-Xylene	<0.50	0.50	0.0097	mg/kg wet	1	"	"	"	"	
Methyl isobutyl ketone	<0.50	0.50	0.014	mg/kg wet	1	"	"	"	"	
Methyl tert-butyl ether	<0.25	0.25	0.0055	mg/kg wet	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Soil (1403007-29) Methanol										
Sampled: 07/07/14 00:00 Received: 07/10/14 9:10										
Methylene chloride	<1.0	1.0	0.0039	mg/kg wet	1	B4G1431	07/14/14	07/15/14	EPA 8260B	
Naphthalene	<0.50	0.50	0.012	mg/kg wet	1	"	"	"	"	
n-Butylbenzene	<0.25	0.25	0.0055	mg/kg wet	1	"	"	"	"	
n-Propylbenzene	<0.25	0.25	0.0031	mg/kg wet	1	"	"	"	"	
o-Xylene	<0.25	0.25	0.0039	mg/kg wet	1	"	"	"	"	
p-Isopropyltoluene	<0.25	0.25	0.0030	mg/kg wet	1	"	"	"	"	
sec-Butylbenzene	<0.25	0.25	0.0035	mg/kg wet	1	"	"	"	"	
Styrene	<0.25	0.25	0.0054	mg/kg wet	1	"	"	"	"	
tert-Butylbenzene	<0.25	0.25	0.0027	mg/kg wet	1	"	"	"	"	
Tetrachloroethene	<0.25	0.25	0.0050	mg/kg wet	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.032	mg/kg wet	1	"	"	"	"	T-1
Toluene	<0.25	0.25	0.0035	mg/kg wet	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.25	0.25	0.0045	mg/kg wet	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.25	0.25	0.0063	mg/kg wet	1	"	"	"	"	
Trichloroethene	<0.25	0.25	0.0038	mg/kg wet	1	"	"	"	"	
Trichlorofluoromethane	<0.25	0.25	0.0062	mg/kg wet	1	"	"	"	"	
Vinyl chloride	<0.25	0.25	0.0061	mg/kg wet	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.3			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	95.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.4			78.1-125 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1102 - EPA 3510C (Sep Funnel)											
Blank (B4G1102-BLK1)											
						Prepared & Analyzed: 07/11/14					
Diesel Range Organics	< 100	100	21	ug/L							
Surrogate: <i>Triacontane (C-30)</i>	382			ug/L	400		95.6	70-130			
LCS (B4G1102-BS1)											
						Prepared & Analyzed: 07/11/14					
Diesel Range Organics	1660	100	21	ug/L	1600		104	75-115			
Surrogate: <i>Triacontane (C-30)</i>	370			ug/L	400		92.5	70-130			
LCS Dup (B4G1102-BSD1)											
						Prepared: 07/11/14 Analyzed: 07/12/14					
Diesel Range Organics	1610	100	21	ug/L	1600		100	75-115	3.12	20	
Surrogate: <i>Triacontane (C-30)</i>	373			ug/L	400		93.3	70-130			
Duplicate (B4G1102-DUP1)											
						Source: 1403013-01 Prepared & Analyzed: 07/11/14					
Diesel Range Organics	67.0	110	24	ug/L		<110			NA	20	QR-2
Surrogate: <i>Triacontane (C-30)</i>	446			ug/L	449		99.1	70-130			
Batch B4G1103 - Sonication (Wisc DRO)											
Blank (B4G1103-BLK1)											
						Prepared & Analyzed: 07/11/14					
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: <i>Triacontane (C-30)</i>	12.8			mg/kg wet	16.0		79.9	70-130			
LCS (B4G1103-BS1)											
						Prepared & Analyzed: 07/11/14					
Diesel Range Organics	58.7	8.0	1.3	mg/kg wet	64.0		91.7	70-120			
Surrogate: <i>Triacontane (C-30)</i>	13.4			mg/kg wet	16.0		83.6	70-130			
LCS Dup (B4G1103-BSD1)											
						Prepared: 07/11/14 Analyzed: 07/12/14					
Diesel Range Organics	55.6	8.0	1.3	mg/kg wet	64.0		86.9	70-120	5.37	20	
Surrogate: <i>Triacontane (C-30)</i>	12.9			mg/kg wet	16.0		80.8	70-130			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1403 - Sonication (Wisc DRO)											
Blank (B4G1403-BLK1)											
						Prepared & Analyzed: 07/14/14					
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: <i>Triacontane (C-30)</i>	15.1			mg/kg wet	16.0		94.2	70-130			
LCS (B4G1403-BS1)											
						Prepared & Analyzed: 07/14/14					
Diesel Range Organics	69.8	8.0	1.3	mg/kg wet	64.0		109	70-120			
Surrogate: <i>Triacontane (C-30)</i>	13.8			mg/kg wet	16.0		86.3	70-130			
LCS Dup (B4G1403-BSD1)											
						Prepared: 07/14/14 Analyzed: 07/15/14					
Diesel Range Organics	70.4	8.0	1.3	mg/kg wet	64.0		110	70-120	0.888	20	
Surrogate: <i>Triacontane (C-30)</i>	15.9			mg/kg wet	16.0		99.2	70-130			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1013 - EPA 5035 Soil (Purge and Trap)											
Blank (B4G1013-BLK1) Prepared & Analyzed: 07/10/14											
Gasoline range organics	< 5.0	5.0	0.54	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	22.9			ug/L	25.0		91.5	80-150			
LCS (B4G1013-BS1) Prepared & Analyzed: 07/10/14											
Gasoline range organics	982			ug/L	1000		98.2	80-120			
Surrogate: 4-Fluorochlorobenzene	23.5			ug/L	25.0		94.2	80-150			
LCS Dup (B4G1013-BSD1) Prepared: 07/10/14 Analyzed: 07/11/14											
Gasoline range organics	1080			ug/L	1000		108	80-120	9.19	20	
Surrogate: 4-Fluorochlorobenzene	22.9			ug/L	25.0		91.6	80-150			
Duplicate (B4G1013-DUP1) Source: 1403007-03 Prepared & Analyzed: 07/10/14											
Gasoline range organics	1.51	5.1	0.55	mg/kg dry		<5.1			NA	20	
Surrogate: 4-Fluorochlorobenzene	23.5			ug/L	25.0		93.9	80-150			
Batch B4G1105 - EPA 5030 Water (Purge and Trap)											
Blank (B4G1105-BLK1) Prepared & Analyzed: 07/11/14											
Gasoline range organics	< 100	100	14	ug/L							
Surrogate: 4-Fluorochlorobenzene	23.7			ug/L	25.0		94.8	80-150			
LCS (B4G1105-BS1) Prepared & Analyzed: 07/11/14											
Gasoline range organics	982	100	14	ug/L	1000		98.2	80-120			
Surrogate: 4-Fluorochlorobenzene	24.4			ug/L	25.0		97.7	80-150			
LCS Dup (B4G1105-BSD1) Prepared: 07/11/14 Analyzed: 07/12/14											
Gasoline range organics	989	100	14	ug/L	1000		98.9	80-120	0.710	20	
Surrogate: 4-Fluorochlorobenzene	23.7			ug/L	25.0		94.7	80-150			
Duplicate (B4G1105-DUP1) Source: 1402969-01 Prepared: 07/11/14 Analyzed: 07/12/14											
Gasoline range organics	32.6	100	14	ug/L		<100			NA	20	
Surrogate: 4-Fluorochlorobenzene	23.7			ug/L	25.0		94.9	80-150			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1406 - EPA 5035 Soil (Purge and Trap)											
Blank (B4G1406-BLK1)											
						Prepared & Analyzed: 07/14/14					
Gasoline range organics	< 5.0	5.0	0.54	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	22.9			ug/L	25.0		91.8	80-150			
LCS (B4G1406-BS1)											
						Prepared & Analyzed: 07/14/14					
Gasoline range organics	1010			ug/L	1000		101	80-120			
Surrogate: 4-Fluorochlorobenzene	23.3			ug/L	25.0		93.0	80-150			
LCS Dup (B4G1406-BSD1)											
						Prepared: 07/14/14 Analyzed: 07/15/14					
Gasoline range organics	977			ug/L	1000		97.7	80-120	3.00	20	
Surrogate: 4-Fluorochlorobenzene	23.2			ug/L	25.0		92.9	80-150			
Duplicate (B4G1406-DUP1)											
						Source: 1403045-01 Prepared & Analyzed: 07/14/14					
Gasoline range organics	1.73	6.0	0.64	mg/kg dry		<6.0			NA	20	
Surrogate: 4-Fluorochlorobenzene	23.4			ug/L	25.0		93.4	80-150			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1407 - EPA 245.1/7470A Digestion											
Blank (B4G1407-BLK1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	< 0.00020	0.00020	0.000052	mg/L							
LCS (B4G1407-BS1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00192	0.00020	0.000052	mg/L	0.00200		96.0	80-120			
LCS Dup (B4G1407-BSD1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00202	0.00020	0.000052	mg/L	0.00200		101	80-120	5.08	20	
Matrix Spike (B4G1407-MS1) Source: 1403007-25 Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00210	0.00020	0.000052	mg/L	0.00200	<0.00020	95.6	75-125			
Matrix Spike Dup (B4G1407-MSD1) Source: 1403007-25 Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00203	0.00020	0.000052	mg/L	0.00200	<0.00020	92.1	75-125	3.39	20	
Batch B4G1417 - EPA 200.7/3005A Digestion											
Blank (B4G1417-BLK1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	< 0.010	0.010	0.0014	mg/L							
Barium	< 0.020	0.020	0.0021	mg/L							
Cadmium	< 0.0010	0.0010	0.00015	mg/L							
Chromium	< 0.010	0.010	0.00015	mg/L							
Lead	< 0.0030	0.0030	0.00058	mg/L							
Selenium	< 0.020	0.020	0.0040	mg/L							
Silver	< 0.0050	0.0050	0.00031	mg/L							
LCS (B4G1417-BS1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	0.371	0.010	0.0014	mg/L	0.399		93.0	80-120			
Barium	0.394	0.020	0.0021	mg/L	0.399		98.7	80-120			
Cadmium	0.381	0.0010	0.00015	mg/L	0.399		95.6	80-120			
Chromium	0.384	0.010	0.00015	mg/L	0.399		96.3	80-120			
Lead	0.395	0.0030	0.00058	mg/L	0.399		99.0	80-120			
Selenium	0.372	0.020	0.0040	mg/L	0.399		93.1	80-120			
Silver	0.0379	0.0050	0.00031	mg/L	0.0399		94.9	80-120			
LCS Dup (B4G1417-BSD1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	0.385	0.010	0.0014	mg/L	0.399		96.6	80-120	3.74	20	
Barium	0.406	0.020	0.0021	mg/L	0.399		102	80-120	3.02	20	
Cadmium	0.394	0.0010	0.00015	mg/L	0.399		98.8	80-120	3.31	20	
Chromium	0.398	0.010	0.00015	mg/L	0.399		99.7	80-120	3.54	20	
Lead	0.410	0.0030	0.00058	mg/L	0.399		103	80-120	3.79	20	
Selenium	0.386	0.020	0.0040	mg/L	0.399		96.8	80-120	3.83	20	
Silver	0.0389	0.0050	0.00031	mg/L	0.0399		97.4	80-120	2.57	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1417 - EPA 200.7/3005A Digestion											
Matrix Spike (B4G1417-MS1)		Source: 1403007-25			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	0.403	0.010	0.0014	mg/L	0.399	<0.010	101	75-125			
Barium	0.678	0.020	0.0021	mg/L	0.399	0.290	97.3	75-125			
Cadmium	0.399	0.0010	0.00015	mg/L	0.399	<0.0010	100	75-125			
Chromium	0.393	0.010	0.00015	mg/L	0.399	<0.010	97.7	75-125			
Lead	0.388	0.0030	0.00058	mg/L	0.399	<0.0030	97.2	75-125			
Selenium	0.394	0.020	0.0040	mg/L	0.399	<0.020	98.7	75-125			
Silver	0.0403	0.0050	0.00031	mg/L	0.0399	<0.0050	101	75-125			
Matrix Spike Dup (B4G1417-MSD1)											
Matrix Spike Dup (B4G1417-MSD1)		Source: 1403007-25			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	0.386	0.010	0.0014	mg/L	0.399	<0.010	96.7	75-125	4.33	20	
Barium	0.655	0.020	0.0021	mg/L	0.399	0.290	91.5	75-125	3.46	20	
Cadmium	0.384	0.0010	0.00015	mg/L	0.399	<0.0010	96.1	75-125	4.02	20	
Chromium	0.379	0.010	0.00015	mg/L	0.399	<0.010	94.2	75-125	3.61	20	
Lead	0.379	0.0030	0.00058	mg/L	0.399	<0.0030	94.9	75-125	2.42	20	
Selenium	0.384	0.020	0.0040	mg/L	0.399	<0.020	96.3	75-125	2.43	20	
Silver	0.0394	0.0050	0.00031	mg/L	0.0399	<0.0050	98.7	75-125	2.25	20	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1419 - EPA 3050B

Blank (B4G1419-BLK1)

Prepared: 07/14/14 Analyzed: 07/16/14

Arsenic	< 0.50	0.50	0.12	mg/kg wet							
Barium	< 1.0	1.0	0.055	mg/kg wet							
Cadmium	< 0.25	0.25	0.033	mg/kg wet							
Chromium	< 0.50	0.50	0.13	mg/kg wet							
Lead	< 1.0	1.0	0.14	mg/kg wet							
Selenium	< 1.0	1.0	0.16	mg/kg wet							
Silver	< 0.25	0.25	0.028	mg/kg wet							

LCS (B4G1419-BS1)

Prepared: 07/14/14 Analyzed: 07/16/14

Arsenic	40.7	0.50	0.12	mg/kg wet	39.9		102	80-120			
Barium	42.2	1.0	0.055	mg/kg wet	39.9		106	80-120			
Cadmium	40.9	0.25	0.033	mg/kg wet	39.9		103	80-120			
Chromium	41.8	0.50	0.13	mg/kg wet	39.9		105	80-120			
Lead	43.2	1.0	0.14	mg/kg wet	39.9		108	80-120			
Selenium	41.0	1.0	0.16	mg/kg wet	39.9		103	80-120			
Silver	4.08	0.25	0.028	mg/kg wet	3.99		102	80-120			

LCS Dup (B4G1419-BSD1)

Prepared: 07/14/14 Analyzed: 07/16/14

Arsenic	40.4	0.50	0.12	mg/kg wet	39.9	1.68	101	80-120	0.614	20	
Barium	42.1	1.0	0.055	mg/kg wet	39.9	29.2	106	80-120	0.273	20	
Cadmium	40.5	0.25	0.033	mg/kg wet	39.9	<0.26	101	80-120	1.18	20	
Chromium	41.4	0.50	0.13	mg/kg wet	39.9	10.8	104	80-120	1.10	20	
Lead	42.7	1.0	0.14	mg/kg wet	39.9	2.86	107	80-120	1.04	20	
Selenium	40.7	1.0	0.16	mg/kg wet	39.9	<1.0	102	80-120	0.609	20	
Silver	4.01	0.25	0.028	mg/kg wet	3.99	<0.26	100	80-120	1.80	20	

Matrix Spike (B4G1419-MS1)

Source: 1403007-01

Prepared: 07/14/14 Analyzed: 07/16/14

Arsenic	41.2	0.52	0.13	mg/kg dry	40.8	1.68	96.8	75-125			
Barium	78.2	1.0	0.057	mg/kg dry	40.8	29.2	120	75-125			
Cadmium	40.0	0.26	0.034	mg/kg dry	40.8	<0.26	98.1	75-125			
Chromium	54.9	0.52	0.14	mg/kg dry	40.8	10.8	108	75-125			
Lead	43.3	1.0	0.14	mg/kg dry	40.8	2.86	99.2	75-125			
Selenium	39.0	1.0	0.17	mg/kg dry	40.8	<1.0	95.7	75-125			
Silver	3.90	0.26	0.028	mg/kg dry	4.08	<0.26	95.8	75-125			

Matrix Spike Dup (B4G1419-MSD1)

Source: 1403007-01

Prepared: 07/14/14 Analyzed: 07/16/14

Arsenic	40.5	0.52	0.13	mg/kg dry	40.7	1.68	95.2	75-125	1.70	20	
Barium	75.8	1.0	0.057	mg/kg dry	40.7	29.2	114	75-125	3.17	20	
Cadmium	39.5	0.26	0.034	mg/kg dry	40.7	<0.26	96.8	75-125	1.36	20	
Chromium	52.2	0.52	0.14	mg/kg dry	40.7	10.8	102	75-125	5.20	20	
Lead	42.5	1.0	0.14	mg/kg dry	40.7	2.86	97.3	75-125	1.90	20	
Selenium	39.1	1.0	0.17	mg/kg dry	40.7	<1.0	96.0	75-125	0.249	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PCB 8082A - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1603 - EPA 3545 ASE Extraction											
Blank (B4G1603-BLK1)											
						Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1016	< 0.20	0.20	0.017	mg/kg wet							
Aroclor 1221	< 0.20	0.20	0.020	mg/kg wet							
Aroclor 1232	< 0.20	0.20	0.030	mg/kg wet							
Aroclor 1242	< 0.20	0.20	0.020	mg/kg wet							
Aroclor 1248	< 0.20	0.20	0.022	mg/kg wet							
Aroclor 1254	< 0.20	0.20	0.024	mg/kg wet							
Aroclor 1260	< 0.20	0.20	0.022	mg/kg wet							
Surrogate: Decachlorobiphenyl	0.0583			mg/kg wet	0.0667		87.5	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0587			mg/kg wet	0.0667		88.0	60.9-138			
LCS (B4G1603-BS1)											
						Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.324	0.20	0.022	mg/kg wet	0.333		97.2	70-130			
Surrogate: Decachlorobiphenyl	0.0593			mg/kg wet	0.0667		89.0	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0587			mg/kg wet	0.0667		88.0	60.9-138			
Matrix Spike (B4G1603-MS1)											
						Source: 1403007-13 Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.337	0.20	0.022	mg/kg dry	0.334	<0.20	101	70-130			
Surrogate: Decachlorobiphenyl	0.0605			mg/kg dry	0.0668		90.5	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0592			mg/kg dry	0.0668		88.5	60.9-138			
Matrix Spike Dup (B4G1603-MSD1)											
						Source: 1403007-13 Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.328	0.20	0.022	mg/kg dry	0.334	<0.20	98.0	70-130	2.75	17.2	
Surrogate: Decachlorobiphenyl	0.0589			mg/kg dry	0.0669		88.0	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0585			mg/kg dry	0.0669		87.5	60.9-138			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes	
Batch B4G1711 - General Preparation												
Duplicate (B4G1711-DUP1)							Source: 1403007-10					Prepared & Analyzed: 07/17/14
% Solids	93.0			%		93.0			0.00	20		
Duplicate (B4G1711-DUP2)							Source: 1403007-20					Prepared & Analyzed: 07/17/14
% Solids	96.0			%		96.0			0.00	20		
Duplicate (B4G1711-DUP3)							Source: 1403007-24					Prepared & Analyzed: 07/17/14
% Solids	93.0			%		93.0			0.00	20		

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Blank (B4G1405-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	< 10	10	0.53	ug/L							
1,2-Dichlorobenzene	< 10	10	0.52	ug/L							
1,2-Diphenylhydrazine as Azobenzene	< 10	10	0.93	ug/L							
1,3-Dichlorobenzene	< 10	10	0.44	ug/L							
1,4-Dichlorobenzene	< 10	10	0.30	ug/L							
2,3,4,6-Tetrachlorophenol	< 10	10	1.7	ug/L							
2,4,5-Trichlorophenol	< 10	10	1.4	ug/L							
2,4,6-Trichlorophenol	< 10	10	1.2	ug/L							
2,4-Dichlorophenol	< 10	10	1.1	ug/L							
2,4-Dimethylphenol	< 10	10	1.4	ug/L							
2,4-Dinitrophenol	< 10	10	1.7	ug/L							
2,4-Dinitrotoluene	< 10	10	0.75	ug/L							
2,6-Dichlorophenol	< 10	10	1.1	ug/L							
2,6-Dinitrotoluene	< 10	10	0.87	ug/L							
2-Chloronaphthalene	< 10	10	0.61	ug/L							
2-Chlorophenol	< 10	10	1.1	ug/L							
2-Methylnaphthalene	< 10	10	1.2	ug/L							
2-Methylphenol	< 10	10	1.2	ug/L							
2-Nitroaniline	< 10	10	1.7	ug/L							
2-Nitrophenol	< 10	10	1.5	ug/L							
3&4-Methylphenol	< 10	10	1.3	ug/L							
3,3'-Dichlorobenzidine	< 25	25	5.9	ug/L							
3-Nitroaniline	< 10	10	1.5	ug/L							
4,6-Dinitro-2-methylphenol	< 10	10	2.0	ug/L							
4-Bromophenyl phenyl ether	< 10	10	0.74	ug/L							
4-Chloro-3-methylphenol	< 10	10	1.4	ug/L							
4-Chloroaniline	< 10	10	2.7	ug/L							
4-Chlorophenyl phenyl ether	< 10	10	0.68	ug/L							
4-Nitroaniline	< 10	10	1.3	ug/L							
4-Nitrophenol	< 10	10	1.9	ug/L							
Acenaphthene	< 10	10	0.74	ug/L							
Acenaphthylene	< 10	10	0.69	ug/L							
Aniline	< 10	10	2.1	ug/L							
Anthracene	< 10	10	0.73	ug/L							
Benzidine	< 100	100	11	ug/L							
Benzo(a)anthracene	< 10	10	0.65	ug/L							
Benzo(a)pyrene	< 10	10	0.62	ug/L							
Benzo(b)fluoranthene	< 10	10	0.64	ug/L							
Benzo(g,h,i)perylene	< 10	10	0.65	ug/L							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Blank (B4G1405-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

Benzo(k)fluoranthene	< 10	10	0.64	ug/L							
Benzoic acid	< 10	10	2.3	ug/L							
Benzyl alcohol	< 10	10	1.5	ug/L							
Bis(2-chloroethoxy)methane	< 10	10	0.66	ug/L							
Bis(2-chloroethyl)ether	< 10	10	0.70	ug/L							
Bis(2-chloroisopropyl)ether	< 10	10	0.84	ug/L							
Bis(2-ethylhexyl)phthalate	< 10	10	0.64	ug/L							
Butyl benzyl phthalate	< 10	10	0.98	ug/L							
Carbazole	< 10	10	0.77	ug/L							
Chrysene	< 10	10	0.62	ug/L							
Dibenz(a,h)anthracene	< 10	10	0.53	ug/L							
Dibenzofuran	< 10	10	1.3	ug/L							
Diethyl phthalate	< 10	10	0.74	ug/L							
Dimethyl phthalate	< 10	10	0.69	ug/L							
Di-n-butyl phthalate	< 10	10	0.79	ug/L							
Di-n-octyl phthalate	< 10	10	0.71	ug/L							
Fluoranthene	< 10	10	0.76	ug/L							
Fluorene	< 10	10	0.74	ug/L							
Hexachlorobenzene	< 10	10	0.68	ug/L							
Hexachlorobutadiene	< 10	10	0.52	ug/L							
Hexachlorocyclopentadiene	< 10	10	0.54	ug/L							
Hexachloroethane	< 10	10	0.47	ug/L							
Indeno (1,2,3-cd) pyrene	< 10	10	0.57	ug/L							
Isophorone	< 10	10	0.70	ug/L							
Naphthalene	< 10	10	0.59	ug/L							
Nitrobenzene	< 10	10	0.71	ug/L							
N-Nitrosodimethylamine	< 10	10	0.56	ug/L							
N-Nitrosodi-n-propylamine	< 10	10	0.75	ug/L							
N-Nitrosodiphenylamine	< 10	10	0.77	ug/L							
Pentachlorophenol	< 10	10	2.4	ug/L							
Phenanthrene	< 10	10	0.74	ug/L							
Phenol	< 10	10	1.0	ug/L							
Pyrene	< 10	10	0.69	ug/L							
Surrogate: 2,4,6-Tribromophenol	89.5			ug/L	100		89.5	30-122			
Surrogate: 2-Fluorobiphenyl	81.1			ug/L	100		81.1	39.2-104			
Surrogate: 2-Fluorophenol	55.1			ug/L	100		55.1	30-80.1			
Surrogate: Nitrobenzene-d5	79.3			ug/L	100		79.3	51.2-103			
Surrogate: Phenol-d6	60.5			ug/L	100		60.5	30-75.3			
Surrogate: Terphenyl-d14	84.5			ug/L	100		84.5	30-116			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

LCS (B4G1405-BS1)

Prepared: 07/14/14 Analyzed: 07/16/14

1,2,4-Trichlorobenzene	79.8	10	0.53	ug/L	100	79.8	38-100
1,4-Dichlorobenzene	77.2	10	0.30	ug/L	100	77.2	30-90
2,4-Dinitrotoluene	94.0	10	0.75	ug/L	100	94.0	57-100
2-Chlorophenol	81.8	10	1.1	ug/L	100	81.8	45-95
4-Chloro-3-methylphenol	91.0	10	1.4	ug/L	100	91.0	52-100
4-Nitrophenol	91.4	10	1.9	ug/L	100	91.4	30-100
Anthracene	82.5	10	0.73	ug/L	100	82.5	60-100
Benzo(a)anthracene	90.2	10	0.65	ug/L	100	90.2	64-100
Benzo(a)pyrene	85.0	10	0.62	ug/L	100	85.0	60-100
Chrysene	93.0	10	0.62	ug/L	100	93.0	60-100
Fluoranthene	81.1	10	0.76	ug/L	100	81.1	63-100
Fluorene	80.4	10	0.74	ug/L	100	80.4	59-100
N-Nitrosodi-n-propylamine	94.0	10	0.75	ug/L	100	94.0	55-100
Pentachlorophenol	91.8	10	2.4	ug/L	100	91.8	45-107
Phenanthrene	84.8	10	0.74	ug/L	100	84.8	62-100
Phenol	67.0	10	1.0	ug/L	100	67.0	30-80
Surrogate: 2,4,6-Tribromophenol	80.4			ug/L	100	80.4	30-122
Surrogate: 2-Fluorobiphenyl	79.2			ug/L	100	79.2	39.2-104
Surrogate: 2-Fluorophenol	61.0			ug/L	100	61.0	30-80.1
Surrogate: Nitrobenzene-d5	82.2			ug/L	100	82.2	51.2-103
Surrogate: Phenol-d6	67.7			ug/L	100	67.7	30-75.3
Surrogate: Terphenyl-d14	97.2			ug/L	100	97.2	30-116

Matrix Spike (B4G1405-MS1)

Source: 1403022-01

Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	89.0	12	0.62	ug/L	117	<12	76.1	30-100
1,4-Dichlorobenzene	84.0	12	0.35	ug/L	117	<12	71.8	30-90
2,4-Dinitrotoluene	109	12	0.88	ug/L	117	<12	93.1	30-110
2-Chlorophenol	91.8	12	1.3	ug/L	117	<12	78.4	30-100
4-Chloro-3-methylphenol	105	12	1.6	ug/L	117	<12	90.1	30-113
4-Nitrophenol	120	12	2.2	ug/L	117	<12	102	30-112
Anthracene	97.6	12	0.85	ug/L	117	<12	83.4	30-119
Benzo(a)anthracene	105	12	0.76	ug/L	117	<12	89.8	30-122
Benzo(a)pyrene	97.8	12	0.73	ug/L	117	<12	83.6	30-118
Chrysene	110	12	0.73	ug/L	117	<12	94.0	30-125
Fluoranthene	92.9	12	0.89	ug/L	117	<12	79.4	30-119
Fluorene	92.1	12	0.87	ug/L	117	<12	78.8	30-107
N-Nitrosodi-n-propylamine	103	12	0.88	ug/L	117	<12	88.1	37-100
Pentachlorophenol	119	12	2.8	ug/L	117	<12	102	30-130
Phenanthrene	99.6	12	0.87	ug/L	117	<12	85.2	30-117
Phenol	85.0	12	1.2	ug/L	117	<12	72.7	30-80

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Matrix Spike (B4G1405-MS1)

Source: 1403022-01

Prepared: 07/14/14 Analyzed: 07/15/14

Surrogate: 2,4,6-Tribromophenol	95.1			ug/L	117		81.3	30-122			
Surrogate: 2-Fluorobiphenyl	88.8			ug/L	117		76.0	39.2-104			
Surrogate: 2-Fluorophenol	74.7			ug/L	117		63.8	30-80.1			
Surrogate: Nitrobenzene-d5	92.1			ug/L	117		78.7	51.2-103			
Surrogate: Phenol-d6	84.8			ug/L	117		72.5	30-75.3			
Surrogate: Terphenyl-d14	103			ug/L	117		88.4	30-116			

Matrix Spike Dup (B4G1405-MSD1)

Source: 1403022-01

Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	99.9	14	0.76	ug/L	144	<14	69.5	30-100	11.6	20	
1,4-Dichlorobenzene	95.0	14	0.43	ug/L	144	<14	66.1	30-90	12.3	20	
2,4-Dinitrotoluene	122	14	1.1	ug/L	144	<14	84.7	30-110	11.2	20	
2-Chlorophenol	104	14	1.6	ug/L	144	<14	72.5	30-100	12.8	20	
4-Chloro-3-methylphenol	114	14	2.0	ug/L	144	<14	79.5	30-113	8.22	20	
4-Nitrophenol	140	14	2.7	ug/L	144	<14	97.6	30-112	15.9	34.3	
Anthracene	112	14	1.1	ug/L	144	<14	77.8	30-119	13.7	20	
Benzo(a)anthracene	120	14	0.94	ug/L	144	<14	83.1	30-122	13.0	20	
Benzo(a)pyrene	113	14	0.89	ug/L	144	<14	78.4	30-118	14.3	20	
Chrysene	125	14	0.89	ug/L	144	<14	86.9	30-125	12.8	20	
Fluoranthene	107	14	1.1	ug/L	144	<14	74.6	30-119	14.5	20	
Fluorene	104	14	1.1	ug/L	144	<14	72.3	30-107	12.1	20	
N-Nitrosodi-n-propylamine	116	14	1.1	ug/L	144	<14	80.3	37-100	11.5	20	
Pentachlorophenol	134	14	3.5	ug/L	144	<14	93.3	30-130	12.2	20	
Phenanthrene	114	14	1.1	ug/L	144	<14	79.3	30-117	13.6	20	
Phenol	103	14	1.4	ug/L	144	<14	71.8	30-80	19.3	31.9	
Surrogate: 2,4,6-Tribromophenol	110			ug/L	144		76.1	30-122			
Surrogate: 2-Fluorobiphenyl	99.6			ug/L	144		69.2	39.2-104			
Surrogate: 2-Fluorophenol	87.7			ug/L	144		60.9	30-80.1			
Surrogate: Nitrobenzene-d5	102			ug/L	144		70.9	51.2-103			
Surrogate: Phenol-d6	104			ug/L	144		72.2	30-75.3			
Surrogate: Terphenyl-d14	115			ug/L	144		80.0	30-116			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1502 - EPA 3545 ASE Extraction

Blank (B4G1502-BLK1)

Prepared & Analyzed: 07/15/14

1,2,4-Trichlorobenzene	< 0.33	0.33	0.075	mg/kg wet							
1,2-Dichlorobenzene	< 0.33	0.33	0.067	mg/kg wet							
1,2-Diphenylhydrazine as Azobenzene	< 0.33	0.33	0.058	mg/kg wet							
1,3-Dichlorobenzene	< 0.33	0.33	0.069	mg/kg wet							
1,4-Dichlorobenzene	< 0.33	0.33	0.068	mg/kg wet							
2,3,4,6-Tetrachlorophenol	< 0.67	0.67	0.19	mg/kg wet							
2,4,5-Trichlorophenol	< 0.67	0.67	0.071	mg/kg wet							
2,4,6-Trichlorophenol	< 0.67	0.67	0.16	mg/kg wet							
2,4-Dichlorophenol	< 0.67	0.67	0.15	mg/kg wet							
2,4-Dimethylphenol	< 0.67	0.67	0.13	mg/kg wet							
2,4-Dinitrophenol	< 0.67	0.67	0.071	mg/kg wet							
2,4-Dinitrotoluene	< 0.33	0.33	0.068	mg/kg wet							
2,6-Dichlorophenol	< 0.67	0.67	0.13	mg/kg wet							
2,6-Dinitrotoluene	< 0.33	0.33	0.077	mg/kg wet							
2-Chloronaphthalene	< 0.33	0.33	0.068	mg/kg wet							
2-Chlorophenol	< 0.67	0.67	0.15	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.080	mg/kg wet							
2-Methylphenol	< 0.67	0.67	0.082	mg/kg wet							
2-Nitroaniline	< 0.33	0.33	0.069	mg/kg wet							
2-Nitrophenol	< 0.67	0.67	0.18	mg/kg wet							
3&4-Methylphenol	< 0.67	0.67	0.082	mg/kg wet							
3,3'-Dichlorobenzidine	< 1.6	1.6	0.45	mg/kg wet							
3-Nitroaniline	< 0.33	0.33	0.072	mg/kg wet							
4,6-Dinitro-2-methylphenol	< 0.67	0.67	0.11	mg/kg wet							
4-Bromophenyl phenyl ether	< 0.33	0.33	0.068	mg/kg wet							
4-Chloro-3-methylphenol	< 0.67	0.67	0.14	mg/kg wet							
4-Chloroaniline	< 0.67	0.67	0.067	mg/kg wet							
4-Chlorophenyl phenyl ether	< 0.33	0.33	0.068	mg/kg wet							
4-Nitroaniline	< 0.33	0.33	0.083	mg/kg wet							
4-Nitrophenol	< 0.67	0.67	0.17	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.063	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.071	mg/kg wet							
Aniline	< 0.67	0.67	0.066	mg/kg wet							
Anthracene	< 0.33	0.33	0.069	mg/kg wet							
Benzidine	< 2.5	2.5	0.44	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.065	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.070	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.059	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.071	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1502 - EPA 3545 ASE Extraction

Blank (B4G1502-BLK1)

Prepared & Analyzed: 07/15/14

Benzo(k)fluoranthene	< 0.33	0.33	0.070	mg/kg wet							
Benzoic acid	< 0.33	0.33	0.064	mg/kg wet							
Benzyl alcohol	< 0.67	0.67	0.15	mg/kg wet							
Bis(2-chloroethoxy)methane	< 0.33	0.33	0.077	mg/kg wet							
Bis(2-chloroethyl)ether	< 0.33	0.33	0.069	mg/kg wet							
Bis(2-chloroisopropyl)ether	< 0.33	0.33	0.078	mg/kg wet							
Bis(2-ethylhexyl)phthalate	< 0.33	0.33	0.081	mg/kg wet							
Butyl benzyl phthalate	< 0.33	0.33	0.083	mg/kg wet							
Carbazole	< 0.33	0.33	0.076	mg/kg wet							
Chrysene	< 0.33	0.33	0.064	mg/kg wet							
Dibenz(a,h)anthracene	< 0.33	0.33	0.082	mg/kg wet							
Dibenzofuran	< 0.33	0.33	0.068	mg/kg wet							
Diethyl phthalate	< 0.33	0.33	0.063	mg/kg wet							
Dimethyl phthalate	< 0.33	0.33	0.069	mg/kg wet							
Di-n-butyl phthalate	< 0.33	0.33	0.079	mg/kg wet							
Di-n-octyl phthalate	< 0.33	0.33	0.10	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.068	mg/kg wet							
Fluorene	< 0.33	0.33	0.065	mg/kg wet							
Hexachlorobenzene	< 0.33	0.33	0.062	mg/kg wet							
Hexachlorobutadiene	< 0.33	0.33	0.077	mg/kg wet							
Hexachlorocyclopentadiene	< 0.33	0.33	0.069	mg/kg wet							
Hexachloroethane	< 0.33	0.33	0.082	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.072	mg/kg wet							
Isophorone	< 0.33	0.33	0.076	mg/kg wet							
Naphthalene	< 0.33	0.33	0.071	mg/kg wet							
Nitrobenzene	< 0.33	0.33	0.080	mg/kg wet							
N-Nitrosodimethylamine	< 0.33	0.33	0.070	mg/kg wet							
N-Nitrosodi-n-propylamine	< 0.33	0.33	0.073	mg/kg wet							
N-Nitrosodiphenylamine	< 0.33	0.33	0.067	mg/kg wet							
Pentachlorophenol	< 0.67	0.67	0.19	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.066	mg/kg wet							
Phenol	< 0.67	0.67	0.14	mg/kg wet							
Pyrene	< 0.33	0.33	0.059	mg/kg wet							
Surrogate: 2,4,6-Tribromophenol	6.36			mg/kg wet	6.67		95.3	53-107			
Surrogate: 2-Fluorobiphenyl	5.43			mg/kg wet	6.67		81.4	53.9-97.9			
Surrogate: 2-Fluorophenol	4.83			mg/kg wet	6.67		72.4	42.5-94.9			
Surrogate: Nitrobenzene-d5	5.21			mg/kg wet	6.67		78.1	48.9-100			
Surrogate: Phenol-d6	5.34			mg/kg wet	6.67		80.1	50.4-99.6			
Surrogate: Terphenyl-d14	5.52			mg/kg wet	6.67		82.9	51-99.6			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1502 - EPA 3545 ASE Extraction

LCS (B4G1502-BS1)

Prepared & Analyzed: 07/15/14

1,2,4-Trichlorobenzene	2.68	0.33	0.075	mg/kg wet	3.33		80.3	50-100			
1,4-Dichlorobenzene	2.51	0.33	0.068	mg/kg wet	3.33		75.4	40-80			
2,4-Dinitrotoluene	2.98	0.33	0.068	mg/kg wet	3.33		89.4	50-90			
2-Chlorophenol	2.67	0.67	0.15	mg/kg wet	3.33		80.1	50-85			
4-Chloro-3-methylphenol	2.91	0.67	0.14	mg/kg wet	3.33		87.3	55-90			
4-Nitrophenol	3.14	0.67	0.17	mg/kg wet	3.33		94.2	45-100			
Anthracene	2.93	0.33	0.069	mg/kg wet	3.33		87.8	55-95			
Benzo(a)anthracene	2.98	0.33	0.065	mg/kg wet	3.33		89.4	55-100			
Benzo(a)pyrene	2.98	0.33	0.070	mg/kg wet	3.33		89.4	55-100			
Chrysene	3.02	0.33	0.064	mg/kg wet	3.33		90.5	55-100			
Fluoranthene	2.89	0.33	0.068	mg/kg wet	3.33		86.6	55-95			
Fluorene	2.89	0.33	0.065	mg/kg wet	3.33		86.6	55-95			
N-Nitrosodi-n-propylamine	2.77	0.33	0.073	mg/kg wet	3.33		83.2	50-90			
Pentachlorophenol	2.77	0.67	0.19	mg/kg wet	3.33		83.2	35-95			
Phenanthrene	2.94	0.33	0.066	mg/kg wet	3.33		88.1	55-95			
Phenol	2.62	0.67	0.14	mg/kg wet	3.33		78.6	50-85			
Surrogate: 2,4,6-Tribromophenol	5.56			mg/kg wet	6.67		83.4	53-107			
Surrogate: 2-Fluorobiphenyl	5.16			mg/kg wet	6.67		77.4	53.9-97.9			
Surrogate: 2-Fluorophenol	5.06			mg/kg wet	6.67		75.9	42.5-94.9			
Surrogate: Nitrobenzene-d5	4.97			mg/kg wet	6.67		74.5	48.9-100			
Surrogate: Phenol-d6	5.39			mg/kg wet	6.67		80.9	50.4-99.6			
Surrogate: Terphenyl-d14	5.77			mg/kg wet	6.67		86.6	51-99.6			

Matrix Spike (B4G1502-MS1)

Source: 1403068-02

Prepared & Analyzed: 07/15/14

1,2,4-Trichlorobenzene	2.67	0.35	0.080	mg/kg dry	3.52	<0.35	75.8	35-100			
1,4-Dichlorobenzene	2.39	0.35	0.072	mg/kg dry	3.52	<0.35	68.1	30-85			
2,4-Dinitrotoluene	3.14	0.35	0.072	mg/kg dry	3.52	<0.35	89.3	45-95			
2-Chlorophenol	2.65	0.71	0.16	mg/kg dry	3.52	<0.71	75.4	35-100			
4-Chloro-3-methylphenol	3.01	0.71	0.15	mg/kg dry	3.52	<0.71	85.5	35-100			
4-Nitrophenol	3.10	0.71	0.18	mg/kg dry	3.52	<0.71	88.2	40-100			
Anthracene	3.16	0.35	0.073	mg/kg dry	3.52	<0.35	89.7	55-100			
Benzo(a)anthracene	3.16	0.35	0.069	mg/kg dry	3.52	<0.35	89.9	50-100			
Benzo(a)pyrene	3.15	0.35	0.074	mg/kg dry	3.52	<0.35	89.4	50-100			
Chrysene	3.08	0.35	0.068	mg/kg dry	3.52	<0.35	87.6	50-100			
Fluoranthene	3.22	0.35	0.072	mg/kg dry	3.52	<0.35	91.6	50-100			
Fluorene	3.05	0.35	0.069	mg/kg dry	3.52	<0.35	86.7	50-100			
N-Nitrosodi-n-propylamine	2.72	0.35	0.078	mg/kg dry	3.52	<0.35	77.5	35-100			
Pentachlorophenol	3.36	0.71	0.20	mg/kg dry	3.52	<0.71	95.4	30-100			
Phenanthrene	3.13	0.35	0.070	mg/kg dry	3.52	<0.35	89.0	55-100			
Phenol	2.75	0.71	0.15	mg/kg dry	3.52	<0.71	78.1	35-100			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1502 - EPA 3545 ASE Extraction

Matrix Spike (B4G1502-MS1)

Source: 1403068-02

Prepared & Analyzed: 07/15/14

Surrogate: 2,4,6-Tribromophenol	6.25			mg/kg dry	7.04		88.9	53-107			
Surrogate: 2-Fluorobiphenyl	5.60			mg/kg dry	7.04		79.5	53.9-97.9			
Surrogate: 2-Fluorophenol	5.13			mg/kg dry	7.04		72.9	42.5-94.9			
Surrogate: Nitrobenzene-d5	5.21			mg/kg dry	7.04		74.0	48.9-100			
Surrogate: Phenol-d6	5.12			mg/kg dry	7.04		72.8	50.4-99.6			
Surrogate: Terphenyl-d14	4.61			mg/kg dry	7.04		65.5	51-99.6			

Matrix Spike Dup (B4G1502-MSD1)

Source: 1403068-02

Prepared & Analyzed: 07/15/14

1,2,4-Trichlorobenzene	2.72	0.35	0.080	mg/kg dry	3.52	<0.35	77.5	35-100	2.09	20	
1,4-Dichlorobenzene	2.46	0.35	0.072	mg/kg dry	3.52	<0.35	70.1	30-85	2.82	20	
2,4-Dinitrotoluene	3.16	0.35	0.072	mg/kg dry	3.52	<0.35	89.9	45-95	0.652	20	
2-Chlorophenol	2.74	0.71	0.16	mg/kg dry	3.52	<0.71	77.8	35-100	3.16	20	
4-Chloro-3-methylphenol	3.00	0.71	0.15	mg/kg dry	3.52	<0.71	85.3	35-100	0.257	20	
4-Nitrophenol	3.06	0.71	0.18	mg/kg dry	3.52	<0.71	87.0	40-100	1.44	20	
Anthracene	3.09	0.35	0.073	mg/kg dry	3.52	<0.35	87.9	55-100	2.02	20	
Benzo(a)anthracene	3.08	0.35	0.069	mg/kg dry	3.52	<0.35	87.6	50-100	2.65	20	
Benzo(a)pyrene	3.14	0.35	0.074	mg/kg dry	3.52	<0.35	89.4	50-100	0.0856	20	
Chrysene	3.02	0.35	0.068	mg/kg dry	3.52	<0.35	85.9	50-100	2.11	20	
Fluoranthene	3.15	0.35	0.072	mg/kg dry	3.52	<0.35	89.5	50-100	2.31	20	
Fluorene	3.09	0.35	0.069	mg/kg dry	3.52	<0.35	87.8	50-100	1.21	20	
N-Nitrosodi-n-propylamine	2.73	0.35	0.078	mg/kg dry	3.52	<0.35	77.7	35-100	0.258	20	
Pentachlorophenol	3.28	0.71	0.20	mg/kg dry	3.52	<0.71	93.2	30-100	2.43	20	
Phenanthrene	3.09	0.35	0.070	mg/kg dry	3.52	<0.35	88.0	55-100	1.18	20	
Phenol	2.82	0.71	0.15	mg/kg dry	3.52	<0.71	80.2	35-100	2.59	20	
Surrogate: 2,4,6-Tribromophenol	6.25			mg/kg dry	7.03		88.9	53-107			
Surrogate: 2-Fluorobiphenyl	5.70			mg/kg dry	7.03		81.1	53.9-97.9			
Surrogate: 2-Fluorophenol	5.36			mg/kg dry	7.03		76.3	42.5-94.9			
Surrogate: Nitrobenzene-d5	5.38			mg/kg dry	7.03		76.6	48.9-100			
Surrogate: Phenol-d6	5.48			mg/kg dry	7.03		77.9	50.4-99.6			
Surrogate: Terphenyl-d14	4.47			mg/kg dry	7.03		63.6	51-99.6			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1017 - EPA 5030 Water (Purge and Trap)

Blank (B4G1017-BLK1)

Prepared & Analyzed: 07/10/14

1,1,1,2-Tetrachloroethane	< 1.0	1.0	0.061	ug/L							
1,1,1-Trichloroethane	< 1.0	1.0	0.080	ug/L							
1,1,2,2-Tetrachloroethane	< 1.0	1.0	0.072	ug/L							
1,1,2-Trichloroethane	< 1.0	1.0	0.049	ug/L							
1,1,2-Trichlorotrifluoroethane	< 1.0	1.0	0.051	ug/L							
1,1-Dichloroethane	< 1.0	1.0	0.049	ug/L							
1,1-Dichloroethene	< 1.0	1.0	0.051	ug/L							
1,1-Dichloropropene	< 1.0	1.0	0.079	ug/L							
1,2,3-Trichlorobenzene	< 5.0	5.0	0.080	ug/L							
1,2,3-Trichloropropane	< 2.5	2.5	0.054	ug/L							
1,2,4-Trichlorobenzene	< 5.0	5.0	0.086	ug/L							
1,2,4-Trimethylbenzene	< 1.0	1.0	0.052	ug/L							
1,2-Dibromo-3-chloropropane	< 5.0	5.0	0.079	ug/L							
1,2-Dibromoethane (EDB)	< 2.5	2.5	0.046	ug/L							
1,2-Dichlorobenzene	< 1.0	1.0	0.058	ug/L							
1,2-Dichloroethane	< 1.0	1.0	0.062	ug/L							
1,2-Dichloropropane	< 1.0	1.0	0.048	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.055	ug/L							
1,3-Dichlorobenzene	< 1.0	1.0	0.057	ug/L							
1,3-Dichloropropane	< 1.0	1.0	0.041	ug/L							
1,4-Dichlorobenzene	< 1.0	1.0	0.058	ug/L							
2,2-Dichloropropane	< 5.0	5.0	0.062	ug/L							
2-Butanone	< 20	20	0.091	ug/L							
2-Chlorotoluene	< 1.0	1.0	0.046	ug/L							
4-Chlorotoluene	< 1.0	1.0	0.053	ug/L							
Acetone	< 20	20	0.54	ug/L							
Allyl chloride	< 5.0	5.0	0.067	ug/L							
Benzene	< 1.0	1.0	0.048	ug/L							
Bromobenzene	< 1.0	1.0	0.052	ug/L							
Bromochloromethane	< 1.0	1.0	0.055	ug/L							
Bromodichloromethane	< 1.0	1.0	0.057	ug/L							
Bromoform	< 5.0	5.0	0.071	ug/L							
Bromomethane	< 5.0	5.0	0.066	ug/L							
Carbon tetrachloride	< 1.0	1.0	0.085	ug/L							
Chlorobenzene	< 1.0	1.0	0.049	ug/L							
Chloroethane	< 2.5	2.5	0.051	ug/L							
Chloroform	< 1.0	1.0	0.052	ug/L							
Chloromethane	< 2.5	2.5	0.054	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.053	ug/L							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1017 - EPA 5030 Water (Purge and Trap)

Blank (B4G1017-BLK1)

Prepared & Analyzed: 07/10/14

cis-1,3-Dichloropropene	< 1.0	1.0	0.034	ug/L							
Dibromochloromethane	< 2.5	2.5	0.026	ug/L							
Dibromomethane	< 2.5	2.5	0.066	ug/L							
Dichlorodifluoromethane	< 5.0	5.0	0.051	ug/L							
Dichlorofluoromethane	< 1.0	1.0	0.061	ug/L							
Ethyl ether	< 5.0	5.0	0.051	ug/L							
Ethylbenzene	< 1.0	1.0	0.050	ug/L							
Hexachlorobutadiene	< 10	10	0.53	ug/L							
Isopropylbenzene	< 1.0	1.0	0.058	ug/L							
m,p-Xylene	< 2.0	2.0	0.11	ug/L							
Methyl isobutyl ketone	< 5.0	5.0	0.055	ug/L							
Methyl tert-butyl ether	< 1.0	1.0	0.053	ug/L							
Methylene chloride	< 5.0	5.0	0.40	ug/L							
Naphthalene	< 5.0	5.0	0.057	ug/L							
n-Butylbenzene	< 2.5	2.5	0.064	ug/L							
n-Propylbenzene	< 1.0	1.0	0.055	ug/L							
o-Xylene	< 1.0	1.0	0.054	ug/L							
p-Isopropyltoluene	< 2.5	2.5	0.047	ug/L							
sec-Butylbenzene	< 1.0	1.0	0.046	ug/L							
Styrene	< 1.0	1.0	0.024	ug/L							
tert-Butylbenzene	< 1.0	1.0	0.052	ug/L							
Tetrachloroethene	< 1.0	1.0	0.051	ug/L							
Tetrahydrofuran	< 20	20	0.064	ug/L							
Toluene	< 1.0	1.0	0.023	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.064	ug/L							
trans-1,3-Dichloropropene	< 1.0	1.0	0.046	ug/L							
Trichloroethene	< 1.0	1.0	0.033	ug/L							
Trichlorofluoromethane	< 1.0	1.0	0.069	ug/L							
Vinyl chloride	< 1.0	1.0	0.049	ug/L							
Surrogate: 4-Bromofluorobenzene	47.0			ug/L	50.0		94.0	80-121			
Surrogate: Dibromofluoromethane	47.2			ug/L	50.0		94.4	79.9-121			
Surrogate: Toluene-d8	47.2			ug/L	50.0		94.4	80-120			

LCS (B4G1017-BS1)

Prepared & Analyzed: 07/10/14

1,1,2,2-Tetrachloroethane	48.1	1.0	0.072	ug/L	50.0		96.2	80-121			
1,1-Dichloroethane	49.0	1.0	0.049	ug/L	50.0		97.9	80-125			
1,1-Dichloroethene	46.7	1.0	0.051	ug/L	50.0		93.4	80-125			
1,3,5-Trimethylbenzene	48.2	1.0	0.055	ug/L	50.0		96.5	75.4-125			
1,4-Dichlorobenzene	47.2	1.0	0.058	ug/L	50.0		94.3	75-125			
2-Chlorotoluene	47.1	1.0	0.046	ug/L	50.0		94.1	75.4-125			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1017 - EPA 5030 Water (Purge and Trap)

LCS (B4G1017-BS1)

Prepared & Analyzed: 07/10/14

Benzene	50.4	1.0	0.048	ug/L	50.0		101	80-120			
Bromoform	50.1	5.0	0.071	ug/L	50.0		100	80-120			
Chlorobenzene	49.2	1.0	0.049	ug/L	50.0		98.5	80-120			
Chloroform	47.3	1.0	0.052	ug/L	50.0		94.6	80-123			
Ethylbenzene	49.4	1.0	0.050	ug/L	50.0		98.9	80-120			
n-Butylbenzene	49.7	2.5	0.064	ug/L	50.0		99.5	75-125			
n-Propylbenzene	48.9	1.0	0.055	ug/L	50.0		97.7	75.8-125			
Toluene	49.6	1.0	0.023	ug/L	50.0		99.2	80-120			
Trichloroethene	49.4	1.0	0.033	ug/L	50.0		98.8	80-120			
Vinyl chloride	45.2	1.0	0.049	ug/L	50.0		90.3	75-130			
Surrogate: 4-Bromofluorobenzene	51.4			ug/L	50.0		103	80-121			
Surrogate: Dibromofluoromethane	48.6			ug/L	50.0		97.2	79.9-121			
Surrogate: Toluene-d8	50.2			ug/L	50.0		100	80-120			

Matrix Spike (B4G1017-MS1)

Source: 1402919-04

Prepared & Analyzed: 07/10/14

1,1,2,2-Tetrachloroethane	51.0	1.0	0.072	ug/L	50.0	<1.0	102	76.8-125			
1,1-Dichloroethane	51.9	1.0	0.049	ug/L	50.0	<1.0	104	80-125			
1,1-Dichloroethene	49.7	1.0	0.051	ug/L	50.0	<1.0	99.3	80-125			
1,3,5-Trimethylbenzene	48.7	1.0	0.055	ug/L	50.0	<1.0	97.4	75-125			
1,4-Dichlorobenzene	48.0	1.0	0.058	ug/L	50.0	<1.0	96.0	75-125			
2-Chlorotoluene	47.4	1.0	0.046	ug/L	50.0	<1.0	94.9	75-125			
Benzene	50.8	1.0	0.048	ug/L	50.0	<1.0	102	80-120			
Bromoform	51.7	5.0	0.071	ug/L	50.0	<5.0	103	80-120			
Chlorobenzene	50.2	1.0	0.049	ug/L	50.0	<1.0	100	80-120			
Chloroform	49.6	1.0	0.052	ug/L	50.0	<1.0	99.1	79.8-125			
Ethylbenzene	50.4	1.0	0.050	ug/L	50.0	<1.0	101	80-120			
n-Butylbenzene	46.5	2.5	0.064	ug/L	50.0	<2.5	92.9	75-130			
n-Propylbenzene	48.3	1.0	0.055	ug/L	50.0	<1.0	96.6	75-125			
Toluene	50.9	1.0	0.023	ug/L	50.0	<1.0	102	80-120			
Trichloroethene	49.3	1.0	0.033	ug/L	50.0	<1.0	98.6	80-120			
Vinyl chloride	47.4	1.0	0.049	ug/L	50.0	<1.0	94.8	75-130			
Surrogate: 4-Bromofluorobenzene	50.7			ug/L	50.0		101	80-121			
Surrogate: Dibromofluoromethane	48.4			ug/L	50.0		96.8	79.9-121			
Surrogate: Toluene-d8	49.8			ug/L	50.0		99.7	80-120			

Matrix Spike Dup (B4G1017-MSD1)

Source: 1402919-04

Prepared & Analyzed: 07/10/14

1,1,2,2-Tetrachloroethane	51.0	1.0	0.072	ug/L	50.0	<1.0	102	76.8-125	0.0122	20	
1,1-Dichloroethane	51.3	1.0	0.049	ug/L	50.0	<1.0	103	80-125	1.26	20	
1,1-Dichloroethene	49.5	1.0	0.051	ug/L	50.0	<1.0	99.1	80-125	0.250	20	
1,3,5-Trimethylbenzene	48.7	1.0	0.055	ug/L	50.0	<1.0	97.3	75-125	0.0756	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1017 - EPA 5030 Water (Purge and Trap)

Matrix Spike Dup (B4G1017-MSD1)

Source: 1402919-04

Prepared & Analyzed: 07/10/14

1,4-Dichlorobenzene	47.9	1.0	0.058	ug/L	50.0	<1.0	95.7	75-125	0.309	20	
2-Chlorotoluene	47.8	1.0	0.046	ug/L	50.0	<1.0	95.5	75-125	0.691	20	
Benzene	50.8	1.0	0.048	ug/L	50.0	<1.0	102	80-120	0.0219	20	
Bromoform	53.4	5.0	0.071	ug/L	50.0	<5.0	107	80-120	3.26	20	
Chlorobenzene	51.8	1.0	0.049	ug/L	50.0	<1.0	104	80-120	3.06	20	
Chloroform	48.1	1.0	0.052	ug/L	50.0	<1.0	96.3	79.8-125	2.92	20	
Ethylbenzene	51.3	1.0	0.050	ug/L	50.0	<1.0	103	80-120	1.74	20	
n-Butylbenzene	47.4	2.5	0.064	ug/L	50.0	<2.5	94.8	75-130	1.98	20	
n-Propylbenzene	49.0	1.0	0.055	ug/L	50.0	<1.0	98.0	75-125	1.50	20	
Toluene	51.5	1.0	0.023	ug/L	50.0	<1.0	103	80-120	1.19	20	
Trichloroethene	50.0	1.0	0.033	ug/L	50.0	<1.0	100	80-120	1.41	20	
Vinyl chloride	48.1	1.0	0.049	ug/L	50.0	<1.0	96.3	75-130	1.55	20	
Surrogate: 4-Bromofluorobenzene	50.6			ug/L	50.0		101	80-121			
Surrogate: Dibromofluoromethane	47.9			ug/L	50.0		95.9	79.9-121			
Surrogate: Toluene-d8	50.3			ug/L	50.0		101	80-120			

Batch B4G1427 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1427-BLK1)

Prepared & Analyzed: 07/14/14

1,1,1,2-Tetrachloroethane	< 0.25	0.25	0.0051	mg/kg wet							
1,1,1-Trichloroethane	< 0.25	0.25	0.0056	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.25	0.25	0.0057	mg/kg wet							
1,1,2-Trichloroethane	< 0.25	0.25	0.0073	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.25	0.25	0.0091	mg/kg wet							
1,1-Dichloroethane	< 0.25	0.25	0.0033	mg/kg wet							
1,1-Dichloroethane	< 0.25	0.25	0.0058	mg/kg wet							
1,1-Dichloropropene	< 0.25	0.25	0.0055	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.0051	mg/kg wet							
1,2,3-Trichloropropane	< 0.25	0.25	0.0046	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.0054	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.25	0.25	0.0033	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.0083	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.25	0.25	0.0072	mg/kg wet							
1,2-Dichlorobenzene	< 0.25	0.25	0.0034	mg/kg wet							
1,2-Dichloroethane	< 0.25	0.25	0.0055	mg/kg wet							
1,2-Dichloropropane	< 0.25	0.25	0.0048	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.25	0.25	0.0025	mg/kg wet							
1,3-Dichlorobenzene	< 0.25	0.25	0.0038	mg/kg wet							
1,3-Dichloropropane	< 0.25	0.25	0.0055	mg/kg wet							
1,4-Dichlorobenzene	< 0.25	0.25	0.0050	mg/kg wet							
2,2-Dichloropropane	< 0.50	0.50	0.0087	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1427 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1427-BLK1)

Prepared & Analyzed: 07/14/14

2-Butanone	< 2.0	2.0	0.014	mg/kg wet							
2-Chlorotoluene	< 0.25	0.25	0.0022	mg/kg wet							
4-Chlorotoluene	< 0.25	0.25	0.0036	mg/kg wet							
Acetone	< 2.0	2.0	0.10	mg/kg wet							
Allyl chloride	< 0.50	0.50	0.0083	mg/kg wet							
Benzene	< 0.25	0.25	0.0027	mg/kg wet							
Bromobenzene	< 0.25	0.25	0.0052	mg/kg wet							
Bromochloromethane	< 0.25	0.25	0.0074	mg/kg wet							
Bromodichloromethane	< 0.25	0.25	0.0043	mg/kg wet							
Bromoform	< 0.50	0.50	0.0070	mg/kg wet							
Bromomethane	< 0.50	0.50	0.0060	mg/kg wet							
Carbon tetrachloride	< 0.25	0.25	0.0060	mg/kg wet							
Chlorobenzene	< 0.25	0.25	0.0026	mg/kg wet							
Chloroethane	< 0.25	0.25	0.0072	mg/kg wet							
Chloroform	< 0.25	0.25	0.0023	mg/kg wet							
Chloromethane	< 0.25	0.25	0.0067	mg/kg wet							
cis-1,2-Dichloroethene	< 0.25	0.25	0.0018	mg/kg wet							
cis-1,3-Dichloropropene	< 0.25	0.25	0.0049	mg/kg wet							
Dibromochloromethane	< 0.25	0.25	0.0046	mg/kg wet							
Dibromomethane	< 0.25	0.25	0.0046	mg/kg wet							
Dichlorodifluoromethane	< 0.50	0.50	0.0094	mg/kg wet							
Dichlorofluoromethane	< 0.25	0.25	0.0079	mg/kg wet							
Ethyl ether	< 0.50	0.50	0.0050	mg/kg wet							
Ethylbenzene	< 0.25	0.25	0.0026	mg/kg wet							
Hexachlorobutadiene	< 1.0	1.0	0.18	mg/kg wet							
Isopropylbenzene	< 0.25	0.25	0.0017	mg/kg wet							
m,p-Xylene	< 0.50	0.50	0.0097	mg/kg wet							
Methyl isobutyl ketone	< 0.50	0.50	0.014	mg/kg wet							
Methyl tert-butyl ether	< 0.25	0.25	0.0055	mg/kg wet							
Methylene chloride	< 1.0	1.0	0.0039	mg/kg wet							
Naphthalene	< 0.50	0.50	0.012	mg/kg wet							
n-Butylbenzene	< 0.25	0.25	0.0055	mg/kg wet							
n-Propylbenzene	< 0.25	0.25	0.0031	mg/kg wet							
o-Xylene	< 0.25	0.25	0.0039	mg/kg wet							
p-Isopropyltoluene	< 0.25	0.25	0.0030	mg/kg wet							
sec-Butylbenzene	< 0.25	0.25	0.0035	mg/kg wet							
Styrene	< 0.25	0.25	0.0054	mg/kg wet							
tert-Butylbenzene	< 0.25	0.25	0.0027	mg/kg wet							
Tetrachloroethene	< 0.25	0.25	0.0050	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1427 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1427-BLK1)

Prepared & Analyzed: 07/14/14

Tetrahydrofuran	< 2.0	2.0	0.032	mg/kg wet							
Toluene	< 0.25	0.25	0.0035	mg/kg wet							
trans-1,2-Dichloroethene	< 0.25	0.25	0.0045	mg/kg wet							
trans-1,3-Dichloropropene	< 0.25	0.25	0.0063	mg/kg wet							
Trichloroethene	< 0.25	0.25	0.0038	mg/kg wet							
Trichlorofluoromethane	< 0.25	0.25	0.0062	mg/kg wet							
Vinyl chloride	< 0.25	0.25	0.0061	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	47.3			ug/L	50.0		94.6	80-124			
Surrogate: Dibromofluoromethane	47.1			ug/L	50.0		94.2	77.1-123			
Surrogate: Toluene-d8	45.6			ug/L	50.0		91.2	78.1-125			

LCS (B4G1427-BS1)

Prepared & Analyzed: 07/14/14

1,1,2,2-Tetrachloroethane	45.2			ug/L	50.0		90.4	75-120			
1,1-Dichloroethane	45.4			ug/L	50.0		90.8	79.6-120			
1,1-Dichloroethene	43.2			ug/L	50.0		86.3	78.3-120			
1,3,5-Trimethylbenzene	47.1			ug/L	50.0		94.1	77-120			
1,4-Dichlorobenzene	50.1			ug/L	50.0		100	75-125			
2-Chlorotoluene	46.5			ug/L	50.0		93.0	75.9-120			
Benzene	48.1			ug/L	50.0		96.1	80-120			
Bromoform	51.7			ug/L	50.0		103	80-120			
Chlorobenzene	51.6			ug/L	50.0		103	80-120			
Chloroform	45.8			ug/L	50.0		91.7	80-120			
Ethylbenzene	50.4			ug/L	50.0		101	80-120			
n-Butylbenzene	47.4			ug/L	50.0		94.8	75-125			
n-Propylbenzene	46.5			ug/L	50.0		92.9	75-120			
Toluene	47.7			ug/L	50.0		95.4	80-120			
Trichloroethene	47.0			ug/L	50.0		94.1	80-120			
Vinyl chloride	44.0			ug/L	50.0		88.1	75-130			
Surrogate: 4-Bromofluorobenzene	48.8			ug/L	50.0		97.6	80-124			
Surrogate: Dibromofluoromethane	48.1			ug/L	50.0		96.2	77.1-123			
Surrogate: Toluene-d8	46.2			ug/L	50.0		92.5	78.1-125			

Matrix Spike (B4G1427-MS1)

Source: 1402953-12RE1

Prepared & Analyzed: 07/14/14

1,1,2,2-Tetrachloroethane	47.2			ug/L	50.0	<	94.5	75-125			
1,1-Dichloroethane	44.3			ug/L	50.0	<	88.6	78.7-123			
1,1-Dichloroethene	41.8			ug/L	50.0	<	83.6	75.8-121			
1,3,5-Trimethylbenzene	47.9			ug/L	50.0	<	95.8	75-120			
1,4-Dichlorobenzene	49.9			ug/L	50.0	<	99.9	75-125			
2-Chlorotoluene	47.2			ug/L	50.0	<	94.5	75-120			
Benzene	46.9			ug/L	50.0	<	93.8	80-120			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1427 - EPA 5035 Soil (Purge and Trap)

Matrix Spike (B4G1427-MS1)

Source: 1402953-12RE1

Prepared & Analyzed: 07/14/14

Bromoform	50.8			ug/L	50.0	<	102	80-120			
Chlorobenzene	51.1			ug/L	50.0	<	102	80-120			
Chloroform	44.8			ug/L	50.0	<	89.6	80-120			
Ethylbenzene	49.8			ug/L	50.0	<	99.6	80-120			
n-Butylbenzene	48.7			ug/L	50.0	<	97.5	73.8-125			
n-Propylbenzene	47.8			ug/L	50.0	<	95.7	75-120			
Toluene	48.1			ug/L	50.0	<	96.1	80-120			
Trichloroethene	46.3			ug/L	50.0	<	92.7	80-120			
Vinyl chloride	44.6			ug/L	50.0	<	89.2	74.8-130			
Surrogate: 4-Bromofluorobenzene	48.5			ug/L	50.0		96.9	80-124			
Surrogate: Dibromofluoromethane	46.5			ug/L	50.0		92.9	77.1-123			
Surrogate: Toluene-d8	46.2			ug/L	50.0		92.3	78.1-125			

Matrix Spike Dup (B4G1427-MSD1)

Source: 1402953-12RE1

Prepared & Analyzed: 07/14/14

1,1,2,2-Tetrachloroethane	47.4			ug/L	50.0	<	94.9	75-125	0.410	20	
1,1-Dichloroethane	44.5			ug/L	50.0	<	88.9	78.7-123	0.358	20	
1,1-Dichloroethene	41.7			ug/L	50.0	<	83.4	75.8-121	0.232	20	
1,3,5-Trimethylbenzene	48.3			ug/L	50.0	<	96.5	75-120	0.751	20	
1,4-Dichlorobenzene	48.7			ug/L	50.0	<	97.4	75-125	2.44	20	
2-Chlorotoluene	47.3			ug/L	50.0	<	94.7	75-120	0.213	20	
Benzene	47.1			ug/L	50.0	<	94.3	80-120	0.452	20	
Bromoform	50.8			ug/L	50.0	<	102	80-120	0.0386	20	
Chlorobenzene	51.3			ug/L	50.0	<	103	80-120	0.365	20	
Chloroform	44.4			ug/L	50.0	<	88.8	80-120	0.972	20	
Ethylbenzene	50.3			ug/L	50.0	<	101	80-120	1.07	20	
n-Butylbenzene	48.6			ug/L	50.0	<	97.2	73.8-125	0.286	20	
n-Propylbenzene	48.2			ug/L	50.0	<	96.4	75-120	0.721	20	
Toluene	47.6			ug/L	50.0	<	95.1	80-120	1.04	20	
Trichloroethene	46.7			ug/L	50.0	<	93.4	80-120	0.791	20	
Vinyl chloride	44.5			ug/L	50.0	<	89.1	74.8-130	0.128	20	
Surrogate: 4-Bromofluorobenzene	48.1			ug/L	50.0		96.3	80-124			
Surrogate: Dibromofluoromethane	47.6			ug/L	50.0		95.2	77.1-123			
Surrogate: Toluene-d8	46.1			ug/L	50.0		92.2	78.1-125			

American Engineering Testing, Inc.
 550 Cleveland Ave N
 St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
 Project Number: 02-02098
 Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
 Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1430 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1430-BLK1)

Prepared & Analyzed: 07/13/14

1,1,1,2-Tetrachloroethane	< 0.25	0.25	0.0051	mg/kg wet							
1,1,1-Trichloroethane	< 0.25	0.25	0.0056	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.25	0.25	0.0057	mg/kg wet							
1,1,2-Trichloroethane	< 0.25	0.25	0.0073	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.25	0.25	0.0091	mg/kg wet							
1,1-Dichloroethane	< 0.25	0.25	0.0033	mg/kg wet							
1,1-Dichloroethene	< 0.25	0.25	0.0058	mg/kg wet							
1,1-Dichloropropene	< 0.25	0.25	0.0055	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.0051	mg/kg wet							
1,2,3-Trichloropropane	< 0.25	0.25	0.0046	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.0054	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.25	0.25	0.0033	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.0083	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.25	0.25	0.0072	mg/kg wet							
1,2-Dichlorobenzene	< 0.25	0.25	0.0034	mg/kg wet							
1,2-Dichloroethane	< 0.25	0.25	0.0055	mg/kg wet							
1,2-Dichloropropane	< 0.25	0.25	0.0048	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.25	0.25	0.0025	mg/kg wet							
1,3-Dichlorobenzene	< 0.25	0.25	0.0038	mg/kg wet							
1,3-Dichloropropane	< 0.25	0.25	0.0055	mg/kg wet							
1,4-Dichlorobenzene	< 0.25	0.25	0.0050	mg/kg wet							
2,2-Dichloropropane	< 0.50	0.50	0.0087	mg/kg wet							
2-Butanone	< 2.0	2.0	0.014	mg/kg wet							
2-Chlorotoluene	< 0.25	0.25	0.0022	mg/kg wet							
4-Chlorotoluene	< 0.25	0.25	0.0036	mg/kg wet							
Acetone	< 2.0	2.0	0.10	mg/kg wet							
Allyl chloride	< 0.50	0.50	0.0083	mg/kg wet							
Benzene	< 0.25	0.25	0.0027	mg/kg wet							
Bromobenzene	< 0.25	0.25	0.0052	mg/kg wet							
Bromochloromethane	< 0.25	0.25	0.0074	mg/kg wet							
Bromodichloromethane	< 0.25	0.25	0.0043	mg/kg wet							
Bromoform	< 0.50	0.50	0.0070	mg/kg wet							
Bromomethane	< 0.50	0.50	0.0060	mg/kg wet							
Carbon tetrachloride	< 0.25	0.25	0.0060	mg/kg wet							
Chlorobenzene	< 0.25	0.25	0.0026	mg/kg wet							
Chloroethane	< 0.25	0.25	0.0072	mg/kg wet							
Chloroform	< 0.25	0.25	0.0023	mg/kg wet							
Chloromethane	< 0.25	0.25	0.0067	mg/kg wet							
cis-1,2-Dichloroethene	< 0.25	0.25	0.0018	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1430 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1430-BLK1)

Prepared & Analyzed: 07/13/14

cis-1,3-Dichloropropene	< 0.25	0.25	0.0049	mg/kg wet							
Dibromochloromethane	< 0.25	0.25	0.0046	mg/kg wet							
Dibromomethane	< 0.25	0.25	0.0046	mg/kg wet							
Dichlorodifluoromethane	< 0.50	0.50	0.0094	mg/kg wet							
Dichlorofluoromethane	< 0.25	0.25	0.0079	mg/kg wet							
Ethyl ether	< 0.50	0.50	0.0050	mg/kg wet							
Ethylbenzene	< 0.25	0.25	0.0026	mg/kg wet							
Hexachlorobutadiene	< 1.0	1.0	0.18	mg/kg wet							
Isopropylbenzene	< 0.25	0.25	0.0017	mg/kg wet							
m,p-Xylene	< 0.50	0.50	0.0097	mg/kg wet							
Methyl isobutyl ketone	< 0.50	0.50	0.014	mg/kg wet							
Methyl tert-butyl ether	< 0.25	0.25	0.0055	mg/kg wet							
Methylene chloride	< 1.0	1.0	0.0039	mg/kg wet							
Naphthalene	< 0.50	0.50	0.012	mg/kg wet							
n-Butylbenzene	< 0.25	0.25	0.0055	mg/kg wet							
n-Propylbenzene	< 0.25	0.25	0.0031	mg/kg wet							
o-Xylene	< 0.25	0.25	0.0039	mg/kg wet							
p-Isopropyltoluene	< 0.25	0.25	0.0030	mg/kg wet							
sec-Butylbenzene	< 0.25	0.25	0.0035	mg/kg wet							
Styrene	< 0.25	0.25	0.0054	mg/kg wet							
tert-Butylbenzene	< 0.25	0.25	0.0027	mg/kg wet							
Tetrachloroethene	< 0.25	0.25	0.0050	mg/kg wet							
Tetrahydrofuran	< 2.0	2.0	0.032	mg/kg wet							
Toluene	< 0.25	0.25	0.0035	mg/kg wet							
trans-1,2-Dichloroethene	< 0.25	0.25	0.0045	mg/kg wet							
trans-1,3-Dichloropropene	< 0.25	0.25	0.0063	mg/kg wet							
Trichloroethene	< 0.25	0.25	0.0038	mg/kg wet							
Trichlorofluoromethane	< 0.25	0.25	0.0062	mg/kg wet							
Vinyl chloride	< 0.25	0.25	0.0061	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	46.6			ug/L	50.0		93.3	80-124			
Surrogate: Dibromofluoromethane	46.4			ug/L	50.0		92.8	77.1-123			
Surrogate: Toluene-d8	44.6			ug/L	50.0		89.2	78.1-125			

LCS (B4G1430-BS1)

Prepared & Analyzed: 07/13/14

1,1,2,2-Tetrachloroethane	45.9			ug/L	50.0		91.9	75-120			
1,1-Dichloroethane	43.4			ug/L	50.0		86.9	79.6-120			
1,1-Dichloroethene	42.1			ug/L	50.0		84.2	78.3-120			
1,3,5-Trimethylbenzene	46.5			ug/L	50.0		92.9	77-120			
1,4-Dichlorobenzene	47.7			ug/L	50.0		95.4	75-125			
2-Chlorotoluene	45.7			ug/L	50.0		91.5	75.9-120			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1430 - EPA 5035 Soil (Purge and Trap)

LCS (B4G1430-BS1)

Prepared & Analyzed: 07/13/14

Benzene	46.3			ug/L	50.0		92.7	80-120			
Bromoform	51.1			ug/L	50.0		102	80-120			
Chlorobenzene	49.8			ug/L	50.0		99.7	80-120			
Chloroform	43.3			ug/L	50.0		86.6	80-120			
Ethylbenzene	49.3			ug/L	50.0		98.6	80-120			
n-Butylbenzene	46.8			ug/L	50.0		93.6	75-125			
n-Propylbenzene	46.3			ug/L	50.0		92.6	75-120			
Toluene	46.4			ug/L	50.0		92.8	80-120			
Trichloroethene	46.3			ug/L	50.0		92.6	80-120			
Vinyl chloride	45.5			ug/L	50.0		91.0	75-130			
Surrogate: 4-Bromofluorobenzene	48.3			ug/L	50.0		96.6	80-124			
Surrogate: Dibromofluoromethane	47.2			ug/L	50.0		94.5	77.1-123			
Surrogate: Toluene-d8	45.9			ug/L	50.0		91.8	78.1-125			

Matrix Spike (B4G1430-MS1)

Source: 1403007-04

Prepared & Analyzed: 07/13/14

1,1,2,2-Tetrachloroethane	41.7			ug/L	50.0	<	83.4	75-125			
1,1-Dichloroethane	41.7			ug/L	50.0	<	83.4	78.7-123			
1,1-Dichloroethene	40.0			ug/L	50.0	<	80.0	75.8-121			
1,3,5-Trimethylbenzene	45.3			ug/L	50.0	<	90.7	75-120			
1,4-Dichlorobenzene	46.6			ug/L	50.0	<	93.3	75-125			
2-Chlorotoluene	44.5			ug/L	50.0	<	88.9	75-120			
Benzene	45.1			ug/L	50.0	<	90.2	80-120			
Bromoform	48.3			ug/L	50.0	<	96.6	80-120			
Chlorobenzene	48.5			ug/L	50.0	<	97.0	80-120			
Chloroform	42.4			ug/L	50.0	<	84.8	80-120			
Ethylbenzene	46.9			ug/L	50.0	<	93.8	80-120			
n-Butylbenzene	46.7			ug/L	50.0	<	93.3	73.8-125			
n-Propylbenzene	45.0			ug/L	50.0	<	89.9	75-120			
Toluene	46.9			ug/L	50.0	<	93.7	80-120			
Trichloroethene	50.1			ug/L	50.0	<	100	80-120			
Vinyl chloride	43.8			ug/L	50.0	<	87.7	74.8-130			
Surrogate: 4-Bromofluorobenzene	48.1			ug/L	50.0		96.3	80-124			
Surrogate: Dibromofluoromethane	47.4			ug/L	50.0		94.8	77.1-123			
Surrogate: Toluene-d8	45.9			ug/L	50.0		91.7	78.1-125			

Matrix Spike Dup (B4G1430-MSD1)

Source: 1403007-04

Prepared & Analyzed: 07/13/14

1,1,2,2-Tetrachloroethane	35.8			ug/L	50.0	<	71.7	75-125	15.1	20	M2
1,1-Dichloroethane	39.7			ug/L	50.0	<	79.4	78.7-123	4.91	20	
1,1-Dichloroethene	37.7			ug/L	50.0	<	75.4	75.8-121	5.89	20	M2
1,3,5-Trimethylbenzene	43.9			ug/L	50.0	<	87.8	75-120	3.18	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1430 - EPA 5035 Soil (Purge and Trap)											
Matrix Spike Dup (B4G1430-MSD1)			Source: 1403007-04			Prepared & Analyzed: 07/13/14					
1,4-Dichlorobenzene	45.1			ug/L	50.0	<	90.1	75-125	3.44	20	
2-Chlorotoluene	43.1			ug/L	50.0	<	86.2	75-120	3.08	20	
Benzene	43.5			ug/L	50.0	<	87.1	80-120	3.60	20	
Bromoform	48.4			ug/L	50.0	<	96.8	80-120	0.272	20	
Chlorobenzene	47.6			ug/L	50.0	<	95.2	80-120	1.86	20	
Chloroform	39.4			ug/L	50.0	<	78.8	80-120	7.28	20	M2
Ethylbenzene	46.1			ug/L	50.0	<	92.1	80-120	1.77	20	
n-Butylbenzene	44.9			ug/L	50.0	<	89.9	73.8-125	3.73	20	
n-Propylbenzene	43.5			ug/L	50.0	<	87.1	75-120	3.19	20	
Toluene	43.7			ug/L	50.0	<	87.3	80-120	7.04	20	
Trichloroethene	49.1			ug/L	50.0	<	98.2	80-120	1.93	20	
Vinyl chloride	41.8			ug/L	50.0	<	83.5	74.8-130	4.86	20	
Surrogate: 4-Bromofluorobenzene	47.9			ug/L	50.0		95.9	80-124			
Surrogate: Dibromofluoromethane	46.4			ug/L	50.0		92.8	77.1-123			
Surrogate: Toluene-d8	45.0			ug/L	50.0		89.9	78.1-125			

Batch B4G1431 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1431-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

1,1,1,2-Tetrachloroethane	< 0.25	0.25	0.0051	mg/kg wet
1,1,1-Trichloroethane	< 0.25	0.25	0.0056	mg/kg wet
1,1,2,2-Tetrachloroethane	< 0.25	0.25	0.0057	mg/kg wet
1,1,2-Trichloroethane	< 0.25	0.25	0.0073	mg/kg wet
1,1,2-Trichlorotrifluoroethane	< 0.25	0.25	0.0091	mg/kg wet
1,1-Dichloroethane	< 0.25	0.25	0.0033	mg/kg wet
1,1-Dichloroethane	< 0.25	0.25	0.0058	mg/kg wet
1,1-Dichloropropene	< 0.25	0.25	0.0055	mg/kg wet
1,2,3-Trichlorobenzene	< 0.50	0.50	0.0051	mg/kg wet
1,2,3-Trichloropropane	< 0.25	0.25	0.0046	mg/kg wet
1,2,4-Trichlorobenzene	< 0.50	0.50	0.0054	mg/kg wet
1,2,4-Trimethylbenzene	< 0.25	0.25	0.0033	mg/kg wet
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.0083	mg/kg wet
1,2-Dibromoethane (EDB)	< 0.25	0.25	0.0072	mg/kg wet
1,2-Dichlorobenzene	< 0.25	0.25	0.0034	mg/kg wet
1,2-Dichloroethane	< 0.25	0.25	0.0055	mg/kg wet
1,2-Dichloropropane	< 0.25	0.25	0.0048	mg/kg wet
1,3,5-Trimethylbenzene	< 0.25	0.25	0.0025	mg/kg wet
1,3-Dichlorobenzene	< 0.25	0.25	0.0038	mg/kg wet
1,3-Dichloropropane	< 0.25	0.25	0.0055	mg/kg wet
1,4-Dichlorobenzene	< 0.25	0.25	0.0050	mg/kg wet
2,2-Dichloropropane	< 0.50	0.50	0.0087	mg/kg wet

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1431 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1431-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

2-Butanone	< 2.0	2.0	0.014	mg/kg wet							
2-Chlorotoluene	< 0.25	0.25	0.0022	mg/kg wet							
4-Chlorotoluene	< 0.25	0.25	0.0036	mg/kg wet							
Acetone	< 2.0	2.0	0.10	mg/kg wet							
Allyl chloride	< 0.50	0.50	0.0083	mg/kg wet							
Benzene	< 0.25	0.25	0.0027	mg/kg wet							
Bromobenzene	< 0.25	0.25	0.0052	mg/kg wet							
Bromochloromethane	< 0.25	0.25	0.0074	mg/kg wet							
Bromodichloromethane	< 0.25	0.25	0.0043	mg/kg wet							
Bromoform	< 0.50	0.50	0.0070	mg/kg wet							
Bromomethane	< 0.50	0.50	0.0060	mg/kg wet							
Carbon tetrachloride	< 0.25	0.25	0.0060	mg/kg wet							
Chlorobenzene	< 0.25	0.25	0.0026	mg/kg wet							
Chloroethane	< 0.25	0.25	0.0072	mg/kg wet							
Chloroform	< 0.25	0.25	0.0023	mg/kg wet							
Chloromethane	< 0.25	0.25	0.0067	mg/kg wet							
cis-1,2-Dichloroethene	< 0.25	0.25	0.0018	mg/kg wet							
cis-1,3-Dichloropropene	< 0.25	0.25	0.0049	mg/kg wet							
Dibromochloromethane	< 0.25	0.25	0.0046	mg/kg wet							
Dibromomethane	< 0.25	0.25	0.0046	mg/kg wet							
Dichlorodifluoromethane	< 0.50	0.50	0.0094	mg/kg wet							
Dichlorofluoromethane	< 0.25	0.25	0.0079	mg/kg wet							
Ethyl ether	< 0.50	0.50	0.0050	mg/kg wet							
Ethylbenzene	< 0.25	0.25	0.0026	mg/kg wet							
Hexachlorobutadiene	< 1.0	1.0	0.18	mg/kg wet							
Isopropylbenzene	< 0.25	0.25	0.0017	mg/kg wet							
m,p-Xylene	< 0.50	0.50	0.0097	mg/kg wet							
Methyl isobutyl ketone	< 0.50	0.50	0.014	mg/kg wet							
Methyl tert-butyl ether	< 0.25	0.25	0.0055	mg/kg wet							
Methylene chloride	< 1.0	1.0	0.0039	mg/kg wet							
Naphthalene	< 0.50	0.50	0.012	mg/kg wet							
n-Butylbenzene	< 0.25	0.25	0.0055	mg/kg wet							
n-Propylbenzene	< 0.25	0.25	0.0031	mg/kg wet							
o-Xylene	< 0.25	0.25	0.0039	mg/kg wet							
p-Isopropyltoluene	< 0.25	0.25	0.0030	mg/kg wet							
sec-Butylbenzene	< 0.25	0.25	0.0035	mg/kg wet							
Styrene	< 0.25	0.25	0.0054	mg/kg wet							
tert-Butylbenzene	< 0.25	0.25	0.0027	mg/kg wet							
Tetrachloroethene	< 0.25	0.25	0.0050	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403007
Date Reported: 07/18/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1431 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1431-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

Tetrahydrofuran	< 2.0	2.0	0.032	mg/kg wet							
Toluene	< 0.25	0.25	0.0035	mg/kg wet							
trans-1,2-Dichloroethene	< 0.25	0.25	0.0045	mg/kg wet							
trans-1,3-Dichloropropene	< 0.25	0.25	0.0063	mg/kg wet							
Trichloroethene	< 0.25	0.25	0.0038	mg/kg wet							
Trichlorofluoromethane	< 0.25	0.25	0.0062	mg/kg wet							
Vinyl chloride	< 0.25	0.25	0.0061	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	45.9			ug/L	50.0		91.8	80-124			
Surrogate: Dibromofluoromethane	45.8			ug/L	50.0		91.7	77.1-123			
Surrogate: Toluene-d8	44.4			ug/L	50.0		88.8	78.1-125			

LCS (B4G1431-BS1)

Prepared & Analyzed: 07/14/14

1,1,2,2-Tetrachloroethane	46.3			ug/L	50.0		92.7	75-120			
1,1-Dichloroethane	45.7			ug/L	50.0		91.5	79.6-120			
1,1-Dichloroethene	43.4			ug/L	50.0		86.9	78.3-120			
1,3,5-Trimethylbenzene	48.6			ug/L	50.0		97.1	77-120			
1,4-Dichlorobenzene	50.0			ug/L	50.0		100	75-125			
2-Chlorotoluene	47.6			ug/L	50.0		95.2	75.9-120			
Benzene	48.6			ug/L	50.0		97.3	80-120			
Bromoform	51.8			ug/L	50.0		104	80-120			
Chlorobenzene	51.8			ug/L	50.0		104	80-120			
Chloroform	46.1			ug/L	50.0		92.1	80-120			
Ethylbenzene	51.2			ug/L	50.0		102	80-120			
n-Butylbenzene	48.1			ug/L	50.0		96.1	75-125			
n-Propylbenzene	48.5			ug/L	50.0		97.1	75-120			
Toluene	48.9			ug/L	50.0		97.8	80-120			
Trichloroethene	48.5			ug/L	50.0		97.1	80-120			
Vinyl chloride	45.1			ug/L	50.0		90.1	75-130			
Surrogate: 4-Bromofluorobenzene	50.3			ug/L	50.0		101	80-124			
Surrogate: Dibromofluoromethane	47.4			ug/L	50.0		94.8	77.1-123			
Surrogate: Toluene-d8	47.7			ug/L	50.0		95.4	78.1-125			

Matrix Spike (B4G1431-MS1)

Source: 1403007-16

Prepared: 07/14/14 Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	44.7			ug/L	50.0	<	89.5	75-125			
1,1-Dichloroethane	43.0			ug/L	50.0	<	86.1	78.7-123			
1,1-Dichloroethene	41.8			ug/L	50.0	<	83.6	75.8-121			
1,3,5-Trimethylbenzene	47.1			ug/L	50.0	<	94.2	75-120			
1,4-Dichlorobenzene	48.6			ug/L	50.0	<	97.3	75-125			
2-Chlorotoluene	46.4			ug/L	50.0	<	92.8	75-120			
Benzene	46.5			ug/L	50.0	<	92.9	80-120			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1431 - EPA 5035 Soil (Purge and Trap)

Matrix Spike (B4G1431-MS1) **Source: 1403007-16** Prepared: 07/14/14 Analyzed: 07/15/14

Bromoform	52.0			ug/L	50.0	<	104	80-120			
Chlorobenzene	50.5			ug/L	50.0	<	101	80-120			
Chloroform	44.1			ug/L	50.0	<	88.3	80-120			
Ethylbenzene	49.9			ug/L	50.0	<	99.9	80-120			
n-Butylbenzene	48.5			ug/L	50.0	<	97.0	73.8-125			
n-Propylbenzene	47.8			ug/L	50.0	<	95.6	75-120			
Toluene	46.4			ug/L	50.0	<	92.8	80-120			
Trichloroethene	48.4			ug/L	50.0	<	96.9	80-120			
Vinyl chloride	42.2			ug/L	50.0	<	84.4	74.8-130			
Surrogate: 4-Bromofluorobenzene	48.5			ug/L	50.0		97.0	80-124			
Surrogate: Dibromofluoromethane	46.7			ug/L	50.0		93.4	77.1-123			
Surrogate: Toluene-d8	45.7			ug/L	50.0		91.4	78.1-125			

Matrix Spike Dup (B4G1431-MSD1) **Source: 1403007-16** Prepared: 07/14/14 Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	47.5			ug/L	50.0	<	95.0	75-125	6.05	20	
1,1-Dichloroethane	43.5			ug/L	50.0	<	87.0	78.7-123	1.04	20	
1,1-Dichloroethene	42.2			ug/L	50.0	<	84.4	75.8-121	0.869	20	
1,3,5-Trimethylbenzene	47.6			ug/L	50.0	<	95.2	75-120	1.08	20	
1,4-Dichlorobenzene	48.4			ug/L	50.0	<	96.7	75-125	0.607	20	
2-Chlorotoluene	46.2			ug/L	50.0	<	92.4	75-120	0.492	20	
Benzene	46.1			ug/L	50.0	<	92.2	80-120	0.793	20	
Bromoform	50.1			ug/L	50.0	<	100	80-120	3.85	20	
Chlorobenzene	50.3			ug/L	50.0	<	101	80-120	0.406	20	
Chloroform	43.1			ug/L	50.0	<	86.2	80-120	2.45	20	
Ethylbenzene	49.5			ug/L	50.0	<	99.0	80-120	0.829	20	
n-Butylbenzene	48.9			ug/L	50.0	<	97.7	73.8-125	0.708	20	
n-Propylbenzene	47.8			ug/L	50.0	<	95.6	75-120	0.0393	20	
Toluene	46.7			ug/L	50.0	<	93.3	80-120	0.509	20	
Trichloroethene	46.6			ug/L	50.0	<	93.2	80-120	3.91	20	
Vinyl chloride	42.0			ug/L	50.0	<	83.9	74.8-130	0.513	20	
Surrogate: 4-Bromofluorobenzene	48.6			ug/L	50.0		97.3	80-124			
Surrogate: Dibromofluoromethane	46.2			ug/L	50.0		92.3	77.1-123			
Surrogate: Toluene-d8	45.7			ug/L	50.0		91.5	78.1-125			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403007 Date Reported: 07/18/14
---	---	--

Notes and Definitions

T-1	MDH does not offer certification for this parameter.
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-2	Analyses are not controlled on RPD values from sample concentrations less than 5 times the reporting limit.
PH2	Insufficient preservative to reduce the sample pH to less than 2.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
M	Results in the diesel organics range contain hydrocarbons more volatile than DRO.
L1	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
H	Results in the gasoline range contain hydrocarbons less volatile than GRO.
<	Less than value listed
dry	Sample results reported on a dry weight basis
NA	Not applicable. The %RPD is not calculated from values less than the reporting limit.
MDL	Method Detection Limit
RL	Reporting Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
MS	Matrix Spike = Laboratory Fortified Matrix (LFM)

LEGEND

Technical Services, Inc.

www.legend-group.com

88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

17212

PAGE 2 OF 3

ADDRESS: _____
PHONE: _____

OTHER

1403007

St. Paul Office
550 Cleveland Ave. N.
St. Paul, MN 55114
651-659-9001
651-659-1379 (fax)



AET PROJECT NUMBER 02-02098

PROJECT NAME/LOCATION Ramsey County-Loucks

AET PROJECT MANAGER Camilla Pederson

SEND REPORT TO: pederson, ctimmerman, ctiller@amesgtest.com

Christa Timmerman

Camilla Pederson

Signature

REQUESTED TURNAROUND TIME: NORMAL RUSH

DATE NEEDED BY: _____

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE
13	HA-15 (3-4)	7/10/11	1510	Soil
14	HA-13 (0-1)		1605	
15	HA-14 (1-2)		1555	
16	B-2 (8-12)		1020	
17	B-6 (8-10)		1340	
18	B-5 (0-4)		1120	
19	B-3 (4-8)		1250	
20	B-4 (0-4)	7/11/11	1330	
21	B-1 (4-8)		1500	
22	B-4 (16-20)		1345	
23	HA-3 (1-2)		1230	
24	HA-2 (2-3)		1215	

NOTE:

-Voc/Geo Shore jar 0.30
-Svoc/ACRA Shore jar 0.60

ANALYSIS	PRESERVATIVES					FIELD FILTERED Y/N	NO. OF CONTAINERS	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME	REMARKS
	UNPRESERVED	MCH	HCL	H ₂ SO ₄	HNO ₃							
Geo	X						4					13 AD
Voc	X						3					14
GRD	X											15
Svoc	X											16
RCRA-Metals	X											17
Mer-Stuff	X											18
	X											19
	X											20
	X											21
	X											22
	X											23
	X											24

RELINQUISHED BY/AFFILIATION: [Signature] AET
ACCEPTED BY/AFFILIATION: [Signature] AET
DATE: 7/10/11
TIME: 1910

17213

PAGE 3 OF 3

ADDRESS: _____
 PHONE: _____

OTHER

1403007

St. Paul Office
 550 Cleveland Ave. N.
 St. Paul, MN 55114
 651-659-9001
 651-659-1379 (fax)



AET PROJECT NUMBER 02-02098

PROJECT NAME/LOCATION Ramsey County - Locks

AET PROJECT MANAGER Camilla Pedersen

SEND REPORT TO Spederson, Cimmerman, ctiller@ametest.com

Calista J. Timmerman

SAMPLED BY (PRINT) Calista J. Timmerman
 SAMPLER SIGNATURE

REQUESTED TURNAROUND TIME: NORMAL RUSH

DATE NEEDED BY: _____

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS		PRESERVATIVES				FIELD FILTERED Y/N	ANALYSIS	REMARKS	DATE	TIME
					UNPRESERVED	PRESERVED	MCOH	HCL	H ₂ SO ₄	HNO ₃					
25	B-1	7/7/14	1515	Water	9	1					Y	Geo. DRO. VOC SVOC Dis Metals	25 AT		
26	B-2	7/8/14	0915	↓	4	1					Y		26 AJ		
27	B-6	7/8/14	1350	↓	9	1					Y		27 AL		
28	Duplicate B-2	7/8/14	0915	↓	1	1							NA		
	Trip Blank Water	7/10/14											28 AB		
	Trip Blank Soil												29 AB		
NOTE: 0.30 5.80															
RELINQUISHED BY/AFFILIATION Calista J. Timmerman AET															
ACCEPTED BY/AFFILIATION UR													7/10/14	910	



88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

July 24, 2014

REVIEWED

By Calista Timmerman at 1:50 pm, Aug 11, 2014

Ms. Camilla Pederson
American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Work Order Number: 1403022
RE: 02-02098 Ramsey County-Loucks

Enclosed are the results of analyses for samples received by the laboratory on 07/10/14. If you have any questions concerning this report, please feel free to contact me.

Results are not blank corrected unless noted within the report. Additionally, all QC results meet requirements unless noted.

All samples will be retained by Legend Technical Services, Inc., unless consumed in the analysis, at ambient conditions for 30 days from the date of this report and then discarded unless other arrangements are made. All samples were received in acceptable condition unless otherwise noted.

All test results and QC meet requirements of the 2003 NELAC standard.

MDH (NELAP) Accreditation #027-123-295

Prepared by,
LEGEND TECHNICAL SERVICES, INC

A handwritten signature in black ink that reads "BACH PHAM".

Bach Pham
Client Manager II
bpham@legend-group.com

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Dup-1	1403022-01	Water	07/10/14 00:00	07/10/14 16:55
Dup-2	1403022-02	Soil	07/10/14 00:00	07/10/14 16:55
Dup-3	1403022-03	Soil	07/10/14 00:00	07/10/14 16:55
Dup-4	1403022-04	Soil	07/10/14 00:00	07/10/14 16:55
Trip Blank Water	1403022-05	Water	07/10/14 00:00	07/10/14 16:55

Shipping Container Information

Default Cooler	Temperature (°C): 9.1	
Received on ice: Yes	Temperature blank was present	Received on ice pack: No
Received on melt water: No	Ambient: No	Acceptable (IH/ISO only): No
Custody seals: No		

Case Narrative:

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

DRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Diesel Range Organics	<120	120	25	ug/L	1	B4G1505	07/15/14	07/15/14	WI(95) DRO	PH2
Surrogate: Triacontane (C-30)	88.3			70-130 %		"	"	"	"	
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Diesel Range Organics	46	33	5.4	mg/kg dry	5	B4G1403	07/14/14	07/15/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	99.8			70-130 %		"	"	"	"	
Dup-3 (1403022-03) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Diesel Range Organics	<6.7	6.7	1.1	mg/kg dry	1	B4G1403	07/14/14	07/15/14	WI(95) DRO	
Surrogate: Triacontane (C-30)	92.7			70-130 %		"	"	"	"	
Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Diesel Range Organics	12	6.3	1.0	mg/kg dry	1	B4G1403	07/14/14	07/15/14	WI(95) DRO	L1
Surrogate: Triacontane (C-30)	92.3			70-130 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

WI(95) GRO/8015D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Gasoline range organics	<100	100	14	ug/L	1	B4G1707	07/17/14	07/17/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.6			80-150 %		"	"	"	"	
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Gasoline range organics	<5.2	5.2	0.56	mg/kg dry	1	B4G1406	07/14/14	07/15/14	WI(95) GRO	
Surrogate: 4-Fluorochlorobenzene	93.2			80-150 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

DISSOLVED METAL ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Arsenic	<0.010	0.010	0.0014	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Barium	0.25	0.020	0.0021	mg/L	1	"	"	"	"	
Cadmium	<0.0010	0.0010	0.00015	mg/L	1	"	"	"	"	
Chromium	<0.010	0.010	0.00015	mg/L	1	"	"	"	"	
Lead	<0.0030	0.0030	0.00058	mg/L	1	"	"	07/17/14	"	
Mercury	<0.00020	0.00020	0.000052	mg/L	1	B4G1407	07/14/14	07/18/14	EPA 7470A (Dissolved)	
Selenium	<0.020	0.020	0.0040	mg/L	1	B4G1417	07/14/14	07/16/14	EPA 6010C (Dissolved)	
Silver	<0.0050	0.0050	0.00031	mg/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Arsenic	2.3	0.52	0.13	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Barium	22	1.0	0.057	mg/kg dry	1	"	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	7.1	0.52	0.14	mg/kg dry	1	"	"	"	"	
Lead	26	1.0	0.15	mg/kg dry	1	"	"	"	"	
Mercury	0.15	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.029	mg/kg dry	1	"	"	"	"	
Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Arsenic	<0.51	0.51	0.13	mg/kg dry	1	B4G0709	07/14/14	07/16/14	EPA 6010C	
Barium	4.6	1.0	0.056	mg/kg dry	1	B4G1419	"	"	"	
Cadmium	<0.26	0.26	0.034	mg/kg dry	1	"	"	"	"	
Chromium	2.0	0.51	0.14	mg/kg dry	1	"	"	"	"	
Lead	5.0	1.0	0.14	mg/kg dry	1	"	"	"	"	
Mercury	<0.10	0.10	0.027	mg/kg dry	1	B4G1706	07/17/14	07/18/14	EPA 7471B	
Selenium	<1.0	1.0	0.17	mg/kg dry	1	B4G1419	07/14/14	07/16/14	EPA 6010C	
Silver	<0.26	0.26	0.028	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

PCB 8082A
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Aroclor 1016	<0.21	0.21	0.018	mg/kg dry	1	B4G1603	07/16/14	07/17/14	EPA 8082A	
Aroclor 1221	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1232	<0.21	0.21	0.031	mg/kg dry	1	"	"	"	"	
Aroclor 1242	<0.21	0.21	0.021	mg/kg dry	1	"	"	"	"	
Aroclor 1248	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Aroclor 1254	<0.21	0.21	0.025	mg/kg dry	1	"	"	"	"	
Aroclor 1260	<0.21	0.21	0.023	mg/kg dry	1	"	"	"	"	
Surrogate: Decachlorobiphenyl	86.5			65.3-143 %		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene	91.0			60.9-138 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

PERCENT SOLIDS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
% Solids	96			%	1	B4G1513	07/15/14	07/16/14	% calculation	
Dup-3 (1403022-03) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
% Solids	99			%	1	B4G1513	07/15/14	07/16/14	% calculation	
Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
% Solids	98			%	1	B4G1513	07/15/14	07/16/14	% calculation	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,2,4-Trichlorobenzene	<11	11	0.60	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
1,2-Dichlorobenzene	<11	11	0.58	ug/L	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<11	11	1.0	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<11	11	0.49	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<11	11	0.34	ug/L	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<11	11	1.9	ug/L	1	"	"	"	"	
2,4,5-Trichlorophenol	<11	11	1.6	ug/L	1	"	"	"	"	
2,4,6-Trichlorophenol	<11	11	1.3	ug/L	1	"	"	"	"	
2,4-Dichlorophenol	<11	11	1.2	ug/L	1	"	"	"	"	
2,4-Dimethylphenol	<11	11	1.6	ug/L	1	"	"	"	"	
2,4-Dinitrophenol	<11	11	1.9	ug/L	1	"	"	"	"	
2,4-Dinitrotoluene	<11	11	0.84	ug/L	1	"	"	"	"	
2,6-Dichlorophenol	<11	11	1.2	ug/L	1	"	"	"	"	
2,6-Dinitrotoluene	<11	11	0.98	ug/L	1	"	"	"	"	
2-Chloronaphthalene	<11	11	0.69	ug/L	1	"	"	"	"	
2-Chlorophenol	<11	11	1.2	ug/L	1	"	"	"	"	
2-Methylnaphthalene	<11	11	1.3	ug/L	1	"	"	"	"	
2-Methylphenol	<11	11	1.3	ug/L	1	"	"	"	"	
2-Nitroaniline	<11	11	1.9	ug/L	1	"	"	"	"	
2-Nitrophenol	<11	11	1.7	ug/L	1	"	"	"	"	
3&4-Methylphenol	<11	11	1.5	ug/L	1	"	"	"	"	
3,3'-Dichlorobenzidine	<28	28	6.6	ug/L	1	"	"	"	"	
3-Nitroaniline	<11	11	1.7	ug/L	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<11	11	2.2	ug/L	1	"	"	"	"	
4-Bromophenyl phenyl ether	<11	11	0.83	ug/L	1	"	"	"	"	
4-Chloro-3-methylphenol	<11	11	1.6	ug/L	1	"	"	"	"	
4-Chloroaniline	<11	11	3.0	ug/L	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<11	11	0.76	ug/L	1	"	"	"	"	
4-Nitroaniline	<11	11	1.5	ug/L	1	"	"	"	"	
4-Nitrophenol	<11	11	2.1	ug/L	1	"	"	"	"	
Acenaphthene	<11	11	0.83	ug/L	1	"	"	"	"	
Acenaphthylene	<11	11	0.78	ug/L	1	"	"	"	"	
Aniline	<11	11	2.4	ug/L	1	"	"	"	"	
Anthracene	<11	11	0.82	ug/L	1	"	"	"	"	
Benzidine	<110	110	12	ug/L	1	"	"	"	"	
Benzo(a)anthracene	<11	11	0.73	ug/L	1	"	"	"	"	
Benzo(a)pyrene	<11	11	0.70	ug/L	1	"	"	"	"	
Benzo(b)fluoranthene	<11	11	0.72	ug/L	1	"	"	"	"	
Benzo(g,h,i)perylene	<11	11	0.73	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Benzo(k)fluoranthene	<11	11	0.72	ug/L	1	B4G1405	07/14/14	07/14/14	EPA 8270D	
Benzoic acid	<11	11	2.6	ug/L	1	"	"	"	"	
Benzyl alcohol	<11	11	1.7	ug/L	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<11	11	0.74	ug/L	1	"	"	"	"	
Bis(2-chloroethyl)ether	<11	11	0.79	ug/L	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<11	11	0.94	ug/L	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<11	11	0.72	ug/L	1	"	"	"	"	
Butyl benzyl phthalate	<11	11	1.1	ug/L	1	"	"	"	"	
Carbazole	<11	11	0.87	ug/L	1	"	"	"	"	T-1
Chrysene	<11	11	0.70	ug/L	1	"	"	"	"	
Dibenz(a,h)anthracene	<11	11	0.60	ug/L	1	"	"	"	"	
Dibenzofuran	<11	11	1.5	ug/L	1	"	"	"	"	
Diethyl phthalate	<11	11	0.83	ug/L	1	"	"	"	"	
Dimethyl phthalate	<11	11	0.78	ug/L	1	"	"	"	"	
Di-n-butyl phthalate	<11	11	0.89	ug/L	1	"	"	"	"	
Di-n-octyl phthalate	<11	11	0.80	ug/L	1	"	"	"	"	
Fluoranthene	<11	11	0.85	ug/L	1	"	"	"	"	
Fluorene	<11	11	0.83	ug/L	1	"	"	"	"	
Hexachlorobenzene	<11	11	0.76	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<11	11	0.58	ug/L	1	"	"	"	"	
Hexachlorocyclopentadiene	<11	11	0.61	ug/L	1	"	"	"	"	
Hexachloroethane	<11	11	0.53	ug/L	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<11	11	0.64	ug/L	1	"	"	"	"	
Isophorone	<11	11	0.79	ug/L	1	"	"	"	"	
Naphthalene	<11	11	0.66	ug/L	1	"	"	"	"	
Nitrobenzene	<11	11	0.80	ug/L	1	"	"	"	"	
N-Nitrosodimethylamine	<11	11	0.63	ug/L	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<11	11	0.84	ug/L	1	"	"	"	"	
N-Nitrosodiphenylamine	<11	11	0.87	ug/L	1	"	"	"	"	
Pentachlorophenol	<11	11	2.7	ug/L	1	"	"	"	"	
Phenanthrene	<11	11	0.83	ug/L	1	"	"	"	"	
Phenol	<11	11	1.1	ug/L	1	"	"	"	"	
Pyrene	<11	11	0.78	ug/L	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	92.5			30-122 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	75.3			39.2-104 %		"	"	"	"	
Surrogate: 2-Fluorophenol	57.2			30-80.1 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	73.3			51.2-103 %		"	"	"	"	
Surrogate: Phenol-d6	63.2			30-75.3 %		"	"	"	"	
Surrogate: Terphenyl-d14	78.5			30-116 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,2,4-Trichlorobenzene	<0.34	0.34	0.078	mg/kg dry	1	B4G1401	07/14/14	07/14/14	EPA 8270D	
1,2-Dichlorobenzene	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
1,2-Diphenylhydrazine as Azobenzene	<0.34	0.34	0.060	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,3,4,6-Tetrachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
2,4,5-Trichlorophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4,6-Trichlorophenol	<0.70	0.70	0.17	mg/kg dry	1	"	"	"	"	
2,4-Dichlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2,4-Dimethylphenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,4-Dinitrophenol	<0.70	0.70	0.074	mg/kg dry	1	"	"	"	"	
2,4-Dinitrotoluene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2,6-Dichlorophenol	<0.70	0.70	0.14	mg/kg dry	1	"	"	"	"	
2,6-Dinitrotoluene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
2-Chloronaphthalene	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
2-Chlorophenol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
2-Methylnaphthalene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
2-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
2-Nitroaniline	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
2-Nitrophenol	<0.70	0.70	0.19	mg/kg dry	1	"	"	"	"	
3&4-Methylphenol	<0.70	0.70	0.085	mg/kg dry	1	"	"	"	"	
3,3'-Dichlorobenzidine	<1.7	1.7	0.47	mg/kg dry	1	"	"	"	"	
3-Nitroaniline	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
4,6-Dinitro-2-methylphenol	<0.70	0.70	0.11	mg/kg dry	1	"	"	"	"	
4-Bromophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Chloro-3-methylphenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
4-Chloroaniline	<0.70	0.70	0.070	mg/kg dry	1	"	"	"	"	
4-Chlorophenyl phenyl ether	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
4-Nitroaniline	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
4-Nitrophenol	<0.70	0.70	0.18	mg/kg dry	1	"	"	"	"	
Acenaphthene	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Acenaphthylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Aniline	<0.70	0.70	0.069	mg/kg dry	1	"	"	"	"	
Anthracene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Benzidine	<2.6	2.6	0.46	mg/kg dry	1	"	"	"	"	
Benzo(a)anthracene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Benzo(a)pyrene	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
Benzo(b)fluoranthene	<0.34	0.34	0.061	mg/kg dry	1	"	"	"	"	
Benzo(g,h,i)perylene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Benzo(k)fluoranthene	<0.34	0.34	0.073	mg/kg dry	1	B4G1401	07/14/14	07/14/14	EPA 8270D	
Benzoic acid	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Benzyl alcohol	<0.70	0.70	0.16	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethoxy)methane	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Bis(2-chloroethyl)ether	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Bis(2-chloroisopropyl)ether	<0.34	0.34	0.081	mg/kg dry	1	"	"	"	"	
Bis(2-ethylhexyl)phthalate	<0.34	0.34	0.084	mg/kg dry	1	"	"	"	"	
Butyl benzyl phthalate	<0.34	0.34	0.086	mg/kg dry	1	"	"	"	"	
Carbazole	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	T-1
Chrysene	<0.34	0.34	0.067	mg/kg dry	1	"	"	"	"	
Dibenz(a,h)anthracene	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Dibenzofuran	<0.34	0.34	0.071	mg/kg dry	1	"	"	"	"	
Diethyl phthalate	<0.34	0.34	0.066	mg/kg dry	1	"	"	"	"	
Dimethyl phthalate	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Di-n-butyl phthalate	<0.34	0.34	0.082	mg/kg dry	1	"	"	"	"	
Di-n-octyl phthalate	<0.34	0.34	0.10	mg/kg dry	1	"	"	"	"	
Fluoranthene	0.42	0.34	0.071	mg/kg dry	1	"	"	"	"	
Fluorene	<0.34	0.34	0.068	mg/kg dry	1	"	"	"	"	
Hexachlorobenzene	<0.34	0.34	0.065	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.34	0.34	0.080	mg/kg dry	1	"	"	"	"	
Hexachlorocyclopentadiene	<0.34	0.34	0.072	mg/kg dry	1	"	"	"	"	
Hexachloroethane	<0.34	0.34	0.085	mg/kg dry	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	<0.34	0.34	0.075	mg/kg dry	1	"	"	"	"	
Isophorone	<0.34	0.34	0.079	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.34	0.34	0.074	mg/kg dry	1	"	"	"	"	
Nitrobenzene	<0.34	0.34	0.083	mg/kg dry	1	"	"	"	"	
N-Nitrosodimethylamine	<0.34	0.34	0.073	mg/kg dry	1	"	"	"	"	
N-Nitrosodi-n-propylamine	<0.34	0.34	0.076	mg/kg dry	1	"	"	"	"	
N-Nitrosodiphenylamine	<0.34	0.34	0.070	mg/kg dry	1	"	"	"	"	
Pentachlorophenol	<0.70	0.70	0.20	mg/kg dry	1	"	"	"	"	
Phenanthrene	<0.34	0.34	0.069	mg/kg dry	1	"	"	"	"	
Phenol	<0.70	0.70	0.15	mg/kg dry	1	"	"	"	"	
Pyrene	0.40	0.34	0.061	mg/kg dry	1	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	77.2			53-107 %		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	68.5			53.9-97.9 %		"	"	"	"	
Surrogate: 2-Fluorophenol	53.3			42.5-94.9 %		"	"	"	"	
Surrogate: Nitrobenzene-d5	61.6			48.9-100 %		"	"	"	"	
Surrogate: Phenol-d6	65.2			50.4-99.6 %		"	"	"	"	
Surrogate: Terphenyl-d14	69.1			51-99.6 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1514	07/15/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-1 (1403022-01) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	B4G1514	07/15/14	07/15/14	EPA 8260B	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	"	"	"	"	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.069	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	92.6			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.5			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	97.2			80-120 %		"	"	"	"	

Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1,1,2-Tetrachloroethane	<0.26	0.26	0.0053	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
1,1,1-Trichloroethane	<0.26	0.26	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.26	0.26	0.0059	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.26	0.26	0.0076	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.26	0.26	0.0095	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1-Dichloroethene	<0.26	0.26	0.0060	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
1,1-Dichloropropene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.52	0.52	0.0053	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.52	0.52	0.0056	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.26	0.26	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.26	0.26	0.0035	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.26	0.26	0.0050	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.26	0.26	0.0026	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.52	0.52	0.0091	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.1	2.1	0.015	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.26	0.26	0.0023	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.26	0.26	0.0038	mg/kg dry	1	"	"	"	"	
Acetone	<2.1	2.1	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.52	0.52	0.0086	mg/kg dry	1	"	"	"	"	
Benzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.26	0.26	0.0054	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.26	0.26	0.0077	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.26	0.26	0.0045	mg/kg dry	1	"	"	"	"	
Bromoform	<0.52	0.52	0.0073	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.52	0.52	0.0062	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.26	0.26	0.0062	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.26	0.26	0.0027	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.26	0.26	0.0075	mg/kg dry	1	"	"	"	"	
Chloroform	<0.26	0.26	0.0024	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.26	0.26	0.0070	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.26	0.26	0.0019	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.26	0.26	0.0051	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.26	0.26	0.0048	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.52	0.52	0.0098	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.26	0.26	0.0082	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.52	0.52	0.0052	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-2 (1403022-02) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Ethylbenzene	<0.26	0.26	0.0027	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
Hexachlorobutadiene	<1.0	1.0	0.19	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.26	0.26	0.0018	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.52	0.52	0.010	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.52	0.52	0.015	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
Methylene chloride	<1.0	1.0	0.0041	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.52	0.52	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.26	0.26	0.0057	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.26	0.26	0.0032	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.26	0.26	0.0041	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.26	0.26	0.0031	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
Styrene	<0.26	0.26	0.0056	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.26	0.26	0.0028	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	0.26	0.26	0.0052	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.1	2.1	0.033	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.26	0.26	0.0036	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.26	0.26	0.0047	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.26	0.26	0.0066	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.26	0.26	0.0040	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.26	0.26	0.0065	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.26	0.26	0.0064	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.4			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	92.8			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	91.4			78.1-125 %		"	"	"	"	

Dup-3 (1403022-03) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1,1,2-Tetrachloroethane	<0.25	0.25	0.0052	mg/kg dry	1	B4G1611	07/15/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<0.25	0.25	0.0057	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.25	0.25	0.0058	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.25	0.25	0.0074	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.25	0.25	0.0092	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.25	0.25	0.0059	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.51	0.51	0.0052	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.51	0.51	0.0055	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.25	0.25	0.0033	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-3 (1403022-03) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,2-Dibromo-3-chloropropane	<0.51	0.51	0.0084	mg/kg dry	1	B4G1611	07/15/14	07/15/14	EPA 8260B	
1,2-Dibromoethane (EDB)	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.25	0.25	0.0034	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.25	0.25	0.0048	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.25	0.25	0.0025	mg/kg dry	1	"	"	"	"	
1,3-Dichlorobenzene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
1,3-Dichloropropane	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.51	0.51	0.0088	mg/kg dry	1	"	"	"	"	
2-Butanone	<2.0	2.0	0.014	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.25	0.25	0.0022	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.25	0.25	0.0036	mg/kg dry	1	"	"	"	"	
Acetone	<2.0	2.0	0.10	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.51	0.51	0.0084	mg/kg dry	1	"	"	"	"	
Benzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.25	0.25	0.0053	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.25	0.25	0.0075	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.25	0.25	0.0043	mg/kg dry	1	"	"	"	"	
Bromoform	<0.51	0.51	0.0071	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.51	0.51	0.0061	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.25	0.25	0.0061	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.25	0.25	0.0073	mg/kg dry	1	"	"	"	"	
Chloroform	<0.25	0.25	0.0023	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.25	0.25	0.0068	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.25	0.25	0.0018	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.25	0.25	0.0049	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.25	0.25	0.0046	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.51	0.51	0.0095	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.25	0.25	0.0080	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.51	0.51	0.0051	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.25	0.25	0.0026	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<1.0	1.0	0.18	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.25	0.25	0.0017	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.51	0.51	0.0098	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.51	0.51	0.014	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-3 (1403022-03) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
Methylene chloride	<1.0	1.0	0.0039	mg/kg dry	1	B4G1611	07/15/14	07/15/14	EPA 8260B	
Naphthalene	<0.51	0.51	0.012	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.25	0.25	0.0056	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.25	0.25	0.0031	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.25	0.25	0.0039	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.25	0.25	0.0030	mg/kg dry	1	"	"	"	"	
sec-Butylbenzene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
Styrene	<0.25	0.25	0.0055	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.25	0.25	0.0027	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.25	0.25	0.0051	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<2.0	2.0	0.032	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.25	0.25	0.0035	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.25	0.25	0.0045	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.25	0.25	0.0064	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.25	0.25	0.0038	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.25	0.25	0.0063	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.25	0.25	0.0062	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.5			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	93.9			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	90.7			78.1-125 %		"	"	"	"	

Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1,1,2-Tetrachloroethane	<0.23	0.23	0.0048	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
1,1,1-Trichloroethane	<0.23	0.23	0.0052	mg/kg dry	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<0.23	0.23	0.0053	mg/kg dry	1	"	"	"	"	
1,1,2-Trichloroethane	<0.23	0.23	0.0068	mg/kg dry	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<0.23	0.23	0.0085	mg/kg dry	1	"	"	"	"	T-1
1,1-Dichloroethane	<0.23	0.23	0.0031	mg/kg dry	1	"	"	"	"	
1,1-Dichloroethene	<0.23	0.23	0.0054	mg/kg dry	1	"	"	"	"	
1,1-Dichloropropene	<0.23	0.23	0.0051	mg/kg dry	1	"	"	"	"	
1,2,3-Trichlorobenzene	<0.47	0.47	0.0048	mg/kg dry	1	"	"	"	"	
1,2,3-Trichloropropane	<0.23	0.23	0.0043	mg/kg dry	1	"	"	"	"	
1,2,4-Trichlorobenzene	<0.47	0.47	0.0050	mg/kg dry	1	"	"	"	"	
1,2,4-Trimethylbenzene	<0.23	0.23	0.0031	mg/kg dry	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<0.23	0.23	0.0067	mg/kg dry	1	"	"	"	"	
1,2-Dichlorobenzene	<0.23	0.23	0.0032	mg/kg dry	1	"	"	"	"	
1,2-Dichloroethane	<0.23	0.23	0.0051	mg/kg dry	1	"	"	"	"	
1,2-Dichloropropane	<0.23	0.23	0.0045	mg/kg dry	1	"	"	"	"	
1,3,5-Trimethylbenzene	<0.23	0.23	0.0023	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,3-Dichlorobenzene	<0.23	0.23	0.0036	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
1,3-Dichloropropane	<0.23	0.23	0.0051	mg/kg dry	1	"	"	"	"	
1,4-Dichlorobenzene	<0.23	0.23	0.0047	mg/kg dry	1	"	"	"	"	
2,2-Dichloropropane	<0.47	0.47	0.0081	mg/kg dry	1	"	"	"	"	
2-Butanone	<1.9	1.9	0.013	mg/kg dry	1	"	"	"	"	
2-Chlorotoluene	<0.23	0.23	0.0021	mg/kg dry	1	"	"	"	"	
4-Chlorotoluene	<0.23	0.23	0.0034	mg/kg dry	1	"	"	"	"	
Acetone	<1.9	1.9	0.093	mg/kg dry	1	"	"	"	"	
Allyl chloride	<0.47	0.47	0.0078	mg/kg dry	1	"	"	"	"	
Benzene	<0.23	0.23	0.0025	mg/kg dry	1	"	"	"	"	
Bromobenzene	<0.23	0.23	0.0049	mg/kg dry	1	"	"	"	"	
Bromochloromethane	<0.23	0.23	0.0069	mg/kg dry	1	"	"	"	"	
Bromodichloromethane	<0.23	0.23	0.0040	mg/kg dry	1	"	"	"	"	
Bromoform	<0.47	0.47	0.0065	mg/kg dry	1	"	"	"	"	
Bromomethane	<0.47	0.47	0.0056	mg/kg dry	1	"	"	"	"	
Carbon tetrachloride	<0.23	0.23	0.0056	mg/kg dry	1	"	"	"	"	
Chlorobenzene	<0.23	0.23	0.0024	mg/kg dry	1	"	"	"	"	
Chloroethane	<0.23	0.23	0.0067	mg/kg dry	1	"	"	"	"	
Chloroform	<0.23	0.23	0.0021	mg/kg dry	1	"	"	"	"	
Chloromethane	<0.23	0.23	0.0063	mg/kg dry	1	"	"	"	"	
cis-1,2-Dichloroethene	<0.23	0.23	0.0017	mg/kg dry	1	"	"	"	"	
cis-1,3-Dichloropropene	<0.23	0.23	0.0046	mg/kg dry	1	"	"	"	"	
Dibromochloromethane	<0.23	0.23	0.0043	mg/kg dry	1	"	"	"	"	
Dibromomethane	<0.23	0.23	0.0043	mg/kg dry	1	"	"	"	"	
Dichlorodifluoromethane	<0.47	0.47	0.0088	mg/kg dry	1	"	"	"	"	
Dichlorofluoromethane	<0.23	0.23	0.0074	mg/kg dry	1	"	"	"	"	T-1
Ethyl ether	<0.47	0.47	0.0047	mg/kg dry	1	"	"	"	"	
Ethylbenzene	<0.23	0.23	0.0024	mg/kg dry	1	"	"	"	"	
Hexachlorobutadiene	<0.93	0.93	0.17	mg/kg dry	1	"	"	"	"	
Isopropylbenzene	<0.23	0.23	0.0016	mg/kg dry	1	"	"	"	"	
m,p-Xylene	<0.47	0.47	0.0091	mg/kg dry	1	"	"	"	"	
Methyl isobutyl ketone	<0.47	0.47	0.013	mg/kg dry	1	"	"	"	"	
Methyl tert-butyl ether	<0.23	0.23	0.0051	mg/kg dry	1	"	"	"	"	
Methylene chloride	<0.93	0.93	0.0036	mg/kg dry	1	"	"	"	"	
Naphthalene	<0.47	0.47	0.011	mg/kg dry	1	"	"	"	"	
n-Butylbenzene	<0.23	0.23	0.0051	mg/kg dry	1	"	"	"	"	
n-Propylbenzene	<0.23	0.23	0.0029	mg/kg dry	1	"	"	"	"	
o-Xylene	<0.23	0.23	0.0036	mg/kg dry	1	"	"	"	"	
p-Isopropyltoluene	<0.23	0.23	0.0028	mg/kg dry	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Dup-4 (1403022-04) Soil Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
sec-Butylbenzene	<0.23	0.23	0.0033	mg/kg dry	1	B4G1611	07/15/14	07/16/14	EPA 8260B	
Styrene	<0.23	0.23	0.0050	mg/kg dry	1	"	"	"	"	
tert-Butylbenzene	<0.23	0.23	0.0025	mg/kg dry	1	"	"	"	"	
Tetrachloroethene	<0.23	0.23	0.0047	mg/kg dry	1	"	"	"	"	
Tetrahydrofuran	<1.9	1.9	0.030	mg/kg dry	1	"	"	"	"	T-1
Toluene	<0.23	0.23	0.0033	mg/kg dry	1	"	"	"	"	
trans-1,2-Dichloroethene	<0.23	0.23	0.0042	mg/kg dry	1	"	"	"	"	
trans-1,3-Dichloropropene	<0.23	0.23	0.0059	mg/kg dry	1	"	"	"	"	
Trichloroethene	<0.23	0.23	0.0036	mg/kg dry	1	"	"	"	"	
Trichlorofluoromethane	<0.23	0.23	0.0058	mg/kg dry	1	"	"	"	"	
Vinyl chloride	<0.23	0.23	0.0057	mg/kg dry	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	94.5			80-124 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.6			77.1-123 %		"	"	"	"	
Surrogate: Toluene-d8	91.5			78.1-125 %		"	"	"	"	

Trip Blank Water (1403022-05) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
1,1,1,2-Tetrachloroethane	<1.0	1.0	0.061	ug/L	1	B4G1514	07/15/14	07/15/14	EPA 8260B	
1,1,1-Trichloroethane	<1.0	1.0	0.080	ug/L	1	"	"	"	"	
1,1,2,2-Tetrachloroethane	<1.0	1.0	0.072	ug/L	1	"	"	"	"	
1,1,2-Trichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	<1.0	1.0	0.051	ug/L	1	"	"	"	"	T-1
1,1-Dichloroethane	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
1,1-Dichloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
1,1-Dichloropropene	<1.0	1.0	0.079	ug/L	1	"	"	"	"	
1,2,3-Trichlorobenzene	<5.0	5.0	0.080	ug/L	1	"	"	"	"	
1,2,3-Trichloropropane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
1,2,4-Trichlorobenzene	<5.0	5.0	0.086	ug/L	1	"	"	"	"	
1,2,4-Trimethylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
1,2-Dibromo-3-chloropropane	<5.0	5.0	0.079	ug/L	1	"	"	"	"	
1,2-Dibromoethane (EDB)	<2.5	2.5	0.046	ug/L	1	"	"	"	"	
1,2-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
1,2-Dichloroethane	<1.0	1.0	0.062	ug/L	1	"	"	"	"	
1,2-Dichloropropane	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
1,3,5-Trimethylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
1,3-Dichlorobenzene	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
1,3-Dichloropropane	<1.0	1.0	0.041	ug/L	1	"	"	"	"	
1,4-Dichlorobenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
2,2-Dichloropropane	<5.0	5.0	0.062	ug/L	1	"	"	"	"	
2-Butanone	<20	20	0.091	ug/L	1	"	"	"	"	
2-Chlorotoluene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Water (1403022-05) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
4-Chlorotoluene	<1.0	1.0	0.053	ug/L	1	B4G1514	07/15/14	07/15/14	EPA 8260B	
Acetone	<20	20	0.54	ug/L	1	"	"	"	"	
Allyl chloride	<5.0	5.0	0.067	ug/L	1	"	"	"	"	
Benzene	<1.0	1.0	0.048	ug/L	1	"	"	"	"	
Bromobenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Bromochloromethane	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
Bromodichloromethane	<1.0	1.0	0.057	ug/L	1	"	"	"	"	
Bromoform	<5.0	5.0	0.071	ug/L	1	"	"	"	"	
Bromomethane	<5.0	5.0	0.066	ug/L	1	"	"	"	"	
Carbon tetrachloride	<1.0	1.0	0.085	ug/L	1	"	"	"	"	
Chlorobenzene	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Chloroethane	<2.5	2.5	0.051	ug/L	1	"	"	"	"	
Chloroform	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Chloromethane	<2.5	2.5	0.054	ug/L	1	"	"	"	"	
cis-1,2-Dichloroethene	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
cis-1,3-Dichloropropene	<1.0	1.0	0.034	ug/L	1	"	"	"	"	
Dibromochloromethane	<2.5	2.5	0.026	ug/L	1	"	"	"	"	
Dibromomethane	<2.5	2.5	0.066	ug/L	1	"	"	"	"	
Dichlorodifluoromethane	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Dichlorofluoromethane	<1.0	1.0	0.061	ug/L	1	"	"	"	"	T-1
Ethyl ether	<5.0	5.0	0.051	ug/L	1	"	"	"	"	
Ethylbenzene	<1.0	1.0	0.050	ug/L	1	"	"	"	"	
Hexachlorobutadiene	<10	10	0.53	ug/L	1	"	"	"	"	
Isopropylbenzene	<1.0	1.0	0.058	ug/L	1	"	"	"	"	
m,p-Xylene	<2.0	2.0	0.11	ug/L	1	"	"	"	"	
Methyl isobutyl ketone	<5.0	5.0	0.055	ug/L	1	"	"	"	"	
Methyl tert-butyl ether	<1.0	1.0	0.053	ug/L	1	"	"	"	"	
Methylene chloride	<5.0	5.0	0.40	ug/L	1	"	"	"	"	
Naphthalene	<5.0	5.0	0.057	ug/L	1	"	"	"	"	
n-Butylbenzene	<2.5	2.5	0.064	ug/L	1	"	"	"	"	
n-Propylbenzene	<1.0	1.0	0.055	ug/L	1	"	"	"	"	
o-Xylene	<1.0	1.0	0.054	ug/L	1	"	"	"	"	
p-Isopropyltoluene	<2.5	2.5	0.047	ug/L	1	"	"	"	"	
sec-Butylbenzene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Styrene	<1.0	1.0	0.024	ug/L	1	"	"	"	"	
tert-Butylbenzene	<1.0	1.0	0.052	ug/L	1	"	"	"	"	
Tetrachloroethene	<1.0	1.0	0.051	ug/L	1	"	"	"	"	
Tetrahydrofuran	<20	20	0.064	ug/L	1	"	"	"	"	T-1
Toluene	<1.0	1.0	0.023	ug/L	1	"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank Water (1403022-05) Water Sampled: 07/10/14 00:00 Received: 07/10/14 16:55										
trans-1,2-Dichloroethene	<1.0	1.0	0.064	ug/L	1	B4G1514	07/15/14	07/15/14	EPA 8260B	
trans-1,3-Dichloropropene	<1.0	1.0	0.046	ug/L	1	"	"	"	"	
Trichloroethene	<1.0	1.0	0.033	ug/L	1	"	"	"	"	
Trichlorofluoromethane	<1.0	1.0	0.069	ug/L	1	"	"	"	"	
Vinyl chloride	<1.0	1.0	0.049	ug/L	1	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	86.8			80-121 %		"	"	"	"	
Surrogate: Dibromofluoromethane	94.1			79.9-121 %		"	"	"	"	
Surrogate: Toluene-d8	92.4			80-120 %		"	"	"	"	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

DRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1403 - Sonication (Wisc DRO)											
Blank (B4G1403-BLK1)											
						Prepared & Analyzed: 07/14/14					
Diesel Range Organics	< 8.0	8.0	1.3	mg/kg wet							
Surrogate: <i>Triacontane (C-30)</i>	15.1			mg/kg wet	16.0		94.2	70-130			
LCS (B4G1403-BS1)											
						Prepared & Analyzed: 07/14/14					
Diesel Range Organics	69.8	8.0	1.3	mg/kg wet	64.0		109	70-120			
Surrogate: <i>Triacontane (C-30)</i>	13.8			mg/kg wet	16.0		86.3	70-130			
LCS Dup (B4G1403-BSD1)											
						Prepared: 07/14/14			Analyzed: 07/15/14		
Diesel Range Organics	70.4	8.0	1.3	mg/kg wet	64.0		110	70-120	0.888	20	
Surrogate: <i>Triacontane (C-30)</i>	15.9			mg/kg wet	16.0		99.2	70-130			
Batch B4G1505 - EPA 3510C (Sep Funnel)											
Blank (B4G1505-BLK1)											
						Prepared & Analyzed: 07/15/14					
Diesel Range Organics	< 100	100	21	ug/L							
Surrogate: <i>Triacontane (C-30)</i>	437			ug/L	400		109	70-130			
LCS (B4G1505-BS1)											
						Prepared: 07/15/14			Analyzed: 07/17/14		
Diesel Range Organics	1830	100	21	ug/L	1600		115	75-115			
Surrogate: <i>Triacontane (C-30)</i>	405			ug/L	400		101	70-130			
LCS Dup (B4G1505-BSD1)											
						Prepared: 07/15/14			Analyzed: 07/17/14		
Diesel Range Organics	1790	100	21	ug/L	1600		112	75-115	2.36	20	
Surrogate: <i>Triacontane (C-30)</i>	392			ug/L	400		98.0	70-130			
Duplicate (B4G1505-DUP1)											
						Source: 1403022-01			Prepared & Analyzed: 07/15/14		
Diesel Range Organics	73.2	110	22	ug/L		<110			NA	20	PH2
Surrogate: <i>Triacontane (C-30)</i>	444			ug/L	421		106	70-130			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

WI(95) GRO/8015D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1406 - EPA 5035 Soil (Purge and Trap)											
Blank (B4G1406-BLK1) Prepared & Analyzed: 07/14/14											
Gasoline range organics	< 5.0	5.0	0.54	mg/kg wet							
Surrogate: 4-Fluorochlorobenzene	22.9			ug/L	25.0		91.8	80-150			
LCS (B4G1406-BS1) Prepared & Analyzed: 07/14/14											
Gasoline range organics	1010			ug/L	1000		101	80-120			
Surrogate: 4-Fluorochlorobenzene	23.3			ug/L	25.0		93.0	80-150			
LCS Dup (B4G1406-BSD1) Prepared: 07/14/14 Analyzed: 07/15/14											
Gasoline range organics	977			ug/L	1000		97.7	80-120	3.00	20	
Surrogate: 4-Fluorochlorobenzene	23.2			ug/L	25.0		92.9	80-150			
Duplicate (B4G1406-DUP1) Source: 1403045-01 Prepared & Analyzed: 07/14/14											
Gasoline range organics	1.73	6.0	0.64	mg/kg dry		<6.0			NA	20	
Surrogate: 4-Fluorochlorobenzene	23.4			ug/L	25.0		93.4	80-150			
Batch B4G1707 - EPA 5030 Water (Purge and Trap)											
Blank (B4G1707-BLK1) Prepared & Analyzed: 07/17/14											
Gasoline range organics	< 100	100	14	ug/L							
Surrogate: 4-Fluorochlorobenzene	23.4			ug/L	25.0		93.6	80-150			
LCS (B4G1707-BS1) Prepared & Analyzed: 07/17/14											
Gasoline range organics	1030	100	14	ug/L	1000		103	80-120			
Surrogate: 4-Fluorochlorobenzene	23.8			ug/L	25.0		95.4	80-150			
LCS Dup (B4G1707-BSD1) Prepared & Analyzed: 07/17/14											
Gasoline range organics	1000	100	14	ug/L	1000		100	80-120	2.76	20	
Surrogate: 4-Fluorochlorobenzene	23.1			ug/L	25.0		92.3	80-150			
Duplicate (B4G1707-DUP1) Source: 1403022-01 Prepared & Analyzed: 07/17/14											
Gasoline range organics	27.5	100	14	ug/L		<100			NA	20	
Surrogate: 4-Fluorochlorobenzene	21.4			ug/L	25.0		85.5	80-150			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1407 - EPA 245.1/7470A Digestion											
Blank (B4G1407-BLK1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	< 0.00020	0.00020	0.000052	mg/L							
LCS (B4G1407-BS1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00192	0.00020	0.000052	mg/L	0.00200		96.0	80-120			
LCS Dup (B4G1407-BSD1) Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00202	0.00020	0.000052	mg/L	0.00200		101	80-120	5.08	20	
Matrix Spike (B4G1407-MS1) Source: 1403007-25 Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00210	0.00020	0.000052	mg/L	0.00200	<0.00020	95.6	75-125			
Matrix Spike Dup (B4G1407-MSD1) Source: 1403007-25 Prepared: 07/14/14 Analyzed: 07/18/14											
Mercury	0.00203	0.00020	0.000052	mg/L	0.00200	<0.00020	92.1	75-125	3.39	20	
Batch B4G1417 - EPA 200.7/3005A Digestion											
Blank (B4G1417-BLK1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	< 0.010	0.010	0.0014	mg/L							
Barium	< 0.020	0.020	0.0021	mg/L							
Cadmium	< 0.0010	0.0010	0.00015	mg/L							
Chromium	< 0.010	0.010	0.00015	mg/L							
Lead	< 0.0030	0.0030	0.00058	mg/L							
Selenium	< 0.020	0.020	0.0040	mg/L							
Silver	< 0.0050	0.0050	0.00031	mg/L							
LCS (B4G1417-BS1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	0.371	0.010	0.0014	mg/L	0.399		93.0	80-120			
Barium	0.394	0.020	0.0021	mg/L	0.399		98.7	80-120			
Cadmium	0.381	0.0010	0.00015	mg/L	0.399		95.6	80-120			
Chromium	0.384	0.010	0.00015	mg/L	0.399		96.3	80-120			
Lead	0.395	0.0030	0.00058	mg/L	0.399		99.0	80-120			
Selenium	0.372	0.020	0.0040	mg/L	0.399		93.1	80-120			
Silver	0.0379	0.0050	0.00031	mg/L	0.0399		94.9	80-120			
LCS Dup (B4G1417-BSD1) Prepared: 07/14/14 Analyzed: 07/16/14											
Arsenic	0.385	0.010	0.0014	mg/L	0.399		96.6	80-120	3.74	20	
Barium	0.406	0.020	0.0021	mg/L	0.399		102	80-120	3.02	20	
Cadmium	0.394	0.0010	0.00015	mg/L	0.399		98.8	80-120	3.31	20	
Chromium	0.398	0.010	0.00015	mg/L	0.399		99.7	80-120	3.54	20	
Lead	0.410	0.0030	0.00058	mg/L	0.399		103	80-120	3.79	20	
Selenium	0.386	0.020	0.0040	mg/L	0.399		96.8	80-120	3.83	20	
Silver	0.0389	0.0050	0.00031	mg/L	0.0399		97.4	80-120	2.57	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

DISSOLVED METAL ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1417 - EPA 200.7/3005A Digestion											
Matrix Spike (B4G1417-MS1)		Source: 1403007-25			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	0.403	0.010	0.0014	mg/L	0.399	<0.010	101	75-125			
Barium	0.678	0.020	0.0021	mg/L	0.399	0.290	97.3	75-125			
Cadmium	0.399	0.0010	0.00015	mg/L	0.399	<0.0010	100	75-125			
Chromium	0.393	0.010	0.00015	mg/L	0.399	<0.010	97.7	75-125			
Lead	0.388	0.0030	0.00058	mg/L	0.399	<0.0030	97.2	75-125			
Selenium	0.394	0.020	0.0040	mg/L	0.399	<0.020	98.7	75-125			
Silver	0.0403	0.0050	0.00031	mg/L	0.0399	<0.0050	101	75-125			
Matrix Spike Dup (B4G1417-MSD1)											
Matrix Spike Dup (B4G1417-MSD1)		Source: 1403007-25			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	0.386	0.010	0.0014	mg/L	0.399	<0.010	96.7	75-125	4.33	20	
Barium	0.655	0.020	0.0021	mg/L	0.399	0.290	91.5	75-125	3.46	20	
Cadmium	0.384	0.0010	0.00015	mg/L	0.399	<0.0010	96.1	75-125	4.02	20	
Chromium	0.379	0.010	0.00015	mg/L	0.399	<0.010	94.2	75-125	3.61	20	
Lead	0.379	0.0030	0.00058	mg/L	0.399	<0.0030	94.9	75-125	2.42	20	
Selenium	0.384	0.020	0.0040	mg/L	0.399	<0.020	96.3	75-125	2.43	20	
Silver	0.0394	0.0050	0.00031	mg/L	0.0399	<0.0050	98.7	75-125	2.25	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G0709 - Pb-CPSIA/Prop 65 Digestion											
Blank (B4G0709-BLK1)						Prepared: 07/07/14 Analyzed: 07/09/14					
Arsenic	< 0.50	0.50	0.12	mg/kg wet							
LCS (B4G0709-BS1)						Prepared: 07/07/14 Analyzed: 07/09/14					
Arsenic	400	0.50	0.12	mg/kg wet	399		100	80-120			
LCS Dup (B4G0709-BSD1)						Prepared: 07/07/14 Analyzed: 07/09/14					
Arsenic	387	0.50	0.12	mg/kg wet	399		97.0	80-120	3.23	20	
Duplicate (B4G0709-DUP1)						Source: 1402683-04 Prepared: 07/07/14 Analyzed: 07/09/14					
Arsenic	53.8	86	22	mg/kg wet		<86			NA	20	
Reference (B4G0709-SRM1)						Prepared: 07/07/14 Analyzed: 07/09/14					
Arsenic	935	70	18	mg/kg wet	880		106	80-120			
Batch B4G1419 - EPA 3050B											
Blank (B4G1419-BLK1)						Prepared: 07/14/14 Analyzed: 07/16/14					
Arsenic	< 0.50	0.50	0.12	mg/kg wet							
Barium	< 1.0	1.0	0.055	mg/kg wet							
Cadmium	< 0.25	0.25	0.033	mg/kg wet							
Chromium	< 0.50	0.50	0.13	mg/kg wet							
Lead	< 1.0	1.0	0.14	mg/kg wet							
Selenium	< 1.0	1.0	0.16	mg/kg wet							
Silver	< 0.25	0.25	0.028	mg/kg wet							
LCS (B4G1419-BS1)						Prepared: 07/14/14 Analyzed: 07/16/14					
Arsenic	40.7	0.50	0.12	mg/kg wet	39.9		102	80-120			
Barium	42.2	1.0	0.055	mg/kg wet	39.9		106	80-120			
Cadmium	40.9	0.25	0.033	mg/kg wet	39.9		103	80-120			
Chromium	41.8	0.50	0.13	mg/kg wet	39.9		105	80-120			
Lead	43.2	1.0	0.14	mg/kg wet	39.9		108	80-120			
Selenium	41.0	1.0	0.16	mg/kg wet	39.9		103	80-120			
Silver	4.08	0.25	0.028	mg/kg wet	3.99		102	80-120			
LCS Dup (B4G1419-BSD1)						Prepared: 07/14/14 Analyzed: 07/16/14					
Arsenic	40.4	0.50	0.12	mg/kg wet	39.9		101	80-120	0.614	20	
Barium	42.1	1.0	0.055	mg/kg wet	39.9		106	80-120	0.273	20	
Cadmium	40.5	0.25	0.033	mg/kg wet	39.9		101	80-120	1.18	20	
Chromium	41.4	0.50	0.13	mg/kg wet	39.9		104	80-120	1.10	20	
Lead	42.7	1.0	0.14	mg/kg wet	39.9		107	80-120	1.04	20	
Selenium	40.7	1.0	0.16	mg/kg wet	39.9		102	80-120	0.609	20	
Silver	4.01	0.25	0.028	mg/kg wet	3.99		100	80-120	1.80	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

TOTAL METALS ANALYSIS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1419 - EPA 3050B											
Matrix Spike (B4G1419-MS1)		Source: 1403007-01			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	41.2	0.52	0.13	mg/kg dry	40.8	1.68	96.8	75-125			
Barium	78.2	1.0	0.057	mg/kg dry	40.8	29.2	120	75-125			
Cadmium	40.0	0.26	0.034	mg/kg dry	40.8	<0.26	98.1	75-125			
Chromium	54.9	0.52	0.14	mg/kg dry	40.8	10.8	108	75-125			
Lead	43.3	1.0	0.14	mg/kg dry	40.8	2.86	99.2	75-125			
Selenium	39.0	1.0	0.17	mg/kg dry	40.8	<1.0	95.7	75-125			
Silver	3.90	0.26	0.028	mg/kg dry	4.08	<0.26	95.8	75-125			
Matrix Spike Dup (B4G1419-MSD1)											
Matrix Spike Dup (B4G1419-MSD1)		Source: 1403007-01			Prepared: 07/14/14		Analyzed: 07/16/14				
Arsenic	40.5	0.52	0.13	mg/kg dry	40.7	1.68	95.2	75-125	1.70	20	
Barium	75.8	1.0	0.057	mg/kg dry	40.7	29.2	114	75-125	3.17	20	
Cadmium	39.5	0.26	0.034	mg/kg dry	40.7	<0.26	96.8	75-125	1.36	20	
Chromium	52.2	0.52	0.14	mg/kg dry	40.7	10.8	102	75-125	5.20	20	
Lead	42.5	1.0	0.14	mg/kg dry	40.7	2.86	97.3	75-125	1.90	20	
Selenium	39.1	1.0	0.17	mg/kg dry	40.7	<1.0	96.0	75-125	0.249	20	
Silver	3.89	0.26	0.028	mg/kg dry	4.07	<0.26	95.6	75-125	0.274	20	
Batch B4G1706 - EPA 7471A											
Blank (B4G1706-BLK1)					Prepared: 07/17/14		Analyzed: 07/18/14				
Mercury	< 0.10	0.10	0.026	mg/kg wet							
LCS (B4G1706-BS1)					Prepared: 07/17/14		Analyzed: 07/18/14				
Mercury	0.185	0.10	0.026	mg/kg wet	0.200		92.5	80-120			
LCS Dup (B4G1706-BSD1)					Prepared: 07/17/14		Analyzed: 07/18/14				
Mercury	0.188	0.10	0.026	mg/kg wet	0.200		94.0	80-120	1.61	20	
Matrix Spike (B4G1706-MS1)		Source: 1403007-01			Prepared: 07/17/14		Analyzed: 07/18/14				
Mercury	0.205	0.10	0.027	mg/kg dry	0.203	<0.10	101	75-125			
Matrix Spike Dup (B4G1706-MSD1)		Source: 1403007-01			Prepared: 07/17/14		Analyzed: 07/18/14				
Mercury	0.231	0.10	0.027	mg/kg dry	0.203	<0.10	114	75-125	11.9	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

PCB 8082A - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1603 - EPA 3545 ASE Extraction											
Blank (B4G1603-BLK1)											
						Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1016	< 0.20	0.20	0.017	mg/kg wet							
Aroclor 1221	< 0.20	0.20	0.020	mg/kg wet							
Aroclor 1232	< 0.20	0.20	0.030	mg/kg wet							
Aroclor 1242	< 0.20	0.20	0.020	mg/kg wet							
Aroclor 1248	< 0.20	0.20	0.022	mg/kg wet							
Aroclor 1254	< 0.20	0.20	0.024	mg/kg wet							
Aroclor 1260	< 0.20	0.20	0.022	mg/kg wet							
Surrogate: Decachlorobiphenyl	0.0583			mg/kg wet	0.0667		87.5	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0587			mg/kg wet	0.0667		88.0	60.9-138			
LCS (B4G1603-BS1)											
						Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.324	0.20	0.022	mg/kg wet	0.333		97.2	70-130			
Surrogate: Decachlorobiphenyl	0.0593			mg/kg wet	0.0667		89.0	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0587			mg/kg wet	0.0667		88.0	60.9-138			
Matrix Spike (B4G1603-MS1)											
						Source: 1403007-13 Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.337	0.20	0.022	mg/kg dry	0.334	<0.20	101	70-130			
Surrogate: Decachlorobiphenyl	0.0605			mg/kg dry	0.0668		90.5	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0592			mg/kg dry	0.0668		88.5	60.9-138			
Matrix Spike Dup (B4G1603-MSD1)											
						Source: 1403007-13 Prepared: 07/16/14 Analyzed: 07/17/14					
Aroclor 1260	0.328	0.20	0.022	mg/kg dry	0.334	<0.20	98.0	70-130	2.75	17.2	
Surrogate: Decachlorobiphenyl	0.0589			mg/kg dry	0.0669		88.0	65.3-143			
Surrogate: Tetrachloro-meta-xylene	0.0585			mg/kg dry	0.0669		87.5	60.9-138			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

PERCENT SOLIDS - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
Batch B4G1513 - General Preparation											
Duplicate (B4G1513-DUP1)											
Source: 1403068-02 Prepared: 07/15/14 Analyzed: 07/16/14											
% Solids	94.0			%		94.0			0.00	20	

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1401 - EPA 3545 ASE Extraction

Blank (B4G1401-BLK1)

Prepared & Analyzed: 07/14/14

1,2,4-Trichlorobenzene	< 0.33	0.33	0.075	mg/kg wet							
1,2-Dichlorobenzene	< 0.33	0.33	0.067	mg/kg wet							
1,2-Diphenylhydrazine as Azobenzene	< 0.33	0.33	0.058	mg/kg wet							
1,3-Dichlorobenzene	< 0.33	0.33	0.069	mg/kg wet							
1,4-Dichlorobenzene	< 0.33	0.33	0.068	mg/kg wet							
2,3,4,6-Tetrachlorophenol	< 0.67	0.67	0.19	mg/kg wet							
2,4,5-Trichlorophenol	< 0.67	0.67	0.071	mg/kg wet							
2,4,6-Trichlorophenol	< 0.67	0.67	0.16	mg/kg wet							
2,4-Dichlorophenol	< 0.67	0.67	0.15	mg/kg wet							
2,4-Dimethylphenol	< 0.67	0.67	0.13	mg/kg wet							
2,4-Dinitrophenol	< 0.67	0.67	0.071	mg/kg wet							
2,4-Dinitrotoluene	< 0.33	0.33	0.068	mg/kg wet							
2,6-Dichlorophenol	< 0.67	0.67	0.13	mg/kg wet							
2,6-Dinitrotoluene	< 0.33	0.33	0.077	mg/kg wet							
2-Chloronaphthalene	< 0.33	0.33	0.068	mg/kg wet							
2-Chlorophenol	< 0.67	0.67	0.15	mg/kg wet							
2-Methylnaphthalene	< 0.33	0.33	0.080	mg/kg wet							
2-Methylphenol	< 0.67	0.67	0.082	mg/kg wet							
2-Nitroaniline	< 0.33	0.33	0.069	mg/kg wet							
2-Nitrophenol	< 0.67	0.67	0.18	mg/kg wet							
3&4-Methylphenol	< 0.67	0.67	0.082	mg/kg wet							
3,3'-Dichlorobenzidine	< 1.6	1.6	0.45	mg/kg wet							
3-Nitroaniline	< 0.33	0.33	0.072	mg/kg wet							
4,6-Dinitro-2-methylphenol	< 0.67	0.67	0.11	mg/kg wet							
4-Bromophenyl phenyl ether	< 0.33	0.33	0.068	mg/kg wet							
4-Chloro-3-methylphenol	< 0.67	0.67	0.14	mg/kg wet							
4-Chloroaniline	< 0.67	0.67	0.067	mg/kg wet							
4-Chlorophenyl phenyl ether	< 0.33	0.33	0.068	mg/kg wet							
4-Nitroaniline	< 0.33	0.33	0.083	mg/kg wet							
4-Nitrophenol	< 0.67	0.67	0.17	mg/kg wet							
Acenaphthene	< 0.33	0.33	0.063	mg/kg wet							
Acenaphthylene	< 0.33	0.33	0.071	mg/kg wet							
Aniline	< 0.67	0.67	0.066	mg/kg wet							
Anthracene	< 0.33	0.33	0.069	mg/kg wet							
Benzidine	< 2.5	2.5	0.44	mg/kg wet							
Benzo(a)anthracene	< 0.33	0.33	0.065	mg/kg wet							
Benzo(a)pyrene	< 0.33	0.33	0.070	mg/kg wet							
Benzo(b)fluoranthene	< 0.33	0.33	0.059	mg/kg wet							
Benzo(g,h,i)perylene	< 0.33	0.33	0.071	mg/kg wet							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1401 - EPA 3545 ASE Extraction

Blank (B4G1401-BLK1)

Prepared & Analyzed: 07/14/14

Benzo(k)fluoranthene	< 0.33	0.33	0.070	mg/kg wet							
Benzoic acid	< 0.33	0.33	0.064	mg/kg wet							
Benzyl alcohol	< 0.67	0.67	0.15	mg/kg wet							
Bis(2-chloroethoxy)methane	< 0.33	0.33	0.077	mg/kg wet							
Bis(2-chloroethyl)ether	< 0.33	0.33	0.069	mg/kg wet							
Bis(2-chloroisopropyl)ether	< 0.33	0.33	0.078	mg/kg wet							
Bis(2-ethylhexyl)phthalate	< 0.33	0.33	0.081	mg/kg wet							
Butyl benzyl phthalate	< 0.33	0.33	0.083	mg/kg wet							
Carbazole	< 0.33	0.33	0.076	mg/kg wet							
Chrysene	< 0.33	0.33	0.064	mg/kg wet							
Dibenz(a,h)anthracene	< 0.33	0.33	0.082	mg/kg wet							
Dibenzofuran	< 0.33	0.33	0.068	mg/kg wet							
Diethyl phthalate	< 0.33	0.33	0.063	mg/kg wet							
Dimethyl phthalate	< 0.33	0.33	0.069	mg/kg wet							
Di-n-butyl phthalate	< 0.33	0.33	0.079	mg/kg wet							
Di-n-octyl phthalate	< 0.33	0.33	0.10	mg/kg wet							
Fluoranthene	< 0.33	0.33	0.068	mg/kg wet							
Fluorene	< 0.33	0.33	0.065	mg/kg wet							
Hexachlorobenzene	< 0.33	0.33	0.062	mg/kg wet							
Hexachlorobutadiene	< 0.33	0.33	0.077	mg/kg wet							
Hexachlorocyclopentadiene	< 0.33	0.33	0.069	mg/kg wet							
Hexachloroethane	< 0.33	0.33	0.082	mg/kg wet							
Indeno (1,2,3-cd) pyrene	< 0.33	0.33	0.072	mg/kg wet							
Isophorone	< 0.33	0.33	0.076	mg/kg wet							
Naphthalene	< 0.33	0.33	0.071	mg/kg wet							
Nitrobenzene	< 0.33	0.33	0.080	mg/kg wet							
N-Nitrosodimethylamine	< 0.33	0.33	0.070	mg/kg wet							
N-Nitrosodi-n-propylamine	< 0.33	0.33	0.073	mg/kg wet							
N-Nitrosodiphenylamine	< 0.33	0.33	0.067	mg/kg wet							
Pentachlorophenol	< 0.67	0.67	0.19	mg/kg wet							
Phenanthrene	< 0.33	0.33	0.066	mg/kg wet							
Phenol	< 0.67	0.67	0.14	mg/kg wet							
Pyrene	< 0.33	0.33	0.059	mg/kg wet							
Surrogate: 2,4,6-Tribromophenol	3.12			mg/kg wet	3.33		93.6	53-107			
Surrogate: 2-Fluorobiphenyl	2.83			mg/kg wet	3.33		84.8	53.9-97.9			
Surrogate: 2-Fluorophenol	2.26			mg/kg wet	3.33		67.8	42.5-94.9			
Surrogate: Nitrobenzene-d5	2.62			mg/kg wet	3.33		78.5	48.9-100			
Surrogate: Phenol-d6	2.71			mg/kg wet	3.33		81.3	50.4-99.6			
Surrogate: Terphenyl-d14	2.99			mg/kg wet	3.33		89.7	51-99.6			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1401 - EPA 3545 ASE Extraction

LCS (B4G1401-BS1)

Prepared & Analyzed: 07/14/14

1,2,4-Trichlorobenzene	2.46	0.33	0.075	mg/kg wet	3.33		73.8	50-100			
1,4-Dichlorobenzene	2.21	0.33	0.068	mg/kg wet	3.33		66.3	40-80			
2,4-Dinitrotoluene	2.87	0.33	0.068	mg/kg wet	3.33		86.1	50-90			
2-Chlorophenol	2.37	0.67	0.15	mg/kg wet	3.33		71.0	50-85			
4-Chloro-3-methylphenol	2.80	0.67	0.14	mg/kg wet	3.33		84.0	55-90			
4-Nitrophenol	2.67	0.67	0.17	mg/kg wet	3.33		80.0	45-100			
Anthracene	2.72	0.33	0.069	mg/kg wet	3.33		81.5	55-95			
Benzo(a)anthracene	2.80	0.33	0.065	mg/kg wet	3.33		84.0	55-100			
Benzo(a)pyrene	2.77	0.33	0.070	mg/kg wet	3.33		83.2	55-100			
Chrysene	2.88	0.33	0.064	mg/kg wet	3.33		86.5	55-100			
Fluoranthene	2.79	0.33	0.068	mg/kg wet	3.33		83.6	55-95			
Fluorene	2.73	0.33	0.065	mg/kg wet	3.33		81.9	55-95			
N-Nitrosodi-n-propylamine	2.57	0.33	0.073	mg/kg wet	3.33		77.0	50-90			
Pentachlorophenol	2.57	0.67	0.19	mg/kg wet	3.33		77.0	35-95			
Phenanthrene	2.76	0.33	0.066	mg/kg wet	3.33		82.7	55-95			
Phenol	2.39	0.67	0.14	mg/kg wet	3.33		71.7	50-85			
Surrogate: 2,4,6-Tribromophenol	5.18			mg/kg wet	6.67		77.7	53-107			
Surrogate: 2-Fluorobiphenyl	4.70			mg/kg wet	6.67		70.5	53.9-97.9			
Surrogate: 2-Fluorophenol	4.40			mg/kg wet	6.67		66.0	42.5-94.9			
Surrogate: Nitrobenzene-d5	4.55			mg/kg wet	6.67		68.3	48.9-100			
Surrogate: Phenol-d6	4.75			mg/kg wet	6.67		71.3	50.4-99.6			
Surrogate: Terphenyl-d14	5.56			mg/kg wet	6.67		83.5	51-99.6			

Matrix Spike (B4G1401-MS1)

Source: 1403045-01

Prepared & Analyzed: 07/14/14

1,2,4-Trichlorobenzene	2.88	0.39	0.089	mg/kg dry	3.97	<0.39	72.5	35-100			
1,4-Dichlorobenzene	2.47	0.39	0.081	mg/kg dry	3.97	<0.39	62.2	30-85			
2,4-Dinitrotoluene	3.60	0.39	0.081	mg/kg dry	3.97	<0.39	90.7	45-95			
2-Chlorophenol	2.91	0.80	0.18	mg/kg dry	3.97	<0.80	73.4	35-100			
4-Chloro-3-methylphenol	3.41	0.80	0.17	mg/kg dry	3.97	<0.80	86.0	35-100			
4-Nitrophenol	3.69	0.80	0.20	mg/kg dry	3.97	<0.80	92.9	40-100			
Anthracene	3.50	0.39	0.082	mg/kg dry	3.97	<0.39	88.2	55-100			
Benzo(a)anthracene	3.60	0.39	0.077	mg/kg dry	3.97	<0.39	90.7	50-100			
Benzo(a)pyrene	3.48	0.39	0.083	mg/kg dry	3.97	<0.39	87.7	50-100			
Chrysene	3.69	0.39	0.076	mg/kg dry	3.97	<0.39	93.0	50-100			
Fluoranthene	3.55	0.39	0.081	mg/kg dry	3.97	<0.39	89.4	50-100			
Fluorene	3.35	0.39	0.077	mg/kg dry	3.97	<0.39	84.5	50-100			
N-Nitrosodi-n-propylamine	3.01	0.39	0.087	mg/kg dry	3.97	<0.39	75.9	35-100			
Pentachlorophenol	3.98	0.80	0.23	mg/kg dry	3.97	<0.80	100	30-100			
Phenanthrene	3.52	0.39	0.079	mg/kg dry	3.97	<0.39	88.8	55-100			
Phenol	2.98	0.80	0.17	mg/kg dry	3.97	<0.80	75.0	35-100			

American Engineering Testing, Inc.
 550 Cleveland Ave N
 St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
 Project Number: 02-02098
 Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
 Date Reported: 07/24/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1401 - EPA 3545 ASE Extraction

Matrix Spike (B4G1401-MS1)

Source: 1403045-01

Prepared & Analyzed: 07/14/14

Surrogate: 2,4,6-Tribromophenol	6.66			mg/kg dry	7.94		83.9	53-107			
Surrogate: 2-Fluorobiphenyl	5.64			mg/kg dry	7.94		71.1	53.9-97.9			
Surrogate: 2-Fluorophenol	5.32			mg/kg dry	7.94		67.0	42.5-94.9			
Surrogate: Nitrobenzene-d5	5.39			mg/kg dry	7.94		67.9	48.9-100			
Surrogate: Phenol-d6	5.84			mg/kg dry	7.94		73.6	50.4-99.6			
Surrogate: Terphenyl-d14	7.18			mg/kg dry	7.94		90.4	51-99.6			

Matrix Spike Dup (B4G1401-MSD1)

Source: 1403045-01

Prepared & Analyzed: 07/14/14

1,2,4-Trichlorobenzene	2.97	0.39	0.089	mg/kg dry	3.96	<0.39	74.9	35-100	3.16	20	
1,4-Dichlorobenzene	2.68	0.39	0.081	mg/kg dry	3.96	<0.39	67.7	30-85	8.26	20	
2,4-Dinitrotoluene	3.59	0.39	0.081	mg/kg dry	3.96	<0.39	90.7	45-95	0.208	20	
2-Chlorophenol	2.91	0.80	0.18	mg/kg dry	3.96	<0.80	73.4	35-100	0.242	20	
4-Chloro-3-methylphenol	3.35	0.80	0.17	mg/kg dry	3.96	<0.80	84.5	35-100	1.89	20	
4-Nitrophenol	3.63	0.80	0.20	mg/kg dry	3.96	<0.80	91.6	40-100	1.51	20	
Anthracene	3.39	0.39	0.082	mg/kg dry	3.96	<0.39	85.5	55-100	3.21	20	
Benzo(a)anthracene	3.42	0.39	0.077	mg/kg dry	3.96	<0.39	86.4	50-100	4.97	20	
Benzo(a)pyrene	3.36	0.39	0.083	mg/kg dry	3.96	<0.39	84.8	50-100	3.41	20	
Chrysene	3.56	0.39	0.076	mg/kg dry	3.96	<0.39	89.8	50-100	3.55	20	
Fluoranthene	3.46	0.39	0.081	mg/kg dry	3.96	<0.39	87.2	50-100	2.59	20	
Fluorene	3.36	0.39	0.077	mg/kg dry	3.96	<0.39	84.7	50-100	0.129	20	
N-Nitrosodi-n-propylamine	3.06	0.39	0.087	mg/kg dry	3.96	<0.39	77.1	35-100	1.45	20	
Pentachlorophenol	3.76	0.80	0.23	mg/kg dry	3.96	<0.80	94.8	30-100	5.67	20	
Phenanthrene	3.44	0.39	0.079	mg/kg dry	3.96	<0.39	86.9	55-100	2.28	20	
Phenol	2.94	0.80	0.17	mg/kg dry	3.96	<0.80	74.2	35-100	1.18	20	
Surrogate: 2,4,6-Tribromophenol	6.51			mg/kg dry	7.93		82.2	53-107			
Surrogate: 2-Fluorobiphenyl	5.75			mg/kg dry	7.93		72.6	53.9-97.9			
Surrogate: 2-Fluorophenol	5.38			mg/kg dry	7.93		67.8	42.5-94.9			
Surrogate: Nitrobenzene-d5	5.55			mg/kg dry	7.93		70.0	48.9-100			
Surrogate: Phenol-d6	5.79			mg/kg dry	7.93		73.1	50.4-99.6			
Surrogate: Terphenyl-d14	6.87			mg/kg dry	7.93		86.6	51-99.6			



88 Empire Drive
 St Paul, MN 55103
 Tel: 651-642-1150
 Fax: 651-642-1239

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Blank (B4G1405-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	< 10	10	0.53	ug/L							
1,2-Dichlorobenzene	< 10	10	0.52	ug/L							
1,2-Diphenylhydrazine as Azobenzene	< 10	10	0.93	ug/L							
1,3-Dichlorobenzene	< 10	10	0.44	ug/L							
1,4-Dichlorobenzene	< 10	10	0.30	ug/L							
2,3,4,6-Tetrachlorophenol	< 10	10	1.7	ug/L							
2,4,5-Trichlorophenol	< 10	10	1.4	ug/L							
2,4,6-Trichlorophenol	< 10	10	1.2	ug/L							
2,4-Dichlorophenol	< 10	10	1.1	ug/L							
2,4-Dimethylphenol	< 10	10	1.4	ug/L							
2,4-Dinitrophenol	< 10	10	1.7	ug/L							
2,4-Dinitrotoluene	< 10	10	0.75	ug/L							
2,6-Dichlorophenol	< 10	10	1.1	ug/L							
2,6-Dinitrotoluene	< 10	10	0.87	ug/L							
2-Chloronaphthalene	< 10	10	0.61	ug/L							
2-Chlorophenol	< 10	10	1.1	ug/L							
2-Methylnaphthalene	< 10	10	1.2	ug/L							
2-Methylphenol	< 10	10	1.2	ug/L							
2-Nitroaniline	< 10	10	1.7	ug/L							
2-Nitrophenol	< 10	10	1.5	ug/L							
3&4-Methylphenol	< 10	10	1.3	ug/L							
3,3'-Dichlorobenzidine	< 25	25	5.9	ug/L							
3-Nitroaniline	< 10	10	1.5	ug/L							
4,6-Dinitro-2-methylphenol	< 10	10	2.0	ug/L							
4-Bromophenyl phenyl ether	< 10	10	0.74	ug/L							
4-Chloro-3-methylphenol	< 10	10	1.4	ug/L							
4-Chloroaniline	< 10	10	2.7	ug/L							
4-Chlorophenyl phenyl ether	< 10	10	0.68	ug/L							
4-Nitroaniline	< 10	10	1.3	ug/L							
4-Nitrophenol	< 10	10	1.9	ug/L							
Acenaphthene	< 10	10	0.74	ug/L							
Acenaphthylene	< 10	10	0.69	ug/L							
Aniline	< 10	10	2.1	ug/L							
Anthracene	< 10	10	0.73	ug/L							
Benzidine	< 100	100	11	ug/L							
Benzo(a)anthracene	< 10	10	0.65	ug/L							
Benzo(a)pyrene	< 10	10	0.62	ug/L							
Benzo(b)fluoranthene	< 10	10	0.64	ug/L							
Benzo(g,h,i)perylene	< 10	10	0.65	ug/L							

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Blank (B4G1405-BLK1)

Prepared: 07/14/14 Analyzed: 07/15/14

Benzo(k)fluoranthene	< 10	10	0.64	ug/L							
Benzoic acid	< 10	10	2.3	ug/L							
Benzyl alcohol	< 10	10	1.5	ug/L							
Bis(2-chloroethoxy)methane	< 10	10	0.66	ug/L							
Bis(2-chloroethyl)ether	< 10	10	0.70	ug/L							
Bis(2-chloroisopropyl)ether	< 10	10	0.84	ug/L							
Bis(2-ethylhexyl)phthalate	< 10	10	0.64	ug/L							
Butyl benzyl phthalate	< 10	10	0.98	ug/L							
Carbazole	< 10	10	0.77	ug/L							
Chrysene	< 10	10	0.62	ug/L							
Dibenz(a,h)anthracene	< 10	10	0.53	ug/L							
Dibenzofuran	< 10	10	1.3	ug/L							
Diethyl phthalate	< 10	10	0.74	ug/L							
Dimethyl phthalate	< 10	10	0.69	ug/L							
Di-n-butyl phthalate	< 10	10	0.79	ug/L							
Di-n-octyl phthalate	< 10	10	0.71	ug/L							
Fluoranthene	< 10	10	0.76	ug/L							
Fluorene	< 10	10	0.74	ug/L							
Hexachlorobenzene	< 10	10	0.68	ug/L							
Hexachlorobutadiene	< 10	10	0.52	ug/L							
Hexachlorocyclopentadiene	< 10	10	0.54	ug/L							
Hexachloroethane	< 10	10	0.47	ug/L							
Indeno (1,2,3-cd) pyrene	< 10	10	0.57	ug/L							
Isophorone	< 10	10	0.70	ug/L							
Naphthalene	< 10	10	0.59	ug/L							
Nitrobenzene	< 10	10	0.71	ug/L							
N-Nitrosodimethylamine	< 10	10	0.56	ug/L							
N-Nitrosodi-n-propylamine	< 10	10	0.75	ug/L							
N-Nitrosodiphenylamine	< 10	10	0.77	ug/L							
Pentachlorophenol	< 10	10	2.4	ug/L							
Phenanthrene	< 10	10	0.74	ug/L							
Phenol	< 10	10	1.0	ug/L							
Pyrene	< 10	10	0.69	ug/L							
Surrogate: 2,4,6-Tribromophenol	89.5			ug/L	100		89.5	30-122			
Surrogate: 2-Fluorobiphenyl	81.1			ug/L	100		81.1	39.2-104			
Surrogate: 2-Fluorophenol	55.1			ug/L	100		55.1	30-80.1			
Surrogate: Nitrobenzene-d5	79.3			ug/L	100		79.3	51.2-103			
Surrogate: Phenol-d6	60.5			ug/L	100		60.5	30-75.3			
Surrogate: Terphenyl-d14	84.5			ug/L	100		84.5	30-116			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

LCS (B4G1405-BS1)

Prepared: 07/14/14 Analyzed: 07/16/14

1,2,4-Trichlorobenzene	79.8	10	0.53	ug/L	100		79.8	38-100			
1,4-Dichlorobenzene	77.2	10	0.30	ug/L	100		77.2	30-90			
2,4-Dinitrotoluene	94.0	10	0.75	ug/L	100		94.0	57-100			
2-Chlorophenol	81.8	10	1.1	ug/L	100		81.8	45-95			
4-Chloro-3-methylphenol	91.0	10	1.4	ug/L	100		91.0	52-100			
4-Nitrophenol	91.4	10	1.9	ug/L	100		91.4	30-100			
Anthracene	82.5	10	0.73	ug/L	100		82.5	60-100			
Benzo(a)anthracene	90.2	10	0.65	ug/L	100		90.2	64-100			
Benzo(a)pyrene	85.0	10	0.62	ug/L	100		85.0	60-100			
Chrysene	93.0	10	0.62	ug/L	100		93.0	60-100			
Fluoranthene	81.1	10	0.76	ug/L	100		81.1	63-100			
Fluorene	80.4	10	0.74	ug/L	100		80.4	59-100			
N-Nitrosodi-n-propylamine	94.0	10	0.75	ug/L	100		94.0	55-100			
Pentachlorophenol	91.8	10	2.4	ug/L	100		91.8	45-107			
Phenanthrene	84.8	10	0.74	ug/L	100		84.8	62-100			
Phenol	67.0	10	1.0	ug/L	100		67.0	30-80			
Surrogate: 2,4,6-Tribromophenol	80.4			ug/L	100		80.4	30-122			
Surrogate: 2-Fluorobiphenyl	79.2			ug/L	100		79.2	39.2-104			
Surrogate: 2-Fluorophenol	61.0			ug/L	100		61.0	30-80.1			
Surrogate: Nitrobenzene-d5	82.2			ug/L	100		82.2	51.2-103			
Surrogate: Phenol-d6	67.7			ug/L	100		67.7	30-75.3			
Surrogate: Terphenyl-d14	97.2			ug/L	100		97.2	30-116			

Matrix Spike (B4G1405-MS1)

Source: 1403022-01

Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	89.0	12	0.62	ug/L	117	<12	76.1	30-100			
1,4-Dichlorobenzene	84.0	12	0.35	ug/L	117	<12	71.8	30-90			
2,4-Dinitrotoluene	109	12	0.88	ug/L	117	<12	93.1	30-110			
2-Chlorophenol	91.8	12	1.3	ug/L	117	<12	78.4	30-100			
4-Chloro-3-methylphenol	105	12	1.6	ug/L	117	<12	90.1	30-113			
4-Nitrophenol	120	12	2.2	ug/L	117	<12	102	30-112			
Anthracene	97.6	12	0.85	ug/L	117	<12	83.4	30-119			
Benzo(a)anthracene	105	12	0.76	ug/L	117	<12	89.8	30-122			
Benzo(a)pyrene	97.8	12	0.73	ug/L	117	<12	83.6	30-118			
Chrysene	110	12	0.73	ug/L	117	<12	94.0	30-125			
Fluoranthene	92.9	12	0.89	ug/L	117	<12	79.4	30-119			
Fluorene	92.1	12	0.87	ug/L	117	<12	78.8	30-107			
N-Nitrosodi-n-propylamine	103	12	0.88	ug/L	117	<12	88.1	37-100			
Pentachlorophenol	119	12	2.8	ug/L	117	<12	102	30-130			
Phenanthrene	99.6	12	0.87	ug/L	117	<12	85.2	30-117			
Phenol	85.0	12	1.2	ug/L	117	<12	72.7	30-80			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

SVOC 8270D - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1405 - EPA 3510C (Sep Funnel)

Matrix Spike (B4G1405-MS1)	Source: 1403022-01		Prepared: 07/14/14		Analyzed: 07/15/14	
Surrogate: 2,4,6-Tribromophenol	95.1		ug/L	117	81.3	30-122
Surrogate: 2-Fluorobiphenyl	88.8		ug/L	117	76.0	39.2-104
Surrogate: 2-Fluorophenol	74.7		ug/L	117	63.8	30-80.1
Surrogate: Nitrobenzene-d5	92.1		ug/L	117	78.7	51.2-103
Surrogate: Phenol-d6	84.8		ug/L	117	72.5	30-75.3
Surrogate: Terphenyl-d14	103		ug/L	117	88.4	30-116

Matrix Spike Dup (B4G1405-MSD1) Source: 1403022-01 Prepared: 07/14/14 Analyzed: 07/15/14

1,2,4-Trichlorobenzene	99.9	14	0.76	ug/L	144	<14	69.5	30-100	11.6	20
1,4-Dichlorobenzene	95.0	14	0.43	ug/L	144	<14	66.1	30-90	12.3	20
2,4-Dinitrotoluene	122	14	1.1	ug/L	144	<14	84.7	30-110	11.2	20
2-Chlorophenol	104	14	1.6	ug/L	144	<14	72.5	30-100	12.8	20
4-Chloro-3-methylphenol	114	14	2.0	ug/L	144	<14	79.5	30-113	8.22	20
4-Nitrophenol	140	14	2.7	ug/L	144	<14	97.6	30-112	15.9	34.3
Anthracene	112	14	1.1	ug/L	144	<14	77.8	30-119	13.7	20
Benzo(a)anthracene	120	14	0.94	ug/L	144	<14	83.1	30-122	13.0	20
Benzo(a)pyrene	113	14	0.89	ug/L	144	<14	78.4	30-118	14.3	20
Chrysene	125	14	0.89	ug/L	144	<14	86.9	30-125	12.8	20
Fluoranthene	107	14	1.1	ug/L	144	<14	74.6	30-119	14.5	20
Fluorene	104	14	1.1	ug/L	144	<14	72.3	30-107	12.1	20
N-Nitrosodi-n-propylamine	116	14	1.1	ug/L	144	<14	80.3	37-100	11.5	20
Pentachlorophenol	134	14	3.5	ug/L	144	<14	93.3	30-130	12.2	20
Phenanthrene	114	14	1.1	ug/L	144	<14	79.3	30-117	13.6	20
Phenol	103	14	1.4	ug/L	144	<14	71.8	30-80	19.3	31.9
Surrogate: 2,4,6-Tribromophenol	110		ug/L	144	76.1	30-122				
Surrogate: 2-Fluorobiphenyl	99.6		ug/L	144	69.2	39.2-104				
Surrogate: 2-Fluorophenol	87.7		ug/L	144	60.9	30-80.1				
Surrogate: Nitrobenzene-d5	102		ug/L	144	70.9	51.2-103				
Surrogate: Phenol-d6	104		ug/L	144	72.2	30-75.3				
Surrogate: Terphenyl-d14	115		ug/L	144	80.0	30-116				

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1514 - EPA 5030 Water (Purge and Trap)

Blank (B4G1514-BLK1)

Prepared & Analyzed: 07/15/14

1,1,1,2-Tetrachloroethane	< 1.0	1.0	0.061	ug/L							
1,1,1-Trichloroethane	< 1.0	1.0	0.080	ug/L							
1,1,2,2-Tetrachloroethane	< 1.0	1.0	0.072	ug/L							
1,1,2-Trichloroethane	< 1.0	1.0	0.049	ug/L							
1,1,2-Trichlorotrifluoroethane	< 1.0	1.0	0.051	ug/L							
1,1-Dichloroethane	< 1.0	1.0	0.049	ug/L							
1,1-Dichloroethene	< 1.0	1.0	0.051	ug/L							
1,1-Dichloropropene	< 1.0	1.0	0.079	ug/L							
1,2,3-Trichlorobenzene	< 5.0	5.0	0.080	ug/L							
1,2,3-Trichloropropane	< 2.5	2.5	0.054	ug/L							
1,2,4-Trichlorobenzene	< 5.0	5.0	0.086	ug/L							
1,2,4-Trimethylbenzene	< 1.0	1.0	0.052	ug/L							
1,2-Dibromo-3-chloropropane	< 5.0	5.0	0.079	ug/L							
1,2-Dibromoethane (EDB)	< 2.5	2.5	0.046	ug/L							
1,2-Dichlorobenzene	< 1.0	1.0	0.058	ug/L							
1,2-Dichloroethane	< 1.0	1.0	0.062	ug/L							
1,2-Dichloropropane	< 1.0	1.0	0.048	ug/L							
1,3,5-Trimethylbenzene	< 1.0	1.0	0.055	ug/L							
1,3-Dichlorobenzene	< 1.0	1.0	0.057	ug/L							
1,3-Dichloropropane	< 1.0	1.0	0.041	ug/L							
1,4-Dichlorobenzene	< 1.0	1.0	0.058	ug/L							
2,2-Dichloropropane	< 5.0	5.0	0.062	ug/L							
2-Butanone	< 20	20	0.091	ug/L							
2-Chlorotoluene	< 1.0	1.0	0.046	ug/L							
4-Chlorotoluene	< 1.0	1.0	0.053	ug/L							
Acetone	< 20	20	0.54	ug/L							
Allyl chloride	< 5.0	5.0	0.067	ug/L							
Benzene	< 1.0	1.0	0.048	ug/L							
Bromobenzene	< 1.0	1.0	0.052	ug/L							
Bromochloromethane	< 1.0	1.0	0.055	ug/L							
Bromodichloromethane	< 1.0	1.0	0.057	ug/L							
Bromoform	< 5.0	5.0	0.071	ug/L							
Bromomethane	< 5.0	5.0	0.066	ug/L							
Carbon tetrachloride	< 1.0	1.0	0.085	ug/L							
Chlorobenzene	< 1.0	1.0	0.049	ug/L							
Chloroethane	< 2.5	2.5	0.051	ug/L							
Chloroform	< 1.0	1.0	0.052	ug/L							
Chloromethane	< 2.5	2.5	0.054	ug/L							
cis-1,2-Dichloroethene	< 1.0	1.0	0.053	ug/L							

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1514 - EPA 5030 Water (Purge and Trap)

Blank (B4G1514-BLK1)

Prepared & Analyzed: 07/15/14

cis-1,3-Dichloropropene	< 1.0	1.0	0.034	ug/L							
Dibromochloromethane	< 2.5	2.5	0.026	ug/L							
Dibromomethane	< 2.5	2.5	0.066	ug/L							
Dichlorodifluoromethane	< 5.0	5.0	0.051	ug/L							
Dichlorofluoromethane	< 1.0	1.0	0.061	ug/L							
Ethyl ether	< 5.0	5.0	0.051	ug/L							
Ethylbenzene	< 1.0	1.0	0.050	ug/L							
Hexachlorobutadiene	< 10	10	0.53	ug/L							
Isopropylbenzene	< 1.0	1.0	0.058	ug/L							
m,p-Xylene	< 2.0	2.0	0.11	ug/L							
Methyl isobutyl ketone	< 5.0	5.0	0.055	ug/L							
Methyl tert-butyl ether	< 1.0	1.0	0.053	ug/L							
Methylene chloride	< 5.0	5.0	0.40	ug/L							
Naphthalene	< 5.0	5.0	0.057	ug/L							
n-Butylbenzene	< 2.5	2.5	0.064	ug/L							
n-Propylbenzene	< 1.0	1.0	0.055	ug/L							
o-Xylene	< 1.0	1.0	0.054	ug/L							
p-Isopropyltoluene	< 2.5	2.5	0.047	ug/L							
sec-Butylbenzene	< 1.0	1.0	0.046	ug/L							
Styrene	< 1.0	1.0	0.024	ug/L							
tert-Butylbenzene	< 1.0	1.0	0.052	ug/L							
Tetrachloroethene	< 1.0	1.0	0.051	ug/L							
Tetrahydrofuran	< 20	20	0.064	ug/L							
Toluene	< 1.0	1.0	0.023	ug/L							
trans-1,2-Dichloroethene	< 1.0	1.0	0.064	ug/L							
trans-1,3-Dichloropropene	< 1.0	1.0	0.046	ug/L							
Trichloroethene	< 1.0	1.0	0.033	ug/L							
Trichlorofluoromethane	< 1.0	1.0	0.069	ug/L							
Vinyl chloride	< 1.0	1.0	0.049	ug/L							
Surrogate: 4-Bromofluorobenzene	44.6			ug/L	50.0		89.2	80-121			
Surrogate: Dibromofluoromethane	46.2			ug/L	50.0		92.4	79.9-121			
Surrogate: Toluene-d8	46.7			ug/L	50.0		93.4	80-120			

LCS (B4G1514-BS1)

Prepared & Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	47.5	1.0	0.072	ug/L	50.0		95.0	80-121			
1,1-Dichloroethane	49.0	1.0	0.049	ug/L	50.0		97.9	80-125			
1,1-Dichloroethene	45.1	1.0	0.051	ug/L	50.0		90.2	80-125			
1,3,5-Trimethylbenzene	49.4	1.0	0.055	ug/L	50.0		98.8	75.4-125			
1,4-Dichlorobenzene	51.3	1.0	0.058	ug/L	50.0		103	75-125			
2-Chlorotoluene	47.9	1.0	0.046	ug/L	50.0		95.9	75.4-125			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1514 - EPA 5030 Water (Purge and Trap)

LCS (B4G1514-BS1)

Prepared & Analyzed: 07/15/14

Benzene	50.7	1.0	0.048	ug/L	50.0		101	80-120			
Bromoform	53.4	5.0	0.071	ug/L	50.0		107	80-120			
Chlorobenzene	54.8	1.0	0.049	ug/L	50.0		110	80-120			
Chloroform	47.5	1.0	0.052	ug/L	50.0		94.9	80-123			
Ethylbenzene	53.1	1.0	0.050	ug/L	50.0		106	80-120			
n-Butylbenzene	52.2	2.5	0.064	ug/L	50.0		104	75-125			
n-Propylbenzene	49.3	1.0	0.055	ug/L	50.0		98.5	75.8-125			
Toluene	50.4	1.0	0.023	ug/L	50.0		101	80-120			
Trichloroethene	50.7	1.0	0.033	ug/L	50.0		101	80-120			
Vinyl chloride	41.1	1.0	0.049	ug/L	50.0		82.2	75-130			
Surrogate: 4-Bromofluorobenzene	46.2			ug/L	50.0		92.4	80-121			
Surrogate: Dibromofluoromethane	46.4			ug/L	50.0		92.8	79.9-121			
Surrogate: Toluene-d8	47.1			ug/L	50.0		94.1	80-120			

Matrix Spike (B4G1514-MS1)

Source: 1403022-01

Prepared & Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	50.0	1.0	0.072	ug/L	50.0	<1.0	100	76.8-125			
1,1-Dichloroethane	47.0	1.0	0.049	ug/L	50.0	<1.0	94.0	80-125			
1,1-Dichloroethene	44.2	1.0	0.051	ug/L	50.0	<1.0	88.3	80-125			
1,3,5-Trimethylbenzene	50.6	1.0	0.055	ug/L	50.0	<1.0	101	75-125			
1,4-Dichlorobenzene	50.7	1.0	0.058	ug/L	50.0	<1.0	101	75-125			
2-Chlorotoluene	49.3	1.0	0.046	ug/L	50.0	<1.0	98.5	75-125			
Benzene	50.5	1.0	0.048	ug/L	50.0	<1.0	101	80-120			
Bromoform	53.4	5.0	0.071	ug/L	50.0	<5.0	107	80-120			
Chlorobenzene	53.5	1.0	0.049	ug/L	50.0	<1.0	107	80-120			
Chloroform	47.1	1.0	0.052	ug/L	50.0	<1.0	94.2	79.8-125			
Ethylbenzene	53.0	1.0	0.050	ug/L	50.0	<1.0	106	80-120			
n-Butylbenzene	51.6	2.5	0.064	ug/L	50.0	<2.5	103	75-130			
n-Propylbenzene	50.8	1.0	0.055	ug/L	50.0	<1.0	102	75-125			
Toluene	52.0	1.0	0.023	ug/L	50.0	<1.0	104	80-120			
Trichloroethene	49.3	1.0	0.033	ug/L	50.0	<1.0	98.6	80-120			
Vinyl chloride	41.3	1.0	0.049	ug/L	50.0	<1.0	82.6	75-130			
Surrogate: 4-Bromofluorobenzene	48.2			ug/L	50.0		96.5	80-121			
Surrogate: Dibromofluoromethane	45.6			ug/L	50.0		91.2	79.9-121			
Surrogate: Toluene-d8	48.5			ug/L	50.0		97.0	80-120			

Matrix Spike Dup (B4G1514-MSD1)

Source: 1403022-01

Prepared & Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	51.4	1.0	0.072	ug/L	50.0	<1.0	103	76.8-125	2.67	20	
1,1-Dichloroethane	47.7	1.0	0.049	ug/L	50.0	<1.0	95.5	80-125	1.58	20	
1,1-Dichloroethene	43.6	1.0	0.051	ug/L	50.0	<1.0	87.2	80-125	1.26	20	
1,3,5-Trimethylbenzene	51.1	1.0	0.055	ug/L	50.0	<1.0	102	75-125	1.03	20	

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1514 - EPA 5030 Water (Purge and Trap)

Matrix Spike Dup (B4G1514-MSD1)

Source: 1403022-01

Prepared & Analyzed: 07/15/14

1,4-Dichlorobenzene	51.1	1.0	0.058	ug/L	50.0	<1.0	102	75-125	0.782	20	
2-Chlorotoluene	49.3	1.0	0.046	ug/L	50.0	<1.0	98.7	75-125	0.182	20	
Benzene	49.8	1.0	0.048	ug/L	50.0	<1.0	99.6	80-120	1.44	20	
Bromoform	52.6	5.0	0.071	ug/L	50.0	<5.0	105	80-120	1.44	20	
Chlorobenzene	53.1	1.0	0.049	ug/L	50.0	<1.0	106	80-120	0.827	20	
Chloroform	46.5	1.0	0.052	ug/L	50.0	<1.0	93.0	79.8-125	1.25	20	
Ethylbenzene	52.5	1.0	0.050	ug/L	50.0	<1.0	105	80-120	0.840	20	
n-Butylbenzene	52.5	2.5	0.064	ug/L	50.0	<2.5	105	75-130	1.83	20	
n-Propylbenzene	51.2	1.0	0.055	ug/L	50.0	<1.0	102	75-125	0.881	20	
Toluene	51.4	1.0	0.023	ug/L	50.0	<1.0	103	80-120	1.15	20	
Trichloroethene	49.3	1.0	0.033	ug/L	50.0	<1.0	98.6	80-120	0.0327	20	
Vinyl chloride	40.5	1.0	0.049	ug/L	50.0	<1.0	81.0	75-130	1.95	20	
Surrogate: 4-Bromofluorobenzene	47.0			ug/L	50.0		94.0	80-121			
Surrogate: Dibromofluoromethane	46.1			ug/L	50.0		92.3	79.9-121			
Surrogate: Toluene-d8	47.9			ug/L	50.0		95.7	80-120			

Batch B4G1611 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1611-BLK1)

Prepared & Analyzed: 07/15/14

1,1,1,2-Tetrachloroethane	< 0.25	0.25	0.0051	mg/kg wet							
1,1,1-Trichloroethane	< 0.25	0.25	0.0056	mg/kg wet							
1,1,2,2-Tetrachloroethane	< 0.25	0.25	0.0057	mg/kg wet							
1,1,2-Trichloroethane	< 0.25	0.25	0.0073	mg/kg wet							
1,1,2-Trichlorotrifluoroethane	< 0.25	0.25	0.0091	mg/kg wet							
1,1-Dichloroethane	< 0.25	0.25	0.0033	mg/kg wet							
1,1-Dichloroethane	< 0.25	0.25	0.0058	mg/kg wet							
1,1-Dichloropropene	< 0.25	0.25	0.0055	mg/kg wet							
1,2,3-Trichlorobenzene	< 0.50	0.50	0.0051	mg/kg wet							
1,2,3-Trichloropropane	< 0.25	0.25	0.0046	mg/kg wet							
1,2,4-Trichlorobenzene	< 0.50	0.50	0.0054	mg/kg wet							
1,2,4-Trimethylbenzene	< 0.25	0.25	0.0033	mg/kg wet							
1,2-Dibromo-3-chloropropane	< 0.50	0.50	0.0083	mg/kg wet							
1,2-Dibromoethane (EDB)	< 0.25	0.25	0.0072	mg/kg wet							
1,2-Dichlorobenzene	< 0.25	0.25	0.0034	mg/kg wet							
1,2-Dichloroethane	< 0.25	0.25	0.0055	mg/kg wet							
1,2-Dichloropropane	< 0.25	0.25	0.0048	mg/kg wet							
1,3,5-Trimethylbenzene	< 0.25	0.25	0.0025	mg/kg wet							
1,3-Dichlorobenzene	< 0.25	0.25	0.0038	mg/kg wet							
1,3-Dichloropropane	< 0.25	0.25	0.0055	mg/kg wet							
1,4-Dichlorobenzene	< 0.25	0.25	0.0050	mg/kg wet							
2,2-Dichloropropane	< 0.50	0.50	0.0087	mg/kg wet							

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1611 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1611-BLK1)

Prepared & Analyzed: 07/15/14

2-Butanone	< 2.0	2.0	0.014	mg/kg wet							
2-Chlorotoluene	< 0.25	0.25	0.0022	mg/kg wet							
4-Chlorotoluene	< 0.25	0.25	0.0036	mg/kg wet							
Acetone	< 2.0	2.0	0.10	mg/kg wet							
Allyl chloride	< 0.50	0.50	0.0083	mg/kg wet							
Benzene	< 0.25	0.25	0.0027	mg/kg wet							
Bromobenzene	< 0.25	0.25	0.0052	mg/kg wet							
Bromochloromethane	< 0.25	0.25	0.0074	mg/kg wet							
Bromodichloromethane	< 0.25	0.25	0.0043	mg/kg wet							
Bromoform	< 0.50	0.50	0.0070	mg/kg wet							
Bromomethane	< 0.50	0.50	0.0060	mg/kg wet							
Carbon tetrachloride	< 0.25	0.25	0.0060	mg/kg wet							
Chlorobenzene	< 0.25	0.25	0.0026	mg/kg wet							
Chloroethane	< 0.25	0.25	0.0072	mg/kg wet							
Chloroform	< 0.25	0.25	0.0023	mg/kg wet							
Chloromethane	< 0.25	0.25	0.0067	mg/kg wet							
cis-1,2-Dichloroethene	< 0.25	0.25	0.0018	mg/kg wet							
cis-1,3-Dichloropropene	< 0.25	0.25	0.0049	mg/kg wet							
Dibromochloromethane	< 0.25	0.25	0.0046	mg/kg wet							
Dibromomethane	< 0.25	0.25	0.0046	mg/kg wet							
Dichlorodifluoromethane	< 0.50	0.50	0.0094	mg/kg wet							
Dichlorofluoromethane	< 0.25	0.25	0.0079	mg/kg wet							
Ethyl ether	< 0.50	0.50	0.0050	mg/kg wet							
Ethylbenzene	< 0.25	0.25	0.0026	mg/kg wet							
Hexachlorobutadiene	< 1.0	1.0	0.18	mg/kg wet							
Isopropylbenzene	< 0.25	0.25	0.0017	mg/kg wet							
m,p-Xylene	< 0.50	0.50	0.0097	mg/kg wet							
Methyl isobutyl ketone	< 0.50	0.50	0.014	mg/kg wet							
Methyl tert-butyl ether	< 0.25	0.25	0.0055	mg/kg wet							
Methylene chloride	< 1.0	1.0	0.0039	mg/kg wet							
Naphthalene	< 0.50	0.50	0.012	mg/kg wet							
n-Butylbenzene	< 0.25	0.25	0.0055	mg/kg wet							
n-Propylbenzene	< 0.25	0.25	0.0031	mg/kg wet							
o-Xylene	< 0.25	0.25	0.0039	mg/kg wet							
p-Isopropyltoluene	< 0.25	0.25	0.0030	mg/kg wet							
sec-Butylbenzene	< 0.25	0.25	0.0035	mg/kg wet							
Styrene	< 0.25	0.25	0.0054	mg/kg wet							
tert-Butylbenzene	< 0.25	0.25	0.0027	mg/kg wet							
Tetrachloroethene	< 0.25	0.25	0.0050	mg/kg wet							

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1611 - EPA 5035 Soil (Purge and Trap)

Blank (B4G1611-BLK1)

Prepared & Analyzed: 07/15/14

Tetrahydrofuran	< 2.0	2.0	0.032	mg/kg wet							
Toluene	< 0.25	0.25	0.0035	mg/kg wet							
trans-1,2-Dichloroethene	< 0.25	0.25	0.0045	mg/kg wet							
trans-1,3-Dichloropropene	< 0.25	0.25	0.0063	mg/kg wet							
Trichloroethene	< 0.25	0.25	0.0038	mg/kg wet							
Trichlorofluoromethane	< 0.25	0.25	0.0062	mg/kg wet							
Vinyl chloride	< 0.25	0.25	0.0061	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	47.2			ug/L	50.0		94.4	80-124			
Surrogate: Dibromofluoromethane	47.0			ug/L	50.0		94.0	77.1-123			
Surrogate: Toluene-d8	45.3			ug/L	50.0		90.6	78.1-125			

LCS (B4G1611-BS1)

Prepared & Analyzed: 07/15/14

1,1,1,2-Tetrachloroethane	47.7			ug/L	50.0		95.4	75-120			
1,1-Dichloroethane	44.7			ug/L	50.0		89.5	79.6-120			
1,1-Dichloroethene	41.6			ug/L	50.0		83.2	78.3-120			
1,3,5-Trimethylbenzene	47.3			ug/L	50.0		94.7	77-120			
1,4-Dichlorobenzene	48.3			ug/L	50.0		96.7	75-125			
2-Chlorotoluene	46.6			ug/L	50.0		93.2	75.9-120			
Benzene	48.2			ug/L	50.0		96.4	80-120			
Bromoform	50.4			ug/L	50.0		101	80-120			
Chlorobenzene	50.7			ug/L	50.0		101	80-120			
Chloroform	44.3			ug/L	50.0		88.6	80-120			
Ethylbenzene	49.8			ug/L	50.0		99.5	80-120			
n-Butylbenzene	47.7			ug/L	50.0		95.5	75-125			
n-Propylbenzene	47.3			ug/L	50.0		94.5	75-120			
Toluene	48.3			ug/L	50.0		96.6	80-120			
Trichloroethene	46.7			ug/L	50.0		93.4	80-120			
Vinyl chloride	41.7			ug/L	50.0		83.4	75-130			
Surrogate: 4-Bromofluorobenzene	48.8			ug/L	50.0		97.5	80-124			
Surrogate: Dibromofluoromethane	47.1			ug/L	50.0		94.2	77.1-123			
Surrogate: Toluene-d8	46.4			ug/L	50.0		92.9	78.1-125			

Matrix Spike (B4G1611-MS1)

Source: 1403022-03

Prepared & Analyzed: 07/15/14

1,1,1,2-Tetrachloroethane	48.3			ug/L	50.0	<	96.6	75-125			
1,1-Dichloroethane	45.2			ug/L	50.0	<	90.4	78.7-123			
1,1-Dichloroethene	43.4			ug/L	50.0	<	86.8	75.8-121			
1,3,5-Trimethylbenzene	47.5			ug/L	50.0	<	94.9	75-120			
1,4-Dichlorobenzene	48.1			ug/L	50.0	<	96.2	75-125			
2-Chlorotoluene	46.9			ug/L	50.0	<	93.8	75-120			
Benzene	48.1			ug/L	50.0	<	96.2	80-120			

American Engineering Testing, Inc.
550 Cleveland Ave N
St. Paul, MN 55114

Project: 02-02098 Ramsey County-Loucks
Project Number: 02-02098
Project Manager: Ms. Camilla Pederson

Work Order #: 1403022
Date Reported: 07/24/14

VOC 8260B - Quality Control
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	%RPD	%RPD Limit	Notes
---------	--------	----	-----	-------	-------------	---------------	------	-------------	------	------------	-------

Batch B4G1611 - EPA 5035 Soil (Purge and Trap)

Matrix Spike (B4G1611-MS1)

Source: 1403022-03

Prepared & Analyzed: 07/15/14

Bromoform	50.6			ug/L	50.0	<	101	80-120			
Chlorobenzene	50.8			ug/L	50.0	<	102	80-120			
Chloroform	44.5			ug/L	50.0	<	89.1	80-120			
Ethylbenzene	51.0			ug/L	50.0	<	102	80-120			
n-Butylbenzene	47.4			ug/L	50.0	<	94.8	73.8-125			
n-Propylbenzene	47.6			ug/L	50.0	<	95.2	75-120			
Toluene	48.4			ug/L	50.0	<	96.9	80-120			
Trichloroethene	47.3			ug/L	50.0	<	94.7	80-120			
Vinyl chloride	44.3			ug/L	50.0	<	88.6	74.8-130			
Surrogate: 4-Bromofluorobenzene	49.4			ug/L	50.0		98.8	80-124			
Surrogate: Dibromofluoromethane	46.3			ug/L	50.0		92.6	77.1-123			
Surrogate: Toluene-d8	46.3			ug/L	50.0		92.7	78.1-125			

Matrix Spike Dup (B4G1611-MSD1)

Source: 1403022-03

Prepared & Analyzed: 07/15/14

1,1,2,2-Tetrachloroethane	48.8			ug/L	50.0	<	97.6	75-125	1.03	20	
1,1-Dichloroethane	45.2			ug/L	50.0	<	90.4	78.7-123	0.0613	20	
1,1-Dichloroethene	43.4			ug/L	50.0	<	86.8	75.8-121	0.0567	20	
1,3,5-Trimethylbenzene	48.3			ug/L	50.0	<	96.7	75-120	1.86	20	
1,4-Dichlorobenzene	49.6			ug/L	50.0	<	99.2	75-125	3.01	20	
2-Chlorotoluene	48.4			ug/L	50.0	<	96.8	75-120	3.08	20	
Benzene	48.5			ug/L	50.0	<	97.0	80-120	0.918	20	
Bromoform	51.5			ug/L	50.0	<	103	80-120	1.64	20	
Chlorobenzene	51.7			ug/L	50.0	<	103	80-120	1.66	20	
Chloroform	45.9			ug/L	50.0	<	91.8	80-120	2.97	20	
Ethylbenzene	50.9			ug/L	50.0	<	102	80-120	0.100	20	
n-Butylbenzene	48.5			ug/L	50.0	<	97.1	73.8-125	2.35	20	
n-Propylbenzene	49.2			ug/L	50.0	<	98.5	75-120	3.40	20	
Toluene	48.6			ug/L	50.0	<	97.2	80-120	0.322	20	
Trichloroethene	47.6			ug/L	50.0	<	95.3	80-120	0.631	20	
Vinyl chloride	43.6			ug/L	50.0	<	87.3	74.8-130	1.53	20	
Surrogate: 4-Bromofluorobenzene	48.5			ug/L	50.0		97.1	80-124			
Surrogate: Dibromofluoromethane	45.7			ug/L	50.0		91.3	77.1-123			
Surrogate: Toluene-d8	45.6			ug/L	50.0		91.2	78.1-125			

American Engineering Testing, Inc. 550 Cleveland Ave N St. Paul, MN 55114	Project: 02-02098 Ramsey County-Loucks Project Number: 02-02098 Project Manager: Ms. Camilla Pederson	Work Order #: 1403022 Date Reported: 07/24/14
---	---	--

Notes and Definitions

- T-1 MDH does not offer certification for this parameter.
- PH2 Insufficient preservative to reduce the sample pH to less than 2.
- L1 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
- < Less than value listed
- dry Sample results reported on a dry weight basis
- NA Not applicable. The %RPD is not calculated from values less than the reporting limit.
- MDL Method Detection Limit
- RL Reporting Limit
- RPD Relative Percent Difference
- LCS Laboratory Control Spike = Blank Spike (BS) = Laboratory Fortified Blank (LFB)
- MS Matrix Spike = Laboratory Fortified Matrix (LFM)

LEGEND

Technical Services, Inc.

www.legend-group.com

88 Empire Drive
St Paul, MN 55103
Tel: 651-642-1150
Fax: 651-642-1239

17282

PAGE ____ OF ____

ADDRESS:

PHONE:

OTHER

1403022

St. Paul Office
550 Cleveland Ave. N.
St. Paul, MN 55114
651-659-9001
651-659-1379 (fax)



AET PROJECT NUMBER 02-02098

PROJECT NAME/LOCATION Ramsey County - Loucks

AET PROJECT MANAGER Camille Pederson

SEND REPORT TO Pederson, Chiller, Timmerman

Calista Timmerman

SAMPLED BY (PRINT)
SAMPLER SIGNATURE

REQUESTED TURNAROUND TIME: NORMAL RUSH

DATE NEEDED BY:

ITEM#	SAMPLE DESCRIPTION	DATE	TIME	SAMPLE TYPE
1	Dup-1	.		Water
2	Dup-2			Soil
3	Dup-3			Soil
4	Dup-4			Soil
	THP Blank Water			7/10/14

ANALYSIS	PRESERVATIVES				FIELD FILTERED Y/N	REMARKS							
	NO. OF CONTAINERS	UNPRESERVED	MOOH	HCL		H ₂ SO ₄	HNO ₃	GRD	DDO	VOC	SVOC	DIS METALS	ECRAMETALS
	12	3	B					X	X	X	X		
	4	3	1		Y			X	X	X	X	X	
	4	3	1					X	X	X	X	X	
	4	3	1					X	X	X	X	X	
								X	X	X	X	X	

NOTE:
Soil - VOC/GRD stored jar
- SVOC/PCRAMETALS jar
9/10/14

ITEM NUMBER	RELINQUISHED BY/AFFILIATION	ACCEPTED BY/AFFILIATION	DATE	TIME
1-4	Calista Timmerman AET			
		Willy Proctor	7/10/14	10:55

July 27, 2014

Camie Pederson
AET
550 Cleveland Avenue North
Saint Paul, MN 55114

REVIEWED

By Calista Timmerman at 1:50 pm, Aug 11, 2014

RE: Project: 02-02098
Pace Project No.: 10273601

Dear Camie Pederson:

Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 02-02098

Pace Project No.: 10273601

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alabama Certification #40770

Alabama Certification #40770

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida/NELAP Certification #: E87605

Guam Certification #: Pace

Georgia Certification #: 959

Idaho Certification #: MN00064

Hawaii Certification #MN00064

Illinois Certification #: 200011

Indiana Certification#C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky Dept of Envi. Protection - DW #90062

Kentucky Dept of Envi. Protection - WW #:90062

Louisiana DEQ Certification #: 3086

Louisiana DHH #: LA140001

Maine Certification #: 2013011

Maryland Certification #: 322

Michigan DEPH Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT0092

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Carolina State Public Health #: 27700

North Dakota Certification #: R-036

Ohio EPA #: 4150

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Saipan (CNMI) #:MP0003

South Carolina #:74003001

Texas Certification #: T104704192

Tennessee Certification #: 02818

Utah Certification #: MN000642013-4

Virginia DGS Certification #: 251

Virginia/VELAP Certification #: Pace

Washington Certification #: C486

Wisconsin Certification #: 999407970

West Virginia Certification #: 382

West Virginia TO-15 Approval

West Virginia DHHR #:9952C

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: 02-02098

Pace Project No.: 10273601

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10273601001	VP-10	Air	07/08/14 12:20	07/10/14 17:15
10273601002	VP-9	Air	07/08/14 10:10	07/10/14 17:15
10273601003	VP-7	Air	07/07/14 13:50	07/10/14 17:15
10273601004	VP-12	Air	07/08/14 14:50	07/10/14 17:15
10273601005	VP-8	Air	07/08/14 08:40	07/10/14 17:15
10273601006	VP-11	Air	07/08/14 13:00	07/10/14 17:15
10273601007	VP-3	Air	07/09/14 10:45	07/10/14 17:15
10273601008	VP-4	Air	07/09/14 10:55	07/10/14 17:15
10273601009	VP-1	Air	07/09/14 10:10	07/10/14 17:15
10273601010	VP-2	Air	07/09/14 10:30	07/10/14 17:15
10273601011	VP-6	Air	07/09/14 12:00	07/10/14 17:15
10273601012	VP-5	Air	07/09/14 11:50	07/10/14 17:15
10273601013	VP-13	Air	07/09/14 11:20	07/10/14 17:15

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: 02-02098

Pace Project No.: 10273601

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10273601001	VP-10	TO-15	AH2	61
10273601002	VP-9	TO-15	AH2	61
10273601003	VP-7	TO-15	AH2	61
10273601004	VP-12	TO-15	AH2	61
10273601005	VP-8	TO-15	AH2	61
10273601006	VP-11	TO-15	AH2	61
10273601007	VP-3	TO-15	AH2	61
10273601008	VP-4	TO-15	AH2	61
10273601009	VP-1	TO-15	AH2	61
10273601010	VP-2	TO-15	JAM	61
10273601011	VP-6	TO-15	JAM	61
10273601012	VP-5	TO-15	JAM	61
10273601013	VP-13	TO-15	JAM	61

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-10	Lab ID: 10273601001	Collected: 07/08/14 12:20	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	ND	ug/m3	141	58.46		07/20/14 18:56	67-64-1	
Benzene	16.7	ug/m3	1.1	1.74		07/19/14 21:55	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/19/14 21:55	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/19/14 21:55	75-27-4	
Bromoform	ND	ug/m3	3.7	1.74		07/19/14 21:55	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/19/14 21:55	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/19/14 21:55	106-99-0	
2-Butanone (MEK)	90.7	ug/m3	1.0	1.74		07/19/14 21:55	78-93-3	
Carbon disulfide	24.4	ug/m3	1.1	1.74		07/19/14 21:55	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/19/14 21:55	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		07/19/14 21:55	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/19/14 21:55	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/19/14 21:55	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/19/14 21:55	74-87-3	
Cyclohexane	57.0	ug/m3	1.2	1.74		07/19/14 21:55	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/19/14 21:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/19/14 21:55	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/19/14 21:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/19/14 21:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/19/14 21:55	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.8	1.74		07/19/14 21:55	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/19/14 21:55	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/19/14 21:55	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/19/14 21:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/19/14 21:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/19/14 21:55	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/19/14 21:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/19/14 21:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/19/14 21:55	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/19/14 21:55	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/19/14 21:55	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/19/14 21:55	141-78-6	
Ethylbenzene	3.6	ug/m3	1.5	1.74		07/19/14 21:55	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/19/14 21:55	622-96-8	
n-Heptane	161	ug/m3	1.4	1.74		07/19/14 21:55	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/19/14 21:55	87-68-3	
n-Hexane	418	ug/m3	42.1	58.46		07/20/14 18:56	110-54-3	
2-Hexanone	6.1	ug/m3	2.6	1.74		07/19/14 21:55	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/19/14 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	4.0	ug/m3	1.4	1.74		07/19/14 21:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/19/14 21:55	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/19/14 21:55	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/19/14 21:55	67-63-0	
Propylene	1070	ug/m3	51.2	58.46		07/20/14 18:56	115-07-1	
Styrene	2.6	ug/m3	1.5	1.74		07/19/14 21:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/19/14 21:55	79-34-5	
Tetrachloroethene	3.8	ug/m3	1.2	1.74		07/19/14 21:55	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-10	Lab ID: 10273601001	Collected: 07/08/14 12:20	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/19/14 21:55	109-99-9	
Toluene	16.1	ug/m3	1.3	1.74		07/19/14 21:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/19/14 21:55	120-82-1	
1,1,1-Trichloroethane	2.4	ug/m3	1.9	1.74		07/19/14 21:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/19/14 21:55	79-00-5	
Trichloroethene	2.4	ug/m3	0.96	1.74		07/19/14 21:55	79-01-6	
Trichlorofluoromethane	979	ug/m3	66.6	58.46		07/20/14 18:56	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/19/14 21:55	76-13-1	
1,2,4-Trimethylbenzene	3.0	ug/m3	1.7	1.74		07/19/14 21:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/19/14 21:55	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.74		07/19/14 21:55	108-05-4	
Vinyl chloride	ND	ug/m3	0.45	1.74		07/19/14 21:55	75-01-4	
m&p-Xylene	9.4	ug/m3	3.1	1.74		07/19/14 21:55	179601-23-1	
o-Xylene	5.3	ug/m3	1.5	1.74		07/19/14 21:55	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-9	Lab ID: 10273601002	Collected: 07/08/14 10:10	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	321	ug/m3	4.2	1.74		07/20/14 10:09	67-64-1	E
Benzene	16.5	ug/m3	1.1	1.74		07/20/14 10:09	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/20/14 10:09	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/20/14 10:09	75-27-4	
Bromoform	ND	ug/m3	3.7	1.74		07/20/14 10:09	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/20/14 10:09	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/20/14 10:09	106-99-0	
2-Butanone (MEK)	101	ug/m3	1.0	1.74		07/20/14 10:09	78-93-3	
Carbon disulfide	30.4	ug/m3	1.1	1.74		07/20/14 10:09	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/20/14 10:09	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		07/20/14 10:09	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/20/14 10:09	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/20/14 10:09	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/20/14 10:09	74-87-3	
Cyclohexane	32.1	ug/m3	1.2	1.74		07/20/14 10:09	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/20/14 10:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/20/14 10:09	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:09	106-46-7	
Dichlorodifluoromethane	4.5	ug/m3	1.8	1.74		07/20/14 10:09	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/20/14 10:09	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/20/14 10:09	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:09	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/20/14 10:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:09	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/20/14 10:09	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/20/14 10:09	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/20/14 10:09	141-78-6	
Ethylbenzene	3.6	ug/m3	1.5	1.74		07/20/14 10:09	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/20/14 10:09	622-96-8	
n-Heptane	22.8	ug/m3	1.4	1.74		07/20/14 10:09	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/20/14 10:09	87-68-3	
n-Hexane	18.3	ug/m3	1.3	1.74		07/20/14 10:09	110-54-3	
2-Hexanone	7.1	ug/m3	2.6	1.74		07/20/14 10:09	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/20/14 10:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	4.8	ug/m3	1.4	1.74		07/20/14 10:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/20/14 10:09	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/20/14 10:09	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/20/14 10:09	67-63-0	
Propylene	267	ug/m3	244	278.4		07/20/14 19:18	115-07-1	A3
Styrene	2.3	ug/m3	1.5	1.74		07/20/14 10:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/20/14 10:09	79-34-5	
Tetrachloroethene	220	ug/m3	1.2	1.74		07/20/14 10:09	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-9		Lab ID: 10273601002	Collected: 07/08/14 10:10	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR		Analytical Method: TO-15							
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/20/14 10:09	109-99-9		
Toluene	17.1	ug/m3	1.3	1.74		07/20/14 10:09	108-88-3		
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/20/14 10:09	120-82-1		
1,1,1-Trichloroethane	4.1	ug/m3	1.9	1.74		07/20/14 10:09	71-55-6		
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/20/14 10:09	79-00-5		
Trichloroethene	ND	ug/m3	0.96	1.74		07/20/14 10:09	79-01-6		
Trichlorofluoromethane	13000	ug/m3	317	278.4		07/20/14 19:18	75-69-4	A3	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/20/14 10:09	76-13-1		
1,2,4-Trimethylbenzene	3.5	ug/m3	1.7	1.74		07/20/14 10:09	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 10:09	108-67-8		
Vinyl acetate	ND	ug/m3	1.2	1.74		07/20/14 10:09	108-05-4		
Vinyl chloride	ND	ug/m3	0.45	1.74		07/20/14 10:09	75-01-4		
m&p-Xylene	12.5	ug/m3	3.1	1.74		07/20/14 10:09	179601-23-1		
o-Xylene	8.1	ug/m3	1.5	1.74		07/20/14 10:09	95-47-6		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-7	Lab ID: 10273601003	Collected: 07/07/14 13:50	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	331	ug/m3	4.2	1.74		07/20/14 10:33	67-64-1	E
Benzene	12.2	ug/m3	1.1	1.74		07/20/14 10:33	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/20/14 10:33	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/20/14 10:33	75-27-4	
Bromoform	ND	ug/m3	3.7	1.74		07/20/14 10:33	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/20/14 10:33	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/20/14 10:33	106-99-0	
2-Butanone (MEK)	40.4	ug/m3	1.0	1.74		07/20/14 10:33	78-93-3	
Carbon disulfide	31.6	ug/m3	1.1	1.74		07/20/14 10:33	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/20/14 10:33	56-23-5	
Chlorobenzene	1.7	ug/m3	1.6	1.74		07/20/14 10:33	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/20/14 10:33	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/20/14 10:33	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/20/14 10:33	74-87-3	
Cyclohexane	59.7	ug/m3	1.2	1.74		07/20/14 10:33	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/20/14 10:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/20/14 10:33	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:33	106-46-7	
Dichlorodifluoromethane	5.6	ug/m3	1.8	1.74		07/20/14 10:33	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/20/14 10:33	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/20/14 10:33	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:33	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/20/14 10:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:33	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/20/14 10:33	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/20/14 10:33	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/20/14 10:33	141-78-6	
Ethylbenzene	2.1	ug/m3	1.5	1.74		07/20/14 10:33	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/20/14 10:33	622-96-8	
n-Heptane	22.1	ug/m3	1.4	1.74		07/20/14 10:33	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/20/14 10:33	87-68-3	
n-Hexane	18.2	ug/m3	1.3	1.74		07/20/14 10:33	110-54-3	
2-Hexanone	5.3	ug/m3	2.6	1.74		07/20/14 10:33	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/20/14 10:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	5.6	ug/m3	1.4	1.74		07/20/14 10:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/20/14 10:33	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/20/14 10:33	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/20/14 10:33	67-63-0	
Propylene	279	ug/m3	1.5	1.74		07/20/14 10:33	115-07-1	E
Styrene	2.3	ug/m3	1.5	1.74		07/20/14 10:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/20/14 10:33	79-34-5	
Tetrachloroethene	289	ug/m3	1.2	1.74		07/20/14 10:33	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-7		Lab ID: 10273601003	Collected: 07/07/14 13:50	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/20/14 10:33	109-99-9	
Toluene	25.4	ug/m3	1.3	1.74		07/20/14 10:33	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/20/14 10:33	120-82-1	
1,1,1-Trichloroethane	19.9	ug/m3	1.9	1.74		07/20/14 10:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/20/14 10:33	79-00-5	
Trichloroethene	2.6	ug/m3	0.96	1.74		07/20/14 10:33	79-01-6	
Trichlorofluoromethane	182	ug/m3	2.0	1.74		07/20/14 10:33	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/20/14 10:33	76-13-1	
1,2,4-Trimethylbenzene	1.8	ug/m3	1.7	1.74		07/20/14 10:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 10:33	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.74		07/20/14 10:33	108-05-4	
Vinyl chloride	ND	ug/m3	0.45	1.74		07/20/14 10:33	75-01-4	
m&p-Xylene	8.4	ug/m3	3.1	1.74		07/20/14 10:33	179601-23-1	
o-Xylene	5.0	ug/m3	1.5	1.74		07/20/14 10:33	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-12	Lab ID: 10273601004	Collected: 07/08/14 14:50	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	369	ug/m3	4.2	1.74		07/20/14 10:57	67-64-1	E
Benzene	31.3	ug/m3	1.1	1.74		07/20/14 10:57	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/20/14 10:57	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/20/14 10:57	75-27-4	
Bromoform	ND	ug/m3	3.7	1.74		07/20/14 10:57	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/20/14 10:57	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/20/14 10:57	106-99-0	
2-Butanone (MEK)	89.0	ug/m3	1.0	1.74		07/20/14 10:57	78-93-3	
Carbon disulfide	28.9	ug/m3	1.1	1.74		07/20/14 10:57	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/20/14 10:57	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		07/20/14 10:57	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/20/14 10:57	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/20/14 10:57	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/20/14 10:57	74-87-3	
Cyclohexane	59.7	ug/m3	1.2	1.74		07/20/14 10:57	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/20/14 10:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/20/14 10:57	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 10:57	106-46-7	
Dichlorodifluoromethane	135	ug/m3	1.8	1.74		07/20/14 10:57	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/20/14 10:57	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/20/14 10:57	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 10:57	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/20/14 10:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 10:57	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/20/14 10:57	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/20/14 10:57	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/20/14 10:57	141-78-6	
Ethylbenzene	9.9	ug/m3	1.5	1.74		07/20/14 10:57	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/20/14 10:57	622-96-8	
n-Heptane	44.6	ug/m3	1.4	1.74		07/20/14 10:57	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/20/14 10:57	87-68-3	
n-Hexane	42.5	ug/m3	1.3	1.74		07/20/14 10:57	110-54-3	
2-Hexanone	6.3	ug/m3	2.6	1.74		07/20/14 10:57	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/20/14 10:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	6.6	ug/m3	1.4	1.74		07/20/14 10:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/20/14 10:57	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/20/14 10:57	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/20/14 10:57	67-63-0	
Propylene	814	ug/m3	1.5	1.74		07/20/14 10:57	115-07-1	E
Styrene	2.6	ug/m3	1.5	1.74		07/20/14 10:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/20/14 10:57	79-34-5	
Tetrachloroethene	16.0	ug/m3	1.2	1.74		07/20/14 10:57	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-12		Lab ID: 10273601004	Collected: 07/08/14 14:50	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/20/14 10:57	109-99-9	
Toluene	40.2	ug/m3	1.3	1.74		07/20/14 10:57	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/20/14 10:57	120-82-1	
1,1,1-Trichloroethane	2.0	ug/m3	1.9	1.74		07/20/14 10:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/20/14 10:57	79-00-5	
Trichloroethene	ND	ug/m3	0.96	1.74		07/20/14 10:57	79-01-6	
Trichlorofluoromethane	27.5	ug/m3	2.0	1.74		07/20/14 10:57	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/20/14 10:57	76-13-1	
1,2,4-Trimethylbenzene	3.4	ug/m3	1.7	1.74		07/20/14 10:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 10:57	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.74		07/20/14 10:57	108-05-4	
Vinyl chloride	ND	ug/m3	0.45	1.74		07/20/14 10:57	75-01-4	
m&p-Xylene	20.1	ug/m3	3.1	1.74		07/20/14 10:57	179601-23-1	
o-Xylene	14.1	ug/m3	1.5	1.74		07/20/14 10:57	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-8		Lab ID: 10273601005	Collected: 07/08/14 08:40	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	147	ug/m3	4.2	1.74		07/20/14 11:21	67-64-1	E
Benzene	10.4	ug/m3	1.1	1.74		07/20/14 11:21	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/20/14 11:21	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/20/14 11:21	75-27-4	
Bromoform	5.9	ug/m3	3.7	1.74		07/20/14 11:21	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/20/14 11:21	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/20/14 11:21	106-99-0	
2-Butanone (MEK)	32.8	ug/m3	1.0	1.74		07/20/14 11:21	78-93-3	
Carbon disulfide	6.5	ug/m3	1.1	1.74		07/20/14 11:21	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/20/14 11:21	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		07/20/14 11:21	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/20/14 11:21	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/20/14 11:21	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/20/14 11:21	74-87-3	
Cyclohexane	17.7	ug/m3	1.2	1.74		07/20/14 11:21	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/20/14 11:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/20/14 11:21	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:21	106-46-7	
Dichlorodifluoromethane	4.8	ug/m3	1.8	1.74		07/20/14 11:21	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/20/14 11:21	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/20/14 11:21	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:21	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/20/14 11:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 11:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 11:21	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/20/14 11:21	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/20/14 11:21	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/20/14 11:21	141-78-6	
Ethylbenzene	3.1	ug/m3	1.5	1.74		07/20/14 11:21	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/20/14 11:21	622-96-8	
n-Heptane	25.1	ug/m3	1.4	1.74		07/20/14 11:21	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/20/14 11:21	87-68-3	
n-Hexane	15.1	ug/m3	1.3	1.74		07/20/14 11:21	110-54-3	
2-Hexanone	5.1	ug/m3	2.6	1.74		07/20/14 11:21	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/20/14 11:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.9	ug/m3	1.4	1.74		07/20/14 11:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/20/14 11:21	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/20/14 11:21	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/20/14 11:21	67-63-0	
Propylene	217	ug/m3	1.5	1.74		07/20/14 11:21	115-07-1	E
Styrene	ND	ug/m3	1.5	1.74		07/20/14 11:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/20/14 11:21	79-34-5	
Tetrachloroethene	11.3	ug/m3	1.2	1.74		07/20/14 11:21	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-8		Lab ID: 10273601005	Collected: 07/08/14 08:40	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/20/14 11:21	109-99-9	
Toluene	14.4	ug/m3	1.3	1.74		07/20/14 11:21	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/20/14 11:21	120-82-1	
1,1,1-Trichloroethane	3.6	ug/m3	1.9	1.74		07/20/14 11:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/20/14 11:21	79-00-5	
Trichloroethene	ND	ug/m3	0.96	1.74		07/20/14 11:21	79-01-6	
Trichlorofluoromethane	255	ug/m3	2.0	1.74		07/20/14 11:21	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/20/14 11:21	76-13-1	
1,2,4-Trimethylbenzene	1.8	ug/m3	1.7	1.74		07/20/14 11:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 11:21	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.74		07/20/14 11:21	108-05-4	
Vinyl chloride	ND	ug/m3	0.45	1.74		07/20/14 11:21	75-01-4	
m&p-Xylene	8.8	ug/m3	3.1	1.74		07/20/14 11:21	179601-23-1	
o-Xylene	4.4	ug/m3	1.5	1.74		07/20/14 11:21	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-11	Lab ID: 10273601006	Collected: 07/08/14 13:00	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	121	ug/m3	4.2	1.74		07/20/14 11:46	67-64-1	
Benzene	4.5	ug/m3	1.1	1.74		07/20/14 11:46	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.74		07/20/14 11:46	100-44-7	
Bromodichloromethane	ND	ug/m3	2.4	1.74		07/20/14 11:46	75-27-4	
Bromoform	ND	ug/m3	3.7	1.74		07/20/14 11:46	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.74		07/20/14 11:46	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.74		07/20/14 11:46	106-99-0	
2-Butanone (MEK)	29.8	ug/m3	1.0	1.74		07/20/14 11:46	78-93-3	
Carbon disulfide	31.3	ug/m3	1.1	1.74		07/20/14 11:46	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.74		07/20/14 11:46	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.74		07/20/14 11:46	108-90-7	
Chloroethane	ND	ug/m3	0.94	1.74		07/20/14 11:46	75-00-3	
Chloroform	ND	ug/m3	0.86	1.74		07/20/14 11:46	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.74		07/20/14 11:46	74-87-3	
Cyclohexane	23.5	ug/m3	1.2	1.74		07/20/14 11:46	110-82-7	
Dibromochloromethane	ND	ug/m3	3.0	1.74		07/20/14 11:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.7	1.74		07/20/14 11:46	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.74		07/20/14 11:46	106-46-7	
Dichlorodifluoromethane	16.9	ug/m3	1.8	1.74		07/20/14 11:46	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.74		07/20/14 11:46	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.71	1.74		07/20/14 11:46	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.74		07/20/14 11:46	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.74		07/20/14 11:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 11:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.74		07/20/14 11:46	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.5	1.74		07/20/14 11:46	76-14-2	
Ethanol	ND	ug/m3	1.7	1.74		07/20/14 11:46	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.74		07/20/14 11:46	141-78-6	
Ethylbenzene	ND	ug/m3	1.5	1.74		07/20/14 11:46	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.74		07/20/14 11:46	622-96-8	
n-Heptane	17.1	ug/m3	1.4	1.74		07/20/14 11:46	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.4	1.74		07/20/14 11:46	87-68-3	
n-Hexane	11.1	ug/m3	1.3	1.74		07/20/14 11:46	110-54-3	
2-Hexanone	6.5	ug/m3	2.6	1.74		07/20/14 11:46	591-78-6	
Methylene Chloride	ND	ug/m3	6.1	1.74		07/20/14 11:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	3.6	ug/m3	1.4	1.74		07/20/14 11:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.74		07/20/14 11:46	1634-04-4	
Naphthalene	ND	ug/m3	4.6	1.74		07/20/14 11:46	91-20-3	
2-Propanol	ND	ug/m3	2.2	1.74		07/20/14 11:46	67-63-0	
Propylene	163	ug/m3	1.5	1.74		07/20/14 11:46	115-07-1	E
Styrene	1.8	ug/m3	1.5	1.74		07/20/14 11:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.74		07/20/14 11:46	79-34-5	
Tetrachloroethene	7.9	ug/m3	1.2	1.74		07/20/14 11:46	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-11		Lab ID: 10273601006	Collected: 07/08/14 13:00	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.74		07/20/14 11:46	109-99-9	
Toluene	6.5	ug/m3	1.3	1.74		07/20/14 11:46	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.6	1.74		07/20/14 11:46	120-82-1	
1,1,1-Trichloroethane	4.2	ug/m3	1.9	1.74		07/20/14 11:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.96	1.74		07/20/14 11:46	79-00-5	
Trichloroethene	ND	ug/m3	0.96	1.74		07/20/14 11:46	79-01-6	
Trichlorofluoromethane	21.0	ug/m3	2.0	1.74		07/20/14 11:46	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.8	1.74		07/20/14 11:46	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 11:46	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.74		07/20/14 11:46	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.74		07/20/14 11:46	108-05-4	
Vinyl chloride	ND	ug/m3	0.45	1.74		07/20/14 11:46	75-01-4	
m&p-Xylene	5.9	ug/m3	3.1	1.74		07/20/14 11:46	179601-23-1	
o-Xylene	2.6	ug/m3	1.5	1.74		07/20/14 11:46	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-3	Lab ID: 10273601007	Collected: 07/09/14 10:45	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	233 ug/m3		4.1	1.68		07/20/14 12:10	67-64-1	E
Benzene	7.6 ug/m3		1.1	1.68		07/20/14 12:10	71-43-2	
Benzyl chloride	ND ug/m3		1.8	1.68		07/20/14 12:10	100-44-7	
Bromodichloromethane	ND ug/m3		2.3	1.68		07/20/14 12:10	75-27-4	
Bromoform	ND ug/m3		3.5	1.68		07/20/14 12:10	75-25-2	
Bromomethane	ND ug/m3		1.3	1.68		07/20/14 12:10	74-83-9	
1,3-Butadiene	ND ug/m3		0.76	1.68		07/20/14 12:10	106-99-0	
2-Butanone (MEK)	37.0 ug/m3		1.0	1.68		07/20/14 12:10	78-93-3	
Carbon disulfide	1.8 ug/m3		1.1	1.68		07/20/14 12:10	75-15-0	
Carbon tetrachloride	ND ug/m3		1.1	1.68		07/20/14 12:10	56-23-5	
Chlorobenzene	ND ug/m3		1.6	1.68		07/20/14 12:10	108-90-7	
Chloroethane	ND ug/m3		0.91	1.68		07/20/14 12:10	75-00-3	
Chloroform	ND ug/m3		0.83	1.68		07/20/14 12:10	67-66-3	
Chloromethane	ND ug/m3		0.71	1.68		07/20/14 12:10	74-87-3	
Cyclohexane	6.3 ug/m3		1.2	1.68		07/20/14 12:10	110-82-7	
Dibromochloromethane	ND ug/m3		2.9	1.68		07/20/14 12:10	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/m3		2.6	1.68		07/20/14 12:10	106-93-4	
1,2-Dichlorobenzene	ND ug/m3		2.0	1.68		07/20/14 12:10	95-50-1	
1,3-Dichlorobenzene	ND ug/m3		2.0	1.68		07/20/14 12:10	541-73-1	
1,4-Dichlorobenzene	ND ug/m3		2.0	1.68		07/20/14 12:10	106-46-7	
Dichlorodifluoromethane	44.0 ug/m3		1.7	1.68		07/20/14 12:10	75-71-8	
1,1-Dichloroethane	ND ug/m3		1.4	1.68		07/20/14 12:10	75-34-3	
1,2-Dichloroethane	ND ug/m3		0.69	1.68		07/20/14 12:10	107-06-2	
1,1-Dichloroethene	ND ug/m3		1.4	1.68		07/20/14 12:10	75-35-4	
cis-1,2-Dichloroethene	ND ug/m3		1.4	1.68		07/20/14 12:10	156-59-2	
trans-1,2-Dichloroethene	ND ug/m3		1.4	1.68		07/20/14 12:10	156-60-5	
1,2-Dichloropropane	ND ug/m3		1.6	1.68		07/20/14 12:10	78-87-5	
cis-1,3-Dichloropropene	ND ug/m3		1.5	1.68		07/20/14 12:10	10061-01-5	
trans-1,3-Dichloropropene	ND ug/m3		1.5	1.68		07/20/14 12:10	10061-02-6	
Dichlorotetrafluoroethane	ND ug/m3		2.4	1.68		07/20/14 12:10	76-14-2	
Ethanol	120 ug/m3		1.6	1.68		07/20/14 12:10	64-17-5	E
Ethyl acetate	ND ug/m3		1.2	1.68		07/20/14 12:10	141-78-6	
Ethylbenzene	23.7 ug/m3		1.5	1.68		07/20/14 12:10	100-41-4	
4-Ethyltoluene	3.3 ug/m3		1.7	1.68		07/20/14 12:10	622-96-8	
n-Heptane	24.9 ug/m3		1.4	1.68		07/20/14 12:10	142-82-5	
Hexachloro-1,3-butadiene	ND ug/m3		9.1	1.68		07/20/14 12:10	87-68-3	
n-Hexane	24.5 ug/m3		1.2	1.68		07/20/14 12:10	110-54-3	
2-Hexanone	44.1 ug/m3		2.5	1.68		07/20/14 12:10	591-78-6	
Methylene Chloride	ND ug/m3		5.9	1.68		07/20/14 12:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	9.1 ug/m3		1.4	1.68		07/20/14 12:10	108-10-1	
Methyl-tert-butyl ether	ND ug/m3		1.2	1.68		07/20/14 12:10	1634-04-4	
Naphthalene	6.6 ug/m3		4.5	1.68		07/20/14 12:10	91-20-3	
2-Propanol	ND ug/m3		2.1	1.68		07/20/14 12:10	67-63-0	
Propylene	104 ug/m3		1.5	1.68		07/20/14 12:10	115-07-1	E
Styrene	ND ug/m3		1.5	1.68		07/20/14 12:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/m3		1.2	1.68		07/20/14 12:10	79-34-5	
Tetrachloroethene	8.4 ug/m3		1.2	1.68		07/20/14 12:10	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-3		Lab ID: 10273601007	Collected: 07/09/14 10:45	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.68		07/20/14 12:10	109-99-9	
Toluene	15.5	ug/m3	1.3	1.68		07/20/14 12:10	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.68		07/20/14 12:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		07/20/14 12:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.92	1.68		07/20/14 12:10	79-00-5	
Trichloroethene	1.2	ug/m3	0.92	1.68		07/20/14 12:10	79-01-6	
Trichlorofluoromethane	8.3	ug/m3	1.9	1.68		07/20/14 12:10	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.68		07/20/14 12:10	76-13-1	
1,2,4-Trimethylbenzene	18.6	ug/m3	1.7	1.68		07/20/14 12:10	95-63-6	
1,3,5-Trimethylbenzene	11.5	ug/m3	1.7	1.68		07/20/14 12:10	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.68		07/20/14 12:10	108-05-4	
Vinyl chloride	ND	ug/m3	0.44	1.68		07/20/14 12:10	75-01-4	
m&p-Xylene	78.9	ug/m3	3.0	1.68		07/20/14 12:10	179601-23-1	
o-Xylene	32.4	ug/m3	1.5	1.68		07/20/14 12:10	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-4	Lab ID: 10273601008	Collected: 07/09/14 10:55	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	328	ug/m3	4.1	1.68		07/20/14 12:34	67-64-1	E
Benzene	4.5	ug/m3	1.1	1.68		07/20/14 12:34	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.68		07/20/14 12:34	100-44-7	
Bromodichloromethane	ND	ug/m3	2.3	1.68		07/20/14 12:34	75-27-4	
Bromoform	ND	ug/m3	3.5	1.68		07/20/14 12:34	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.68		07/20/14 12:34	74-83-9	
1,3-Butadiene	ND	ug/m3	0.76	1.68		07/20/14 12:34	106-99-0	
2-Butanone (MEK)	46.4	ug/m3	1.0	1.68		07/20/14 12:34	78-93-3	
Carbon disulfide	4.6	ug/m3	1.1	1.68		07/20/14 12:34	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.68		07/20/14 12:34	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.68		07/20/14 12:34	108-90-7	
Chloroethane	ND	ug/m3	0.91	1.68		07/20/14 12:34	75-00-3	
Chloroform	1.8	ug/m3	0.83	1.68		07/20/14 12:34	67-66-3	
Chloromethane	ND	ug/m3	0.71	1.68		07/20/14 12:34	74-87-3	
Cyclohexane	2.8	ug/m3	1.2	1.68		07/20/14 12:34	110-82-7	
Dibromochloromethane	ND	ug/m3	2.9	1.68		07/20/14 12:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.6	1.68		07/20/14 12:34	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:34	106-46-7	
Dichlorodifluoromethane	4.2	ug/m3	1.7	1.68		07/20/14 12:34	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.68		07/20/14 12:34	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.69	1.68		07/20/14 12:34	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:34	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.68		07/20/14 12:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/20/14 12:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/20/14 12:34	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.4	1.68		07/20/14 12:34	76-14-2	
Ethanol	76.1	ug/m3	1.6	1.68		07/20/14 12:34	64-17-5	
Ethyl acetate	ND	ug/m3	1.2	1.68		07/20/14 12:34	141-78-6	
Ethylbenzene	3.5	ug/m3	1.5	1.68		07/20/14 12:34	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.68		07/20/14 12:34	622-96-8	
n-Heptane	5.9	ug/m3	1.4	1.68		07/20/14 12:34	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.1	1.68		07/20/14 12:34	87-68-3	
n-Hexane	4.1	ug/m3	1.2	1.68		07/20/14 12:34	110-54-3	
2-Hexanone	13.6	ug/m3	2.5	1.68		07/20/14 12:34	591-78-6	
Methylene Chloride	ND	ug/m3	5.9	1.68		07/20/14 12:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	7.2	ug/m3	1.4	1.68		07/20/14 12:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.2	1.68		07/20/14 12:34	1634-04-4	
Naphthalene	5.8	ug/m3	4.5	1.68		07/20/14 12:34	91-20-3	
2-Propanol	ND	ug/m3	2.1	1.68		07/20/14 12:34	67-63-0	
Propylene	15.0	ug/m3	1.5	1.68		07/20/14 12:34	115-07-1	
Styrene	2.5	ug/m3	1.5	1.68		07/20/14 12:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.68		07/20/14 12:34	79-34-5	
Tetrachloroethene	10.2	ug/m3	1.2	1.68		07/20/14 12:34	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-4		Lab ID: 10273601008	Collected: 07/09/14 10:55	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.68		07/20/14 12:34	109-99-9	
Toluene	7.6	ug/m3	1.3	1.68		07/20/14 12:34	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.68		07/20/14 12:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		07/20/14 12:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.92	1.68		07/20/14 12:34	79-00-5	
Trichloroethene	ND	ug/m3	0.92	1.68		07/20/14 12:34	79-01-6	
Trichlorofluoromethane	6.2	ug/m3	1.9	1.68		07/20/14 12:34	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.68		07/20/14 12:34	76-13-1	
1,2,4-Trimethylbenzene	4.1	ug/m3	1.7	1.68		07/20/14 12:34	95-63-6	
1,3,5-Trimethylbenzene	1.7	ug/m3	1.7	1.68		07/20/14 12:34	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.68		07/20/14 12:34	108-05-4	
Vinyl chloride	ND	ug/m3	0.44	1.68		07/20/14 12:34	75-01-4	
m&p-Xylene	7.5	ug/m3	3.0	1.68		07/20/14 12:34	179601-23-1	
o-Xylene	3.6	ug/m3	1.5	1.68		07/20/14 12:34	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-1	Lab ID: 10273601009	Collected: 07/09/14 10:10	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	313	ug/m3	4.1	1.68		07/20/14 12:59	67-64-1	E
Benzene	ND	ug/m3	1.1	1.68		07/20/14 12:59	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.68		07/20/14 12:59	100-44-7	
Bromodichloromethane	ND	ug/m3	2.3	1.68		07/20/14 12:59	75-27-4	
Bromoform	ND	ug/m3	3.5	1.68		07/20/14 12:59	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.68		07/20/14 12:59	74-83-9	
1,3-Butadiene	ND	ug/m3	0.76	1.68		07/20/14 12:59	106-99-0	
2-Butanone (MEK)	35.6	ug/m3	1.0	1.68		07/20/14 12:59	78-93-3	
Carbon disulfide	ND	ug/m3	1.1	1.68		07/20/14 12:59	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.68		07/20/14 12:59	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.68		07/20/14 12:59	108-90-7	
Chloroethane	ND	ug/m3	0.91	1.68		07/20/14 12:59	75-00-3	
Chloroform	ND	ug/m3	0.83	1.68		07/20/14 12:59	67-66-3	
Chloromethane	ND	ug/m3	0.71	1.68		07/20/14 12:59	74-87-3	
Cyclohexane	ND	ug/m3	1.2	1.68		07/20/14 12:59	110-82-7	
Dibromochloromethane	ND	ug/m3	2.9	1.68		07/20/14 12:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.6	1.68		07/20/14 12:59	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/20/14 12:59	106-46-7	
Dichlorodifluoromethane	2.5	ug/m3	1.7	1.68		07/20/14 12:59	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.68		07/20/14 12:59	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.69	1.68		07/20/14 12:59	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/20/14 12:59	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.68		07/20/14 12:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/20/14 12:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/20/14 12:59	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.4	1.68		07/20/14 12:59	76-14-2	
Ethanol	76.2	ug/m3	1.6	1.68		07/20/14 12:59	64-17-5	
Ethyl acetate	ND	ug/m3	1.2	1.68		07/20/14 12:59	141-78-6	
Ethylbenzene	ND	ug/m3	1.5	1.68		07/20/14 12:59	100-41-4	
4-Ethyltoluene	ND	ug/m3	1.7	1.68		07/20/14 12:59	622-96-8	
n-Heptane	5.7	ug/m3	1.4	1.68		07/20/14 12:59	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	9.1	1.68		07/20/14 12:59	87-68-3	
n-Hexane	2.0	ug/m3	1.2	1.68		07/20/14 12:59	110-54-3	
2-Hexanone	4.9	ug/m3	2.5	1.68		07/20/14 12:59	591-78-6	
Methylene Chloride	ND	ug/m3	5.9	1.68		07/20/14 12:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	3.4	ug/m3	1.4	1.68		07/20/14 12:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.2	1.68		07/20/14 12:59	1634-04-4	
Naphthalene	ND	ug/m3	4.5	1.68		07/20/14 12:59	91-20-3	
2-Propanol	ND	ug/m3	2.1	1.68		07/20/14 12:59	67-63-0	
Propylene	2.8	ug/m3	1.5	1.68		07/20/14 12:59	115-07-1	
Styrene	2.0	ug/m3	1.5	1.68		07/20/14 12:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.68		07/20/14 12:59	79-34-5	
Tetrachloroethene	1.8	ug/m3	1.2	1.68		07/20/14 12:59	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-1		Lab ID: 10273601009	Collected: 07/09/14 10:10	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	1.0	1.68		07/20/14 12:59	109-99-9	
Toluene	4.3	ug/m3	1.3	1.68		07/20/14 12:59	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.68		07/20/14 12:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		07/20/14 12:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.92	1.68		07/20/14 12:59	79-00-5	
Trichloroethene	2.1	ug/m3	0.92	1.68		07/20/14 12:59	79-01-6	
Trichlorofluoromethane	5.0	ug/m3	1.9	1.68		07/20/14 12:59	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.68		07/20/14 12:59	76-13-1	
1,2,4-Trimethylbenzene	3.7	ug/m3	1.7	1.68		07/20/14 12:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.7	1.68		07/20/14 12:59	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.68		07/20/14 12:59	108-05-4	
Vinyl chloride	ND	ug/m3	0.44	1.68		07/20/14 12:59	75-01-4	
m&p-Xylene	4.7	ug/m3	3.0	1.68		07/20/14 12:59	179601-23-1	
o-Xylene	2.1	ug/m3	1.5	1.68		07/20/14 12:59	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098
Pace Project No.: 10273601

Sample: VP-2		Lab ID: 10273601010	Collected: 07/09/14 10:30	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	121	ug/m3	20.3	8.4		07/23/14 17:30	67-64-1	
Benzene	ND	ug/m3	5.5	8.4		07/23/14 17:30	71-43-2	
Benzyl chloride	ND	ug/m3	8.8	8.4		07/23/14 17:30	100-44-7	
Bromodichloromethane	ND	ug/m3	11.4	8.4		07/23/14 17:30	75-27-4	
Bromoform	ND	ug/m3	17.6	8.4		07/23/14 17:30	75-25-2	
Bromomethane	ND	ug/m3	6.6	8.4		07/23/14 17:30	74-83-9	
1,3-Butadiene	ND	ug/m3	3.8	8.4		07/23/14 17:30	106-99-0	
2-Butanone (MEK)	20.6	ug/m3	5.0	8.4		07/23/14 17:30	78-93-3	
Carbon disulfide	ND	ug/m3	5.3	8.4		07/23/14 17:30	75-15-0	
Carbon tetrachloride	ND	ug/m3	5.4	8.4		07/23/14 17:30	56-23-5	
Chlorobenzene	ND	ug/m3	7.9	8.4		07/23/14 17:30	108-90-7	
Chloroethane	ND	ug/m3	4.5	8.4		07/23/14 17:30	75-00-3	
Chloroform	ND	ug/m3	4.2	8.4		07/23/14 17:30	67-66-3	
Chloromethane	ND	ug/m3	3.5	8.4		07/23/14 17:30	74-87-3	
Cyclohexane	ND	ug/m3	14.7	8.4		07/23/14 17:30	110-82-7	
Dibromochloromethane	ND	ug/m3	14.5	8.4		07/23/14 17:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	13.1	8.4		07/23/14 17:30	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	10.2	8.4		07/23/14 17:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	10.2	8.4		07/23/14 17:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	10.2	8.4		07/23/14 17:30	106-46-7	
Dichlorodifluoromethane	35.6	ug/m3	8.5	8.4		07/23/14 17:30	75-71-8	
1,1-Dichloroethane	ND	ug/m3	6.9	8.4		07/23/14 17:30	75-34-3	
1,2-Dichloroethane	ND	ug/m3	3.4	8.4		07/23/14 17:30	107-06-2	
1,1-Dichloroethene	ND	ug/m3	6.8	8.4		07/23/14 17:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	6.8	8.4		07/23/14 17:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	6.8	8.4		07/23/14 17:30	156-60-5	
1,2-Dichloropropane	ND	ug/m3	7.9	8.4		07/23/14 17:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	7.7	8.4		07/23/14 17:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	19.4	8.4		07/23/14 17:30	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	11.9	8.4		07/23/14 17:30	76-14-2	
Ethanol	28.0	ug/m3	8.1	8.4		07/23/14 17:30	64-17-5	
Ethyl acetate	ND	ug/m3	6.1	8.4		07/23/14 17:30	141-78-6	
Ethylbenzene	ND	ug/m3	7.4	8.4		07/23/14 17:30	100-41-4	
4-Ethyltoluene	ND	ug/m3	21.0	8.4		07/23/14 17:30	622-96-8	
n-Heptane	ND	ug/m3	7.0	8.4		07/23/14 17:30	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	18.5	8.4		07/23/14 17:30	87-68-3	
n-Hexane	ND	ug/m3	6.0	8.4		07/23/14 17:30	110-54-3	
2-Hexanone	ND	ug/m3	12.6	8.4		07/23/14 17:30	591-78-6	
Methylene Chloride	60.3	ug/m3	29.7	8.4		07/23/14 17:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	7.0	8.4		07/23/14 17:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	15.4	8.4		07/23/14 17:30	1634-04-4	
Naphthalene	ND	ug/m3	22.3	8.4		07/23/14 17:30	91-20-3	
2-Propanol	15.4	ug/m3	10.5	8.4		07/23/14 17:30	67-63-0	
Propylene	ND	ug/m3	2.9	8.4		07/23/14 17:30	115-07-1	
Styrene	ND	ug/m3	7.3	8.4		07/23/14 17:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	5.9	8.4		07/23/14 17:30	79-34-5	
Tetrachloroethene	42.3	ug/m3	5.8	8.4		07/23/14 17:30	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-2		Lab ID: 10273601010	Collected: 07/09/14 10:30	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	12.6	8.4		07/23/14 17:30	109-99-9	
Toluene	ND	ug/m3	6.5	8.4		07/23/14 17:30	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	12.7	8.4		07/23/14 17:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	9.3	8.4		07/23/14 17:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	4.6	8.4		07/23/14 17:30	79-00-5	
Trichloroethene	ND	ug/m3	9.2	8.4		07/23/14 17:30	79-01-6	
Trichlorofluoromethane	429	ug/m3	9.6	8.4		07/23/14 17:30	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	13.4	8.4		07/23/14 17:30	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	42.0	8.4		07/23/14 17:30	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	21.0	8.4		07/23/14 17:30	108-67-8	
Vinyl acetate	ND	ug/m3	15.0	8.4		07/23/14 17:30	108-05-4	
Vinyl chloride	ND	ug/m3	2.2	8.4		07/23/14 17:30	75-01-4	
m&p-Xylene	ND	ug/m3	14.8	8.4		07/23/14 17:30	179601-23-1	
o-Xylene	ND	ug/m3	18.5	8.4		07/23/14 17:30	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-6		Lab ID: 10273601011	Collected: 07/09/14 12:00	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	193	ug/m3	108	44.69		07/24/14 13:55	67-64-1	
Benzene	2.5	ug/m3	1.1	1.68		07/23/14 18:49	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.68		07/23/14 18:49	100-44-7	
Bromodichloromethane	ND	ug/m3	2.3	1.68		07/23/14 18:49	75-27-4	
Bromoform	ND	ug/m3	3.5	1.68		07/23/14 18:49	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.68		07/23/14 18:49	74-83-9	
1,3-Butadiene	ND	ug/m3	0.76	1.68		07/23/14 18:49	106-99-0	
2-Butanone (MEK)	51.4	ug/m3	1.0	1.68		07/23/14 18:49	78-93-3	
Carbon disulfide	2.5	ug/m3	1.1	1.68		07/23/14 18:49	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.68		07/23/14 18:49	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.68		07/23/14 18:49	108-90-7	
Chloroethane	ND	ug/m3	0.91	1.68		07/23/14 18:49	75-00-3	
Chloroform	ND	ug/m3	0.83	1.68		07/23/14 18:49	67-66-3	
Chloromethane	ND	ug/m3	0.71	1.68		07/23/14 18:49	74-87-3	
Cyclohexane	ND	ug/m3	2.9	1.68		07/23/14 18:49	110-82-7	
Dibromochloromethane	ND	ug/m3	2.9	1.68		07/23/14 18:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.6	1.68		07/23/14 18:49	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:49	106-46-7	
Dichlorodifluoromethane	6240	ug/m3	45.1	44.69		07/24/14 13:55	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.68		07/23/14 18:49	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.69	1.68		07/23/14 18:49	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:49	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.68		07/23/14 18:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/23/14 18:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3.9	1.68		07/23/14 18:49	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.4	1.68		07/23/14 18:49	76-14-2	
Ethanol	76.7	ug/m3	1.6	1.68		07/23/14 18:49	64-17-5	
Ethyl acetate	1.4	ug/m3	1.2	1.68		07/23/14 18:49	141-78-6	
Ethylbenzene	3.1	ug/m3	1.5	1.68		07/23/14 18:49	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.2	1.68		07/23/14 18:49	622-96-8	
n-Heptane	3.1	ug/m3	1.4	1.68		07/23/14 18:49	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.7	1.68		07/23/14 18:49	87-68-3	
n-Hexane	5.5	ug/m3	1.2	1.68		07/23/14 18:49	110-54-3	
2-Hexanone	6.0	ug/m3	2.5	1.68		07/23/14 18:49	591-78-6	
Methylene Chloride	ND	ug/m3	5.9	1.68		07/23/14 18:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	5.4	ug/m3	1.4	1.68		07/23/14 18:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	3.1	1.68		07/23/14 18:49	1634-04-4	
Naphthalene	ND	ug/m3	4.5	1.68		07/23/14 18:49	91-20-3	
2-Propanol	34.3	ug/m3	2.1	1.68		07/23/14 18:49	67-63-0	
Propylene	ND	ug/m3	0.59	1.68		07/23/14 18:49	115-07-1	
Styrene	ND	ug/m3	1.5	1.68		07/23/14 18:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.68		07/23/14 18:49	79-34-5	
Tetrachloroethene	2.5	ug/m3	1.2	1.68		07/23/14 18:49	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-6		Lab ID: 10273601011	Collected: 07/09/14 12:00		Received: 07/10/14 17:15		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	10.6	ug/m3	2.5	1.68		07/23/14 18:49	109-99-9	
Toluene	4.0	ug/m3	1.3	1.68		07/23/14 18:49	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.68		07/23/14 18:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		07/23/14 18:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.92	1.68		07/23/14 18:49	79-00-5	
Trichloroethene	ND	ug/m3	1.8	1.68		07/23/14 18:49	79-01-6	
Trichlorofluoromethane	5.6	ug/m3	1.9	1.68		07/23/14 18:49	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.68		07/23/14 18:49	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	8.4	1.68		07/23/14 18:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.2	1.68		07/23/14 18:49	108-67-8	
Vinyl acetate	12.7	ug/m3	3.0	1.68		07/23/14 18:49	108-05-4	
Vinyl chloride	ND	ug/m3	0.44	1.68		07/23/14 18:49	75-01-4	
m&p-Xylene	6.9	ug/m3	3.0	1.68		07/23/14 18:49	179601-23-1	
o-Xylene	ND	ug/m3	3.7	1.68		07/23/14 18:49	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-5	Lab ID: 10273601012	Collected: 07/09/14 11:50	Received: 07/10/14 17:15	Matrix: Air				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	143	ug/m3	114	47.04		07/24/14 13:34	67-64-1	
Benzene	2.0	ug/m3	1.1	1.68		07/23/14 18:23	71-43-2	
Benzyl chloride	ND	ug/m3	1.8	1.68		07/23/14 18:23	100-44-7	
Bromodichloromethane	ND	ug/m3	2.3	1.68		07/23/14 18:23	75-27-4	
Bromoform	ND	ug/m3	3.5	1.68		07/23/14 18:23	75-25-2	
Bromomethane	ND	ug/m3	1.3	1.68		07/23/14 18:23	74-83-9	
1,3-Butadiene	ND	ug/m3	0.76	1.68		07/23/14 18:23	106-99-0	
2-Butanone (MEK)	33.2	ug/m3	1.0	1.68		07/23/14 18:23	78-93-3	
Carbon disulfide	1.1	ug/m3	1.1	1.68		07/23/14 18:23	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.1	1.68		07/23/14 18:23	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.68		07/23/14 18:23	108-90-7	
Chloroethane	ND	ug/m3	0.91	1.68		07/23/14 18:23	75-00-3	
Chloroform	ND	ug/m3	0.83	1.68		07/23/14 18:23	67-66-3	
Chloromethane	ND	ug/m3	0.71	1.68		07/23/14 18:23	74-87-3	
Cyclohexane	ND	ug/m3	2.9	1.68		07/23/14 18:23	110-82-7	
Dibromochloromethane	ND	ug/m3	2.9	1.68		07/23/14 18:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.6	1.68		07/23/14 18:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.0	1.68		07/23/14 18:23	106-46-7	
Dichlorodifluoromethane	4560	ug/m3	47.5	47.04		07/24/14 13:34	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.68		07/23/14 18:23	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.69	1.68		07/23/14 18:23	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		07/23/14 18:23	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.68		07/23/14 18:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	1.68		07/23/14 18:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3.9	1.68		07/23/14 18:23	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.4	1.68		07/23/14 18:23	76-14-2	
Ethanol	66.3	ug/m3	1.6	1.68		07/23/14 18:23	64-17-5	
Ethyl acetate	ND	ug/m3	1.2	1.68		07/23/14 18:23	141-78-6	
Ethylbenzene	2.8	ug/m3	1.5	1.68		07/23/14 18:23	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.2	1.68		07/23/14 18:23	622-96-8	
n-Heptane	ND	ug/m3	1.4	1.68		07/23/14 18:23	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.7	1.68		07/23/14 18:23	87-68-3	
n-Hexane	ND	ug/m3	1.2	1.68		07/23/14 18:23	110-54-3	
2-Hexanone	4.0	ug/m3	2.5	1.68		07/23/14 18:23	591-78-6	
Methylene Chloride	ND	ug/m3	5.9	1.68		07/23/14 18:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	3.5	ug/m3	1.4	1.68		07/23/14 18:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	3.1	1.68		07/23/14 18:23	1634-04-4	
Naphthalene	ND	ug/m3	4.5	1.68		07/23/14 18:23	91-20-3	
2-Propanol	30.7	ug/m3	2.1	1.68		07/23/14 18:23	67-63-0	
Propylene	ND	ug/m3	0.59	1.68		07/23/14 18:23	115-07-1	
Styrene	ND	ug/m3	1.5	1.68		07/23/14 18:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.2	1.68		07/23/14 18:23	79-34-5	
Tetrachloroethene	2.9	ug/m3	1.2	1.68		07/23/14 18:23	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-5		Lab ID: 10273601012	Collected: 07/09/14 11:50	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	10.4	ug/m3	2.5	1.68		07/23/14 18:23	109-99-9	
Toluene	8.1	ug/m3	1.3	1.68		07/23/14 18:23	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.68		07/23/14 18:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		07/23/14 18:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.92	1.68		07/23/14 18:23	79-00-5	
Trichloroethene	ND	ug/m3	1.8	1.68		07/23/14 18:23	79-01-6	
Trichlorofluoromethane	3.3	ug/m3	1.9	1.68		07/23/14 18:23	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.7	1.68		07/23/14 18:23	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	8.4	1.68		07/23/14 18:23	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.2	1.68		07/23/14 18:23	108-67-8	
Vinyl acetate	9.9	ug/m3	3.0	1.68		07/23/14 18:23	108-05-4	
Vinyl chloride	ND	ug/m3	0.44	1.68		07/23/14 18:23	75-01-4	
m&p-Xylene	7.1	ug/m3	3.0	1.68		07/23/14 18:23	179601-23-1	
o-Xylene	ND	ug/m3	3.7	1.68		07/23/14 18:23	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-13		Lab ID: 10273601013	Collected: 07/09/14 11:20	Received: 07/10/14 17:15	Matrix: Air			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Acetone	3.7	ug/m3	3.4	1.39		07/23/14 17:57	67-64-1	
Benzene	ND	ug/m3	0.90	1.39		07/23/14 17:57	71-43-2	
Benzyl chloride	ND	ug/m3	1.5	1.39		07/23/14 17:57	100-44-7	
Bromodichloromethane	ND	ug/m3	1.9	1.39		07/23/14 17:57	75-27-4	
Bromoform	ND	ug/m3	2.9	1.39		07/23/14 17:57	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.39		07/23/14 17:57	74-83-9	
1,3-Butadiene	ND	ug/m3	0.63	1.39		07/23/14 17:57	106-99-0	
2-Butanone (MEK)	1.2	ug/m3	0.83	1.39		07/23/14 17:57	78-93-3	
Carbon disulfide	ND	ug/m3	0.88	1.39		07/23/14 17:57	75-15-0	
Carbon tetrachloride	ND	ug/m3	0.89	1.39		07/23/14 17:57	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.39		07/23/14 17:57	108-90-7	
Chloroethane	ND	ug/m3	0.75	1.39		07/23/14 17:57	75-00-3	
Chloroform	1.9	ug/m3	0.69	1.39		07/23/14 17:57	67-66-3	
Chloromethane	ND	ug/m3	0.58	1.39		07/23/14 17:57	74-87-3	
Cyclohexane	ND	ug/m3	2.4	1.39		07/23/14 17:57	110-82-7	
Dibromochloromethane	ND	ug/m3	2.4	1.39		07/23/14 17:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.2	1.39		07/23/14 17:57	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.7	1.39		07/23/14 17:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.7	1.39		07/23/14 17:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.7	1.39		07/23/14 17:57	106-46-7	
Dichlorodifluoromethane	1.9	ug/m3	1.4	1.39		07/23/14 17:57	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.39		07/23/14 17:57	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.57	1.39		07/23/14 17:57	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.39		07/23/14 17:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		07/23/14 17:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		07/23/14 17:57	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.39		07/23/14 17:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.3	1.39		07/23/14 17:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	3.2	1.39		07/23/14 17:57	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.0	1.39		07/23/14 17:57	76-14-2	
Ethanol	1.8	ug/m3	1.3	1.39		07/23/14 17:57	64-17-5	
Ethyl acetate	ND	ug/m3	1.0	1.39		07/23/14 17:57	141-78-6	
Ethylbenzene	1.3	ug/m3	1.2	1.39		07/23/14 17:57	100-41-4	
4-Ethyltoluene	ND	ug/m3	3.5	1.39		07/23/14 17:57	622-96-8	
n-Heptane	ND	ug/m3	1.2	1.39		07/23/14 17:57	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.1	1.39		07/23/14 17:57	87-68-3	
n-Hexane	ND	ug/m3	1.0	1.39		07/23/14 17:57	110-54-3	
2-Hexanone	ND	ug/m3	2.1	1.39		07/23/14 17:57	591-78-6	
Methylene Chloride	ND	ug/m3	4.9	1.39		07/23/14 17:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	1.3	ug/m3	1.2	1.39		07/23/14 17:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	2.5	1.39		07/23/14 17:57	1634-04-4	
Naphthalene	ND	ug/m3	3.7	1.39		07/23/14 17:57	91-20-3	
2-Propanol	ND	ug/m3	1.7	1.39		07/23/14 17:57	67-63-0	
Propylene	ND	ug/m3	0.49	1.39		07/23/14 17:57	115-07-1	
Styrene	ND	ug/m3	1.2	1.39		07/23/14 17:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	0.97	1.39		07/23/14 17:57	79-34-5	
Tetrachloroethene	1.9	ug/m3	0.96	1.39		07/23/14 17:57	127-18-4	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 02-02098

Pace Project No.: 10273601

Sample: VP-13		Lab ID: 10273601013	Collected: 07/09/14 11:20		Received: 07/10/14 17:15		Matrix: Air	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15						
Tetrahydrofuran	ND	ug/m3	2.1	1.39		07/23/14 17:57	109-99-9	
Toluene	1.9	ug/m3	1.1	1.39		07/23/14 17:57	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	2.1	1.39		07/23/14 17:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.39		07/23/14 17:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.76	1.39		07/23/14 17:57	79-00-5	
Trichloroethene	2.3	ug/m3	1.5	1.39		07/23/14 17:57	79-01-6	
Trichlorofluoromethane	3.5	ug/m3	1.6	1.39		07/23/14 17:57	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.2	1.39		07/23/14 17:57	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	6.9	1.39		07/23/14 17:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3.5	1.39		07/23/14 17:57	108-67-8	
Vinyl acetate	ND	ug/m3	2.5	1.39		07/23/14 17:57	108-05-4	
Vinyl chloride	ND	ug/m3	0.36	1.39		07/23/14 17:57	75-01-4	
m&p-Xylene	ND	ug/m3	2.4	1.39		07/23/14 17:57	179601-23-1	
o-Xylene	ND	ug/m3	3.1	1.39		07/23/14 17:57	95-47-6	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098
Pace Project No.: 10273601

QC Batch: AIR/20825 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10273601001, 10273601002, 10273601003, 10273601004, 10273601005, 10273601006, 10273601007, 10273601008, 10273601009

METHOD BLANK: 1737376 Matrix: Air
Associated Lab Samples: 10273601001, 10273601002, 10273601003, 10273601004, 10273601005, 10273601006, 10273601007, 10273601008, 10273601009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	07/19/14 17:53	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	07/19/14 17:53	
1,1,2-Trichloroethane	ug/m3	ND	0.55	07/19/14 17:53	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	07/19/14 17:53	
1,1-Dichloroethane	ug/m3	ND	0.82	07/19/14 17:53	
1,1-Dichloroethene	ug/m3	ND	0.81	07/19/14 17:53	
1,2,4-Trichlorobenzene	ug/m3	ND	1.5	07/19/14 17:53	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	07/19/14 17:53	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	07/19/14 17:53	
1,2-Dichlorobenzene	ug/m3	ND	1.2	07/19/14 17:53	
1,2-Dichloroethane	ug/m3	ND	0.41	07/19/14 17:53	
1,2-Dichloropropane	ug/m3	ND	0.94	07/19/14 17:53	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	07/19/14 17:53	
1,3-Butadiene	ug/m3	ND	0.45	07/19/14 17:53	
1,3-Dichlorobenzene	ug/m3	ND	1.2	07/19/14 17:53	
1,4-Dichlorobenzene	ug/m3	ND	1.2	07/19/14 17:53	
2-Butanone (MEK)	ug/m3	ND	0.60	07/19/14 17:53	
2-Hexanone	ug/m3	ND	1.5	07/19/14 17:53	
2-Propanol	ug/m3	ND	1.2	07/19/14 17:53	
4-Ethyltoluene	ug/m3	ND	1.0	07/19/14 17:53	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	07/19/14 17:53	
Acetone	ug/m3	ND	2.4	07/19/14 17:53	
Benzene	ug/m3	ND	0.65	07/19/14 17:53	
Benzyl chloride	ug/m3	ND	1.0	07/19/14 17:53	
Bromodichloromethane	ug/m3	ND	1.4	07/19/14 17:53	
Bromoform	ug/m3	ND	2.1	07/19/14 17:53	
Bromomethane	ug/m3	ND	0.79	07/19/14 17:53	
Carbon disulfide	ug/m3	ND	0.63	07/19/14 17:53	
Carbon tetrachloride	ug/m3	ND	0.64	07/19/14 17:53	
Chlorobenzene	ug/m3	ND	0.94	07/19/14 17:53	
Chloroethane	ug/m3	ND	0.54	07/19/14 17:53	
Chloroform	ug/m3	ND	0.50	07/19/14 17:53	
Chloromethane	ug/m3	ND	0.42	07/19/14 17:53	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	07/19/14 17:53	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	07/19/14 17:53	
Cyclohexane	ug/m3	ND	0.70	07/19/14 17:53	
Dibromochloromethane	ug/m3	ND	1.7	07/19/14 17:53	
Dichlorodifluoromethane	ug/m3	ND	1.0	07/19/14 17:53	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	07/19/14 17:53	
Ethanol	ug/m3	ND	0.96	07/19/14 17:53	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098
Pace Project No.: 10273601

METHOD BLANK: 1737376

Matrix: Air

Associated Lab Samples: 10273601001, 10273601002, 10273601003, 10273601004, 10273601005, 10273601006, 10273601007, 10273601008, 10273601009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethyl acetate	ug/m3	ND	0.73	07/19/14 17:53	
Ethylbenzene	ug/m3	ND	0.88	07/19/14 17:53	
Hexachloro-1,3-butadiene	ug/m3	ND	5.4	07/19/14 17:53	
m&p-Xylene	ug/m3	ND	1.8	07/19/14 17:53	
Methyl-tert-butyl ether	ug/m3	ND	0.73	07/19/14 17:53	
Methylene Chloride	ug/m3	ND	3.5	07/19/14 17:53	
n-Heptane	ug/m3	ND	0.83	07/19/14 17:53	
n-Hexane	ug/m3	ND	0.72	07/19/14 17:53	
Naphthalene	ug/m3	ND	2.7	07/19/14 17:53	
o-Xylene	ug/m3	ND	0.88	07/19/14 17:53	
Propylene	ug/m3	ND	0.88	07/19/14 17:53	
Styrene	ug/m3	ND	0.87	07/19/14 17:53	
Tetrachloroethene	ug/m3	ND	0.69	07/19/14 17:53	
Tetrahydrofuran	ug/m3	ND	0.60	07/19/14 17:53	
Toluene	ug/m3	ND	0.77	07/19/14 17:53	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	07/19/14 17:53	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	07/19/14 17:53	
Trichloroethene	ug/m3	ND	0.55	07/19/14 17:53	
Trichlorofluoromethane	ug/m3	ND	1.1	07/19/14 17:53	
Vinyl acetate	ug/m3	ND	0.72	07/19/14 17:53	
Vinyl chloride	ug/m3	ND	0.26	07/19/14 17:53	

LABORATORY CONTROL SAMPLE: 1737377

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	52.5	95	72-128	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	70.3	101	72-136	
1,1,2-Trichloroethane	ug/m3	55.5	56.1	101	72-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	81.1	104	68-126	
1,1-Dichloroethane	ug/m3	41.2	44.4	108	68-128	
1,1-Dichloroethene	ug/m3	40.3	44.9	111	68-130	
1,2,4-Trichlorobenzene	ug/m3	75.5	74.6	99	30-150	
1,2,4-Trimethylbenzene	ug/m3	50	60.1	120	71-140	
1,2-Dibromoethane (EDB)	ug/m3	78.1	85.7	110	73-136	
1,2-Dichlorobenzene	ug/m3	61.2	60.8	99	63-150	
1,2-Dichloroethane	ug/m3	41.2	41.9	102	71-132	
1,2-Dichloropropane	ug/m3	47	52.3	111	72-130	
1,3,5-Trimethylbenzene	ug/m3	50	59.3	119	73-136	
1,3-Butadiene	ug/m3	22.5	24.9	110	72-130	
1,3-Dichlorobenzene	ug/m3	61.2	62.3	102	69-142	
1,4-Dichlorobenzene	ug/m3	61.2	62.5	102	65-142	
2-Butanone (MEK)	ug/m3	30	29.5	98	71-135	
2-Hexanone	ug/m3	41.7	43.1	103	75-133	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098

Pace Project No.: 10273601

LABORATORY CONTROL SAMPLE: 1737377

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Propanol	ug/m3	25	18.2	73	68-135	
4-Ethyltoluene	ug/m3	50	60.8	122	73-134	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.7	50.1	120	72-137	
Acetone	ug/m3	24.2	22.1	91	68-136	
Benzene	ug/m3	32.5	33.8	104	69-134	
Benzyl chloride	ug/m3	52.5	54.5	104	71-136	
Bromodichloromethane	ug/m3	68.2	71.0	104	74-129	
Bromoform	ug/m3	105	106	101	69-138	
Bromomethane	ug/m3	39.5	45.4	115	68-127	
Carbon disulfide	ug/m3	31.7	29.6	93	68-130	
Carbon tetrachloride	ug/m3	64	62.5	98	66-134	
Chlorobenzene	ug/m3	46.8	48.3	103	72-137	
Chloroethane	ug/m3	26.8	24.9	93	69-128	
Chloroform	ug/m3	49.7	49.6	100	72-127	
Chloromethane	ug/m3	21	23.0	110	69-125	
cis-1,2-Dichloroethene	ug/m3	40.3	45.8	114	71-135	
cis-1,3-Dichloropropene	ug/m3	46.2	52.2	113	74-134	
Cyclohexane	ug/m3	35	34.0	97	72-130	
Dibromochloromethane	ug/m3	86.6	90.1	104	73-133	
Dichlorodifluoromethane	ug/m3	50.3	50.6	101	69-125	
Dichlorotetrafluoroethane	ug/m3	71.1	74.7	105	68-128	
Ethanol	ug/m3	19.2	20.0	104	70-134	
Ethyl acetate	ug/m3	36.6	39.6	108	71-134	
Ethylbenzene	ug/m3	44.2	49.2	111	73-139	
Hexachloro-1,3-butadiene	ug/m3	108	107	99	30-150	
m&p-Xylene	ug/m3	44.2	53.7	122	73-139	
Methyl-tert-butyl ether	ug/m3	36.7	43.4	118	72-132	
Methylene Chloride	ug/m3	35.3	33.8	96	64-134	
n-Heptane	ug/m3	41.7	44.5	107	70-130	
n-Hexane	ug/m3	35.8	35.1	98	69-128	
Naphthalene	ug/m3	53.3	48.8	92	61-150	
o-Xylene	ug/m3	44.2	55.9	126	71-138	
Propylene	ug/m3	17.5	17.1	97	69-133	
Styrene	ug/m3	43.3	42.7	99	74-136	
Tetrachloroethene	ug/m3	69	60.7	88	69-136	
Tetrahydrofuran	ug/m3	30	32.0	107	73-131	
Toluene	ug/m3	38.3	37.6	98	67-133	
trans-1,2-Dichloroethene	ug/m3	40.3	43.8	109	70-131	
trans-1,3-Dichloropropene	ug/m3	46.2	52.2	113	72-135	
Trichloroethene	ug/m3	54.6	54.5	100	70-135	
Trichlorofluoromethane	ug/m3	57.1	57.8	101	67-125	
Vinyl acetate	ug/m3	35.8	41.9	117	72-133	
Vinyl chloride	ug/m3	26	28.6	110	69-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098

Pace Project No.: 10273601

SAMPLE DUPLICATE: 1737901

Parameter	Units	10273826001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	6.2	7.6	21	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	2.2J		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	8.2	7.2	13	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	ND	ND		25	
4-Ethyltoluene	ug/m3	ND	1.7J		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	1.5J		25	
Acetone	ug/m3	23.6	23.8	1	25	
Benzene	ug/m3	ND	1.2J		25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	1.9	2.1	8	25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	2.7	2.9	6	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	10.3	12.5	20	25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	3.1	3.4	10	25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	14.8	14.8	0	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	17.6	19.7	11	25	
n-Heptane	ug/m3	5.1	6.2	19	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098

Pace Project No.: 10273601

SAMPLE DUPLICATE: 1737901

Parameter	Units	10273826001 Result	Dup Result	RPD	Max RPD	Qualifiers
n-Hexane	ug/m3	4.5	4.6	3	25	
Naphthalene	ug/m3	ND	3.6J		25	
o-Xylene	ug/m3	4.7	4.7	2	25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	3.4	3.3	6	25	
Tetrachloroethene	ug/m3	2.8	2.6	6	25	
Tetrahydrofuran	ug/m3	ND	ND		25	
Toluene	ug/m3	57.3	59.4	4	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	3.3	3.5	8	25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

SAMPLE DUPLICATE: 1737902

Parameter	Units	10273211001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	1.6J		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	ND	2.2J		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	ND	ND		25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	ND	ND		25	
4-Ethyltoluene	ug/m3	ND	ND		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	21.2	21.1	0	25	
Benzene	ug/m3	ND	1.6J		25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098

Pace Project No.: 10273601

SAMPLE DUPLICATE: 1737902

Parameter	Units	10273211001 Result	Dup Result	RPD	Max RPD	Qualifiers
Carbon disulfide	ug/m3	5.5	5.7	2	25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	9.7	10.8	11	25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	ND	3.1J		25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	22.4	20.7	8	25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	ND	ND		25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	ND	3.5J		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	179	181	1	25	
n-Heptane	ug/m3	51.0	49.2	3	25	
n-Hexane	ug/m3	32.6	34.0	4	25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	ND	ND		25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	2.3	2.2	5	25	
Tetrahydrofuran	ug/m3	ND	ND		25	
Toluene	ug/m3	6.9	6.8	0	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	21.1	20.5	3	25	
Trichlorofluoromethane	ug/m3	ND	ND		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098
Pace Project No.: 10273601

QC Batch: AIR/20858 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10273601010, 10273601011, 10273601012, 10273601013

METHOD BLANK: 1740592 Matrix: Air
Associated Lab Samples: 10273601010, 10273601011, 10273601012, 10273601013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	07/23/14 14:39	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	07/23/14 14:39	
1,1,2-Trichloroethane	ug/m3	ND	0.55	07/23/14 14:39	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	07/23/14 14:39	
1,1-Dichloroethane	ug/m3	ND	0.82	07/23/14 14:39	
1,1-Dichloroethene	ug/m3	ND	0.81	07/23/14 14:39	
1,2,4-Trichlorobenzene	ug/m3	ND	1.5	07/23/14 14:39	
1,2,4-Trimethylbenzene	ug/m3	ND	5.0	07/23/14 14:39	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	07/23/14 14:39	
1,2-Dichlorobenzene	ug/m3	ND	1.2	07/23/14 14:39	
1,2-Dichloroethane	ug/m3	ND	0.41	07/23/14 14:39	
1,2-Dichloropropane	ug/m3	ND	0.94	07/23/14 14:39	
1,3,5-Trimethylbenzene	ug/m3	ND	2.5	07/23/14 14:39	
1,3-Butadiene	ug/m3	ND	0.45	07/23/14 14:39	
1,3-Dichlorobenzene	ug/m3	ND	1.2	07/23/14 14:39	
1,4-Dichlorobenzene	ug/m3	ND	1.2	07/23/14 14:39	
2-Butanone (MEK)	ug/m3	ND	0.60	07/23/14 14:39	
2-Hexanone	ug/m3	ND	1.5	07/23/14 14:39	
2-Propanol	ug/m3	ND	1.2	07/23/14 14:39	
4-Ethyltoluene	ug/m3	ND	2.5	07/23/14 14:39	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	07/23/14 14:39	
Acetone	ug/m3	ND	2.4	07/23/14 14:39	
Benzene	ug/m3	ND	0.65	07/23/14 14:39	
Benzyl chloride	ug/m3	ND	1.0	07/23/14 14:39	
Bromodichloromethane	ug/m3	ND	1.4	07/23/14 14:39	
Bromoform	ug/m3	ND	2.1	07/23/14 14:39	
Bromomethane	ug/m3	ND	0.79	07/23/14 14:39	
Carbon disulfide	ug/m3	ND	0.63	07/23/14 14:39	
Carbon tetrachloride	ug/m3	ND	0.64	07/23/14 14:39	
Chlorobenzene	ug/m3	ND	0.94	07/23/14 14:39	
Chloroethane	ug/m3	ND	0.54	07/23/14 14:39	
Chloroform	ug/m3	ND	0.50	07/23/14 14:39	
Chloromethane	ug/m3	ND	0.42	07/23/14 14:39	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	07/23/14 14:39	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	07/23/14 14:39	
Cyclohexane	ug/m3	ND	1.7	07/23/14 14:39	
Dibromochloromethane	ug/m3	ND	1.7	07/23/14 14:39	
Dichlorodifluoromethane	ug/m3	ND	1.0	07/23/14 14:39	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	07/23/14 14:39	
Ethanol	ug/m3	ND	0.96	07/23/14 14:39	
Ethyl acetate	ug/m3	ND	0.73	07/23/14 14:39	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098
Pace Project No.: 10273601

METHOD BLANK: 1740592 Matrix: Air
Associated Lab Samples: 10273601010, 10273601011, 10273601012, 10273601013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	ND	0.88	07/23/14 14:39	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	07/23/14 14:39	
m&p-Xylene	ug/m3	ND	1.8	07/23/14 14:39	
Methyl-tert-butyl ether	ug/m3	ND	1.8	07/23/14 14:39	
Methylene Chloride	ug/m3	ND	3.5	07/23/14 14:39	
n-Heptane	ug/m3	ND	0.83	07/23/14 14:39	
n-Hexane	ug/m3	ND	0.72	07/23/14 14:39	
Naphthalene	ug/m3	ND	2.7	07/23/14 14:39	
o-Xylene	ug/m3	ND	2.2	07/23/14 14:39	
Propylene	ug/m3	ND	0.35	07/23/14 14:39	
Styrene	ug/m3	ND	0.87	07/23/14 14:39	
Tetrachloroethene	ug/m3	ND	0.69	07/23/14 14:39	
Tetrahydrofuran	ug/m3	ND	1.5	07/23/14 14:39	
Toluene	ug/m3	ND	0.77	07/23/14 14:39	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	07/23/14 14:39	
trans-1,3-Dichloropropene	ug/m3	ND	2.3	07/23/14 14:39	
Trichloroethene	ug/m3	ND	1.1	07/23/14 14:39	
Trichlorofluoromethane	ug/m3	ND	1.1	07/23/14 14:39	
Vinyl acetate	ug/m3	ND	1.8	07/23/14 14:39	
Vinyl chloride	ug/m3	ND	0.26	07/23/14 14:39	

LABORATORY CONTROL SAMPLE: 1740593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	63.8	115	72-128	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	65.0	93	72-136	
1,1,2-Trichloroethane	ug/m3	55.5	57.0	103	72-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	82.6	106	68-126	
1,1-Dichloroethane	ug/m3	41.2	46.8	114	68-128	
1,1-Dichloroethene	ug/m3	40.3	44.7	111	68-130	
1,2,4-Trichlorobenzene	ug/m3	75.5	65.7	87	30-150	
1,2,4-Trimethylbenzene	ug/m3	50	49.7	99	71-140	
1,2-Dibromoethane (EDB)	ug/m3	78.1	78.9	101	73-136	
1,2-Dichlorobenzene	ug/m3	61.2	65.6	107	63-150	
1,2-Dichloroethane	ug/m3	41.2	45.3	110	71-132	
1,2-Dichloropropane	ug/m3	47	54.6	116	72-130	
1,3,5-Trimethylbenzene	ug/m3	50	49.4	99	73-136	
1,3-Butadiene	ug/m3	22.5	26.2	116	72-130	
1,3-Dichlorobenzene	ug/m3	61.2	66.7	109	69-142	
1,4-Dichlorobenzene	ug/m3	61.2	64.0	105	65-142	
2-Butanone (MEK)	ug/m3	30	32.6	109	71-135	
2-Hexanone	ug/m3	41.7	41.2	99	75-133	
2-Propanol	ug/m3	25	26.8	107	68-135	
4-Ethyltoluene	ug/m3	50	49.9	100	73-134	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: 02-02098

Pace Project No.: 10273601

LABORATORY CONTROL SAMPLE: 1740593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	41.7	42.4	102	72-137	
Acetone	ug/m3	24.2	21.8	90	68-136	
Benzene	ug/m3	32.5	33.8	104	69-134	
Benzyl chloride	ug/m3	52.5	62.2	118	71-136	
Bromodichloromethane	ug/m3	68.2	78.6	115	74-129	
Bromoform	ug/m3	105	102	97	69-138	
Bromomethane	ug/m3	39.5	42.9	109	68-127	
Carbon disulfide	ug/m3	31.7	36.4	115	68-130	
Carbon tetrachloride	ug/m3	64	71.1	111	66-134	
Chlorobenzene	ug/m3	46.8	51.9	111	72-137	
Chloroethane	ug/m3	26.8	30.7	115	69-128	
Chloroform	ug/m3	49.7	53.4	108	72-127	
Chloromethane	ug/m3	21	22.1	105	69-125	
cis-1,2-Dichloroethene	ug/m3	40.3	48.2	119	71-135	
cis-1,3-Dichloropropene	ug/m3	46.2	47.0	102	74-134	
Cyclohexane	ug/m3	35	38.5	110	72-130	
Dibromochloromethane	ug/m3	86.6	104	120	73-133	
Dichlorodifluoromethane	ug/m3	50.3	57.5	114	69-125	
Dichlorotetrafluoroethane	ug/m3	71.1	79.1	111	68-128	
Ethanol	ug/m3	19.2	21.6	113	70-134	
Ethyl acetate	ug/m3	36.6	44.9	122	71-134	
Ethylbenzene	ug/m3	44.2	43.3	98	73-139	
Hexachloro-1,3-butadiene	ug/m3	108	102	94	30-150	
m&p-Xylene	ug/m3	44.2	43.8	99	73-139	
Methyl-tert-butyl ether	ug/m3	36.7	38.4	105	72-132	
Methylene Chloride	ug/m3	35.3	31.7	90	64-134	
n-Heptane	ug/m3	41.7	43.0	103	70-130	
n-Hexane	ug/m3	35.8	42.1	117	69-128	
Naphthalene	ug/m3	53.3	51.7	97	61-150	
o-Xylene	ug/m3	44.2	50.7	115	71-138	
Propylene	ug/m3	17.5	18.2	104	69-133	
Styrene	ug/m3	43.3	43.4	100	74-136	
Tetrachloroethene	ug/m3	69	67.6	98	69-136	
Tetrahydrofuran	ug/m3	30	29.7	99	73-131	
Toluene	ug/m3	38.3	42.9	112	67-133	
trans-1,2-Dichloroethene	ug/m3	40.3	46.6	116	70-131	
trans-1,3-Dichloropropene	ug/m3	46.2	47.3	103	72-135	
Trichloroethene	ug/m3	54.6	54.8	100	70-135	
Trichlorofluoromethane	ug/m3	57.1	60.7	106	67-125	
Vinyl acetate	ug/m3	35.8	36.1	101	72-133	
Vinyl chloride	ug/m3	26	27.7	106	69-132	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALIFIERS

Project: 02-02098
Pace Project No.: 10273601

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 10273601001

[1] The Total Hydrocarbon (THC) pattern occurred in the first half of the chromatogram (before toluene).

Sample: 10273601002

[1] The Total Hydrocarbon (THC) pattern occurred in the first half of the chromatogram (before toluene).

Sample: 10273601003

[1] The Total Hydrocarbon (THC) pattern is evenly distributed throughout the chromatogram (before and after toluene).

Sample: 10273601004

[1] The Total Hydrocarbon (THC) pattern is evenly distributed throughout the chromatogram (before and after toluene).

Sample: 10273601005

[1] The Total Hydrocarbon (THC) pattern is evenly distributed throughout the chromatogram (before and after toluene).

Sample: 10273601006

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

Sample: 10273601007

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

Sample: 10273601008

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

Sample: 10273601009

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

Sample: 10273601010

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALIFIERS

Project: 02-02098

Pace Project No.: 10273601

SAMPLE QUALIFIERS

Sample: 10273601011

[1] The Total Hydrocarbon (THC) pattern occurred in the first half of the chromatogram (before toluene).

Sample: 10273601012

[1] The Total Hydrocarbon (THC) pattern occurred in the first half of the chromatogram (before toluene).

Sample: 10273601013

[1] The Total Hydrocarbon (THC) pattern occurred in the second half of the chromatogram (after toluene).

ANALYTE QUALIFIERS

A3 The sample was analyzed by serial dilution.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 02-02098

Pace Project No.: 10273601

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10273601001	VP-10	TO-15	AIR/20825		
10273601002	VP-9	TO-15	AIR/20825		
10273601003	VP-7	TO-15	AIR/20825		
10273601004	VP-12	TO-15	AIR/20825		
10273601005	VP-8	TO-15	AIR/20825		
10273601006	VP-11	TO-15	AIR/20825		
10273601007	VP-3	TO-15	AIR/20825		
10273601008	VP-4	TO-15	AIR/20825		
10273601009	VP-1	TO-15	AIR/20825		
10273601010	VP-2	TO-15	AIR/20858		
10273601011	VP-6	TO-15	AIR/20858		
10273601012	VP-5	TO-15	AIR/20858		
10273601013	VP-13	TO-15	AIR/20858		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

10273601

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



Section A Required Client Information: Company: AET Address: 555 Cleveland Ave St. Paul, MN Email To: chimmerman@paceanalytical.com Phone: 651-659-9001 Requested Due Date/TAT: _____

Section B Required Project Information: Report To: CPederson Copy To: chimmerman Purchase Order No.: _____ Project Name: 02-02098 Project Number: _____

Section C Invoice Information: Attention: _____ Company Name: _____ Address: _____ Pace Quote Reference: _____ Pace Project Manager/Sales Rep. _____ Pace Profile #: _____

18641 Page: 1 of 2

Program: UST Superfund Emissions Clean Air Act Voluntary Clean Up Dry Clean RCRA Other _____

Location of Sampling by State: MN Reporting Units: ug/m³ ppbv ppmv Other: _____

Report Level: II. ___ III. ___ IV. ___ Other: _____

ITEM #	Section D Required Client Information AIR SAMPLE ID Sample IDs MUST BE UNIQUE	Valid Media Codes MEDIA CODE Tedlar Bag TS 1 Liter Summa Can 1LC 6 Liter Summa Can 6LC Low Volume Puff LVP High Volume Puff HVP Other PWTG	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method:	Pace Lab ID
			DATE	TIME						
1	VP-10	1LC 1.4	7/8/14	1220	24	0	2392		PM10	001
2	VP-9	1LC 1.5	7/8/14	1010	23	0	2508		TO-15 Short List*	002
3	VP-7	1LC 1.1	7/7/14	1350	25	0	2223		TO-14	003
4	VP-12	1LC 1.0	7/8/14	1450	25	0	2518		TO-13 (PMH)	004
5	VP-8	1LC 1.0	7/8/14	0840	24	0	2540		TO-4 (CBS)	005
6	VP-11	1LC 1.1	7/8/14	1300	25	0	2516		TO-3M (Methane)	006
7	VP-3	1LC 0.8	7/9/14	1045	25	0	2541		TO-3	007
8	VP-4	1LC 0.7	7/9/14	1055	24	0	2247		3C Fixed Gas (%)	008
9	VP-1	1LC 0.5	7/9/14	1010	25	0	2253		TO-15	009
10	VP-2	1LC 0.7	7/9/14	1030	26	0	2542		TO-15	010
11	VP-6	1LC 0.5	7/9/14	1200	24	0	2538		TO-15	011
12	VP-5	1LC 0.3	7/9/14	1150	24	0	2201		TO-15	012

Comments: _____

RELINQUISHED BY / AFFILIATION: Calista Timmerman AET DATE: 7/14/14 TIME: _____

ACCEPTED BY / AFFILIATION: 40/Pace DATE: 7-10-14 TIME: 1715

Temp in °C: _____ Received on Ice: Y/N _____ Sealed Cooler: Y/N _____ Samples Intact: Y/N _____

SAMPLER NAME AND SIGNATURE: Calista Timmerman DATE SIGNED (MM/DD/YY): 07/16/14

PRINT Name of SAMPLER: _____ SIGNATURE of SAMPLER: _____

ORIGINAL

10273601



AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: **AET** Address: **550 Cleveland Ave N ST Paul, MN** Email To: **chimmerman, chiller, @amerystest.com** Phone: **612-388-3888** Requested Due Date/TAT: **18781** Page: **2 of 2**

Section B Required Project Information: Report To: **cpederson** Copy To: **chimmerman, chiller, @amerystest.com** Purchase Order No.: Project Name: Project Number: **02-02098**

Section C Invoice Information: Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager/Sales Rep. Pace Profile #:

Program: UST Superfund Emissions Clean Air Act Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: Reporting Units: ug/m³ m/m³ ppmV Other

Report Level: I. ___ II. ___ III. ___ IV. ___ Other

ITEM #	Valid Media Codes		MEDIA CODE	PD Reading (Client only)	COLLECTED		Summa Can Number	Flow Control Number	Method:
	TECHNICAL	COMPOSITE			DATE	TIME			
1	VP-13	660371914	1120			300	809		3C-Fixed Gas (%)
2									TO-15
3									TO-14
4									TO-13 (PAH)
5									TO-14 (PCBs)
6									TO-4 (Methane)
7									TO-3
8									3C-Fixed Gas (%)
9									PM10
10									TO-15 Short List*
11									TO-15
12									TO-15 Short List*

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
<i>Calista Timmerman</i>	7-10-14	1715	<i>KO Pace</i>	7-10-14	1715	Temp in °C: <input type="checkbox"/> Received on Ice: <input type="checkbox"/> Custody Sealed Cooler: <input type="checkbox"/> Samples Intact: <input type="checkbox"/>

SAMPLER NAME AND SIGNATURE: *Calista Timmerman*
 PRINT Name of SAMPLER: **Calista Timmerman**
 SIGNATURE of SAMPLER: *Calista Timmerman*
 DATE Signed (MM/DD/YY): **07/10/14**

ORIGINAL

Air Sample Condition Upon Receipt

Client Name: AET **Project #:** _____

WO#: 10273601

10273601

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Tracking Number: _____

Custody Seal on Cooler/Box Present? Yes No **Seals Intact?** Yes No

Packing Material: Bubble Wrap Bubble Bags Foam None Other: _____ **Temp Blank rec:** Yes No

Temp. (TO17 and TO13 samples only) (°C): _____ **Corrected Temp (°C):** _____ **Thermom. Used:** B88A912167504 72337080
 B88A9132521491 80512447

Temp should be above freezing to 6°C **Correction Factor:** _____ **Date & Initials of Person Examining Contents:** 7/11/14

Type of ice Received Blue Wet None

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Media: <u>air can</u>				11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	12.

Samples Received: <u>rec. 12 gauges</u>					
Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
<u>VP-10</u>	<u>2397</u>	<u>VP-6</u>	<u>2538</u>		
<u>VP-9</u>	<u>2508</u>	<u>VP-5</u>	<u>2201</u>		
<u>VP-7</u>	<u>2223</u>	<u>VP-13</u>	<u>0809</u>		
<u>VP-12</u>	<u>2518</u>				
<u>VP-8</u>	<u>2540</u>				
<u>VP-11</u>	<u>2516</u>				
<u>VP-3</u>	<u>2541</u>				
<u>VP-4</u>	<u>2247</u>				
<u>VP-1</u>	<u>2253</u>				
<u>VP-2</u>	<u>2542</u>				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** Yes No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: [Signature] **Date:** 7/11/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)