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14 November 2006

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Remedial Project Manager (SR-6J)
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

RFW Work Order No. 13471.003.001
TRONOX Work Order No. 40-50-01-AKW-AE

Re: 3rd Quarter 2006 Groundwater Monitoring Report
Moss-American Site, Milwaukee, WI

Dear Mr. Hart:

Enclosed is the groundwater monitoring report for the 3rd quarter of 2006. Should you have any questions or comments, please contact me at (847) 918-4142 or Keith Watson at (405) 775-5475.

Very truly yours,

WESTON SOLUTIONS, INC.

Thomas P. Graan, Ph.D.
Principal Project Manager

TPG\tg

cc: T. Wentland, WDNR
K. Watson, KMC



11-14-2006

**QUARTERLY GROUNDWATER TREATMENT
PERFORMANCE MONITORING REPORT
Q3 2006
MOSS-AMERICAN SITE
MILWAUKEE, WISCONSIN**

Prepared for

TRONOX, LLC
123 Robert S. Kerr Avenue
Oklahoma City, OK 73102

Prepared by

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Vernon Hills, IL 60061

November 2006

W. O. No. 13741.003.001.0020

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September 2006 Groundwater Sample Analytical Results

SECTION 1

INTRODUCTION

In accordance with paragraph 4a of the Remedial Design/Remedial Action Statement of Work (RD/RA SOW), Tronox LLC (TRONOX), formerly known as Kerr-McGee Chemical, LLC, is required to implement a groundwater monitoring program capable of detecting changes in chemical concentrations in the groundwater. TRONOX has directed Weston Solutions, Inc. (WESTON®) to perform this work. As previously agreed, the monitoring network currently includes seven shallow groundwater monitoring wells (MW-5S, MW-6S, MW-7S, MW-9S, MW-27S, MW-28S, and MW-29S). Additionally, the quarterly groundwater monitoring program includes sampling of the eight containment performance monitoring wells (MW-30S, MW-31S, MW-32S, MW-33S, MW-34S, MW-35S, MW-36S and MW-37S), which are screened in the shallow groundwater-bearing unit underlying the site. Nine piezometer wells (PZ-01, PZ-02, PZ-03, PZ-04, PZ-05, PZ-06, PZ-07, PZ-09, and PZ-10) and one staff gauge (SG-01) were installed in December 2002 to monitor groundwater movement. The locations of piezometers, the staff gauge, and the groundwater-monitoring wells that are included in the quarterly sampling program are indicated on Figure 1-1.

In addition to the on-site groundwater monitoring wells, four shallow groundwater monitoring wells (MW-A, MW-B, MW-C and MW-D) were installed in September 2003 to monitor groundwater conditions between old and new river channels in the Reach 1. These four wells are sampled annually (during Q3 sampling events) in accordance with the annual groundwater monitoring program for the Reach 1 area.

In December 2004, seven additional shallow groundwater monitoring wells (MW-E, MW-F, MW-G, MW-H, MW-I, MW-J and MW-K) were installed to monitor groundwater conditions between old and new river channels in the Reaches 2 and 3. These seven wells are sampled annually (during Q3 sampling events) in accordance with the annual groundwater monitoring program for the Reaches 2 and 3.

Some wells that were previously part of the groundwater-monitoring network have been removed to facilitate soil remediation activities. TW-09, MW-8S, and MW-8I were removed during excavation activities and installation of the funnel-and-gate groundwater treatment system in 1999. Wells MW-4S and MW-4I were removed during early Q3 2001, and well TW-05 was removed in early Q4 2001 during the “hot spot” soil excavation and treatment process. Wells MW-20S and MW-20I were removed during Q3 2002 when the Little Menomonee River (LMR) diversion work took place.

As discussed in the Q2 2002 Quarterly Groundwater Treatment Performance Monitoring Report, some modifications were made to the sampling program. The first modification was the reduction of performance monitoring well sampling frequency. The treatment performance monitoring wells were originally sampled on a monthly basis, but sample data showed that minimal changes in site conditions were found on a monthly basis. Therefore a change in sampling frequency from monthly to quarterly was recommended. This recommendation was approved by the Wisconsin Department of Natural Resources (WDNR) and the United States Environmental Protection Agency (collectively “Agencies”) and the monthly sampling program was discontinued after the October 2002 sampling event. The second modification was the reduction of the groundwater monitoring program scope. It was proposed that some shallow monitoring wells (MW-3S, MW-10S, MW-13S, MW-25S, MW-26S, and MW-20S) and intermediate monitoring wells (MW-3I, MW-7I, MW-9I, and MW-20I) be removed from the groundwater monitoring program due to zero or few sample detections in these wells. The Agencies approved this recommendation, and the sampling of these wells was discontinued after the September (Q3) 2002 sampling event; however, per the Agencies’ request, these wells were not abandoned, with the exception of MW-20S and MW-20I abandoned during LMR diversion. Instead these wells are utilized to collect water level measurements for the production of more accurate quarterly groundwater potentiometric maps.

The Quality Assurance Project Plan for Installation of Groundwater Remedial System (QAPP) (WESTON, October 1999) requires TRONOX to implement a groundwater monitoring program capable of indicating groundwater chemistry before, during, and after treatment. In addition, the hydraulic gradient is calculated at each treatment gate and is used to estimate groundwater flow

velocity through the treatment gate remediation system. The monitoring network includes six groundwater treatment gates (TG1 through TG6) with three treatment performance monitoring wells located at each groundwater treatment gate. The treatment performance monitoring wells include TG1-1, TG1-2, TG1-3, TG2-1, TG2-2, TG2-3, TG3-1, TG3-2, TG3-3, TG4-1, TG4-2, TG4-3, TG5-1, TG5-2, TG5-3, TG6-1, TG6-2, and TG6-3. The locations of the treatment performance monitoring wells are indicated on Figure 1-1.

In accordance with paragraph 4a (i) of the RD/RA SOW, the quarterly field measurement and analysis of groundwater samples collected from the shallow and containment performance groundwater monitoring wells include groundwater elevation, pH, temperature, turbidity, specific conductance, oxidation-reduction (redox) potential, and dissolved oxygen (DO). Required laboratory analyses include benzene, toluene, ethylbenzene, and xylene (BTEX collectively) and the following polynuclear aromatic hydrocarbon (PAH) compounds: acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.

In accordance with Addendum No. 1 to the QAPP (WESTON, May 2001), the quarterly field measurements for samples collected from the treatment performance monitoring wells include groundwater elevation, pH, temperature, turbidity, specific conductance, redox potential, and DO. Quarterly laboratory analyses required for the treatment performance wells include microbial enumeration, nitrate-nitrogen ($\text{NO}_3\text{-N}$), nitrite-nitrogen ($\text{NO}_2\text{-N}$), total Kjeldahl nitrogen (TKN), ammonia-nitrogen ($\text{NH}_3\text{-N}$), total phosphate-phosphorous ($\text{PO}_4\text{-P}$), orthophosphate (ORP), biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), BTEX, and the PAHs indicated in the above paragraph.

LEGEND

- CABLE FENCE
- ▣ CATCH BASIN
- ⊠ HYDRANT
- ⊠ SIGN
- ▣ FREE PRODUCT COLLECTION SUMP
- UTILITY POLE
- SAMPLING MANHOLE
- MONITORING WELL
- INJECTION WELL
- - - CURRENT RIVER CHANNEL
- - - FORMER RIVER CHANNEL
- ⊕ PIEZOMETER

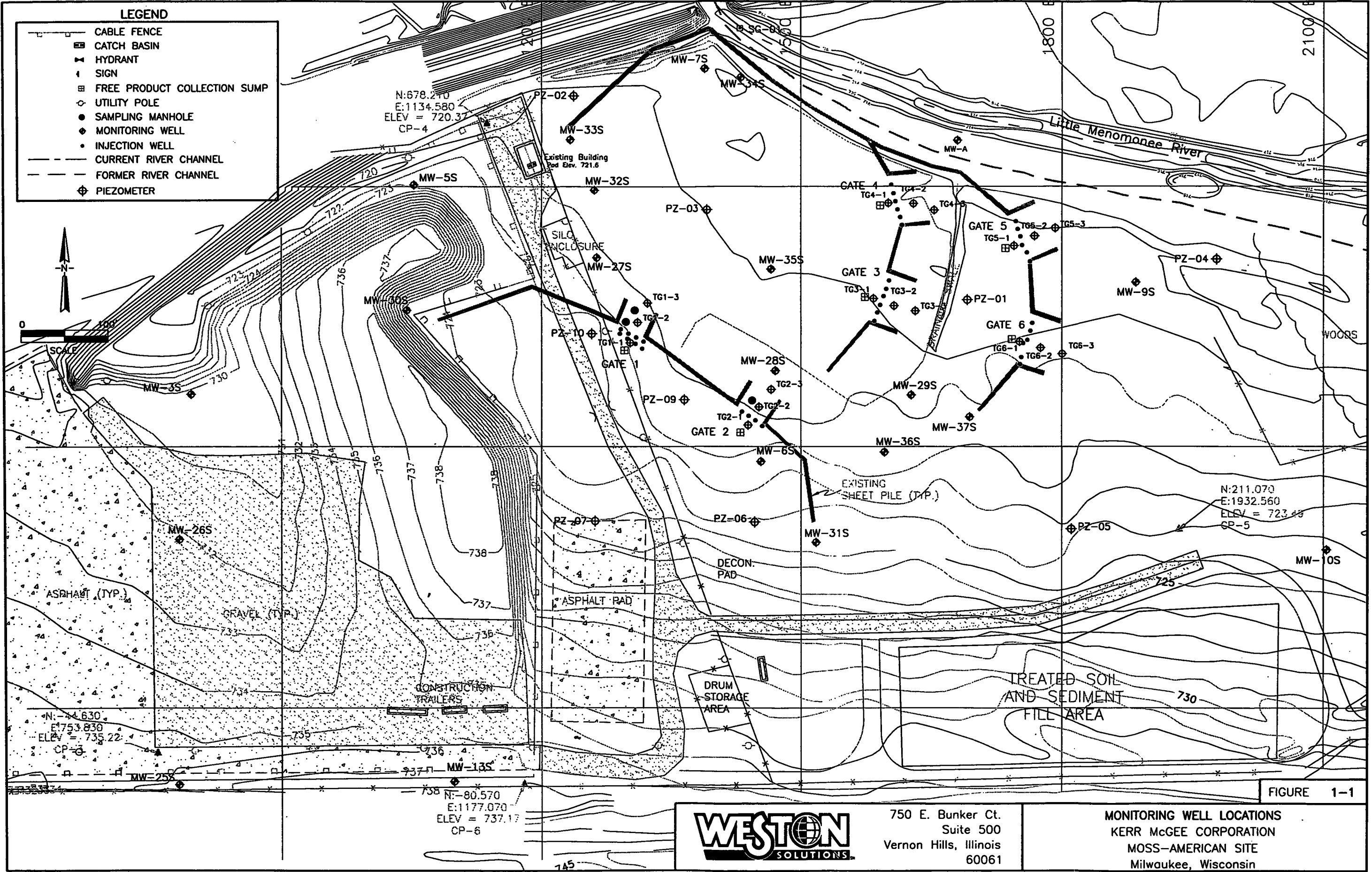


FIGURE 1-1



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MONITORING WELL LOCATIONS
KERR MCGEE CORPORATION
MOSS-AMERICAN SITE
Milwaukee, Wisconsin

N:\C-29\A\090\00.003.dwg, 9/19/2006 10:07:52 -M

SECTION 2

ON-SITE GROUNDWATER MONITORING RESULTS

The Q3 2006 groundwater-monitoring event at the Moss-American site was completed between 18 and 21 September 2006. Tasks completed during the field effort for this event included the collection of groundwater elevation and DO data from the shallow groundwater monitoring, containment performance monitoring, and treatment performance monitoring wells referenced in Section 1. Groundwater elevation measurements were also collected from the 11 additional monitoring wells located along Reaches 1 through 3. Following groundwater elevation and DO measurements, groundwater samples were collected from the shallow, containment performance, treatment performance, and additional groundwater monitoring wells. The results of the Q3 2006 groundwater sampling event are described in the following subsections.

2.1 GROUNDWATER ELEVATION MEASUREMENTS

Depth to water measurements in each of the shallow groundwater monitoring wells, containment performance monitoring wells, treatment performance monitoring wells, additional monitoring wells, and piezometers were made on 18 September 2006. These measurements were used to determine the elevation of the potentiometric surface within the shallow groundwater-bearing zone underlying the site. The water level measurements for the shallow groundwater monitoring and containment performance monitoring wells and calculated elevations are presented in Table 2-1. The groundwater level measurements and corresponding groundwater elevations, calculated hydraulic gradients across the treatment gates, and estimated groundwater flow velocities through the treatment gates are presented in Table 2-2. The groundwater levels for the piezometers are presented in Table 2-3. The staff gauge that was damaged between the Q1 and Q2 2005 sampling events is still awaiting repair and was not read in Q3 2006. Figure 2-1 presents a potentiometric surface map of the shallow groundwater-bearing zone, based on the September 2006 data. Figure 2-2 presents the groundwater potentiometric surface elevations during Q2 2006. An evaluation of the Q3 2006 potentiometric surface map is presented below.

As shown in Figure 2-1, the groundwater within the shallow groundwater-bearing zone generally flows northeastward toward the LMR. In the topographically higher (western) portion of the site, the horizontal hydraulic gradient is relatively steep, at approximately 0.028 feet per foot (ft/ft) to

the northeast, as measured from the vicinity of MW-13S to PZ-06. The topography of the site levels out near the river, as does the potentiometric surface with a northerly hydraulic gradient of approximately 0.014 ft/ft, as measured from the vicinity of PZ-05 to the vicinity of MW-9S. The estimated hydraulic gradients within the treatment gates ranged from 0.0006 to 0.0016 ft/ft (Table 2-2). The hydraulic gradient is relatively flat within the treatment gate area with an overall hydraulic gradient from TG1 to TG5 of approximately 0.0017 ft/ft in an easterly direction.

The average velocity of groundwater flow within the shallow water-bearing zone can be calculated using the following equation:

$$v = Ki/n$$

where:

v = groundwater velocity

K = hydraulic conductivity (also referred to as the coefficient of permeability)

i = hydraulic gradient

n = porosity

Based on slug tests performed on wells installed during the remedial investigation (RI), the hydraulic conductivity of the deposits located on the topographically higher, western portion of the site were in the range of 1×10^{-5} to 1×10^{-6} centimeters per second (cm/s) (0.03 to 0.003 feet per day [ft/day]). Based on laboratory-performed hydraulic conductivity analyses conducted on material used to backfill areas of the site located along the LMR, the hydraulic conductivity of soils located in the topographically lower portion of the site within the funnel-and-gate remedial system is approximately 1×10^{-3} cm/s (3 ft/day). Using a hydraulic gradient of 0.028 ft/ft, an assumed effective porosity of 0.3, and a hydraulic conductivity of 0.03 ft/day, the groundwater flow velocity in the western portion of the site is calculated to be approximately 0.0028 ft/day. Near the river, using a hydraulic gradient of 0.014 ft/ft, a porosity of 0.3, and a hydraulic conductivity of 3 ft/day, the velocity of groundwater flow is calculated to be approximately 0.14 ft/day. The groundwater flow velocities within the treatment gates are estimated to range from 0.0057 to 0.015 ft/day. The groundwater flow velocity through each treatment gate is presented in Table 2-2.

2.2 GROUNDWATER SAMPLE ANALYTICAL RESULTS

Groundwater samples were collected from a total of 33 shallow monitoring wells screened within the shallow groundwater-bearing unit. The shallow wells sampled include seven shallow groundwater monitoring wells (MW-5S, MW-6S, MW-7S, MW-9S, MW-27S, MW-28S, and MW-29S); eight containment performance monitoring wells (MW-30S, MW-31S, MW-32S, MW-33S, MW-34S, MW-35S, MW-36S and MW-37S); and eighteen treatment performance monitoring wells (TG1-1, TG1-2, TG1-3, TG2-1, TG2-2, TG2-3, TG3-1, TG3-2, TG3-3, TG4-1, TG4-2, TG4-3, TG5-1, TG5-2, TG5-3, TG6-1, TG6-2, and TG6-3).

In addition to the investigative groundwater samples collected, four field sample duplicate, one matrix spike/matrix spike duplicate (MS/MSD), and three field blank (identified by an FB prefix) samples were collected for quality assurance/quality control (QA/QC) purposes. Trip blanks accompanied each cooler of sample containers from the laboratory to the site and were shipped back to the laboratory within each cooler containing volatile organic compound (VOC) samples.

All groundwater samples were field screened and laboratory analyzed for the parameters indicated in Section 1.

2.2.1 Field-Measured Parameters

The groundwater samples were measured in the field for pH, specific conductance, temperature, redox potential, DO, and turbidity. The field parameters were collected using a YSI 556 portable water quality meter and a HS Scientific DRT-15CE turbidimeter. Downhole DO readings were collected from monitoring wells after sampling at a given well was completed. The groundwater pH, redox potential, specific conductance, temperature, and turbidity were monitored during well purging prior to sampling. The final (stabilized) values for these measurements prior to sample collection are presented in Table 2-4. Water quality parameter measurements were not collected from well TG1-1, MW-7S, and MW-34S due to the presence, or the historical presence, of sheen or product in the purge water during Q3 2006.

2.2.1.1 pH

The pH of the groundwater samples collected during Q3 2006 ranged from 5.98 to 7.05 pH standard units (S.U.). pH is an important factor in determining the feasibility of bioremediation of contaminants in the site groundwater because biological systems typically function only in narrow pH ranges (typically 6.5 to 8.5 S.U.), and because microbial growth rates are pH dependent.

2.2.1.2 Redox Potential

The redox potentials of the groundwater samples collected at the site during Q3 2006 ranged from -112.8 to 168 millivolts (mV). Redox potential indicates the capability of the groundwater to promote chemical oxidation-reduction processes that consume organic matter and ultimately oxidize organic compounds. Microorganisms typically act as catalysts in oxidation reactions, and as such, the redox potential indicates the potential for the groundwater to oxidize the contaminants present.

Since environmental systems are typically not in equilibrium, the redox potential is used as a gross indicator of the state of oxidation-reduction in the system. Oxidation-reduction rates in the system are greater as the redox potential increases in magnitude. A positive redox potential typically indicates conditions where oxidized ionic species (i.e., NO_3^- , SO_4^{2-} , and Fe^{3+}) predominate in comparison to their reduced counterparts (NH_4^+ , S^{2-} , and Fe^{2+} , respectively). Once DO is removed from water (i.e., via biodegradation of organics), oxidized ionic species become electron acceptors in redox processes. As the processes continue under anaerobic conditions, the reduced ionic species concentration increases, resulting in an overall decrease of the water's oxidation potential.

2.2.1.3 Dissolved Oxygen

DO levels for the groundwater samples collected during Q3 2006 ranged from 0.27 to 16.6 milligrams per liter (mg/L). Overall, the DO readings indicate the presence of intermediate to high levels of oxygen in the water, and the system as a whole is considered to be generally under

oxic conditions. We note that these levels are higher than previous quarters. DO promotes the growth of aerobic and facultative bacteria and the production of readily assimilated nutrients. All of these factors are required to facilitate the oxidation reaction responsible for removing the contaminants from the groundwater under aerobic conditions.

2.2.1.4 Specific Conductance

The specific conductance, or conductivity, of the groundwater samples collected during Q3 2006 ranged from 0.752 to 7.391 millimhos per centimeter (mmho/cm). Conductivity of water is a measure of the ability of the solution to carry an electrical current that is transported by ions in the solution; therefore, conductivity is used as an indicator of the total dissolved solids (TDS) present in a water sample. As the dissolved solids content of a solution increases, the capacity for the water to transmit electrical current increases. Although conductivity is a measure of the aggregate dissolved solids in the water it may be correlated to the readily available nutrient levels in the water, since TDS includes nitrate, nitrite, ammonium, and phosphate ions.

2.2.1.5 Temperature

Groundwater temperatures ranged from 13.05 to 17.01 degrees Celsius (°C) during Q3 2006. Temperature is an extremely important factor in bioremediation because microbial growth rates are greatly dependent upon temperature.

2.2.1.6 Turbidity

Turbidity ranged from non-detect to 94.3 nephelometric turbidity units (NTU) during Q3 2006. Turbidity is a measure of the clarity of water and is used as an indicator of the solids present in a water sample and overall water quality.

2.2.2 Laboratory Analyses

The results of the laboratory analyses performed on the groundwater samples collected during September 2006 are provided in Appendix A. A discussion of the results of the laboratory analyses performed on the groundwater samples are presented in the following subsections.

2.2.2.1 Laboratory Analyses for BTEX and PAH

Each groundwater sample collected during the September 2006 sampling event was analyzed for BTEX and PAH compounds. The results of these analyses are presented and compared to WDNR Preventive Action Limits (PALs) and Enforcement Standards (ESs) in Table 2-5. Table 2-5 identifies parameters detected at concentrations exceeding their respective PALs (shown as bolded values). Parameters with concentrations exceeding both PALs and ESs are presented as shaded and bolded values in Table 2-5. Exceedences are summarized in the following paragraphs.

Groundwater Sample Results

As shown in Table 2-5, anthracene, benzene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, fluorene, naphthalene, and pyrene were detected at concentrations exceeding their respective PALs and/or ESs in the groundwater samples collected from the shallow monitoring well network. The results are as follows:

WDNR PAL Exceedences

- Anthracene was detected at a concentration exceeding the PAL of 600 micrograms per liter ($\mu\text{g/L}$) in the groundwater sample collected from well MW-34S.
- Benzene was detected at concentrations exceeding the PAL of 0.5 $\mu\text{g/L}$ in the groundwater samples collected from wells MW-7S and MW-34S.
- Benzo(a)pyrene was detected at concentrations exceeding the PAL of 0.02 $\mu\text{g/L}$ in the groundwater samples collected from wells MW-34S, MW-35S, MW-36S, TG1-1, TG5-1, TG5-3, and TG6-2.

- Benzo(b)fluoranthene was detected at concentrations exceeding the PAL of 0.02 µg/L in the groundwater samples collected from wells MW-34S, TG1-1, and TG5-1.
- Chrysene was detected at concentrations exceeding the PAL of 0.02 µg/L in the groundwater samples collected from wells MW-34S and MW-5-1.
- Fluoranthene was detected at concentrations exceeding the PAL of 80 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.
- Fluorene was detected at concentrations exceeding the PAL of 80 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.
- Naphthalene was detected at concentrations exceeding the PAL of 8 µg/L in the groundwater samples from wells MW-7S, MW-33S, MW-34S, TG1-1 and TG1-2.
- Pyrene was detected at concentrations exceeding the PAL of 50 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.

WDNR ES Exceedences

- Benzene was detected at a concentration exceeding the ES of 5 µg/L in the groundwater sample collected from well MW-34S.
- Benzo(a)pyrene was detected at concentrations exceeding the ES of 0.2 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.
- Benzo(b)fluoranthene was detected at concentrations exceeding the ES of 0.2 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.
- Chrysene was detected at concentrations exceeding the ES of 0.2 µg/L in the groundwater samples collected from wells MW-34S and TG5-1.
- Fluoranthene was detected at concentrations exceeding the ES of 400 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.
- Fluorene was detected at concentrations exceeding the ES of 400 µg/L in the groundwater sample collected from well MW-34S and TG1-1.
- Naphthalene was detected at concentrations exceeding the ES of 40 µg/L in the groundwater samples collected from wells MW-7S, MW-34S, and TG1-1.
- Pyrene was detected at concentrations exceeding the ES of 250 µg/L in the groundwater samples collected from wells MW-34S and TG1-1.

The plume boundary is primarily in an area encompassing five shallow monitoring wells (MW-7S, MW-33S, MW-34S, TG1-1, and TG1-2). Although PAH's were detected in MW-35S, MW-

36S, TG5-1, TG5-3, and TG6-2 above PALs, these exceedances have not typically been detected in these wells and are not considered to be part of a plume.

The majority of PAL and ES exceedances, as well as detections of BTEX and PAH constituents below PAL and ES levels, are associated with wells MW-34S and TG1-1 in which free product has historically been observed. In general, PAH concentrations measured in groundwater samples collected from the rest of the site were at relatively low levels with only sporadic PAL/ES exceedances. Based on these detected concentrations, the contaminant plume generally demonstrates a northeasterly trend, as indicated in Figure 2-1, similar to the previous 29 quarterly groundwater sampling events. Low to very low (estimated) concentrations of acenaphthene, anthracene, fluoranthene, fluorene, and/or phenanthrene were detected during the Q3 2006 round below the PAL/ES in treatment gate wells TG1-3, TG2-2, TG3-3, TG4-2, TG5-2, T6-1, and TG6-3, where exceedances of PALs/ESs did not occur.

A summary of the concentration of contaminants at wells that have regularly exceeded PALs and/or ESs during the last 12 quarters (3 years) is presented in Table 2-6. Levels of benzene, naphthalene, fluorene, and benzo(a)pyrene fluctuate over wide ranges in some of these wells. However, several constituents have shown an overall decreasing trend in monitoring wells MW-32S, MW-33S and MW-35S. Benzene, fluorene, and benzo(a)pyrene concentrations have remained relatively constant in MW-7S; however, naphthalene concentrations show an overall decreasing trend in MW-7S. Well MW-34S has shown overall fluctuating levels in naphthalene, fluorene, and benzo(a)pyrene; however, benzene concentrations have remained relatively consistent in MW-34S. During Q3 2006, 0.3 feet of free product was detected in well MW-34S. Varying levels of free product have been found in MW-34S in the recent past. This correlates with the elevated levels of constituents found in MW-34S. Well TG1-1 has shown fluctuating naphthalene, fluorene, and benzo(a)pyrene concentrations since it was first sampled in Q3 2000. These fluctuating concentrations could be due to the presence of free product which has historically been observed in well TG1-1. During Q3 2006, trace amounts of free product were detected in well TG1-1.

2.2.2.2 Laboratory Analyses for Treatment Performance Monitoring

The groundwater samples collected from the treatment performance monitoring wells were analyzed for microbial enumeration, NO₃-N, NO₂-N, TKN, NH₃-N, PO₄-P, ORP, BOD, COD, TOC, BTEX, and PAHs. The analytical results for microbial enumeration, NO₃-N, NO₂-N, TKN, NH₃-N, PO₄-P, ORP, BOD, COD, and TOC are presented in Table 2-7. The analytical results for the treatment performance monitoring well groundwater samples are summarized below. The laboratory reports of nutrient and microbial analyses are also included in Appendix A.

Nitrogen and Phosphorous Compounds

Nitrate was only detected in TG3-2 at a concentration of 0.04 mg/L. Nitrate was not detected above detection limits in the remaining treatment performance monitoring wells. Nitrite was only detected in TG3-3 at a concentration of 0.022 mg/L. TKN results include eight detections with concentrations ranging from 0.86 to 1.5 mg/L. Ammonia results include five non-detect results and detections ranging from 0.24 to 1.8 mg/L. Overall, nitrogen compound concentrations are at relatively low levels; however, previous sample results have indicated that NH₃-N concentrations are typically an order of magnitude greater than NO₃-N concentrations and approximately two orders or magnitude greater than NO₂-N.

PO₄-P was detected in treatment performance gates TG2-3 and TG6-1 at concentrations of 0.36 and 0.3 mg/L, respectively. ORP was detected in five treatment performance monitoring wells at concentrations of 0.014 to 0.035 mg/L.

BOD, COD, and TOC

BOD results include non-detect results and one detection at a concentration of 4.6 mg/L in TG3-3. COD concentrations for the samples collected throughout the treatment system ranged from 6.3 to 43.1 mg/L. TOC concentrations for the samples collected throughout the treatment system ranged from 3.1 to 13.3 mg/L. As expected, the treatment gate wells indicate less BOD compared to COD. COD indicates the presence of constituents that exert an oxygen demand,

including carbon compounds such as the site contaminants in the groundwater, and other constituents such as ammonia, sulfurous compounds; and biological material such as humic acids and detritus. A significant portion of oxygen demand exerted by the constituents measured in the COD test may not be readily biodegradable and would typically exert the oxygen demand over an extended time period. The oxygen demand exerted by the constituents the COD analysis detected is catalyzed chemically and thermally. The low BOD indicates low concentrations of material that is readily biodegradable and/or quickly oxidized.

Microbial Enumeration

The total microbial populations for TG1 and TG2 included one non-detect results and detections ranging from 3.0×10^2 to 4.0×10^4 colony forming units per milliliter (CFU/mL) during Q3 2006. The total microbial population for TG3 and TG4 ranged from 2.9×10^2 to 8.5×10^4 CFU/mL during Q3 2006. The total microbial populations for TG5 and TG6 ranged from 1.6×10^2 to 1.1×10^5 CFU/mL during Q3 2006.

The result of degrader microbial population analysis for TG1 and TG2 included two non-detect results and detections ranging from 5.2×10^2 to 1.7×10^3 CFU/mL, in TG1-1 and TG2-3, respectively, during Q3 2006. The degrader microbial populations for TG3 and TG4 included one non-detect result and detections ranging from 1.2×10^2 to 9.9×10^2 CFU/mL during Q3 2006. The degrader microbial populations for TG5 and TG6 included three non-detect results and detections ranging from 4.6×10^2 to 2.1×10^3 CFU/mL during Q3 2006.

LEGEND

- CABLE FENCE
- ▣ CATCH BASIN
- ⊕ HYDRANT
- ⊙ SIGN
- ▣ FREE PRODUCT COLLECTION SUMP
- UTILITY POLE
- SAMPLING MANHOLE
- ⊕ MONITORING WELL
- INJECTION WELL
- ▣ STAFF GAUGE
- ⊕ PIEZOMETER
- - - CURRENT RIVER CHANNEL
- - - FORMER RIVER CHANNEL
- DIRECTION OF GROUNDWATER FLOW
- 728 GROUNDWATER ELEVATION CONTOUR
- - - DASHED WHERE INFERRED
- - - ESTIMATED BOUNDARY OF CONTAMINANT PLUME
- NM GROUNDWATER ELEVATION NOT MEASURED

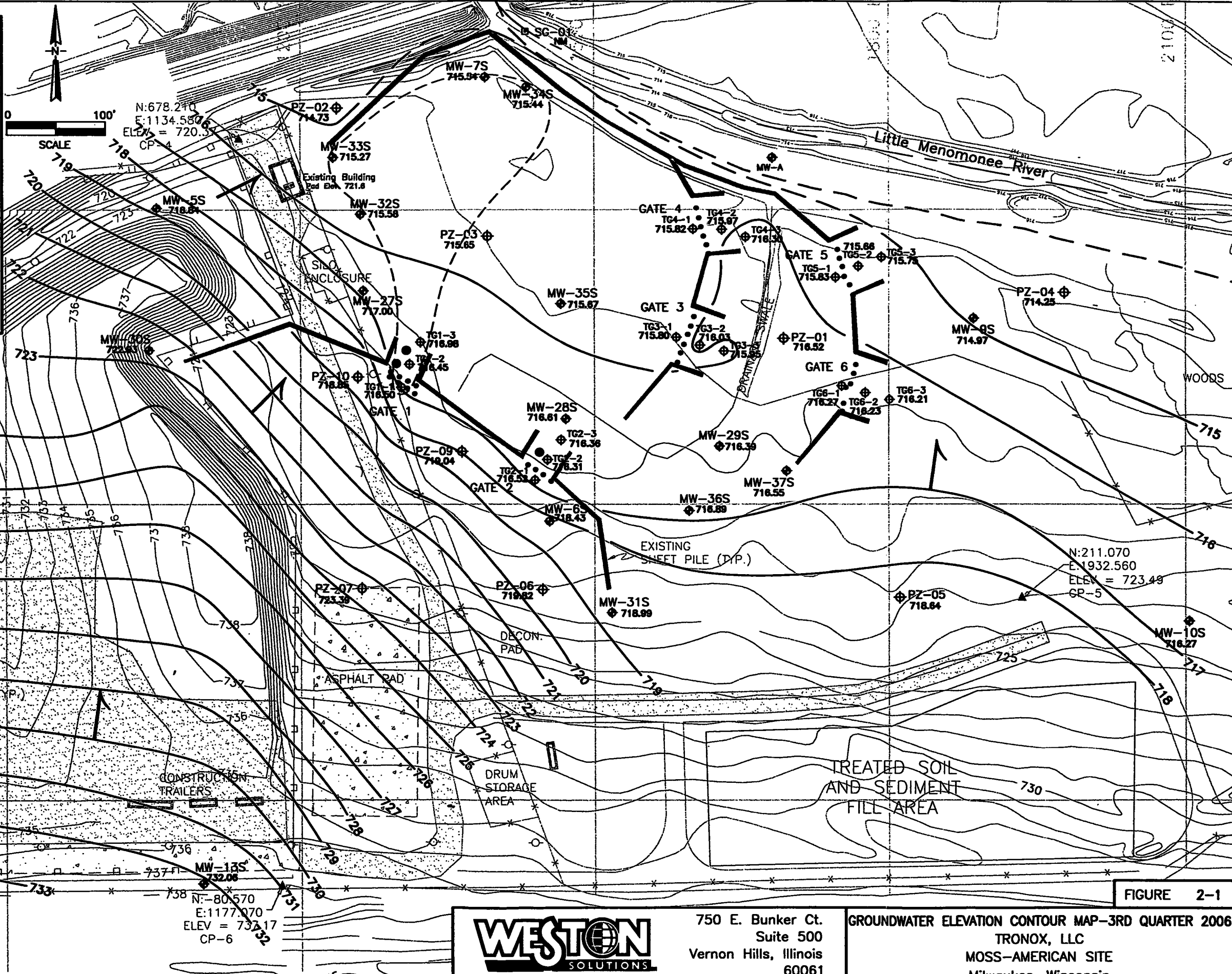


FIGURE 2-1



750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

GROUNDWATER ELEVATION CONTOUR MAP-3RD QUARTER 2006
TRONOX, LLC
MOSS-AMERICAN SITE
Milwaukee, Wisconsin

LEGEND

- CABLE FENCE
- ▣ CATCH BASIN
- ⊕ HYDRANT
- ⊕ SIGN
- ▣ FREE PRODUCT COLLECTION SUMP
- UTILITY POLE
- SAMPLING MANHOLE
- ⊕ MONITORING WELL
- ⊕ INJECTION WELL
- ▣ STAFF GAUGE
- ⊕ PIEZOMETER
- CURRENT RIVER CHANNEL
- - - FORMER RIVER CHANNEL
- DIRECTION OF GROUNDWATER FLOW
- 728 GROUNDWATER ELEVATION CONTOUR
DASHED WHERE INFERRED
- - - ESTIMATED BOUNDARY OF CONTAMINANT PLUME
- NM GROUNDWATER ELEVATION NOT MEASURED

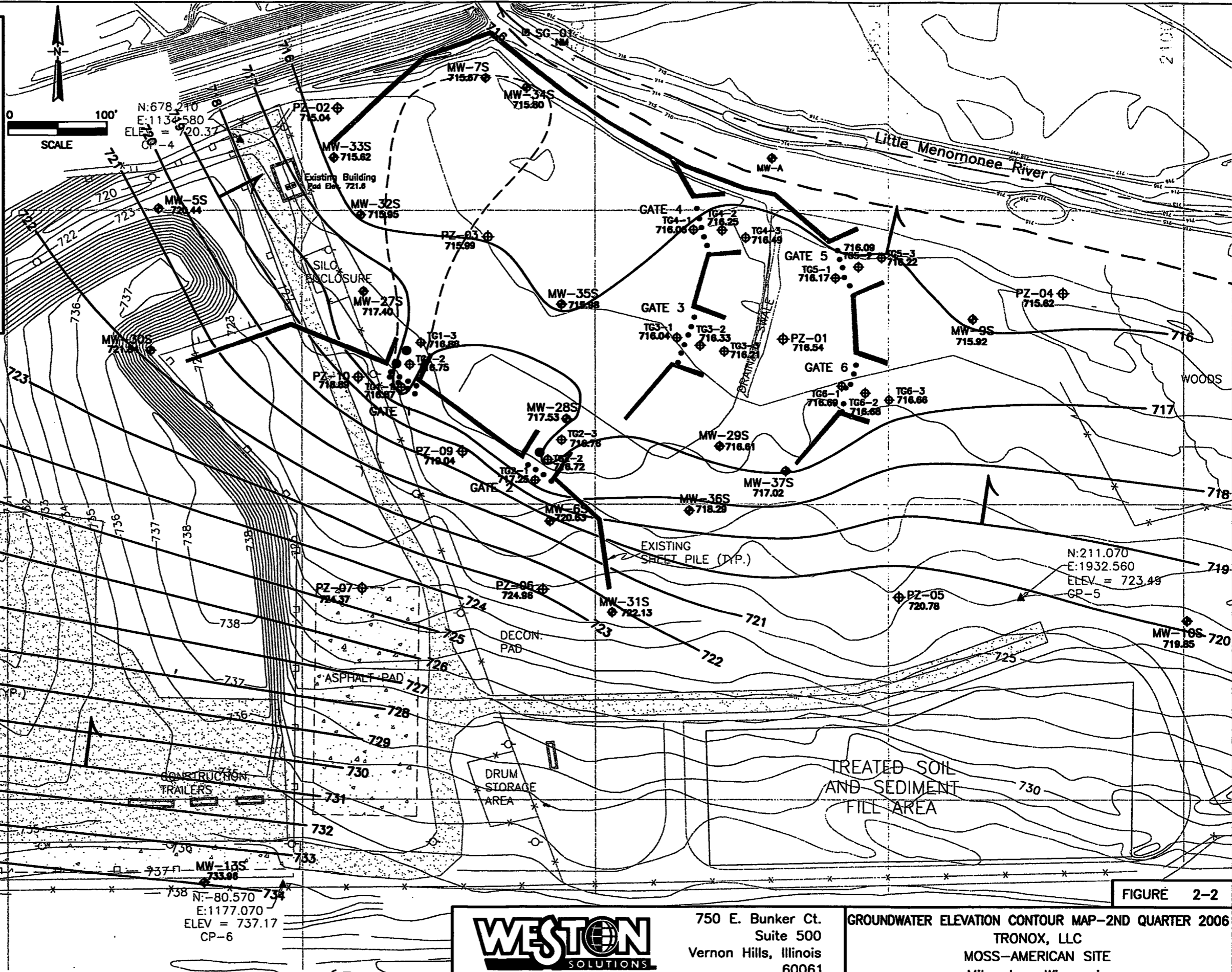


FIGURE 2-2



750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

GROUNDWATER ELEVATION CONTOUR MAP-2ND QUARTER 2006
TRONOX, LLC
MOSS-AMERICAN SITE
Milwaukee, Wisconsin

Table 2-1

**Groundwater Elevation Measurements
Shallow and Containment Performance Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Ground Elevation	TOC Elevation	Depth to Water	Groundwater Elevation	Product Thickness	
MW-3S	729.71	731.45	7.28	724.17	None Detected	
MW-5S	723.41	724.63	5.79	718.84		
MW-6S	723.11	725.24	6.81	718.43		
MW-7S	719.47	721.59	6.05	715.54	Trace Product	
MW-9S	719.15	721.66	6.69	714.97	None Detected	
MW-10S	723.95	726.76	10.49	716.27		
MW-13S	737.73	738.58	6.52	732.06		
MW-25S	736.95	739.19	5.71	733.48		
MW-26S	732.31	731.87	4.22	727.65		
MW-27S	720.57	723.10	6.1	717.00		
MW-28S	719.64	722.13	5.52	716.61		
MW-29S	719.51	722.17	5.78	716.39		
MW-30S	725.35	727.34	4.41	722.93		
MW-31S	725.29	725.31	6.32	718.99		
MW-32S	719.68	722.79	7.21	715.58		
MW-33S	719.25	721.81	6.54	715.27		
MW-34S	718.97	721.52	6.08	715.44		4 inches (DNAPL)
MW-35S	718.14	721.75	6.08	715.67		None Detected
MW-36S	720.41	723.21	6.32	716.89		
MW-37S	721.33	723.30	6.75	716.55		

Notes:

All values in feet.

All elevation measurements are with respect to Mean Sea Level (MSL).

TOC = Top of well casing.

GW = Groundwater.

Depth to groundwater was measured on 26 June 2006

Table 2-2

**Groundwater Elevation Measurements
Treatment Performance Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Ground Elevation	TOC Elevation	Depth to Water	GW Elevation	Hydraulic Gradient (ft/ft)	Groundwater Velocity (ft/day)	Product Thickness
TG1-1	719.77	723.32	6.82	716.50	-0.0053	-0.0501	Trace Product
TG1-2	720.06	722.81	6.36	716.45			
TG1-3	719.56	722.53	5.55	716.98			
TG2-1	720.67	723.80	7.28	716.52	0.0016	0.0151	None Detected
TG2-2	720.62	723.05	6.74	716.31			
TG2-3	720.06	722.61	6.25	716.36			
TG3-1	719.14	721.05	5.25	715.80	-0.0015	-0.0142	
TG3-2	718.87	720.92	4.89	716.03			
TG3-3	718.35	720.60	4.65	715.95			
TG4-1	718.06	721.14	5.32	715.82	-0.0048	-0.0454	
TG4-2	718.26	720.75	4.78	715.97			
TG4-3	718.01	720.04	3.74	716.30			
TG5-1	717.60	721.12	5.29	715.83	0.0008	0.0076	
TG5-2	718.18	720.63	4.97	715.66			
TG5-3	718.17	719.99	4.24	715.75			
TG6-1	719.47	721.96	5.69	716.27	0.0006	0.0057	
TG6-2	719.70	722.05	5.82	716.23			
TG6-3	719.58	722.47	6.26	716.21			

Notes:

All values in feet.

All elevation measurements are with respect to Mean Sea Level (MSL).

Porosity of soil is assumed to be 0.3.

Hydraulic conductivity of treatment gate material is assumed to be 1E-3 cm/s = 3.0 ft/day.

TOC = Top of the casing.

GW = Groundwater.

ft/day = feet per day.

ft/ft = feet per foot.

A negative value in the groundwater velocity column indicates that the groundwater flow was opposite to the general direction of groundwater flow at the site.

Depth to groundwater was measured on 26 June 2006

Table 2-3

**Groundwater Elevation Measurements
Piezometers and Staff Gauge
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Ground Elevation	TOC Elevation	Depth to Water	Groundwater Elevation	Product Thickness
Groundwater					
PZ-01	718.04	721.05	4.53	716.52	None Detecteed
PZ-02	718.89	721.84	7.11	714.73	
PZ-03	719.00	722.09	6.44	715.65	
PZ-04	717.30	720.22	5.97	714.25	
PZ-05	724.34	727.43	8.74	718.69	
PZ-06	724.62	727.79	7.97	719.82	
PZ-07	725.78	728.72	5.33	723.39	
PZ-09	721.12	724.08	6.06	718.02	
PZ-10	722.04	725.05	6.2	718.85	
Surface Water					
ID	Top of Staff Gauge Elevation		Staff Gauge Reading	Water Elevation	
SG-01	716.22		NM	NC	

Notes:

All values in feet.

All elevation measurements are with respect to Mean Sea Level (MSL).

TOC = Top of well casing.

GW = Groundwater.

NM= Not measured

NC= Could not be calculated due to insufficient data

Depth to groundwater was measured on 26 June 2006

Table 2-4

**Field-Measured Parameters
Shallow Groundwater and Containment Performance Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Dissolved Oxygen (mg/L)	Redox Potential (mV)	pH (Standard Units)	Specific Conductance (mmho/cm)	Temperature (Deg C)	Turbidity (NTU)
MW-5S	0.51	168	6.73	0.934	13.05	--
MW-6S	5.2	18.6	6.88	6.502	13.34	--
MW-7S	--	--	--	--	--	--
MW-9S	0.84	-49.7	6.3	1.118	13.16	--
MW-27S	13.9	-96.6	6.42	7.162	14.85	0.8
MW-28S	4.7	-84.2	6.37	5.507	15.04	2.57
MW-29S	1.96	25	6.25	0.864	14.99	--
MW-30S	0.27	18.3	6.31	2.097	13.96	34.2
MW-31S	7.1	13.7	6.8	6.616	13.79	94.3
MW-32S	4.4	-81.8	6.5	5.398	16.36	1.11
MW-33S	6.1	-93	6.36	6.081	14.24	0.83
MW-34S	--	--	--	--	--	--
MW-35S	3.73	-11.9	6.2	7.391	15.79	0.8
MW-36S	6.8	7.1	7.05	6.265	13.72	8.72
MW-37S	2.1	-11.1	6.44	1.001	14.54	--

Table 2-4 (Continued)

**Field-Measured Parameters
Treatment Performance Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Dissolved Oxygen (mg/L)	Redox Potential (mV)	pH (Standard Units)	Specific Conductance (mmho/cm)	Temperature (Deg C)	Turbidity (NTU)
TG1-1	--	--	--	--	--	--
TG1-2	10.7	-99.7	6.61	4.688	15.49	1.38
TG1-3	15.9	-112.8	6.54	4.761	15.63	3.30
TG2-1	2.90	-40.5	6.41	6.271	14.29	0.72
TG2-2	9.60	-103.2	6.66	5.448	14.6	0.28
TG2-3	10.3	-94.2	6.42	5.633	15.43	1.26
TG3-1	4.12	110.9	6.45	1.62	15.91	--
TG3-2	1.75	-40.3	6.64	1.066	15.81	--
TG3-3	2.26	-97.7	6.54	1.139	14.67	--
TG4-1	12.7	-92.4	6.60	4.019	15.48	1.65
TG4-2	11.2	-104.9	6.53	4.294	15.44	0.88
TG4-3	16.6	-82.7	6.42	4.392	14.89	0.81
TG5-1	1.78	159.1	6.26	1.017	16.46	5.58
TG5-2	1.13	-104.2	6.80	0.752	17.01	-12.55
TG5-3	3.83	159.3	6.15	1.028	14.67	6.36
TG6-1	5.61	-88.1	6.70	1.189	16.95	-10.90
TG6-2	1.99	44.1	5.98	1.683	16.27	-12.81
TG6-3	1.38	-55.6	6.36	1.502	16.26	-13.25

Notes:

S - Shallow well.

TG - Treatment gate performance monitoring well.

NM - Not measured due to presence of a sheen or free product in well.

uohm/cm - microhms per centimeter

Deg C - Degrees Celcius

mV - millivolt

mg/L - milligram per liter

NTU - Nephelometric Turbidity unit

-- Reading not collected due to product in well or due to broken urbidity meter.

Table 2-5

**Groundwater Sample Analytical Results
Shallow Monitoring Well Samples
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Field Sample ID	MA3-MW5S-092106-1	MA3-MW5S-092106-1DP	MA3-MW6S-091906-19	MA3-MW7S-091906-05	MA3-MW9S-092006-8		
Location ID	MW-5S	MW-5S	MW-6S	MW-7S	MW-9S	WDNR	
Sample Date	9/21/2006	9/21/2006	9/19/2006	9/19/2006	9/20/2006	PAL	WDNR ES
Unit	ug/l	ug/l	ug/l	ug/l	ug/l	(UG/L)	(UG/L)
BTEX							
Benzene	0.2 U	0.2 U	0.2 U	1.5 J	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	11	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	12 J	0.6 U	124	650
PAHS							
Acenaphthene	0.87 U	0.87 U	0.91 U	24	0.91 U	NA	NA
Acenaphthylene	1.4 U	1.4 U	1.4 U	32	1.4 U	NA	NA
Anthracene	0.039 U	0.039 U	0.040 U	0.038 U	0.040 U	600	3000
Benzo(a)anthracene	0.019 U	0.019 U	0.020 U	0.019 U	0.020 U	NA	NA
Benzo(a)pyrene	0.019 U	0.019 U	0.020 U	0.019 U	0.020 U	0.02	0.2
Benzo(b)fluoranthene	0.039 U	0.039 U	0.040 U	0.038 U	0.040 U	0.02	0.2
Benzo(g,h,i)perylene	0.096 U	0.097 U	0.10 U	0.096 U	0.10 U	NA	NA
Benzo(k)fluoranthene	0.019 U	0.019 U	0.020 U	0.019 U	0.020 U	NA	NA
Chrysene	0.077 U	0.077 U	0.081 U	0.077 U	0.081 U	0.02	0.2
Dibenz(a,h)anthracene	0.039 U	0.039 U	0.040 U	0.038 U	0.040 U	NA	NA
Fluoranthene	0.039 U	0.039 U	0.040 U	0.038 U	0.040 U	80	400
Fluorene	0.48 U	0.48 U	0.50 U	4.6	0.50 U	80	400
Indeno(1,2,3-cd)pyrene	0.077 U	0.077 U	0.081 U	0.077 U	0.081 U	NA	NA
Naphthalene	1.3 U	1.3 U	1.3 U	460	1.3 U	8	40
Phenanthrene	0.077 U	0.077 U	0.081 U	0.077 U	0.081 U	NA	NA
Pyrene	0.17 U	0.17 U	0.18 U	0.17 U	0.18 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

NS-Not sampled due to frozen conditions.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

Groundwater Sample Analytical Results
 Containment Monitoring Well Samples
 Moss-American Site
 Milwaukee, Wisconsin
 Third Quarter 2006

Field Sample ID	MA3-MW27S-091906-11	MA3-MW28S-091906-16	MA3-MW28S-091906-16DP	MA3-MW29S-092006-6	MA3-MW30S-092106-2	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	MW-27S	MW-28S	MW-28S	MW-29S	MW-30S		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/20/2006	9/21/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX							
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS							
Acenaphthene	0.92 U	0.89 U	0.87 U	0.93 U	0.94 U	NA	NA
Acenaphthylene	1.4 U	1.4 U	1.4 U	1.5 U	1.5 U	NA	NA
Anthracene	0.041 U	0.040 U	0.039 U	0.042 U	0.042 U	600	3000
Benzo(a)anthracene	0.021 U	0.020 U	0.019 U	0.021 U	0.021 U	NA	NA
Benzo(a)pyrene	0.021 U	0.020 U	0.019 U	0.021 U	0.021 U	0.02	0.2
Benzo(b)fluoranthene	0.041 U	0.040 U	0.039 U	0.042 U	0.042 U	0.02	0.2
Benzo(g,h,i)perylene	0.10 U	0.099 U	0.097 U	0.10 U	0.10 U	NA	NA
Benzo(k)fluoranthene	0.021 U	0.020 U	0.019 U	0.021 U	0.021 U	NA	NA
Chrysene	0.082 U	0.080 U	0.078 U	0.083 U	0.083 U	0.02	0.2
Dibenz(a,h)anthracene	0.041 U	0.040 U	0.039 U	0.042 U	0.042 U	NA	NA
Fluoranthene	0.041 U	0.040 U	0.039 U	0.042 U	0.047 J	80	400
Fluorene	0.51 U	0.50 U	0.49 U	0.52 U	0.52 U	80	400
Indeno(1,2,3-cd)pyrene	0.082 U	0.080 U	0.078 U	0.083 U	0.083 U	NA	NA
Naphthalene	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	8	40
Phenanthrene	0.082 U	0.080 U	0.078 U	0.083 U	0.083 U	NA	NA
Pyrene	0.18 U	0.18 U	0.17 U	0.19 U	0.19 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

**Groundwater Sample Analytical Results
Containment Monitoring Well Samples
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Field Sample ID	MA3-MW31S-091906-17	MA3-MW32S-091906-10	MA3-MW33S-091906-12	MA3-MW34S-091906-04	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	MW-31S	MW-32S	MW-33S	MW-34S		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/19/2006		
Unit	ug/l	ug/l	ug/l	ug/l		
BTEX						
Benzene	0.2 U	0.2 U	0.2 U	6.6 J	0.5	5
Ethylbenzene	0.2 U	0.2 U	4.8	27	140	700
Toluene	0.2 U	0.2 U	0.2 U	4.0 U	68.6	343
Total Xylenes	0.6 U	0.6 U	1.2 J	77	124	650
PAHS						
Acenaphthene	0.91 U	0.90 U	150	4600	NA	NA
Acenaphthylene	1.4 U	1.4 U	14 J	590	NA	NA
Anthracene	0.040 U	0.040 U	0.53	1600	600	3000
Benzo(a)anthracene	0.020 U	0.020 U	0.020 U	980	NA	NA
Benzo(a)pyrene	0.020 U	0.020 U	0.020 U	370	0.02	0.2
Benzo(b)fluoranthene	0.040 U	0.040 U	0.040 U	320	0.02	0.2
Benzo(g,h,i)perylene	0.10 U	0.10 U	0.10 U	230	NA	NA
Benzo(k)fluoranthene	0.020 U	0.020 U	0.020 U	180	NA	NA
Chrysene	0.081 U	0.080 U	0.081 U	1400	0.02	0.2
Dibenz(a,h)anthracene	0.040 U	0.040 U	0.040 U	35	NA	NA
Fluoranthene	0.040 U	0.040 U	0.040 U	6000	80	400
Fluorene	0.51 U	0.50 U	61	5100	80	400
Indeno(1,2,3-cd)pyrene	0.081 U	0.080 U	0.081 U	120	NA	NA
Naphthalene	1.3 U	1.3 U	12 J	23000	8	40
Phenanthrene	0.081 U	0.080 U	16	14000	NA	NA
Pyrene	0.18 U	0.18 U	0.18 U	4700	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

Groundwater Sample Analytical Results
 Containment Monitoring Well Samples
 Moss-American Site
 Milwaukee, Wisconsin
 Third Quarter 2006

Field Sample ID	MA3-MW35S-091906-09	MA3-MW36S-091906-18	MA3-MW36S-091906-18DP	MA3-MW37S-092006-07	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	MW-35S	MW-36S	MW-36S	MW-37S		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/20/2006		
Unit	ug/l	ug/l	ug/l	ug/l		
BTEX						
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS						
Acenaphthene	0.86 UJ	0.86 U	0.94 U	0.90 U	NA	NA
Acenaphthylene	1.4 J-	1.3 U	1.5 U	1.4 U	NA	NA
Anthracene	0.057 J-	0.038 U	0.042 U	0.040 U	600	3000
Benzo(a)anthracene	0.025 J-	0.022 J	0.021 U	0.020 U	NA	NA
Benzo(a)pyrene	0.064 J-	0.028 J	0.021 U	0.020 U	0.02	0.2
Benzo(b)fluoranthene	0.038 UJ	0.038 U	0.042 U	0.040 U	0.02	0.2
Benzo(g,h,i)perylene	0.095 UJ	0.095 U	0.10 U	0.10 U	NA	NA
Benzo(k)fluoranthene	0.034 J-	0.026 J	0.021 U	0.020 U	NA	NA
Chrysene	0.076 UJ	0.076 U	0.084 U	0.080 U	0.02	0.2
Dibenz(a,h)anthracene	0.20 UJ	0.038 U	0.042 U	0.040 U	NA	NA
Fluoranthene	0.58 J-	0.038 U	0.042 U	0.040 U	80	400
Fluorene	0.48 UJ	0.48 U	0.52 U	0.50 U	80	400
Indeno(1,2,3-cd)pyrene	0.16 J-	0.076 U	0.084 U	0.080 U	NA	NA
Naphthalene	1.2 UJ	1.2 U	1.4 U	1.3 U	8	40
Phenanthrene	0.076 UJ	0.076 U	0.084 U	0.080 U	NA	NA
Pyrene	0.37 J-	0.17 U	0.19 U	0.18 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

**Groundwater Sample Analytical Results
Treatment Performance Monitoring Well Samples
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Field Sample ID	MA3-TG1-1-091906-08	MA3-TG1-2-091906-07	MA3-TG1-3-091906-06	MA3-TG2-1-091906-13	MA3-TG2-2-091906-14	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	TG1-1	TG1-2	TG1-3	TG2-1	TG2-2		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/19/2006	9/19/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX							
Benzene	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	15	0.2 J	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	24	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS							
Acenaphthene	990	41	2.5 J	0.90 U	0.86 U	NA	NA
Acenaphthylene	120 J	15 U	1.5 U	1.4 U	1.3 U	NA	NA
Anthracene	190	1.3	0.10 J	0.040 U	0.038 U	600	3000
Benzo(a)anthracene	120	0.066 J	0.021 U	0.020 U	0.019 U	NA	NA
Benzo(a)pyrene	51	0.019 U	0.021 U	0.020 U	0.019 U	0.02	0.2
Benzo(b)fluoranthene	47	0.038 U	0.042 U	0.040 U	0.038 U	0.02	0.2
Benzo(g,h,i)perylene	31	0.095 U	0.11 U	0.10 U	0.095 U	NA	NA
Benzo(k)fluoranthene	24	0.019 U	0.021 U	0.020 U	0.019 U	NA	NA
Chrysene	190 U	0.076 U	0.084 U	0.080 U	0.076 U	0.02	0.2
Dibenz(a,h)anthracene	6.0 U	0.038 U	0.042 U	0.040 U	0.038 U	NA	NA
Fluoranthene	730	2.3	0.26	0.040 U	0.049 J	80	400
Fluorene	740	20	0.95	0.50 U	0.48 U	80	400
Indeno(1,2,3-cd)pyrene	15	0.076 U	0.084 U	0.080 U	0.076 U	NA	NA
Naphthalene	2200	37	1.4 U	1.3 U	1.2 U	8	40
Phenanthrene	1600	7.5	0.15 J	0.080 U	0.076 U	NA	NA
Pyrene	550	1.4	0.19 U	0.18 U	0.17 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

**Groundwater Sample Analytical Results
Treatment Performance Monitoring Well Samples
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Field Sample ID	MA3-TG2-3-091906-15	MA3-TG3-1-092006-03	MA3-TG3-2-092006-02	MA3-TG3-3-092006-04	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	TG2-3	TG3-1	TG3-2	TG3-3		
Sample Date	9/19/2006	9/20/2006	9/20/2006	9/20/2006		
Unit	ug/l	ug/l	ug/l	ug/l		
BTEX						
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS						
Acenaphthene	0.97 U	0.87 U	0.88 U	0.87 UJ	NA	NA
Acenaphthylene	1.5 U	1.4 U	1.4 U	1.3 UJ	NA	NA
Anthracene	0.043 U	0.039 U	0.039 U	0.039 UJ	600	3000
Benzo(a)anthracene	0.021 U	0.019 U	0.020 U	0.019 UJ	NA	NA
Benzo(a)pyrene	0.021 U	0.019 U	0.020 U	0.019 UJ	0.02	0.2
Benzo(b)fluoranthene	0.043 U	0.039 U	0.039 U	0.039 UJ	0.02	0.2
Benzo(g,h,i)perylene	0.11 U	0.097 U	0.098 U	0.096 UJ	NA	NA
Benzo(k)fluoranthene	0.021 U	0.019 U	0.020 U	0.019 UJ	NA	NA
Chrysene	0.086 U	0.078 U	0.079 U	0.077 UJ	0.02	0.2
Dibenz(a,h)anthracene	0.043 U	0.039 U	0.039 U	0.039 UJ	NA	NA
Fluoranthene	0.043 U	0.039 U	0.039 U	0.039 J	80	400
Fluorene	0.54 U	0.48 U	0.49 U	0.48 UJ	80	400
Indeno(1,2,3-cd)pyrene	0.086 U	0.078 U	0.079 U	0.077 UJ	NA	NA
Naphthalene	1.4 U	1.3 U	1.3 U	1.3 UJ	8	40
Phenanthrene	0.086 U	0.078 U	0.079 U	0.077 UJ	NA	NA
Pyrene	0.19 U	0.17 U	0.18 U	0.17 UJ	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

Groundwater Sample Analytical Results
 Treatment Performance Monitoring Well Samples
 Moss-American Site
 Milwaukee, Wisconsin
 Third Quarter 2006

Field Sample ID	MA3-TG4-1-091906-03	MA3-TG4-2-091906-02	MA3-TG4-3-091906-01	MA3-TG5-1-092006-15	MA3-TG5-1-092006-15DP	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	TG4-1	TG4-2	TG4-3	TG5-1	TG5-1		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/19/2006	9/20/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX							
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS							
Acenaphthene	0.91 U	0.93 U	0.86 U	0.91 U	0.93 U	NA	NA
Acenaphthylene	1.4 U	1.4 U	1.3 U	1.4 U	1.4 U	NA	NA
Anthracene	0.040 U	0.046 J	0.038 U	0.041 U	0.063 J	600	3000
Benzo(a)anthracene	0.020 U	0.021 U	0.019 U	0.020 U	0.29	NA	NA
Benzo(a)pyrene	0.020 U	0.021 U	0.019 U	0.027 J	0.18	0.02	0.2
Benzo(b)fluoranthene	0.040 U	0.041 U	0.038 U	0.041 U	0.16 J	0.02	0.2
Benzo(g,h,i)perylene	0.10 U	0.10 U	0.096 U	0.10 U	0.16 J	NA	NA
Benzo(k)fluoranthene	0.020 U	0.021 U	0.019 U	0.020 U	0.084 J	NA	NA
Chrysene	0.081 U	0.083 U	0.077 U	0.081 U	0.29 J	0.02	0.2
Dibenz(a,h)anthracene	0.040 U	0.041 U	0.038 U	0.041 U	0.041 U	NA	NA
Fluoranthene	0.040 U	0.24	0.038 U	0.041 U	1.2	80	400
Fluorene	0.50 U	0.52 U	0.48 U	0.51 U	0.52 U	80	400
Indeno(1,2,3-cd)pyrene	0.081 U	0.083 U	0.077 U	0.081 U	0.096 J	NA	NA
Naphthalene	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	8	40
Phenanthrene	0.081 U	0.083 U	0.077 U	0.081 U	0.44	NA	NA
Pyrene	0.18 U	0.19 U	0.17 U	0.18 U	0.99	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J - Estimated concentration, biased low.

VOC - Volatile Organic Compound.

PAH - Polynuclear Aromatic Hydrocarbon.

PAL - Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES - Enforcement Standard (WDNR).

NA - Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

**Groundwater Sample Analytical Results
Treatment Performance Monitoring Well Samples
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Field Sample ID	MA3-TG5-2-092006-14	MA3-TG5-3-092006-16	MA3-TG6-1-092006-11	MA3-TG6-2-092006-10	MA3-TG6-3-092006-12	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	TG5-2	TG5-3	TG6-1	TG6-2	TG6-3		
Sample Date	9/19/2006	9/19/2006	9/19/2006	9/20/2006	9/20/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX							
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS							
Acenaphthene	0.96 U	0.89 U	0.89 U	0.90 U	0.91 U	NA	NA
Acenaphthylene	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	NA	NA
Anthracene	0.042 U	0.039 U	0.040 U	0.040 U	0.041 U	600	3000
Benzo(a)anthracene	0.021 U	0.020 U	0.020 U	0.028 J	0.020 U	NA	NA
Benzo(a)pyrene	0.021 U	0.044 J	0.020 U	0.023 J	0.020 U	0.02	0.2
Benzo(b)fluoranthene	0.042 U	0.039 U	0.040 U	0.040 U	0.041 U	0.02	0.2
Benzo(g,h,i)perylene	0.11 U	0.10 J	0.099 U	0.10 U	0.10 U	NA	NA
Benzo(k)fluoranthene	0.021 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	NA
Chrysene	0.085 U	0.079 U	0.079 U	0.080 U	0.081 U	0.02	0.2
Dibenz(a,h)anthracene	0.042 U	0.039 U	0.040 U	0.040 U	0.041 U	NA	NA
Fluoranthene	0.079 J	0.095 J	0.041 J	0.15 J	0.079 J	80	400
Fluorene	0.53 U	0.49 U	0.50 U	0.50 U	0.51 U	80	400
Indeno(1,2,3-cd)pyrene	0.085 U	0.079 U	0.079 U	0.080 U	0.081 U	NA	NA
Naphthalene	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	8	40
Phenanthrene	0.085 U	0.079 U	0.079 U	0.080 U	0.081 U	NA	NA
Pyrene	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J- - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

Table 2-5 (Continued)

Groundwater Sample Analytical Results
 Field Blank and Trip Blank Samples
 Moss-American Site
 Milwaukee, Wisconsin
 Third Quarter 2006

Field Sample ID	MA3-FB-1-091906-20	MA3-FB-092006-18	MA3-FB-092106-10	MA3-TB-1-091906-21	MA3-TB-092006-17	MA3-TB-092106-6	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank		
Sample Date	9/19/2006	9/20/2006	9/21/2006	9/19/2006	9/20/2006	9/21/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX								
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS								
Acenaphthene	0.93 U	0.87 U	0.86 U	--	--	--	NA	NA
Acenaphthylene	1.4 U	1.3 U	1.3 U	--	--	--	NA	NA
Anthracene	0.041 U	0.039 U	0.038 U	--	--	--	600	3000
Benzo(a)anthracene	0.021 U	0.019 U	0.019 U	--	--	--	NA	NA
Benzo(a)pyrene	0.021 U	0.019 U	0.019 U	--	--	--	0.02	0.2
Benzo(b)fluoranthene	0.041 U	0.039 U	0.038 U	--	--	--	0.02	0.2
Benzo(g,h,i)perylene	0.10 U	0.096 U	0.096 U	--	--	--	NA	NA
Benzo(k)fluoranthene	0.021 U	0.019 U	0.019 U	--	--	--	NA	NA
Chrysene	0.083 U	0.077 U	0.077 U	--	--	--	0.02	0.2
Dibenz(a,h)anthracene	0.041 U	0.039 U	0.038 U	--	--	--	NA	NA
Fluoranthene	0.041 U	0.039 U	0.038 U	--	--	--	80	400
Fluorene	0.52 U	0.48 U	0.48 U	--	--	--	80	400
Indeno(1,2,3-cd)pyrene	0.083 U	0.077 U	0.077 U	--	--	--	NA	NA
Naphthalene	1.3 U	1.3 U	1.2 U	--	--	--	8	40
Phenanthrene	0.083 U	0.077 U	0.077 U	--	--	--	NA	NA
Pyrene	0.19 U	0.17 U	0.17 U	--	--	--	50	250

U - Constituent not detected. Detection limit indicated.
 J - Estimated concentration.
 J- - Estimated concentration, biased low.
 VOC-Volatile Organic Compound.
 PAH-Polynuclear Aromatic Hydrocarbon.
 PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.
 ES-Enforcement Standard (WDNR).
 NA-Not Applicable. PAL or ES not available for this parameter.
 Bolded values indicate concentration exceeding PAL.
 Shaded and bolded values indicate concentration exceeding PAL and ES.
 -- = Not analyzed

Table 2-6

**Concentration Trends in Groundwater Monitoring Wells
Fourth Quarter 2003 through Third Quarter 2006
Moss-American Site
Milwaukee, Wisconsin**

	MW-7S	MW-32S	MW-33S	MW-34S	MW-35S	TG1-1
<u>Benzene (ug/L)</u>						
Fourth Quarter (December '03)	2.3 J	0.2 U	0.2 U	6.6	0.2 U	1 U
First Quarter (March '04)	4 U	0.2 U	4 J	5.7 J	0.2 U	1.5
Second Quarter (June '04)	2 U	0.2 U	1 U	7.8 J	0.2 U	1 U
Third Quarter (September '04)	2.2 J	0.2 U	1 U	7.1 J	0.2 U	2 U
Fourth Quarter (December '04)	8.6	0.2 U	0.2 U	7.2 J	0.2 U	0.5 J
First Quarter (March '05)	2.9 J	0.2 U	0.2 U	6.2 J	0.2 U	1 U
Second Quarter (June '05)	1.6 J	0.2 U	0.2 U	6 J	0.2 U	1 U
Third Quarter (September '05)	1.8	0.2 U	0.2 U	7.3	0.2 U	0.8 J
Fourth Quarter (December '05)	1.7 J	0.2 U	0.2 U	5.0 J	0.2 U	1.0 U
First Quarter (March '06)	2.0 U	0.2 U	0.2 U	7.4 J	0.2 U	0.6 J
Second Quarter (June '06)	0.2 U	0.2 U	0.2 U	6.9 J	0.2 U	1.0 U
Third Quarter (September '06)	1.5 J	0.2 U	0.2 U	6.6 J	0.2 U	0.3 J
<u>Naphthalene (ug/L)</u>						
Fourth Quarter (December '03)	3,000	1.4 U	58 J	6,500 J	1.3 U	1,500
First Quarter (March '04)	2,500	1.4 UJ	660 J	7,400	1.4 U	2,200
Second Quarter (June '04)	2,700	1.6 U	600	6,800	1.5 U	1,500
Third Quarter (September '04)	2,700	1.6 U	970	11,000 J	1.7 U	3,200
Fourth Quarter (December '04)	1,600	1.5 U	140	5,700	1.5 U	1,600
First Quarter (March '05)	1,600	1.6 U	170	6,000	1.6 U	5,400
Second Quarter (June '05)	1,700	1.7 U	240	7,600	1.6 U	1,500
Third Quarter (September '05)	1,900	1.7 U	290	6,900	1.7 U	4,000
Fourth Quarter (December '05)	1,000	1.8 U	27	4,400 J	1.7 U	4,300
First Quarter (March '06)	1,000	1.5 U	1.7 U	6,400	2.0 J	3,200
Second Quarter (June '06)	1.4 U	1.4 U	7.1 J	6,500	1.4 U	1,100
Third Quarter (September '06)	850	1.3 U	12 J	23,000	1.2 UJ	2,200

Table 2-6 (Continued)

**Concentration Trends in Groundwater Monitoring Wells
Fourth Quarter 2003 through Second Quarter 2006
Moss-American Site
Milwaukee, Wisconsin**

	MW-7S	MW-32S	MW-33S	MW-34S	MW-35S	TG1-1
Fluorene (ug/L)						
Fourth Quarter (December '03)	8	0.18 U	0.84 J	180 J	0.17 U	150
First Quarter (March '04)	7	0.18 UJ	13	470	0.21 J	160
Second Quarter (June '04)	6.9	0.17 U	19	280	0.19 J	150
Third Quarter (September '04)	7.8	0.18 U	59	2,100 J	1.3	800
Fourth Quarter (December '04)	7.5	0.17 U	6.9	99	0.39 J	420
First Quarter (March '05)	6.5	0.18	9.1	370	0.18 U	2,500
Second Quarter (June '05)	6.3	0.52 U	48	640	0.5 U	320
Third Quarter (September '05)	5.8	0.53 U	56	440	0.53 U	1,100
Fourth Quarter (December '05)	4.2	0.56 U	3.0	94 J	0.52 U	2,100
First Quarter (March '06)	4.0	0.48 U	1.2	93	0.50 U	750
Second Quarter (June '06)	0.53 U	0.56 U	38	110	0.54 U	160 J
Third Quarter (September '06)	4.6	0.50 U	61	5,100	0.48 UJ	740
Benzo(a) pyrene (ug/L)						
Fourth Quarter (December '03)	0.019 U	0.02 U	0.02 U	5.9 J	0.028 J	5.9
First Quarter (March '04)	0.019 U	0.02 UJ	0.02 UJ	29	0.02 U	6.2
Second Quarter (June '04)	0.019 U	0.019 U	0.019 U	17	0.022 J	5.1
Third Quarter (September '04)	0.02 U	0.02 U	0.021 U	140 J	0.021 U	56
Fourth Quarter (December '04)	0.019 U	0.019 U	0.02 U	0.15	0.019 U	33
First Quarter (March '05)	0.02 U	0.02 U	0.019 U	21	0.02 U	200
Second Quarter (June '05)	0.024 J	0.021 U	0.021 U	42	0.02 U	21
Third Quarter (September '05)	0.021 U	0.021 U	0.021 U	23	0.021 U	91
Fourth Quarter (December '05)	0.021 U	0.022 U	0.024 U	0.55 J	0.021 U	180
First Quarter (March '06)	0.020 U	0.019 U	0.021 U	0.24	0.020 U	63
Second Quarter (June '06)	0.021 U	0.022 U	0.021 U	0.18	0.022 U	5.6 J
Third Quarter (September '06)	0.019 U	0.020 U	0.020 U	370	0.064 J-	51

U - Constituent not detected; method detection limit (MDL) of the analysis reported.

J - Estimated concentration.

ug/L - Micrograms per liter.

Table 2-7
Groundwater Sample Analytical Results
Treatment Performance Monitoring Wells- Nutrient and Biological Parameters
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006

Parameter (mg/l)	Sample Identification					
	TG1-1	TG1-2	TG1-3	TG2-1	TG2-2	TG2-3
Nitrogen (Kjeldahl)	0.89 J-	1.2 J-	1.4 J-	0.50 UJ	0.50 UJ	0.96 J-
Nitrite Nitrogen	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Nitrate Nitrogen	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Ammonia Nitrogen	0.77	1.2	1.4	0.20 U	0.51 J	0.94
Ortho-Phosphate as P	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Biochemical oxygen demand	4.5 U	3.5 U	3.8 U	2.5 U	2.4 U	3.6 U
Total Organic Carbon	8.7	11.8	13.3	3.1	3.1	11.6
Total Phosphorus as PO4	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.36
Chemical oxygen demand	43.1 J	29.4 J	33.3 J	6.3 J	7.8 J	29.0 J
Degrader Microbial Population (mean) (CFU/ml)	1230	520	800	100 U	100 U	1700
Total Microbial Population (mean) (CFU/ml)	8300	40000	5600	300	100 U	11000

Parameter (mg/l)	Sample Identification					
	TG3-1	TG3-2	TG3-3	TG4-1	TG4-2	TG4-3
Nitrogen (Kjeldahl)	0.50 UJ	0.50 UJ	1.1 J-	0.50 UJ	0.86 J-	0.89 J-
Nitrite Nitrogen	0.015 U	0.015 U	0.022 J	0.015 U	0.015 U	0.015 U
Nitrate Nitrogen	0.040 U	0.040 J	0.040 U	0.040 U	0.040 U	0.040 U
Ammonia Nitrogen	0.30 J	0.45 J	1.8 J	0.24 J	0.94	0.72
Ortho-Phosphate as P	0.016 J	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Biochemical oxygen demand	3.6 U	3.8 U	4.6 J	2.6 U	2.6 U	2.6 U
Total Organic Carbon	8.3	7.8	11.2	6.7	10.4	11.0
Total Phosphorus as PO4	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Chemical oxygen demand	21.3	22.4	35.8	14.9 J	24.7 J	26.7 J
Degrader Microbial Population (mean) (CFU/ml)	100 U	990	140	120	160	300
Total Microbial Population (mean) (CFU/ml)	85000	290	1800	1300	5200	1000

Parameter (mg/l)	Sample Identification					
	TG5-1	TG5-2	TG5-3	TG6-1	TG6-2	TG6-3
Nitrogen (Kjeldahl)	0.50 UJ	0.50 UJ	0.50 UJ	1.5 J-	0.50 UJ	0.50 UJ
Nitrite Nitrogen	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
Nitrate Nitrogen	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Ammonia Nitrogen	0.20 U	0.45 J	0.20 U	0.51 J	0.20 U	0.20 U
Ortho-Phosphate as P	0.014 J	0.010 U	0.035 J	0.020 J	0.025 J	0.010 U
Biochemical oxygen demand	3.4 U	3.2 U	4.1 U	3.5 U	3.3 U	3.3 U
Total Organic Carbon	3.8	5.7	6.5	10.7	8.6	8.0
Total Phosphorus as PO4	0.25 U	0.25 U	0.25 U	0.30 J	0.25 U	0.25 U
Chemical oxygen demand	11.0	15.0	15.7	29.5	21.7	20.9
Degrader Microbial Population (mean) (CFU/ml)	100 U	460	2100	660	100 U	100 U
Total Microbial Population (mean) (CFU/ml)	28000	3200	110000	4000	160	200

U Constituent not detected. Detection limit indicated.

J Estimated concentration.

J- Estimated concentration; biased low.

SECTION 3
EVALUATION OF PILOT SCALE OPERATIONS

Augmentation of the groundwater treatment system was initiated in October 2000 by injecting air at the treatment gates. In late June 2001, nutrient addition was initiated at TG1 using a solution containing potassium nitrate (KNO_3) and potassium phosphate ($KHPO_4$). System modifications were proposed in the Q2 2002 Quarterly Groundwater Treatment Performance Monitoring Report and are discussed in this section. Information regarding system performance is also presented.

3.1 DISSOLVED OXYGEN

During Q3 2006, the DO concentrations in the majority of the wells were found to be greater than 2.0 mg/L. Seven of the concentrations were found to be greater than 10 mg/L.

NO_3 -N was only detected in one treatment performance well sampled in Q3 2006 and N- NO_2 was not detected. This indicates that nitrogen is primarily present in its reduced state, and a reducing environment exists in the wells. Nitrogen data were not collected for the shallow monitoring wells.

Well packers were installed in the TG5 injection wells in June 2000; however, no discernable change in the DO levels were observed in the TG5 wells until Q1 and Q2 2003. TRONOX/WESTON attempted to install inflatable bladder packers in TG1 and TG2 injection wells in August 2001. However, the packers could not be properly installed due to the injection well configuration.

TRONOX/WESTON will continue to evaluate alternatives for air introduction into the treatment gates.

3.2 NUTRIENTS AND pH

Nutrient injection was discontinued at gate area TG1 as a part of the site modifications recommended in the Q2 2002 Monitoring Report. This took place at the end of October 2002, after the Agencies granted approval. However, nutrient and contaminant levels will continue to be monitored.

Recommended guidelines for bioremediation of contaminants in site groundwater include a pH range of 6.5 to 8.5 S.U. and a minimum carbon-nitrogen-phosphorous (C:N:P) ratio of 100:14:1. The range of pH values measured in the treatment performance monitoring wells (5.98 to 7.05 S.U.) is sufficient to facilitate biological activity.

Table 3-1 contains calculated C:N:P ratios for each of the treatment performance monitoring wells. During Q3 2006, the treatment performance monitoring wells did not exhibit the desired C:N:P ratio of 100:14:1. Nitrogen and phosphorous appear to be the limiting nutrients at the site.

3.3 BACTERIAL POPULATIONS

Total bacterial counts were found, in general, to have decreased in TG1 through TG4 and TG6 from Q2 2006. Total bacterial counts increased in TG5 to have increased from Q2 2006 levels. Increases or steady total bacterial counts were found in TG1 and TG2 from Q2 2006 levels. Degradable bacterial counts in TG1 and TG2 were found to generally increase or remain steady from Q2 2006. Degradable bacterial counts in TG3 through TG6 were found to generally decrease or remain steady from Q2 2006. The degradable bacterial count increased from Q2 2006 in TG5-3.

Figure 3-1 compares the degradable populations in TG1 and TG2 since Q1 2001. As indicated in Figure 3-1, there was a trend of general decrease in the degradable bacterial population levels in TG1 and TG2 from Q1 2001 to Q2 2004. It is uncertain what the cause of this bacterial decrease at the site was. With the exception of the Q1 2006 results, the degradable populations appear to be increasing over the last nine quarters.

3.4 HYDROGEOLOGY

TRONOX/WESTON identified a potential concern associated with the site hydrogeology in the Q2 2001 Monitoring Report. This concern is primarily based on the premise that low flow conditions may cause anoxic conditions and may inhibit TRONOX/WESTON's ability to introduce nutrients and other additives at an optimum level due to poor dispersion from the injection point. Low flow conditions are apparent based on the hydraulic gradient and flow velocities derived. A low flow velocity may be indirectly beneficial as a longer residence time in the treatment gate may allow for more effective biodegradation. No significant change was observed in relation to site hydrogeology during Q3 2006.

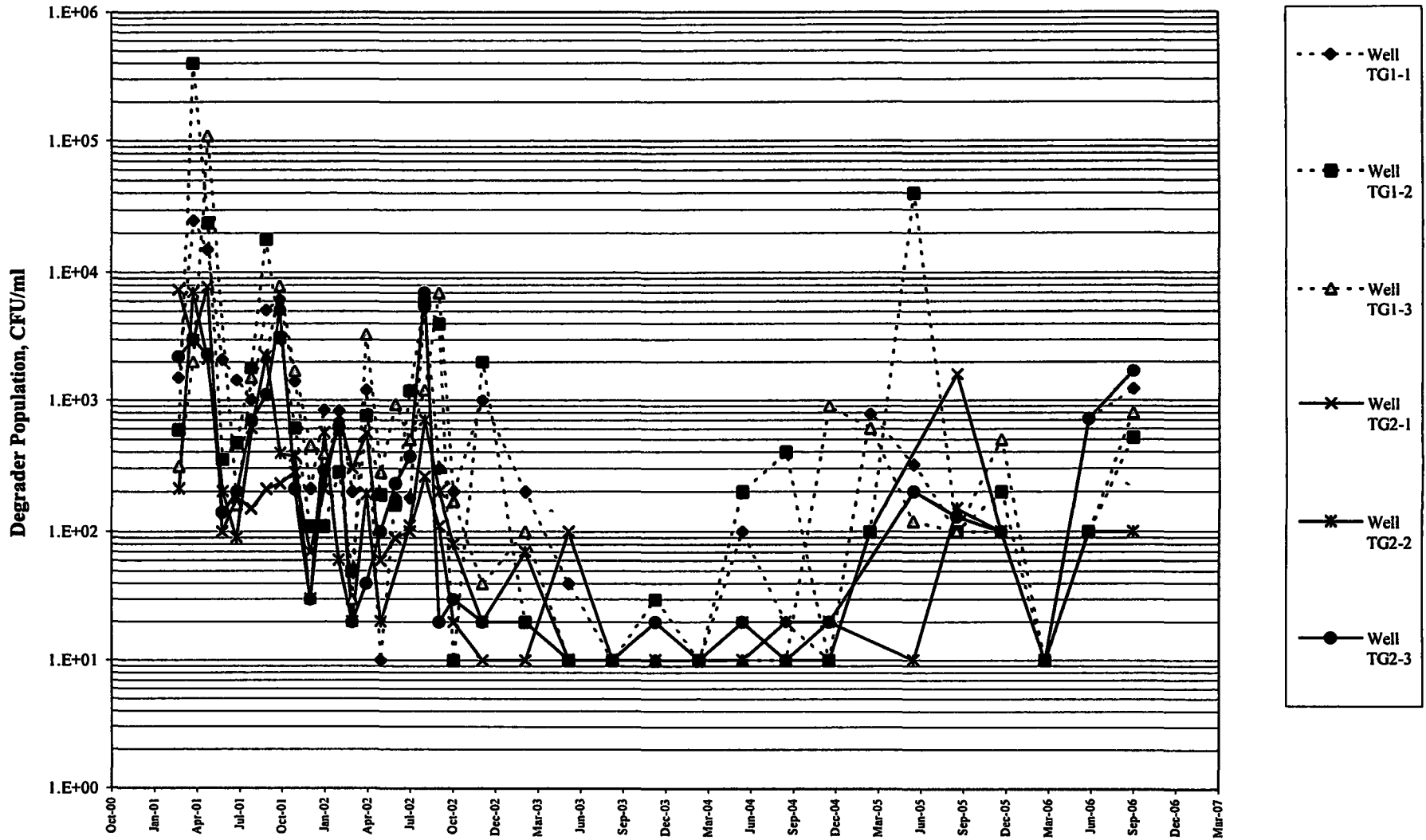
3.5 SITE MODIFICATIONS

Per the Q2 2002 Monitoring Report recommendations, modifications have been made to the system at the site. In October 2002, the performance monitoring well sampling frequency and scope reductions went into effect following the Agencies' approval. Groundwater sampling was revised to a quarterly sampling regime instead of a monthly sampling regime. In addition, shallow monitoring wells MW-3S, MW-10S, MW-13S, MW-20S, MW-25S, and MW-26S, and intermediate wells MW-3I, MW-7I, MW-9I, and MW-20I were removed from the groundwater monitoring program. However, these wells were not abandoned, per WDNR's request, with the exception of MW-20S and MW-20I abandoned during LMR diversion. Water levels will continue to be gathered from these wells on a quarterly basis to assist with the production of the groundwater elevation contour map. Discontinuation of nutrient injection at gate TG1 was also approved and was implemented in October 2002.

The hydrogeologic investigation proposed in the Q2 2002 Monitoring Report took place in December 2002. This work included the installation of nine piezometers (PZ-01 thru PZ-07, PZ-09, and PZ-10) as well as a staff gauge (SG-1). Records were updated with this information, and used to prepare the groundwater elevation contour map for this quarter.

Figure 3-1

Comparison of Degradable Populations in Treatment Gates 1 and 2 since Q1 2001
Moss-American Site
Milwaukee, Wisconsin



Note: Laboratory detection limit is shown where degrader population was not detected at or above the detection limit.

Table 3-1

**Calculation of Carbon:Nitrogen:Phosphorous Ratios
Treatment Performance Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well	Carbon ¹ , mg/L	Total Nitrogen ² , mg/L	Phosphorous ³ , mg/L	C-N-P Ratio (100-14-1 desired)		
				100	14	1
TG1-1	8.7	0.77	ND	100	8.9	0
TG1-2	11.8	1.2	ND	100	10	0
TG1-3	13.3	1.4	ND	100	11	0
TG2-1	3.1	ND	ND	100	0	0
TG2-2	3.1	0.51	ND	100	16	0
TG2-3	11.6	0.94	0.36	100	8.1	3.1
TG3-1	8.3	0.3	ND	100	3.6	0
TG3-2	7.8	0.49	ND	100	6.3	0
TG3-3	11.2	1.822	ND	100	16	0
TG4-1	6.7	0.24	ND	100	3.6	0
TG4-2	10.4	0.94	ND	100	9.0	0
TG4-3	11	0.72	ND	100	6.5	0
TG5-1	3.8	ND	ND	100	0	0
TG5-2	5.7	0.45	ND	100	7.9	0
TG5-3	6.5	0	ND	100	0	0
TG6-1	10.7	0.51	0.3	100	4.8	2.8
TG6-2	8.6	ND	ND	100	0	0
TG6-3	8	ND	ND	100	0	0
Site Average	8.35	0.74	0.33	100	9	0

1 - Carbon measured as Total Organic Carbon (non-purgable).

2 - Nitrogen measured as NH₃-N, NO₂-N, and NO₃-N.

3 - Phosphorous measured as phosphate (PO₄-P).

ND - Constituent not detected.

-- Not available

Shaded values indicate values at or above desired quantity.

SECTION 4

REACH 1, 2 AND 3 GROUNDWATER MONITORING RESULTS

The September 2006 groundwater-monitoring event included the annual sampling event at the Reach 1, 2, and 3 monitoring network at the Moss-American site. These monitoring wells include MW-A, MW-B, MW-C, MW-D, MW-E, MW-F, MW-G, MW-H, MW-I, MW-J, and MW-K and are shown in Figures 4-1 through 4-3. Monitoring wells MW-A through MW-D were first sampled in September 2003 during the on-site Q3 2003 groundwater sampling event. The September 2005 Q3 sampling event was the first time monitoring wells MW-E through MW-K were sampled. Similar to the on-site wells, groundwater elevation measurements were collected from the Reach 1, 2, and 3 monitoring wells prior to sampling each monitoring well and groundwater elevations are presented on Table 4-1. DO measurements were also collected following the purging and sampling of each well.

The results of the annual Reach 1, 2, and 3 groundwater sampling event are described in the following subsections.

4.1 GROUNDWATER SAMPLE ANALYTICAL RESULTS

Groundwater samples were collected from a total of 11 Reach 1, 2, and 3 monitoring wells: MW-A, MW-B, MW-C, MW-D, MW-E, MW-F, MW-G, MW-H, MW-I, and MW-J. Two duplicate samples and two MS/MSD samples were collected from the Reach 1, 2, and 3 monitoring wells for quality control purposes. The QA/QC samples were collected in conjunction with the on-site groundwater monitoring network sampling effort.

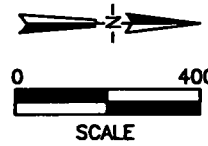
4.1.1 Field-Measured Parameters

The groundwater samples were measured in the field for pH, specific conductance, temperature, redox potential, DO, and turbidity. The field parameters were collected using a YSI 556 portable water quality meter and a HS Scientific DRT-15CE turbidimeter. Downhole DO readings were collected from each monitoring well subsequent to purging and sampling the well. The

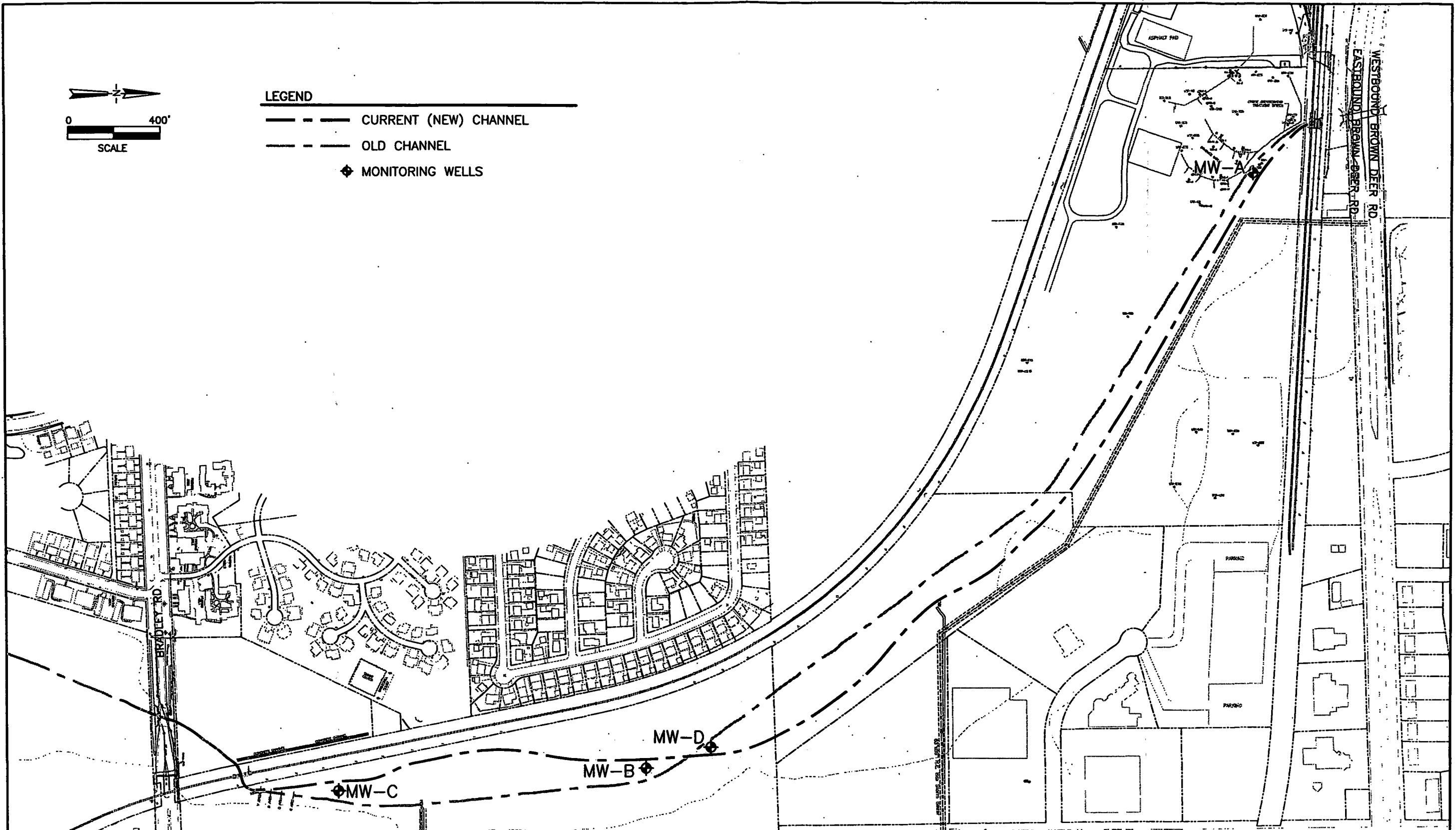
groundwater pH, redox potential, specific conductance, temperature, and turbidity were monitored during well purging prior to sampling. The final (stabilized) values for these measurements prior to sample collection are presented in Table 4-2.

4.1.2 Laboratory Analyses

Each groundwater sample collected from the Reach 1, 2, and 3 monitoring well network during the September 2006 sampling event was analyzed for BTEX and PAH compounds. The results of these analyses are presented and compared to WDNR Preventive Action Limits (PALs) and Enforcement Standards (ESs) in Table 4-3. Only two constituents were detected in the Reach 1, 2, and 3 monitoring wells. Ethylbenzene was detected in MW-E at an estimated concentration of 0.2 ug/L, and anthracene was detected in MW-K at an estimated concentration of 0.044 ug/L. Both of these detections are significantly below the PAL levels of 140 and 600 ug/L for ethylbenzene and anthracene, respectively. Only sporadic detections of BTEX and PAH constituents have been documented from the 2004 through the 2006 sampling events of the Reach 1, 2, and 3 monitoring wells. Based on the above observations, the Reach 1, 2, and 3 monitoring wells do not show chemical impacts and continue to demonstrate effectiveness of the remedy. The results of the laboratory analyses performed on the Reach 1, 2, and 3 groundwater samples collected during September 2006 are provided in Appendix A.



- LEGEND**
- — — CURRENT (NEW) CHANNEL
 - — — OLD CHANNEL
 - ◆ MONITORING WELLS



91st AVE.

FIGURE 4-1

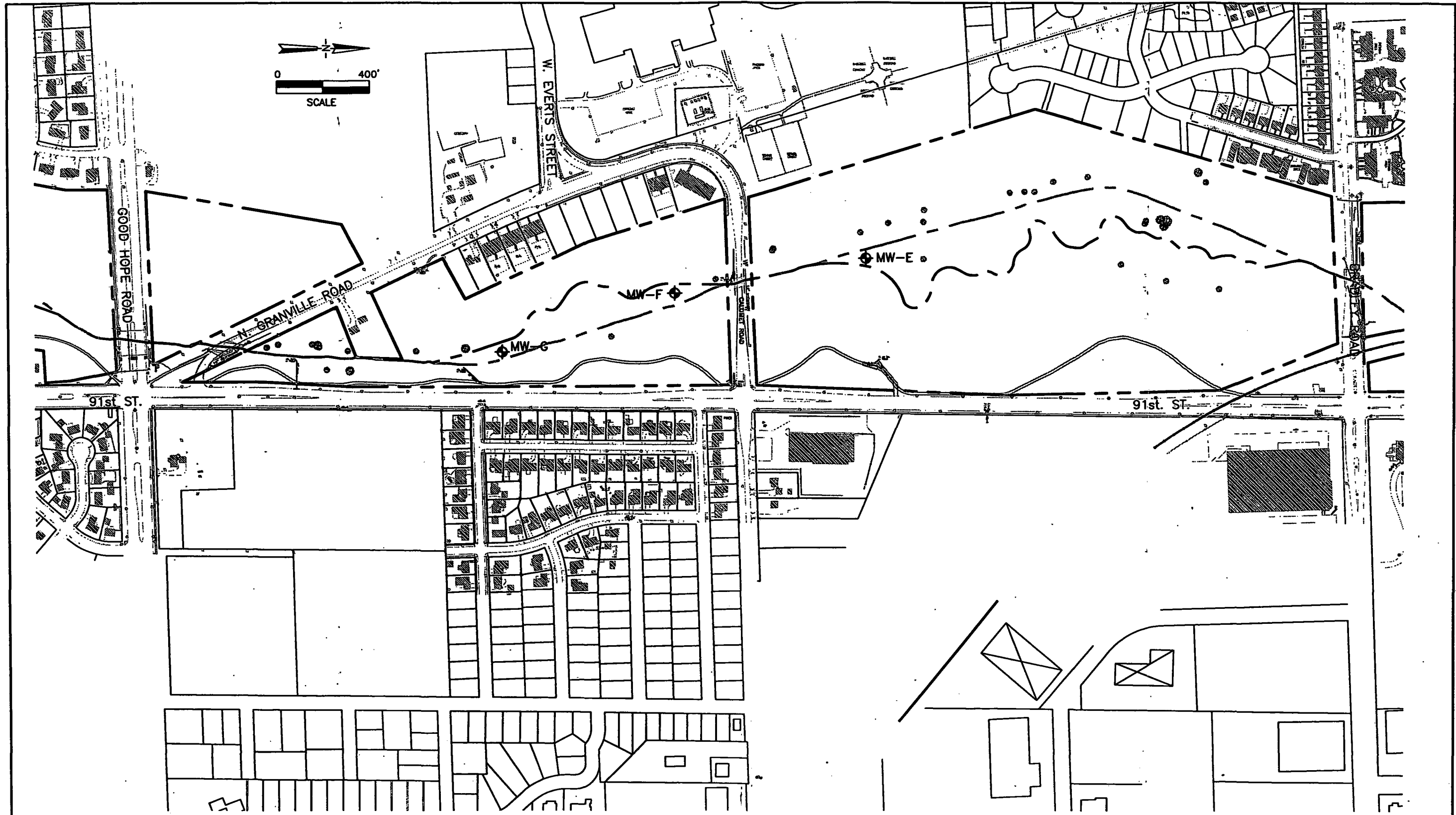


750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

REACH 1 MONITORING WELL LOCATION MAP
TRONOX, LLC
Milwaukee, Wisconsin

11/19/2006 12:4:55

v:\mass-on\REAC-4-2-A\105-SC-LE-NW-LLS.dwg, 11/19/2005 12:46:21 PM



LEGEND

- CURRENT (NEW) CHANNEL
- OLD CHANNEL
- ◆ MONITORING WELLS



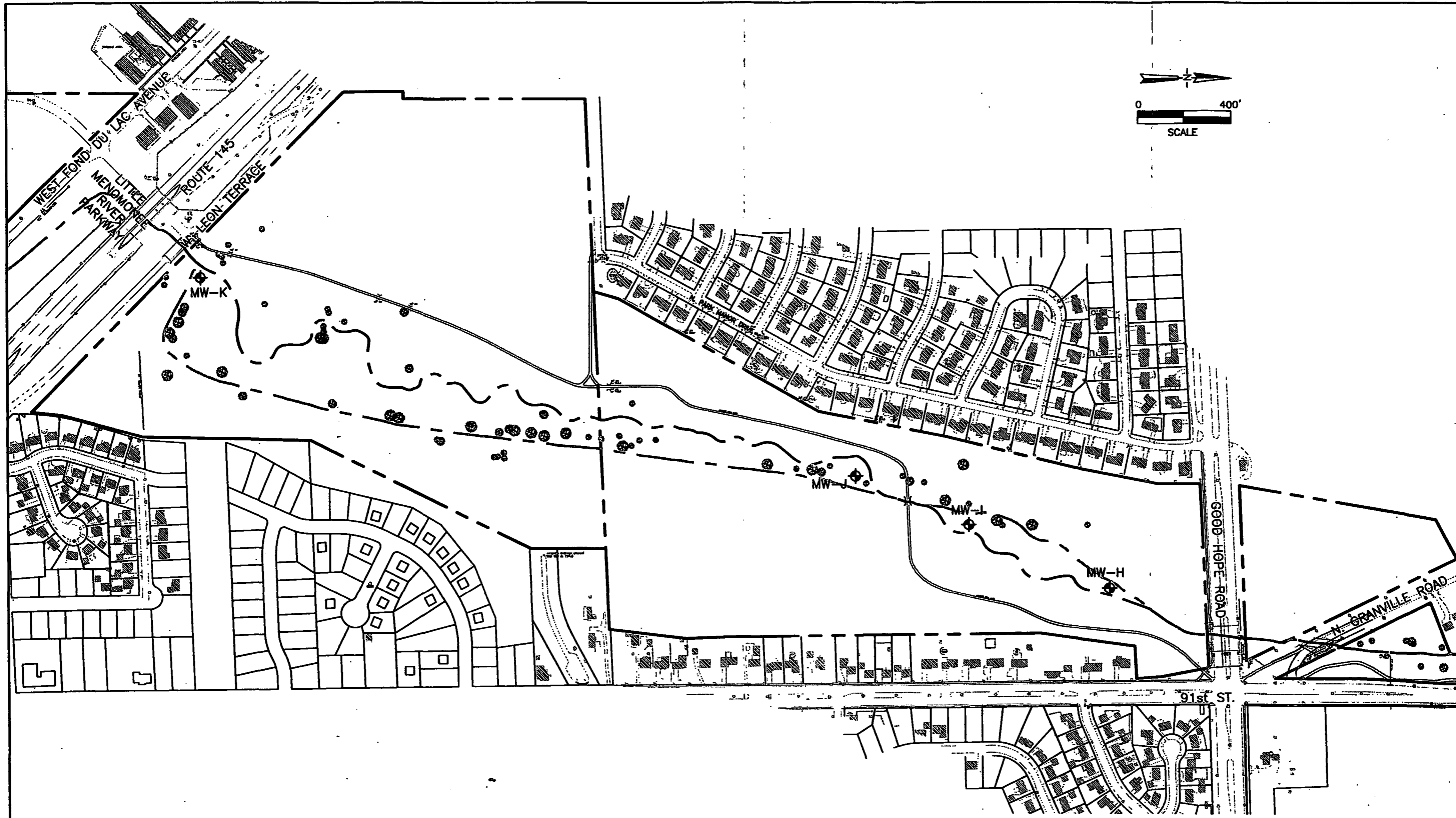
750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

REACH 2 MONITORING WELL LOCATION MAP

TRONOX, LLC
Milwaukee, Wisconsin

FIGURE 4-2

\\ross-ar\444-4-2-A\100-SC-LL-NW-LLS.dwg, 11/10/2006 12:45:44 PM



LEGEND

- CURRENT (NEW) CHANNEL
- OLD CHANNEL
- ◆ MONITORING WELLS

FIGURE 4-3



750 E. Bunker Ct.
 Suite 500
 Vernon Hills, Illinois
 60061

REACH 3 MONITORING WELL LOCATION MAP

TRONOX, LLC
 Milwaukee, Wisconsin

Table 4-1

**Groundwater Elevation Measurements
Reach 1, 2, and 3 Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Ground Elevation	TOC Elevation	Depth to Water	Groundwater Elevation	Product Thickness
MW-A	716.73	716.15	1.89	714.26	None Detected
MW-B	714.92	714.49	2.22	712.27	
MW-C	714.18	713.82	3.03	710.79	
MW-D	716.21	715.85	2.55	713.30	
MW-E	713.26	712.83	3.95	708.88	
MW-F	713.52	713.10	3.86	709.24	
MW-G	713.21	712.75	5.54	707.21	
MW-H	710.40	710.07	2.48	707.59	
MW-I	710.27	709.92	3.51	706.41	
MW-J	710.08	709.85	3.06	706.79	
MW-K	707.13	706.70	1.02	705.68	

Notes:

All values in feet.

All elevation measurements are with respect to Mean Sea Level (MSL).

TOC = Top of well casing.

GW = Groundwater.

Depth to groundwater was measured on 18 September 2006

Table 4-2

**Field-Measured Parameters
Reaches 1, 2, and 3 Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006**

Well ID	Dissolved Oxygen (mg/L)	Redox Potential (mV)	pH (Standard Units)	Specific Conductance (mmho/cm)	Temperature (Deg C)	Turbidity (NTU)
MW-A	1.2	-109.1	6.39	1.127	14.33	1.61
MW-B	0.12	-148.3	6.81	1.744	12.63	--
MW-C	9.7	-114.1	6.59	0.570	14.81	0.62
MW-D	8.2	-62.9	6.52	0.604	13.12	0.71
MW-E	11.3	-55.3	6.75	0.533	14.98	2.70
MW-F	9.2	-50.8	6.50	0.244	14.20	4.98
MW-G	9.9	-55.6	6.53	0.270	14.49	3.71
MW-H	13.4	-71.3	6.90	0.372	14.77	1.79
MW-I	12.1	-80.2	6.70	0.317	15.90	1.56
MW-J	15.4	-68.3	6.83	0.335	12.48	1.95
MW-K	3.5	-8.9	7.00	1.101	15.74	199

Notes:

NM - Not measured due to equipment failure.

uohm/cm - microhms per centimeter

Deg C - Degrees Celcius

mV - millivolt

mg/L - milligram per liter

NTU - Nephelometric Turbidity unit

-- Reading not collected due to product in well or due to broken urbidity meter.

Table 4-3

Groundwater Sample Analytical Results
Reach 1, 2, and 3 Monitoring Wells
Moss-American Site
Milwaukee, Wisconsin
Third Quarter 2006

Field Sample ID	MA3-MWA-092006-1	MA3-MWA-092006-1DP	MA3-MWB-092106-11	MA3-MWC-092006-9	MA3-MWD-092006-5	MA3-MWE-092006-13	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	MW-A	MW-A	MW-B	MW-C	MW-D	MW-E		
Sample Date	9/20/2006	9/20/2006	9/21/2006	9/20/2006	9/20/2006	9/20/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX								
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS								
Acenaphthene	0.87 U	0.87 U	0.95 U	0.90 U	0.95 U	0.88 U		
Acenaphthylene	1.4 U	1.4 U	1.5 U	1.4 U	1.5 U	1.4 U		
Anthracene	0.039 U	0.039 U	0.042 U	0.040 U	0.042 U	0.039 U	600	3000
Benzo(a)anthracene	0.019 U	0.019 U	0.021 U	0.020 U	0.021 U	0.020 U		
Benzo(a)pyrene	0.019 U	0.019 U	0.021 U	0.020 U	0.021 U	0.020 U	0.02	0.2
Benzo(b)fluoranthene	0.039 U	0.039 U	0.042 U	0.040 U	0.042 U	0.039 U	0.02	0.2
Benzo(g,h,i)perylene	0.097 U	0.097 U	0.11 U	0.10 U	0.11 U	0.098 U		
Benzo(k)fluoranthene	0.019 U	0.019 U	0.021 U	0.020 U	0.021 U	0.020 U		
Chrysene	0.077 U	0.078 U	0.085 U	0.080 U	0.085 U	0.078 U	0.02	0.2
Dibenz(a,h)anthracene	0.039 U	0.039 U	0.042 U	0.040 U	0.042 U	0.039 U		
Fluoranthene	0.039 U	0.039 U	0.042 U	0.040 U	0.042 U	0.039 U	80	400
Fluorene	0.48 U	0.48 U	0.53 U	0.50 U	0.53 U	0.49 U	80	400
Indeno(1,2,3-cd)pyrene	0.077 U	0.078 U	0.085 U	0.080 U	0.084 U	0.078 U		
Naphthalene	1.3 U	1.3 U	1.4 U	1.3 U	1.4 U	1.3 U	8	40
Phenanthrene	0.077 U	0.078 U	0.085 U	0.080 U	0.084 U	0.078 U		
Pyrene	0.17 U	0.17 U	0.19 U	0.18 U	0.19 U	0.18 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

BS-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or BS not available for this parameter.

NS-Not sampled due to frozen conditions.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and BS.

Table 4-3 (Continued)

Groundwater Sample Analytical Results
 Reach 1, 2, and 3 Monitoring Wells
 Moss-American Site
 Milwaukee, Wisconsin
 Third Quarter 2006

Field Sample ID	MA3-MVE-092006-13DI	MA3-MWF-092106-4	MA3-MWG-092106-3	MA3-MWH-092106-6	MA3-MWI-092106-5	MA3-MWJ-092106-7	MA3-MWK-092106-8	WDNR PAL (UG/L)	WDNR ES (UG/L)
Location ID	MW-E	MW-F	MW-G	MW-H	MW-I	MW-J	MW-K		
Sample Date	9/20/2006	9/21/2006	9/21/2006	9/21/2006	9/21/2006	9/21/2006	9/21/2006		
Unit	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l		
BTEX									
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5	5
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140	700
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	68.6	343
Total Xylenes	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	124	650
PAHS									
Acenaphthene	0.90 U	0.88 U	0.86 U	0.86 U	0.88 U	0.90 U	0.98 U		
Acenaphthylene	1.4 U	1.4 U	1.3 U	1.3 U	1.4 U	1.4 U	1.5 U		
Anthracene	0.040 U	0.039 U	0.038 U	0.038 U	0.039 U	0.040 U	0.044 J	600	3000
Benzo(a)anthracene	0.020 U	0.020 U	0.019 U	0.019 U	0.019 U	0.020 U	0.022 U		
Benzo(a)pyrene	0.020 U	0.020 U	0.019 U	0.019 U	0.019 U	0.020 U	0.022 U	0.02	0.2
Benzo(b)fluoranthene	0.040 U	0.039 U	0.038 U	0.038 U	0.039 U	0.040 U	0.043 U	0.02	0.2
Benzo(g,h,i)perylene	0.10 U	0.098 U	0.096 U	0.096 U	0.097 U	0.10 U	0.11 U		
Benzo(k)fluoranthene	0.020 U	0.020 U	0.019 U	0.019 U	0.019 U	0.020 U	0.022 U		
Chrysene	0.080 U	0.078 U	0.077 U	0.076 U	0.078 U	0.080 U	0.087 U	0.02	0.2
Dibenz(a,h)anthracene	0.040 U	0.039 U	0.038 U	0.038 U	0.039 U	0.040 U	0.043 U		
Fluoranthene	0.040 U	0.039 U	0.038 U	0.038 U	0.039 U	0.040 U	0.043 U	80	400
Fluorene	0.50 U	0.49 U	0.48 U	0.48 U	0.49 U	0.50 U	0.54 U	80	400
Indeno(1,2,3-cd)pyrene	0.080 U	0.078 U	0.077 U	0.076 U	0.078 U	0.080 U	0.087 U		
Naphthalene	1.3 U	1.3 U	1.2 U	1.2 U	1.3 U	1.3 U	1.4 U	8	40
Phenanthrene	0.080 U	0.078 U	0.077 U	0.076 U	0.078 U	0.080 U	0.087 U		
Pyrene	0.18 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U	0.20 U	50	250

U - Constituent not detected. Detection limit indicated.

J - Estimated concentration.

J - Estimated concentration, biased low.

VOC-Volatile Organic Compound.

PAH-Polynuclear Aromatic Hydrocarbon.

PAL-Wisconsin Department of Natural Resources (WDNR) Preventative Action Limit.

ES-Enforcement Standard (WDNR).

NA-Not Applicable. PAL or ES not available for this parameter.

NS-Not sampled due to frozen conditions.

Bolded values indicate concentration exceeding PAL.

Shaded and bolded values indicate concentration exceeding PAL and ES.

SECTION 5
REFERENCES

Weston Solutions, Inc. (WESTON). 1999. *Quality Assurance Project Plan for Installation of Groundwater Remedial System*. October 1999.

WESTON. 2001. *Quality Assurance Project Plan for Installation of Groundwater Remedial System Addendum No.1*. May 2001.

APPENDIX A

September 2006 Groundwater Sample Analytical Results



Microbac

October 13, 2006

Tom Graan
Weston Solutions, Inc.
750 East Bunker Court
Suite 500
Vernon Hills, IL 60061-1450

Work Order No.: ME0609658

RE: Moss American

Dear Tom Graan:

Microbac Laboratories, Inc. received 9 samples on 9/20/2006 9:15:00 AM for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted. This report includes the numbered pages as well as the Cooler Inspection Report and Chain of Custody form(s).

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Carey A. Gervase
Project Manager

Enclosures

Microbac

WORK ORDER SAMPLE SUMMARY

Date: *Friday, October 13, 2006*

CLIENT: Weston Solutions, Inc.
Project: Moss American
Lab Order: ME0609658

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME0609658-01A	MA3TG110919068		9/19/2006 11:18:00 AM	9/20/2006
ME0609658-02A	MA3TG120919067		9/19/2006 10:35:00 AM	9/20/2006
ME0609658-03A	MA3TG130919066		9/19/2006 10:30:00 AM	9/20/2006
ME0609658-04A	MA3TG2109190613		9/19/2006 2:40:00 PM	9/20/2006
ME0609658-05A	MA3TG2209190614		9/19/2006 2:43:00 PM	9/20/2006
ME0609658-06A	MA3TG2309190615		9/19/2006 2:45:00 PM	9/20/2006
ME0609658-07A	MA3TG410919063		9/19/2006 9:00:00 AM	9/20/2006
ME0609658-08A	MA3TG420919062		9/19/2006 8:55:00 AM	9/20/2006
ME0609658-09A	MA3TG430919061		9/19/2006 8:50:00 AM	9/20/2006



ANALYTICAL RESULTS

Date: *Friday, October 13, 2006*

Client: Weston Solutions, Inc.
Client Project: Moss American

Work Order: ME0609658
Received: 09/20/06 09:15

Analyses	Result	Units	Qual	Analyzed	Tech	Method
<i>01A MA3TG110919068 -</i>						<i>Collected: 09/19/06 11:18</i>
Total Aerobic Degradable Bacteria	1230	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	8300	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>02A MA3TG120919067 -</i>						<i>Collected: 09/19/06 10:35</i>
Total Aerobic Degradable Bacteria	520	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	40000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>03A MA3TG130919066 -</i>						<i>Collected: 09/19/06 10:30</i>
Total Aerobic Degradable Bacteria	800	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	5600	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>04A MA3TG2109190613 -</i>						<i>Collected: 09/19/06 14:40</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	300	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>05A MA3TG2209190614 -</i>						<i>Collected: 09/19/06 14:43</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>06A MA3TG2309190615 -</i>						<i>Collected: 09/19/06 14:45</i>
Total Aerobic Degradable Bacteria	1700	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	11000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>07A MA3TG410919063 -</i>						<i>Collected: 09/19/06 09:00</i>
Total Aerobic Degradable Bacteria	120	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	1300	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>08A MA3TG420919062 -</i>						<i>Collected: 09/19/06 08:55</i>
Total Aerobic Degradable Bacteria	160	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	5200	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>09A MA3TG430919061 -</i>						<i>Collected: 09/19/06 08:50</i>
Total Aerobic Degradable Bacteria	300	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	1000	cfu/ml		09/21/06 20:00	RC	9215B MOD

Microbac

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA = Not Analyzed	N/A = Not Applicable		
mg/L = Milligrams per Liter (ppm)	ug/L = Micrograms per Liter (ppb)	cfu = Colony Forming Unit	
mg/Kg = Milligrams per Kilogram (ppm)	ug/Kg = Micrograms per Kilogram (ppb)	ng/L = Nanograms per Liter (ppt)	
U = Undetected			
J = Analyte concentration detected between RL and MDL (Metals / Organics)			
B = Detected in the associated Method Blank at a concentration above the routine PQL/RL			
b = Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL			
D = Surrogate recoveries are not calculated due to sample dilution			
ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)			
E = Value above quantitation range			
H = Analyte was prepared and/or analyzed outside of the analytical method holding time			
I = Matrix Interference			
R = RPD outside accepted recovery limits			
S = Spike recovery outside recovery limits			
Surr = Surrogate			
DF = Dilution Factor	RL = Reporting Limit	ST = Sample Type	MDL = Method Detection Limit

SAMPLE TYPES

A = Analyte
I = Internal Standard
S = Surrogate
T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

MBLK = Method Blank	ICSA = Interference Check Standard "A"	OPR = Ongoing Precision and Recovery Standard
DUP = Method Duplicate	ICSAB = Interference Check Standard "AB"	
LCS = Laboratory Control Sample	LCSD = Laboratory Control Sample Duplicate	
MS = Matrix Spike	MSD = Matrix Spike Duplicate	
ICB = Initial Calibration Blank	CCB = Continuing Calibration Blank	
ICV = Initial Calibration Verification	CCV = Continuing Calibration Verification	
PDS = Post Digestion Spike	SD = Serial Dilution	

CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

MICROBAC LOCATIONS

Corporate	- Wexford, PA	Camp Hill Division	- Camp Hill, PA
Pittsburgh Division	- Warrendale, PA	Knoxville Division	- Maryville, TN
Erie Division	- Erie, PA / Wilkes-Barre, PA	Venice Division	- Venice, FL / Fort Myers, FL
New Castle Division	- New Castle, PA	South Carolina Division	- New Ellenton, SC
Kentucky Testing Division	- Louisville, KY / Evansville, IN	Fayetteville Division	- Fayetteville, NC
Massachusetts Division	- Marlboro, MA	Southern Testing Division	- Wilson, NC
Gascoyne Division	- Baltimore, MD	Hauser Division	- Boulder, CO
Corona Division	- Corona, CA	Friend Laboratory	- Waverly, NY
South Jersey Division	- Turnersville, NJ		



COOLER INSPECTION

Date: Friday, October 13, 2006

Client Name **WESTON - VERNON HILLS**

Date / Time Received: **9/20/2006 9:15:00 AM**

Work Order Number **ME0609658**

Received by **KRS**

Checklist completed by **KRS** | **9/20/2006 9:38:33 AM**

Reviewed by **CG** | **9/20/2006 2:12:58 PM**

Carrier name **FedEx**

- After-Hour Arrival? Yes No
- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody included sufficient client identification? Yes No
- Chain of custody included sufficient sample collector information? Yes No
- Chain of custody included a sample description? Yes No
- Chain of custody agrees with sample labels? Yes No
- Chain of custody identified the appropriate matrix? Yes No
- Chain of custody included date of collection? Yes No
- Chain of custody included time of collection? Yes No
- Chain of custody identified the appropriate number of containers? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Chain of custody identified the appropriate preservatives? Yes No
- Samples properly preserved? Yes No

If No, adjusted by? _____

Date/Time _____

- Chain of custody included the requested analyses? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Samples received on ice? Yes No
- Container/Temp Blank temperature Temp: 8 °C
- VOA vials have zero headspace? No VOA vials submitted Yes No

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

General Comments:

Sample ID	Client Sample ID	Comments
ME0609658-01A	MA3TG110919068	
ME0609658-02A	MA3TG120919067	
ME0609658-03A	MA3TG130919066	
ME0609658-04A	MA3TG2109190613	
ME0609658-05A	MA3TG2209190614	
ME0609658-06A	MA3TG2309190615	
ME0609658-07A	MA3TG410919063	
ME0609658-08A	MA3TG420919062	
ME0609658-09A	MA3TG430919061	

COC ID: 91906-4

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab MICROBAC LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact N. McDONALD

Lab Phone 219-932-1770

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	MICROBIAL ENUMERATIO N	Filtered Container Preservative		
								00ml-Sterile Pk	
								N/A	
									0609658
	MA3TG110919068	W		N	9/19/2006 11:18	X			01A
	MA3TG120919067	W		N	9/19/2006 10:35	X			02C
	MA3TG130919066	W		N	9/19/2006 10:30	X			03
	MA3TG2109190613	W		N	9/19/2006 14:40	X			04
	MA3TG2209190614	W		N	9/19/2006 14:43	X			05
	MA3TG2309190615	W		N	9/19/2006 14:45	X			06
	MA3TG410919063	W		N	9/19/2006 09:00	X			07
	MA3TG420919062	W		N	9/19/2006 08:55	X			08
	MA3TG430919061	W		N	9/19/2006 08:50	X			09

Remarks/Comments
S.T. 80C Ks

Sampled By Tim Walls

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N

COC Tape was unbroken on outer package Y N
 Labels indicate Properly Preserved Y N

COC Tape was present on sample Y N
 Received within Holding Time Y N

COC Tape was unbroken on sample Y N

Temp of Cooler when Received, C	1	2	3	4	5

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Walls	9/19/06 2000	<i>[Signature]</i>	9/20/06 0915				

ME0609658 WESTON - VERNON HILLS 10/11/2006 CG
 Moss American Tom Graan

Microbac

October 13, 2006

Tom Graan
Weston Solutions, Inc.
750 East Bunker Court
Suite 500
Vernon Hills, IL 60061-1450

Work Order No.: ME0609724

RE: Moss American

Dear Tom Graan:

Microbac Laboratories, Inc. received 9 samples on 9/21/2006 9:15:00 AM for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted. This report includes the numbered pages as well as the Cooler Inspection Report and Chain of Custody form(s).

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
Microbac Laboratories, Inc.



Carey A. Gervase
Project Manager

Enclosures

Microbac

WORK ORDER SAMPLE SUMMARY

Date: *Friday, October 13, 2006*

CLIENT: Weston Solutions, Inc.
Project: Moss American
Lab Order: ME0609724

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME0609724-01A	MA3-TG3-10920063		9/20/2006 9:20:00 AM	9/21/2006
ME0609724-02A	MA3-TG3-20920062		9/20/2006 9:05:00 AM	9/21/2006
ME0609724-03A	MA3-TG3-30920064		9/20/2006 9:25:00 AM	9/21/2006
ME0609724-04A	MA3-TG5-109200615		9/20/2006 3:29:00 PM	9/21/2006
ME0609724-05A	MA3-TG5-209200614		9/20/2006 3:20:00 PM	9/21/2006
ME0609724-06A	MA3-TG5-309200616		9/20/2006 3:30:00 PM	9/21/2006
ME0609724-07A	MA3-TG6-109200611		9/20/2006 2:05:00 PM	9/21/2006
ME0609724-08A	MA3-TG6-209200612		9/20/2006 1:58:00 PM	9/21/2006
ME0609724-09A	MA3-TG6-309200613		9/20/2006 2:15:00 PM	9/21/2006



ANALYTICAL RESULTS

Date: *Friday, October 13, 2006*

Client: Weston Solutions, Inc.
Client Project: Moss American

Work Order: ME0609724
Received: 09/21/06 09:15

Analyses	Result	Units	Qual	Analyzed	Tech	Method
<i>01A MA3-TG3-10920063 -</i>						<i>Collected: 09/20/06 09:20</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	85000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>02A MA3-TG3-20920062 -</i>						<i>Collected: 09/20/06 09:05</i>
Total Aerobic Degradable Bacteria	990	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	290	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>03A MA3-TG3-30920064 -</i>						<i>Collected: 09/20/06 09:25</i>
Total Aerobic Degradable Bacteria	140	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	1800	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>04A MA3-TG5-109200615 -</i>						<i>Collected: 09/20/06 15:29</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	28000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>05A MA3-TG5-209200614 -</i>						<i>Collected: 09/20/06 15:20</i>
Total Aerobic Degradable Bacteria	460	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	3200	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>06A MA3-TG5-309200616 -</i>						<i>Collected: 09/20/06 15:30</i>
Total Aerobic Degradable Bacteria	2100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	110000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>07A MA3-TG6-109200611 -</i>						<i>Collected: 09/20/06 14:05</i>
Total Aerobic Degradable Bacteria	660	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	4000	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>08A MA3-TG6-209200612 -</i>						<i>Collected: 09/20/06 13:58</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	160	cfu/ml		09/21/06 20:00	RC	9215B MOD
<i>09A MA3-TG6-309200613 -</i>						<i>Collected: 09/20/06 14:15</i>
Total Aerobic Degradable Bacteria	< 100	cfu/ml		09/21/06 20:00	RC	9215B MOD
Total Aerobic Bacteria	200	cfu/ml		09/21/06 20:00	RC	9215B MOD

Microbac

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA	=	Not Analyzed	N/A	=	Not Applicable			
mg/L	=	Milligrams per Liter (ppm)	ug/L	=	Micrograms per Liter (ppb)	cfu	=	Colony Forming Unit
mg/Kg	=	Milligrams per Kilogram (ppm)	ug/Kg	=	Micrograms per Kilogram (ppb)	ng/L	=	Nanograms per Liter (ppt)
U	=	Undetected						
J	=	Analyte concentration detected between RL and MDL (Metals / Organics)						
B	=	Detected in the associated Method Blank at a concentration above the routine PQL/RL						
b	=	Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL						
D	=	Surrogate recoveries are not calculated due to sample dilution						
ND	=	Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)						
E	=	Value above quantitation range						
H	=	Analyte was prepared and/or analyzed outside of the analytical method holding time						
I	=	Matrix Interference						
R	=	RPD outside accepted recovery limits						
S	=	Spike recovery outside recovery limits						
Surr	=	Surrogate						
DF	=	Dilution Factor	RL	=	Reporting Limit	ST	=	Sample Type
						MDL	=	Method Detection Limit

SAMPLE TYPES

A	=	Analyte
I	=	Internal Standard
S	=	Surrogate
T	=	Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"	OPR	=	Ongoing Precision and Recovery Standard
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"			
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate			
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate			
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank			
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification			
PDS	=	Post Digestion Spike	SD	=	Serial Dilution			

CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analyses pursuant to each certification below are available upon request.

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- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

MICROBAC LOCATIONS

Corporate	-	Wexford, PA	Camp Hill Division	-	Camp Hill, PA
Pittsburgh Division	-	Warrendale, PA	Knoxville Division	-	Maryville, TN
Erie Division	-	Erie, PA / Wilkes-Barre, PA	Venice Division	-	Venice, FL / Fort Myers, FL
New Castle Division	-	New Castle, PA	South Carolina Division	-	New Ellenton, SC
Kentucky Testing Division	-	Louisville, KY / Evansville, IN	Fayetteville Division	-	Fayetteville, NC
Massachusetts Division	-	Marlboro, MA	Southern Testing Division	-	Wilson, NC
Gascoyne Division	-	Baltimore, MD	Hauser Division	-	Boulder, CO
Corona Division	-	Corona, CA	Friend Laboratory	-	Waverly, NY
South Jersey Division	-	Turnersville, NJ			



COOLER INSPECTION

Date: Friday, October 13, 2006

Client Name **WESTON - VERNON HILLS**

Date / Time Received: **9/21/2006 9:15:00 AM**

Work Order Number **ME0609724**

Received by **DP**

Checklist completed b DP | 9/21/2006 10:23:46 AM

Reviewed by CG | 9/21/2006 1:32:50 PM

Carrier name FedEx

- After-Hour Arrival? Yes No
- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody included sufficient client identification? Yes No
- Chain of custody included sufficient sample collector information? Yes No
- Chain of custody included a sample description? Yes No
- Chain of custody agrees with sample labels? Yes No
- Chain of custody identified the appropriate matrix? Yes No
- Chain of custody included date of collection? Yes No
- Chain of custody included time of collection? Yes No
- Chain of custody identified the appropriate number of containers? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Chain of custody identified the appropriate preservatives? Yes No
- Samples properly preserved? Yes No

If No, adjusted by _____ Date/Time _____

- Chain of custody included the requested analyses? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Samples received on ice? Yes No
- Container/Temp Blank temperature Temp: 7 °C
- VOA vials have zero headspace? No VOA vials submitted Yes No

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

General Comments:

Sample ID	Client Sample ID	Comments
ME0609724-01A	MA3-TG3-10920063	
ME0609724-02A	MA3-TG3-20920062	
ME0609724-03A	MA3-TG3-30920064	
ME0609724-04A	MA3-TG5-109200615	
ME0609724-05A	MA3-TG5-209200614	
ME0609724-06A	MA3-TG5-309200616	
ME0609724-07A	MA3-TG6-109200611	
ME0609724-08A	MA3-TG6-209200612	
ME0609724-09A	MA3-TG6-309200613	

ME0609724 WESTON - VERNON HILLS 10/12/2006
 Enter Project Name Here
 Tom Graan

COC ID: 09202006-9

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American Contact Name Tom Graan
 W. O. 02687.007.007.0001 Contact Phone No. 847-918-4142
 Lab MICROBAC LABS Lab Contact N. MCDONALD
 TAT Lab Phone 219-932-1770

MICROBIAL ENUMERATIO N																			
	Filtered																		
	Container Preservative	100ml-Sterile PI																	

0609724

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	Filtered	Container Preservative												
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X													
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X													
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X													
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X													
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X													
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X													
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X													
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X													
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X													

01-A
 02-A
 03-A
 09-A
 05-A
 06-A
 07-A
 08-A
 09-A

Remarks/Comments

Sampled By T. Willis

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N
 Temp of Cooler when Received, C
 COC Tape was unbroken on outer package Y N
 Labels indicate Property Preserved Y N
 1 2 3 4 5
 COC Tape was present on sample Y N
 Received within Holding Time Y N
 COC Tape was unbroken on sample Y N

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Willis	9-20-06/2000						

J.P.H. 9-21-06/0915



ANALYTICAL RESULTS

Prepared for:

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

405-775-5429

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1006366. Samples arrived at the laboratory on Wednesday, September 20, 2006. The PO# for this group is ZAKW1KEOK0A90089.

<u>Client Description</u>		<u>Lancaster Labs Number</u>
MA3-TG1-1-091906-08	Groundwater	4869131
MA3-TG1-2-091906-07	Groundwater	4869132
MA3-TG1-3-091906-06	Groundwater	4869133
MA3-TG2-1-091906-13	Groundwater	4869134
MA3-TG2-2-091906-14	Groundwater	4869135
MA3-TG2-3-091906-15	Groundwater	4869136
MA3-TG4-1-091906-03	Groundwater	4869137
MA3-TG4-2-091906-02	Groundwater	4869138
MA3-TG4-3-091906-01	Groundwater	4869139

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Weston Solutions, Inc.
ELECTRONIC Tronox LLC
COPY TO
1 COPY TO Data Package Group

Attn: Tom Graan
Attn: Roy Widmann



Questions? Contact your Client Services Representative
Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Kenneth A Bell
Kenneth A. Bell
Group Leader



Lancaster Laboratories Sample No. WW 4869131

MA3-TG1-1-091906-08 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 11:18

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:36
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-8 SDG#: KMA84-01

CAT No.	Analysis Name	CAS Number	As Received		As Received		Dilution Factor
			Result		Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	0.89	J	Detection Limit 0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.		0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.		0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.77		0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.		0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.		4.5	mg/l	1
00273	Total Organic Carbon	n.a.	8.7		1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.		0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	43.1		2.6	mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	0.3	J	0.2	ug/l	1
00777	Toluene	108-88-3	0.2	J	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	15.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	24.		0.6	ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	2,200.		27.	ug/l	20
00782	Acenaphthylene	208-96-8	120.	J	29.	ug/l	20
00783	Acenaphthene	83-32-9	990.		19.	ug/l	20
00784	Fluorene	86-73-7	740.		10.	ug/l	20
00785	Phenanthrene	85-01-8	1,600.		33.	ug/l	400
00789	Anthracene	120-12-7	190.		17.	ug/l	400
00807	Fluoranthene	206-44-0	730.		17.	ug/l	400
00811	Pyrene	129-00-0	550.		3.7	ug/l	20
00812	Benzo(a)anthracene	56-55-3	120.		8.3	ug/l	400
00818	Benzo(b)fluoranthene	205-99-2	47.		0.83	ug/l	20
00823	Benzo(a)pyrene	50-32-8	51.		0.41	ug/l	20
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		6.0	ug/l	20
00898	Indeno(1,2,3-cd)pyrene	193-39-5	15.		1.7	ug/l	20
00907	Benzo(g,h,i)perylene	191-24-2	31.		2.1	ug/l	20
07409	Chrysene	218-01-9	N.D.		190.	ug/l	20
07410	Benzo(k)fluoranthene	207-08-9	24.		0.41	ug/l	20

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the PAH by HPLC compounds



Lancaster Laboratories Sample No. WW 4869131

MA3-TG1-1-091906-08 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 11:18

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:36
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-8 SDG#: KMA84-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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were raised.

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

Due to the presence of interferents near their retention times, normal reporting limits were not attained for several target compounds. The reporting limits for these compounds were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:45	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 22:06	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:20	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Liz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 15:25	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:22	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 05:04	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 12:29	Mark A Clark	20
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 13:54	Mark A Clark	400
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 05:04	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869132

MA3-TG1-2-091906-07 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 10:35

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:36
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-7 SDG#: KMA84-02

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			As Received Result	Method Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	1.2	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	1.2	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.5	mg/l	1
00273	Total Organic Carbon	n.a.	11.8	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	29.4	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	0.2 J	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	37.	1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	15.	ug/l	1
00783	Acenaphthene	83-32-9	41.	0.86	ug/l	1
00784	Fluorene	86-73-7	20.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	7.5	0.076	ug/l	1
00789	Anthracene	120-12-7	1.3	0.038	ug/l	1
00807	Fluoranthene	206-44-0	2.3	0.038	ug/l	1
00811	Pyrene	129-00-0	1.4	0.17	ug/l	1
00812	Benzo (a) anthracene	56-55-3	0.066 J	0.019	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.	0.038	ug/l	1
00823	Benzo (a) pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.	0.038	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	N.D.	0.076	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	N.D.	0.095	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.076	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.	0.019	ug/l	1

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for acenaphthylene. The reporting limit for this compound was raised accordingly.



Lancaster Laboratories Sample No. WW 4869132

MA3-TG1-2-091906-07 Groundwater
091906-2,4,6 02687.007.007.0001

Moss American

Collected: 09/19/2006 10:35

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 09/29/2006 at 08:36
Discard: 11/29/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MA3-7 SDG#: KMA84-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
State of Wisconsin Lab Certification No. EN 748						

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:46	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 22:08	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:24	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 15:50	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:23	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 00:14	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/22/2006 23:25	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 00:14	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869133

MA3-TG1-3-091906-06 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 10:30

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:36
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-6 SDG#: KMA84-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	1.4		0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.		0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.		0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	1.4		0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.		0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.		3.8	mg/l	1
00273	Total Organic Carbon	n.a.	13.3		1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.		0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	33.3		2.6	mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	N.D.		1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.5	ug/l	1
00783	Acenaphthene	83-32-9	2.5	J	0.95	ug/l	1
00784	Fluorene	86-73-7	0.95		0.53	ug/l	1
00785	Phenanthrene	85-01-8	0.15	J	0.084	ug/l	1
00789	Anthracene	120-12-7	0.10	J	0.042	ug/l	1
00807	Fluoranthene	206-44-0	0.26		0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.		0.19	ug/l	1
00812	Benzo (a) anthracene	56-55-3	N.D.		0.021	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.		0.042	ug/l	1
00823	Benzo (a) pyrene	50-32-8	N.D.		0.021	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.		0.042	ug/l	1
00898	Indeno (1,2,3-cd) pyrene	193-39-5	N.D.		0.084	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	N.D.		0.11	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.084	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.		0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Lancaster Laboratories, Inc.
 2425 New Holland Pike
 PO Box 12425
 Lancaster, PA 17605-2425
 717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 4869133

MA3-TG1-3-091906-06 Groundwater
 091906-2,4,6 02687.007.007.0001

Moss American

Collected: 09/19/2006 10:30

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:36
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-6 SDG#: KMA84-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:47	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 22:09	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:25	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:14	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:25	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 02:39	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 00:04	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 02:39	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869134

MA3-TG2-1-091906-13 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 14:40

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA313 SDG#: KMA84-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	N.D.		0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.		0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.		0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	N.D.		0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.		0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.		2.5	mg/l	1
00273	Total Organic Carbon	n.a.	3.1		1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.		0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	6.3	J	2.6	mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	N.D.		1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.		0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.		0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.		0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.		0.18	ug/l	1
00812	Benzo(a) anthracene	56-55-3	N.D.		0.020	ug/l	1
00818	Benzo(b) fluoranthene	205-99-2	N.D.		0.040	ug/l	1
00823	Benzo(a) pyrene	50-32-8	N.D.		0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.		0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.080	ug/l	1
07410	Benzo(k) fluoranthene	207-08-9	N.D.		0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869134

MA3-TG2-1-091906-13 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 14:40

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA313 SDG#: KMA84-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:48	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 22:10	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:26	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:22	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:26	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 03:00	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 00:43	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 03:00	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869135

MA3-TG2-2-091906-14 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 14:43

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA314 SDG#: KMA84-05

CAT No.	Analysis Name	CAS Number	As Received		As Received		Dilution Factor
			Result		Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.		Detection Limit	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.		0.50	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.		0.015	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.51	J	0.040	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.		0.20	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.		0.010	mg/l	1
00273	Total Organic Carbon	n.a.	3.1		2.4	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.		1.0	mg/l	1
01553	Chemical Oxygen Demand	n.a.	7.8	J	0.25	mg/l	1
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.		1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.		0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.076	ug/l	1
00789	Anthracene	120-12-7	N.D.		0.038	ug/l	1
00807	Fluoranthene	206-44-0	0.049	J	0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.		0.17	ug/l	1
00812	Benzo(a) anthracene	56-55-3	N.D.		0.019	ug/l	1
00818	Benzo(b) fluoranthene	205-99-2	N.D.		0.038	ug/l	1
00823	Benzo(a) pyrene	50-32-8	N.D.		0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		0.038	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.076	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.		0.095	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.076	ug/l	1
07410	Benzo(k) fluoranthene	207-08-9	N.D.		0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869135

MA3-TG2-2-091906-14 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 14:43

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA314 SDG#: KMA84-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:50	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 21:50	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:28	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:30	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:29	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 03:20	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 01:22	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 03:20	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869136

MA3-TG2-3-091906-15 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 14:45

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA315 SDG#: KMA84-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	0.96 J	0.50		mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015		mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040		mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.94	0.20		mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010		mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.6		mg/l	1
00273	Total Organic Carbon	n.a.	11.6	1.0		mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	0.36	0.25		mg/l	1
01553	Chemical Oxygen Demand	n.a.	29.0	2.6		mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	N.D.	1.4		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.97		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.54		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.086		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.043		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.043		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19		ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.043		ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.043		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.086		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.11		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.086		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021		ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748



Lancaster Laboratories Sample No. WW 4869136

MA3-TG2-3-091906-15 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 14:45

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA315 SDG#: KMA84-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:51	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 21:51	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:29	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:38	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:30	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 03:41	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 02:01	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 03:41	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869137

MA3-TG4-1-091906-03 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 09:00

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-3 SDG#: KMA84-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	Detection Limit	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.24 J	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	2.6	mg/l	1
00273	Total Organic Carbon	n.a.	6.7	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	14.9	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869137

MA3-TG4-1-091906-03 Groundwater
 091906-2,4,6 02687.007.007.0001

Moss American
 Collected: 09/19/2006 09:00

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-3 SDG#: KMA84-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:54	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 21:53	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:30	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:46	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:32	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 04:02	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 02:39	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 04:02	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869138

MA3-TG4-2-091906-02 Groundwater
 091906-2,4,6 02687.007.007.0001

Moss American

Collected: 09/19/2006 08:55

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-2 SDG#: KMA84-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	0.86 J	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.94	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	2.6	mg/l	1
00273	Total Organic Carbon	n.a.	10.4	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	24.7	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.93	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.083	ug/l	1
00789	Anthracene	120-12-7	0.046 J	0.041	ug/l	1
00807	Fluoranthene	206-44-0	0.24	0.041	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.083	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.083	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748



Lancaster Laboratories Sample No. WW 4869138

MA3-TG4-2-091906-02 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected:09/19/2006 08:55

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-2 SDG#: KMA84-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:55	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 21:54	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:34	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 16:54	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:33	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 04:22	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 03:18	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 04:22	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Lancaster Laboratories Sample No. WW 4869139

MA3-TG4-3-091906-01 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 08:50

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-1 SDG#: KMA84-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	0.89 J		0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.		0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.		0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.72		0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.		0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.		2.6	mg/l	1
00273	Total Organic Carbon	n.a.	11.0		1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.		0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	26.7		2.6	mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	N.D.		1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.		0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.		0.038	ug/l	1
00807	Fluoranthene	206-44-0	N.D.		0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.		0.17	ug/l	1
00812	Benzo (a) anthracene	56-55-3	N.D.		0.019	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.		0.038	ug/l	1
00823	Benzo (a) pyrene	50-32-8	N.D.		0.019	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.		0.038	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	N.D.		0.077	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	N.D.		0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.077	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.		0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869139

MA3-TG4-3-091906-01 Groundwater
 091906-2,4,6 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 08:50

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 09/29/2006 at 08:37
 Discard: 11/29/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MA3-1 SDG#: KMA84-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/28/2006 17:55	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/20/2006 21:55	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/22/2006 18:35	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/25/2006 15:20	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/21/2006 00:05	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/21/2006 09:28	Susan A Engle	1
00273	Total Organic Carbon	EPA 415.1	1	09/25/2006 17:02	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/21/2006 19:34	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/21/2006 07:50	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 04:43	Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/23/2006 04:36	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 04:43	Steven A Skiles	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	2	09/27/2006 17:15	Carolyn M Mastropietro	1
03337	PAH Water Extraction	SW-846 3510C	1	09/21/2006 16:30	Emma L Eck	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/21/2006 12:10	Nancy J Shoop	1



Quality Control Summary

Client Name: Tronox LLC
 Reported: 09/29/06 at 08:37 AM

Group Number: 1006366

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 06263105102A Nitrite Nitrogen	Sample number(s): 4869131-4869134 N.D.	0.015	mg/l	97		90-110		
Batch number: 06263105102B Nitrite Nitrogen	Sample number(s): 4869135-4869139 N.D.	0.015	mg/l	97		90-110		
Batch number: 06264022601A Ortho-Phosphate as P	Sample number(s): 4869131-4869139 N.D.	0.010	mg/l	103		95-105		
Batch number: 06264023502A Biochemical Oxygen Demand	Sample number(s): 4869131-4869139 N.D.			104	111	85-115	6	8
Batch number: 06264110101A Total Phosphorus as PO4 water	Sample number(s): 4869131-4869135 N.D.	0.25	mg/l	100		89-110		
Batch number: 06264110101B Total Phosphorus as PO4 water	Sample number(s): 4869136-4869139 N.D.	0.25	mg/l	100		89-110		
Batch number: 06264155301A Chemical Oxygen Demand	Sample number(s): 4869131-4869139 N.D.			95		87-102		
Batch number: 06264WAD026 Naphthalene	Sample number(s): 4869131-4869139 N.D.	1.3	ug/l	90	90	55-94	0	30
Acenaphthylene	N.D.	1.4	ug/l	92	92	59-96	0	30
Acenaphthene	N.D.	0.90	ug/l	95	94	60-116	1	30
Fluorene	N.D.	0.50	ug/l	99	99	66-106	0	30
Phenanthrene	N.D.	0.080	ug/l	101	102	67-115	1	30
Anthracene	N.D.	0.040	ug/l	97	97	67-109	0	30
Fluoranthene	N.D.	0.040	ug/l	99	99	70-112	0	30
Pyrene	N.D.	0.18	ug/l	100	100	69-113	0	30
Benzo (a) anthracene	N.D.	0.020	ug/l	102	102	73-114	0	30
Benzo (b) fluoranthene	N.D.	0.040	ug/l	103	103	72-113	0	30
Benzo (a) pyrene	N.D.	0.020	ug/l	103	103	68-112	1	30
Dibenz (a, h) anthracene	N.D.	0.040	ug/l	99	103	30-121	4	30
Indeno (1, 2, 3-cd) pyrene	N.D.	0.080	ug/l	103	105	60-111	2	30
Benzo (g, h, i) perylene	N.D.	0.10	ug/l	96	101	9-127	5	30
Chrysene	N.D.	0.080	ug/l	102	102	70-111	0	30
Benzo (k) fluoranthene	N.D.	0.020	ug/l	103	103	72-119	0	30
Batch number: 06265106102A Nitrate Nitrogen	Sample number(s): 4869131 N.D.	0.040	mg/l	109		89-110		
Batch number: 06265106102B Nitrate Nitrogen	Sample number(s): 4869132-4869139 N.D.	0.040	mg/l	109		89-110		
Batch number: 06265A53A	Sample number(s): 4869131-4869139							

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
 Reported: 09/29/06 at 08:37 AM

Group Number: 1006366

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Benzene	N.D.	0.2	ug/l	109	106	86-119	3	30
Toluene	N.D.	0.2	ug/l	112	109	82-119	2	30
Ethylbenzene	N.D.	0.2	ug/l	113	112	81-119	1	30
Total Xylenes	N.D.	0.6	ug/l	114	113	82-120	1	30
Batch number: 06268022101A Ammonia Nitrogen	Sample number(s): 4869131-4869139							
	N.D.	0.20	mg/l	95	95	91-100	0	1
Batch number: 06268049512A Total Organic Carbon	Sample number(s): 4869131-4869139							
	N.D.	1.0	mg/l	100		80-120		
Batch number: 06270108101A Kjeldahl Nitrogen	Sample number(s): 4869131-4869139							
	N.D.	0.50	mg/l	93		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 06263105102A Nitrite Nitrogen	Sample number(s): 4869131-4869134			102		UNSPK: 4869134 N.D.	BKG: 4869134 N.D.	0 (1)	20
Batch number: 06263105102B Nitrite Nitrogen	Sample number(s): 4869135-4869139			111*		UNSPK: 4869137 N.D.	BKG: 4869137 N.D.	0 (1)	20
Batch number: 06264022601A Ortho-Phosphate as P	Sample number(s): 4869131-4869139			101	104	UNSPK: 4869139 N.D.	BKG: 4869139 N.D.	200* (1)	5
Batch number: 06264023502A Biochemical Oxygen Demand	Sample number(s): 4869131-4869139			109	109	UNSPK: 4869137 697.	BKG: P865279 709.	2	9
Batch number: 06264110101A Total Phosphorus as PO4 water	Sample number(s): 4869131-4869135			106		UNSPK: P864156 N.D.	BKG: P864156 N.D.	0 (1)	3
Batch number: 06264110101B Total Phosphorus as PO4 water	Sample number(s): 4869136-4869139			100		UNSPK: 4869139 N.D.	BKG: 4869139 N.D.	200* (1)	3
Batch number: 06264155301A Chemical Oxygen Demand	Sample number(s): 4869131-4869139			41*	33*	UNSPK: 4869131 54.5	BKG: P861869 54.9	1	8
Batch number: 06265106102A Nitrate Nitrogen	Sample number(s): 4869131			96		UNSPK: 4869131 N.D.	BKG: 4869131 N.D.	0 (1)	2
Batch number: 06265106102B Nitrate Nitrogen	Sample number(s): 4869132-4869139			104		UNSPK: 4869139 N.D.	BKG: 4869139 N.D.	0 (1)	2
Batch number: 06265A53A Benzene	Sample number(s): 4869131-4869139			118		UNSPK: P868091 78-131			
Toluene				119		78-129			
Ethylbenzene				118		75-133			

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC Group Number: 1006366
 Reported: 09/29/06 at 08:37 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Total Xylenes	119		84-131						
Batch number: 06268022101A Ammonia Nitrogen	Sample number(s): 4869131-4869139				BKG: P869740				
						10.8	10.9	1	2
Batch number: 06268049512A Total Organic Carbon	Sample number(s): 4869131-4869139				UNSPK: 4869132		BKG: 4869132		
	99		62-148			11.8	11.6	1	2
Batch number: 06270108101A Kjeldahl Nitrogen	Sample number(s): 4869131-4869139				UNSPK: 4869134		BKG: 4869134		
	76*		90-110			N.D.	N.D.	0 (1)	7

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAH's in Water by HPLC

Batch number: 06264WAD026

	Nitrobenzene	Triphenylene
4869131	93	10016*
4869132	102	99
4869133	96	102
4869134	100	100
4869135	98	101
4869136	98	102
4869137	98	103
4869138	96	100
4869139	100	102
Blank	101	104
LCS	103	101
LCSD	105	103

Limits: Nitrobenzene 71-128 Triphenylene 55-130

Analysis Name: BTEX (8021)

Batch number: 06265A53A

	Trifluorotoluene-P
4869131	93
4869132	95
4869133	96
4869134	97
4869135	97
4869136	97
4869137	95
4869138	96
4869139	96
Blank	96
LCS	97

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
Reported: 09/29/06 at 08:37 AM

Group Number: 1006366

Surrogate Quality Control

LCSD	96
MS	96

Limits: 69-129

***- Outside of specification**

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Account# 11441

Group# 1W6066 Sample# 4009101-37

C-611-AL P.-

COC ID: 09192008-4

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

351.2-TKN	353.2-NO2	353.2-NO3	365.1-TP	365.3-OP	405.1-BOD	410.2-COD	415.1-TOC			
0ml-Round G	0ml-Glass V	0ml-Glass V	0ml-Round C	500ml-Plastic	500ml-Plastic	0ml-Round G	0ml-Round G			
H2SO4	N/A	H2SO4	H2SO4	N/A	N/A	H2SO4	H3PO4			
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected					
	MA3TG110919068	W		N	9/19/2006 11:18	X	X	X	X	X
	MA3TG120919067	W		N	9/19/2006 10:35	X	X	X	X	X
	MA3TG130919066	W		N	9/19/2006 10:30	X	X	X	X	X
	MA3TG2109190613	W		N	9/19/2006 14:40	X	X	X	X	X
	MA3TG2209190614	W		N	9/19/2006 14:43	X	X	X	X	X
	MA3TG2309190615	W		N	9/19/2006 14:45	X	X	X	X	X
	MA3TG410919063	W		N	9/19/2006 09:00	X	X	X	X	X
	MA3TG420919062	W		N	9/19/2006 08:55	X	X	X	X	X
	MA3TG430919061	W		N	9/19/2006 08:50	X	X	X	X	X

Remarks/Comments

Sampled By _____

Lab Use Only

COC Tape was present on outer package Y N

Received in good condition Y N

COC Tape was unbroken on outer package Y N

Labels indicate Property Preserved Y N

COC Tape was present on sample Y N

Received within Holding Time Y N

COC Tape was unbroken on sample Y N

9 coolers ranges 3.1-5.7c

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time

Temp of Cooler when Received, C

1	2	3	4	5

9/20/06 P.11:15

Account# 11947 Group# 1006366 Sample# 4869131-39

Original P. 5

COC ID: 09192006-2

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

350-2-NH3																			
	Filtered																		
	Container	0ml-Round G																	
Preservative	H2SO4																		

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected														
	MA3TG110919068	W		N	9/19/2006 11:18	X													
	MA3TG120919067	W		N	9/19/2006 10:35	X													
	MA3TG130919066	W		N	9/19/2006 10:30	X													
	MA3TG2109190613	W		N	9/19/2006 14:40	X													
	MA3TG2209190614	W		N	9/19/2006 14:43	X													
	MA3TG2309190615	W		N	9/19/2006 14:45	X													
	MA3TG410919063	W		N	9/19/2006 09:00	X													
	MA3TG420919062	W		N	9/19/2006 08:55	X													
	MA3TG430919061	W		N	9/19/2006 08:50	X													

Remarks/Comments

Sampled By _____

Lab Use Only

COC Tape was present on outer package Y N

Received in good condition Y N

COC Tape was unbroken on outer package Y N

Labels indicate Property Preserved Y N

COC Tape was present on sample Y N

Received within Holding Time Y N

COC Tape was unbroken on sample Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

9 cooler ranges
3.1-5.2c

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time

9/20/06 @ 11:15

Account# 11447

Group# 1000366 Sample# 4864131-09

C. J. J. P. S

COC ID: 09192006-6

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

8021B-BTEX	8310-PAHS																		
------------	-----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Filtered

Container

Preservative

0ml-Glass Vial L Amber

HCl

N/A

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected														
	MA3TG110919068	W		N	9/19/2006 11:18	X	X												
	MA3TG120919067	W		N	9/19/2006 10:35	X	X												
	MA3TG130919066	W		N	9/19/2006 10:30	X	X												
	MA3TG2109190613	W		N	9/19/2006 14:40	X	X												
	MA3TG2209190614	W		N	9/19/2006 14:43	X	X												
	MA3TG2309190615	W		N	9/19/2006 14:45	X	X												
	MA3TG410919063	W		N	9/19/2006 09:00	X	X												
	MA3TG420919062	W		N	9/19/2006 08:55	X	X												
	MA3TG430919061	W		N	9/19/2006 08:50	X	X												

Remarks/Comments

Sampled By _____

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Properly Preserved Y N

Received within Holding Time Y N

9 cooler ranges 3.1-5.2c

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time

9/20/06



GROUP REPRINT: 1006373

*Revised to add comment
to LLI # 4869162 for
out of spec surrogate.*

*g. Burchall
417
10/4/06*



REVISED

ANALYTICAL RESULTS

Prepared for:

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

405-775-5429

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1006373. Samples arrived at the laboratory on Wednesday, September 20, 2006. The PO# for this group is ZAKW1KEOK0A90089.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MA3-MW27S-091906-11 Groundwater	4869155
MA3-MW28S-091906-16 Groundwater	4869156
MA3-MW28S-091906-16DP Groundwater	4869157
MA3-MW31S-091906-17 Groundwater	4869158
MA3-MW32S-091906-10 Groundwater	4869159
MA3-MW33S-091906-12 Groundwater	4869160
MA3-MW34S-091906-04 Groundwater	4869161
MA3-MW35S-091906-09 Groundwater	4869162
MA3-MW36S-091906-18DP Groundwater	4869163
MA3-MW6S-091906-19 Groundwater	4869164
MA3-MW36S-091906-18 Groundwater	4869165
MA3-MW7S-091906-05 Groundwater	4869166
MA3-FB-1-091906-20 Groundwater	4869167
MA3-TB-1-091906-21 Groundwater	4869168

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Weston Solutions, Inc.
ELECTRONIC Tronox LLC
COPY TO
1 COPY TO Data Package Group

Attn: Tom Graan
Attn: Roy Widmann



REVISED

Questions? Contact your Client Services Representative
Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

A handwritten signature in black ink that reads "Michele J. Smith".

Michele J. Smith
Group Leader



Lancaster Laboratories Sample No. WW 4869155

MA3-MW27S-091906-11 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 12:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-11 SDG#: KMA85-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.92	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.51	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.082	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.041	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.041	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.082	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.082	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 13:57	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869155

MA3-MW27S-091906-11 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 12:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-11	SDG#: KMA85-01					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 01:34	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 13:57	Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869156

MA3-MW28S-091906-16 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 14:47

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-16 SDG#: KMA85-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
08213	BTEX (8021)			Detection Limit		
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.89	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.099	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 14:18	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869156

MA3-MW28S-091906-16 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 14:47

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
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M3-16	SDG#: KMA85-02					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 02:13	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 14:18	Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869157

MA3-MW28S-091906-16DP Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 14:47

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M316D SDG#: KMA85-03FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Detection Limit	
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.		0.2 ug/l	1
00777	Toluene	108-88-3	N.D.		0.2 ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2 ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6 ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.		1.3 ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.4 ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.87 ug/l	1
00784	Fluorene	86-73-7	N.D.		0.49 ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.078 ug/l	1
00789	Anthracene	120-12-7	N.D.		0.039 ug/l	1
00807	Fluoranthene	206-44-0	N.D.		0.039 ug/l	1
00811	Pyrene	129-00-0	N.D.		0.17 ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.		0.019 ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.		0.039 ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.		0.019 ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		0.039 ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.078 ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.		0.097 ug/l	1
07409	Chrysene	218-01-9	N.D.		0.078 ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.		0.019 ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 14:39	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869157

MA3-MW28S-091906-16DP Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 14:47

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
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M316D	SDG#: KMA85-03FD				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 02:52	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 14:39	Steven A Skiles 1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro 1



Lancaster Laboratories Sample No. WW 4869158

MA3-MW31S-091906-17 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected:09/19/2006 16:25

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-17 SDG#: KMA85-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.51		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18		ug/l	1
00812	Benzo (a) anthracene	56-55-3	N.D.	0.020		ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.	0.040		ug/l	1
00823	Benzo (a) pyrene	50-32-8	N.D.	0.020		ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.	0.040		ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	N.D.	0.081		ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	N.D.	0.10		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081		ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.	0.020		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 15:00	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869158

MA3-MW31S-091906-17 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected:09/19/2006 16:25

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-17	SDG#: KMA85-04					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 03:31	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 15:00	Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869159

MA3-MW32S-091906-10 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 12:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-10 SDG#: KMA85-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18		ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040		ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date	Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006	15:20	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869159

MA3-MW32S-091906-10 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected:09/19/2006 12:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-10	SDG#: KMA85-05					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 04:10	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 15:20	Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869160

MA3-MW33S-091906-12 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 12:10

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-12 SDG#: KMA85-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	4.8	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	1.2 J	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	12. J	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	14. J	1.4	ug/l	1
00783	Acenaphthene	83-32-9	150.	0.91	ug/l	1
00784	Fluorene	86-73-7	61.	5.1	ug/l	10
00785	Phenanthrene	85-01-8	16.	0.81	ug/l	10
00789	Anthracene	120-12-7	0.53	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 15:41	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869160

MA3-MW33S-091906-12 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 12:10

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-12	SDG#: KMA85-06					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 04:48	Mark A Clark	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 20:55	Mark A Clark	10
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 15:41	Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869161

MA3-MW34S-091906-04 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 09:25

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-04 SDG#: KMA85-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	6.6 J	4.0	ug/l	20
00777	Toluene	108-88-3	N.D.	4.0	ug/l	20
00778	Ethylbenzene	100-41-4	27.	4.0	ug/l	20
00779	Total Xylenes	1330-20-7	77.	12.	ug/l	20
Due to the nature of the sample matrix, normal reporting limits were not attained.						
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	23,000.	500.	ug/l	20
00782	Acenaphthylene	208-96-8	590.	27.	ug/l	1
00783	Acenaphthene	83-32-9	4,600.	17.	ug/l	1
00784	Fluorene	86-73-7	5,100.	190.	ug/l	20
00785	Phenanthrene	85-01-8	14,000.	150.	ug/l	100
00789	Anthracene	120-12-7	1,600.	15.	ug/l	20
00807	Fluoranthene	206-44-0	6,000.	77.	ug/l	100
00811	Pyrene	129-00-0	4,700.	69.	ug/l	20
00812	Benzo(a)anthracene	56-55-3	980.	7.7	ug/l	20
00818	Benzo(b)fluoranthene	205-99-2	320.	15.	ug/l	20
00823	Benzo(a)pyrene	50-32-8	370.	7.7	ug/l	20
00895	Dibenz(a,h)anthracene	53-70-3	35.	0.77	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	120.	1.5	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	230.	1.9	ug/l	1
07409	Chrysene	218-01-9	1,400.	31.	ug/l	20
07410	Benzo(k)fluoranthene	207-08-9	180.	7.7	ug/l	20

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869161

MA3-MW34S-091906-04 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 09:25

Account Number: 11947

Submitted: 09/20/2006 11:15

Reported: 10/03/2006 at 11:17

Discard: 12/03/2006

Tronox LLC

P.O. Box 268859

Oklahoma City OK 73126-8859

M3-04 SDG#: KMA85-07

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 16:43	Steven A Skiles	20
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 05:27	Mark A Clark	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 21:41	Mark A Clark	20
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 18:25	Mark A Clark	100
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 16:43	Steven A Skiles	20
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869162

MA3-MW35S-091906-09 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 11:18

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-09 SDG#: KMA85-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.		1.2	ug/l	1
00782	Acenaphthylene	208-96-8	1.4 J		1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.		0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.076	ug/l	1
00789	Anthracene	120-12-7	0.057 J		0.038	ug/l	1
00807	Fluoranthene	206-44-0	0.58		0.038	ug/l	1
00811	Pyrene	129-00-0	0.37 J		0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	0.025 J		0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.		0.038	ug/l	1
00823	Benzo(a)pyrene	50-32-8	0.064 J		0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		0.20	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	0.16 J		0.076	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.		0.095	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.076	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	0.034 J		0.019	ug/l	1

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for dibenz(a,h)anthracene. The reporting limit for this compound was raised accordingly.

Surrogate recoveries were outside of QC limits for the HPLC PAH compounds. The analysis was repeated outside of the required hold time and surrogate recoveries met requirements. The data reported is from the initial extraction of the sample.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4869162

MA3-MW35S-091906-09 Groundwater
 091906-1,5 02687.007.007.0001
 Moss American
 Collected: 09/19/2006 11:18

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 10/03/2006 at 11:17
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

M3-09 SDG#: KMA85-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 17:24		Steven A Skiles	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 06:06		Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 17:24		Steven A Skiles	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15		Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869163

MA3-MW36S-091906-18DP Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 16:27

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M318D SDG#: KMA85-09FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.4		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.94		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.084		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.042		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19		ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042		ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.084		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.084		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 17:45	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869163

MA3-MW36S-091906-18DP Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected: 09/19/2006 16:27

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M318D	SDG#: KMA85-09FD				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 06:45	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 17:45	Steven A Skiles 1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro 1



Lancaster Laboratories Sample No. WW 4869164

MA3-MW6S-091906-19 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 16:34

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M318- SDG#: KMA85-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18		ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040		ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 18:06	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869164

MA3-MW6S-091906-19 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 16:34

Account Number: 11947

Submitted: 09/20/2006 11:15

Reported: 10/03/2006 at 11:17

Discard: 12/03/2006

Tronox LLC

P.O. Box 268859

Oklahoma City OK 73126-8859

M318-	SDG#:	KMA85-10					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 07:24	Mark A Clark	1	
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 18:06	Steven A Skiles	1	
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1	



Lancaster Laboratories Sample No. WW 4869165

MA3-MW36S-091906-18 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 16:27

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-18 SDG#: KMA85-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.2		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.86		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.076		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.038		ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.038		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17		ug/l	1
00812	Benzo(a)anthracene	56-55-3	0.022 J	0.019		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.038		ug/l	1
00823	Benzo(a)pyrene	50-32-8	0.028 J	0.019		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.038		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.076		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.095		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.076		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	0.026 J	0.019		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 18:26	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869165

MA3-MW36S-091906-18 Groundwater
091906-1,5 02687.007.007.0001
Moss American
Collected:09/19/2006 16:27

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-18	SDG#: KMA85-11				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 11:56	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 18:26	Steven A Skiles 1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro 1



Lancaster Laboratories Sample No. WW 4869166

MA3-MW7S-091906-05 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 10:15

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-05 SDG#: KMA85-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	1.5 J	1.0	ug/l	5
00777	Toluene	108-88-3	N.D.	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	11.	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	12. J	3.0	ug/l	5
Due to the nature of the sample matrix, normal reporting limits were not attained.						
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	850.	12.	ug/l	10
00782	Acenaphthylene	208-96-8	32.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	24.	0.86	ug/l	1
00784	Fluorene	86-73-7	4.6	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.038	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.038	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.038	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Page 2 of 2
REVISED

Lancaster Laboratories Sample No. WW 4869166

MA3-MW7S-091906-05 Groundwater
091906-1,5 02687.007.007.0001

Moss American

Collected: 09/19/2006 10:15

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-05 SDG#: KMA85-12

No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 18:47	Steven A Skiles	5
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 12:34	Mark A Clark	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 17:39	Mark A Clark	10
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 18:47	Steven A Skiles	5
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro	1



Lancaster Laboratories Sample No. WW 4869167

MA3-FB-1-091906-20 Groundwater
091906 02687.007.007.0001

Moss American

Collected: 09/19/2006 17:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-FB SDG#: KMA85-13FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.93	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.083	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.041	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.041	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.083	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.083	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 13:37	Steven A Skiles	1



Lancaster Laboratories Sample No. WW 4869167

MA3-FB-1-091906-20 Groundwater
091906 02687.007.007.0001

Moss American

Collected: 09/19/2006 17:00

Account Number: 11947

Submitted: 09/20/2006 11:15
Reported: 10/03/2006 at 11:17
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M3-FB	SDG#: KMA85-13FB				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 13:13	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/23/2006 13:37	Steven A Skiles 1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 05:15	Mark P Mastropietro 1



Lancaster Laboratories Sample No. WW 4869168

MA3-TB-1-091906-21 Groundwater
 091906 02687.007.007.0001
 Moss American
 Collected: 09/19/2006

Account Number: 11947

Submitted: 09/20/2006 11:15
 Reported: 10/03/2006 at 11:17
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

M3-TB SDG#: KMA85-14TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/23/2006 12:35	Steven A Skiles	1
01146	GC VOA Water Prep.	SW-846 5030B	1	09/23/2006 12:35	Steven A Skiles	1



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/03/06 at 11:17 AM

Group Number: 1006373

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 06264WAK026			Sample number(s): 4869155-4869167					
Naphthalene	N.D.	1.3	ug/l	87	83	55-94	4	30
Acenaphthylene	N.D.	1.4	ug/l	92	88	59-96	4	30
Acenaphthene	N.D.	0.90	ug/l	93	90	60-116	4	30
Fluorene	N.D.	0.50	ug/l	100	97	66-106	3	30
Phenanthrene	N.D.	0.080	ug/l	102	100	67-115	2	30
Anthracene	N.D.	0.040	ug/l	99	97	67-109	1	30
Fluoranthene	N.D.	0.040	ug/l	99	98	70-112	1	30
Pyrene	N.D.	0.18	ug/l	100	100	69-113	0	30
Benzo(a)anthracene	N.D.	0.020	ug/l	104	103	73-114	0	30
Benzo(b)fluoranthene	N.D.	0.040	ug/l	104	105	72-113	0	30
Benzo(a)pyrene	N.D.	0.020	ug/l	106	106	68-112	0	30
Dibenz(a,h)anthracene	N.D.	0.040	ug/l	106	106	30-121	0	30
Indeno(1,2,3-cd)pyrene	N.D.	0.080	ug/l	108	107	60-111	1	30
Benzo(g,h,i)perylene	N.D.	0.10	ug/l	104	105	9-127	0	30
Chrysene	N.D.	0.080	ug/l	103	103	70-111	0	30
Benzo(k)fluoranthene	N.D.	0.020	ug/l	105	106	72-119	1	30
Batch number: 06266A53A			Sample number(s): 4869155-4869168					
Benzene	N.D.	0.2	ug/l	105	104	86-119	1	30
Toluene	N.D.	0.2	ug/l	108	106	82-119	2	30
Ethylbenzene	N.D.	0.2	ug/l	108	107	81-119	1	30
Total Xylenes	N.D.	0.6	ug/l	109	108	82-120	1	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 06266A53A			Sample number(s): 4869155-4869168 UNSPK: 4869155						
Benzene	113		78-131						
Toluene	116		78-129						
Ethylbenzene	118		75-133						
Total Xylenes	118		84-131						

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/03/06 at 11:17 AM

Group Number: 1006373

Surrogate Quality Control

Analysis Name: PAH's in Water by HPLC
Batch number: 06264WAK026

	Nitrobenzene	Triphenylene
4869155	95	97
4869156	101	101
4869157	99	100
4869158	96	98
4869159	94	97
4869160	96	98
4869161	101	86603*
4869162	95	29*
4869163	97	96
4869164	96	97
4869165	95	95
4869166	90	97
4869167	96	96
Blank	106	105
LCS	104	103
LCSD	100	103
<hr/>		
Limits:	71-128	55-130

Analysis Name: BTEX (8021)
Batch number: 06266A53A
Trifluorotoluene-P

4869155	98
4869156	96
4869157	96
4869158	97
4869159	97
4869160	96
4869161	96
4869162	97
4869163	97
4869164	97
4869165	96
4869166	96
4869167	96
4869168	97
Blank	96
LCS	96
LCSD	96
MS	96
<hr/>	
Limits:	69-129

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



ANALYTICAL RESULTS

Prepared for:

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

405-775-5429

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1006593. Samples arrived at the laboratory on Thursday, September 21, 2006. The PO# for this group is ZAKW1KEOK0A90089.

Client Description

MA3-MW29S-092006-6	Groundwater
MA3-MW9S-092006-8	Groundwater
MA3-MWA-092006-1	Groundwater
MA3-MWA-092006-1DP	Groundwater
MA3-MWC-092006-9	Groundwater
MA3-MWD-092006-5BKG	Groundwater
MA3-MWD-092006-5MS	Groundwater
MA3-MWD-092006-5MSD	Groundwater
MA3-MWE-092006-13	Groundwater
MA3-MWE-092006-13DP	Groundwater

Lancaster Labs Number

4870591
4870592
4870593
4870594
4870595
4870596
4870597
4870598
4870599
4870600

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Weston Solutions, Inc.
ELECTRONIC Tronox LLC
COPY TO
1 COPY TO Data Package Group

Attn: Tom Graan
Attn: Roy Widmann



Questions? Contact your Client Services Representative
Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Michele J. Smith
Michele J. Smith
Group Leader



Lancaster Laboratories Sample No. WW 4870591

MA3-MW29S-092006-6 Groundwater
 092006-1,6 02687.007.007.0001

Moss American
 Collected: 09/20/2006 11:00 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOS29 SDG#: KMA85-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	0.2 J	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.93	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.083	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.083	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.083	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Lancaster Laboratories Sample No. WW 4870591

MA3-MW29S-092006-6 Groundwater
092006-1,6 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:00 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS29 SDG#: KMA85-15

No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 17:38	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 23:36	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 17:38	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870592

MA3-MW9S-092006-8 Groundwater
 092006-1,6 02687.007.007.0001

Moss American
 Collected: 09/20/2006 11:12 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOS9S SDG#: KMA85-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 17:59	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870592

MA3-MW9S-092006-8 Groundwater
092006-1,6 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:12. by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS9S	SDG#: KMA85-16					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 00:15	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 17:59	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870593

MA3-MWA-092006-1 Groundwater
 092006-1,7 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSMA SDG#: KMA85-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.097	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 18:20	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870593

MA3-MWA-092006-1 Groundwater
092006-1,7 02687.007.007.0001

Moss American
Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOSMA	SDG#: KMA85-17					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 00:53	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 18:20	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870594

MA3-MWA-092006-1DP Groundwater
092006-1,7 02687.007.007.0001

Moss American
Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOAFD SDG#: KMA85-18FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.078	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.097	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 18:41	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870594

MA3-MWA-092006-1DP Groundwater
092006-1,7 02687.007.007.0001

Moss American

Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20

Reported: 10/02/2006 at 13:22

Discard: 12/02/2006

Tronox LLC

P.O. Box 268859

Oklahoma City OK 73126-8859

MOAFD	SDG#: KMA85-18FD					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 01:32	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 18:41	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870595

MA3-MWC-092006-9 Groundwater
 092006-1,10 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 13:30 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSMC SDG#: KMA85-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 19:02	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870595

MA3-MWC-092006-9 Groundwater
092006-1,10 02687.007.007.0001

Moss American

Collected: 09/20/2006 13:30 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOSMC	SDG#: KMA85-19				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 02:11	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 19:02	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck 1



Lancaster Laboratories Sample No. WW 4870596

MA3-MWD-092006-5BKG Groundwater
 092006-1,7 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSMD SDG#: KMA85-20BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	0.2 J	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.95	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.53	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.084	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.084	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.11	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.084	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Lancaster Laboratories Sample No. WW 4870596

MA3-MWD-092006-5BKG Groundwater
092006-1,7 02687.007.007.0001

Moss American

Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOSMD SDG#: KMA85-20BKG

CAT

No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 16:16	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 21:39	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 16:16	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870597

MA3-MWD-092006-5MS Groundwater
 092006-1,7 02687.007.007.0001

Moss American
 Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSMD SDG#: KMA85-20MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	23.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	69.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	200.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	200.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	210.	0.95	ug/l	1
00784	Fluorene	86-73-7	21.	0.53	ug/l	1
00785	Phenanthrene	85-01-8	6.6	0.084	ug/l	1
00789	Anthracene	120-12-7	3.0	0.042	ug/l	1
00807	Fluoranthene	206-44-0	3.1	0.042	ug/l	1
00811	Pyrene	129-00-0	21.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	1.6	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	1.3	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	1.7	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	3.3	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	6.6	0.084	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	13.	0.11	ug/l	1
07409	Chrysene	218-01-9	6.4	0.084	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	1.3	0.021	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Lancaster Laboratories Sample No. WW 4870597

MA3-MWD-092006-5MS Groundwater
092006-1,7 02687.007.007.0001

Moss. American

Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20

Reported: 10/02/2006 at 13:22

Discard: 12/02/2006

Tronox LLC

P.O. Box 268859

Oklahoma City OK 73126-8859

MOSMD SDG#: KMA85-20MS

CAT

No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 16:37	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 22:18	Mark A Clark	1
01146	GC VOA Water Prep.	SW-846 5030B	1	09/26/2006 16:37	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870598

MA3-MWD-092006-5MSD Groundwater
 092006-1,7 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859.

MOSMD SDG#: KMA85-20MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	23.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	68.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	190.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	200.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	200.	0.95	ug/l	1
00784	Fluorene	86-73-7	21.	0.53	ug/l	1
00785	Phenanthrene	85-01-8	6.4	0.084	ug/l	1
00789	Anthracene	120-12-7	2.9	0.042	ug/l	1
00807	Fluoranthene	206-44-0	3.0	0.042	ug/l	1
00811	Pyrene	129-00-0	21.	0.19	ug/l	1
00812	Benzo (a) anthracene	56-55-3	1.6	0.021	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	1.3	0.042	ug/l	1
00823	Benzo (a) pyrene	50-32-8	1.6	0.021	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	3.1	0.042	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	6.5	0.084	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	12.	0.11	ug/l	1
07409	Chrysene	218-01-9	6.3	0.084	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	1.3	0.021	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Lancaster Laboratories Sample No. WW 4870598

MA3-MWD-092006-5MSD Groundwater
092006-1,7 02687.007.007.0001

Moss American

Collected: 09/20/2006 10:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOSMD SDG#: KMA85-20MSD

CAT		Analysis			Dilution	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 16:57	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 22:57	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 16:57	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Lancaster Laboratories Sample No. WW 4870599

MA3-MWE-092006-13 Groundwater
 092006-1,10 02687.007.007.0001

Moss American
 Collected: 09/20/2006 14:37 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSME SDG#: KMA85-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.88	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.49	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.078	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.098	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 20:45	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870599

MA3-MWE-092006-13 Groundwater
092006-1,10 02687.007.007.0001
Moss American
Collected: 09/20/2006 14:37 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOSME	SDG#: KMA85-21				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 05:25	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 20:45	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck 1



Lancaster Laboratories Sample No. WW 4870600

MA3-MWE-092006-13DP Groundwater
 092006-1,10 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 14:37 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/02/2006 at 13:22
 Discard: 12/02/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOEFD SDG#: KMA85-22*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 21:06	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870600

MA3-MWE-092006-13DP Groundwater
092006-1,10 02687.007.007.0001

Moss American

Collected: 09/20/2006 14:37 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/02/2006 at 13:22
Discard: 12/02/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOEFD	SDG#: KMA85-22*					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/29/2006 06:43	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 21:06	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/23/2006 18:30	Emma L Eck	1



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/02/06 at 01:22 PM

Group Number: 1006593

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 06265WAK026 Sample number(s): 4870591-4870600								
Naphthalene	N.D.	1.3	ug/l	90		55-94		
Acenaphthylene	N.D.	1.4	ug/l	93		59-96		
Acenaphthene	N.D.	0.90	ug/l	95		60-116		
Fluorene	N.D.	0.50	ug/l	101		66-106		
Phenanthrene	N.D.	0.080	ug/l	103		67-115		
Anthracene	N.D.	0.040	ug/l	93		67-109		
Fluoranthene	N.D.	0.040	ug/l	99		70-112		
Pyrene	N.D.	0.18	ug/l	102		69-113		
Benzo (a) anthracene	N.D.	0.020	ug/l	103		73-114		
Benzo (b) fluoranthene	N.D.	0.040	ug/l	104		72-113		
Benzo (a) pyrene	N.D.	0.020	ug/l	103		68-112		
Dibenz (a, h) anthracene	N.D.	0.040	ug/l	92		30-121		
Indeno (1, 2, 3-cd) pyrene	N.D.	0.080	ug/l	96		60-111		
Benzo (g, h, i) perylene	N.D.	0.10	ug/l	95		9-127		
Chrysene	N.D.	0.080	ug/l	103		70-111		
Benzo (k) fluoranthene	N.D.	0.020	ug/l	103		72-119		
Batch number: 06269A53A Sample number(s): 4870591-4870600								
Benzene	N.D.	0.2	ug/l	108	110	86-119	2	30
Toluene	N.D.	0.2	ug/l	110	111	82-119	1	30
Ethylbenzene	N.D.	0.2	ug/l	110	111	81-119	1	30
Total Xylenes	N.D.	0.6	ug/l	112	113	82-120	1	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 06265WAK026 Sample number(s): 4870591-4870600 UNSPK: 4870596									
Naphthalene	96	92	54-112	5	30				
Acenaphthylene	96	93	63-104	4	30				
Acenaphthene	97	94	59-114	4	30				
Fluorene	102	99	66-102	3	30				
Phenanthrene	104	101	66-115	3	30				
Anthracene	96	92	68-104	4	30				
Fluoranthene	99	96	67-104	4	30				
Pyrene	101	98	66-106	3	30				
Benzo (a) anthracene	101	99	63-111	2	30				
Benzo (b) fluoranthene	103	100	71-106	3	30				
Benzo (a) pyrene	105	101	69-109	5	30				
Dibenz (a, h) anthracene	104	98	62-115	5	30				

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/02/06 at 01:22 PM

Group Number: 1006593

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Indeno(1,2,3-cd)pyrene	105	102	56-112	2	30				
Benzo(g,h,i)perylene	100	93	56-115	7	30				
Chrysene	102	99	69-107	3	30				
Benzo(k)fluoranthene	103	101	70-109	2	30				
Batch number: 06269A53A Sample number(s): 4870591-4870600 UNSPK: 4870596									
Benzene	115	113	78-131	1	30				
Toluene	115	114	78-129	1	30				
Ethylbenzene	113	112	75-133	1	30				
Total Xylenes	115	114	84-131	1	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAH's in Water by HPLC
 Batch number: 06265WAK026

	Nitrobenzene	Triphenylene
4870591	89	91
4870592	108	108
4870593	93	97
4870594	95	96
4870595	94	99
4870596	106	105
4870597	105	102
4870598	104	99
4870599	100	104
4870600	99	103
Blank	107	106
LCS	103	106
MS	105	102
MSD	104	99
Limits:	71-128	55-130

Analysis Name: BTEX (8021)
 Batch number: 06269A53A

	Trifluorotoluene-P
4870591	95
4870592	96
4870593	95
4870594	96
4870595	96
4870596	96
4870597	97
4870598	98
4870599	96

*-Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/02/06 at 01:22 PM

Group Number: 1006593

Surrogate Quality Control

4870600	96
Blank	97
LCS	96
LCSD	97
MS	97
MSD	98

Limits: 69-129

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Account# 11947

Group# 1006593

Sample# 4870591-600

COC ID: 09202006-1

Chain of Custody Record



Client **Kerr McGee**

Site Name **Moss American**

W. O. **02687.007.007.0001**

Lab **LANCASTER LABS**

TAT

Contact Name **Tom Graan**

Contact Phone No. **847-918-4142**

Lab Contact **C. SWEIGART**

Lab Phone **717-656-2308 X1527**

353-2-N02	353-2-N03	415-1-TOC	8021B-BTEX	8021B-BTEX						
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Filtered

Container

Preservative

10ml-Glass Via	10ml-Glass Via	10ml-Round An	10ml-Glass Via	10ml-Glass Via
N/A	H2SO4	H3PO4	HCl	HCl

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	353-2-N02	353-2-N03	415-1-TOC	8021B-BTEX	8021B-BTEX						
	MA3-MW29S0920066	W		N	9/20/2006 11:00				X	X						
	MA3-MW37S0920067	W		N	9/20/2006 11:08				X	X						
	MA3-MW37S0920067MSD	W		Y	9/20/2006 11:08				X	X						
	MA3-MW9S0920068	W		N	9/20/2006 11:12				X	X						
	MA3-MWA0920061	W		N	9/20/2006 09:05				X	X						
	MA3-MWA0920061DP	W		N	9/20/2006 09:05				X	X						
	MA3-MWC0920069	W		N	9/20/2006 13:30				X	X						
	MA3-MWD0920065	W		N	9/20/2006 10:25				X	X						
	MA3-MWD0920065MSD	W		Y	9/20/2006 10:25				X	X						
	MA3-MWE09200613	W		N	9/20/2006 14:37				X	X						
	MA3-MWE09200613DP	W		N	9/20/2006 14:37				X	X						
	MA3-TB09200617	W		N	9/20/2006 08:00				X	X						
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X	X	X	X	X						
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X	X	X	X	X						
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X	X	X	X	X						
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X	X	X	X	X						
	MA3-TG5-109200615DP	W		N	9/20/2006 15:29				X	X						
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X	X	X	X	X						
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X	X	X	X	X						
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X	X	X	X	X						

Remarks/Comments

Sampled By T. Wall

Lab Use Only

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Properly Preserved Y N

Received within Holding Time Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

Relinquished By T. Wall Date / Time 9-20-06/2000

Received By C. Swigart Date / Time 9/20/06 09:20

9 cooler ranges

Account # 1144

Group # 160540

Invoice # 4076571-000

COC ID: 09202006-1

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

	353-2-NO2	353-2-NO3	415-1-TOC	8021B-BTEX	8021B-BTEX						
Filtered											
Container	0ml-Glass Via	0ml-Glass Via	0ml-Round An	0ml-Glass Via	0ml-Glass Via						
Preservative	N/A	H2SO4	H3PO4	HCl	HCl						
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected						
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X	X	X	X	X	
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X	X	X	X	X	

Remarks/Comments

Lab Use Only

COC Tape was present on outer package Y N

Received in good condition Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

COC Tape was unbroken on outer package Y N

Labels indicate Properly Preserved Y N

COC Tape was present on sample Y N

Received within Holding Time Y N

COC Tape was unbroken on sample Y N

2 cooler changes
2.1-5.0C

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Wallis	9-10-06/2006						

Sampled By T. Wallis

Mass Zook 9/21/06 0900

Account # 11941 Group # 1006543 Sample # 4810591-600

COC ID: 09202008-7

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American
 W. O. 02687.007.007.0001
 Lab LANCASTER LABS
 TAT
 Contact Name Tom Graan
 Contact Phone No. 847-918-4142
 Lab Contact C. SWEIGART
 Lab Phone 717-656-2308 X1527

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	8310-PAHS															
						Filtered															
						Container	Ornl. Amber G														
						N/A															
	MA3-MWA0920061	W		N	9/20/2006 09:05	X															
	MA3-MWA0920061DP	W		N	9/20/2006 09:05	X															
	MA3-MWD0920065	W		N	9/20/2006 10:25	X															
	MA3-MWD0920065MSD	W		Y	9/20/2006 10:25	X															

Remarks/Comments

 Sampled By T. Walk

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N
 COC Tape was unbroken on outer package Y N
 Labels indicate Property Preserved Y N
 COC Tape was present on sample Y N
 Received within Holding Time Y N
 COC Tape was unbroken on sample Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

9 cooler ranges - 2.5-5.0c

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Walk	9-20-06/2006						

Pass Junk 9/21/06 09:20

Account # 11947 Group # 1006593 Sample # 4870591-600

COC ID: 09202006-10

Chain of Custody Record



Client **Kerr McGee**
 Site Name **Moss American**
 W. O. **02687.007.007.0001**
 Lab **LANCASTER LABS**
 TAT

Contact Name **Tom Graan**
 Contact Phone No. **847-918-4142**
 Lab Contact **C. SWEIGART**
 Lab Phone **717-656-2308 X1527**

*8021R-BTEX	8310-PAMS														
------------------------	-----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Filtered															
Container	10ml-Glass Vial	L. Amber													
Preservative	HCl	N/A													

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	HCl	N/A								
	MA3-FB09200618	W		N	9/20/2006 15:45	X	X								
	MA3-MWC0920069	W		N	9/20/2006 13:30		X								
	MA3-MWE09200613	W		N	9/20/2006 14:37		X								
	MA3-MWE09200613DP	W		N	9/20/2006 14:37		X								
	MA3-TG6-109200611	W		N	9/20/2006 14:05		X								

Remarks/Comments

Sampled By T. Walls

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N

COC Tape was unbroken on outer package Y N
 Labels indicate Property Preserved Y N

COC Tape was present on sample Y N
 Received within Holding Time Y N

COC Tape was unbroken on sample Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Walls	9-20-06/2006						

9 cooler changes 2.1-5.0C

Mass Zor 9/20/06



ANALYTICAL RESULTS

Prepared for:

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

405-775-5429

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1006616. Samples arrived at the laboratory on Thursday, September 21, 2006. The PO# for this group is ZAKW1KEOK0A90089.

Client Description

MA3-MW37S-092006-07BKG Groundwater
MA3-MW37S-092006-07MS Groundwater
MA3-MW37S-092006-07MSD Groundwater
MA3-TB-092006-17 Groundwater
MA3-TG3-1-092006-03 Groundwater
MA3-TG3-2-092006-02 Groundwater
MA3-TG3-3-092006-04 Groundwater
MA3-TG5-1-092006-15 Groundwater
MA3-TG5-1-092006-15DP Groundwater
MA3-TG5-2-092006-14 Groundwater
MA3-TG5-3-092006-16 Groundwater
MA3-TG6-1-092006-11 Groundwater
MA3-TG6-2-092006-10 Groundwater
MA3-TG6-3-092006-12 Groundwater
MA3-FB-092006-18 Groundwater

Lancaster Labs Number

4870905
4870906
4870907
4870908
4870909
4870910
4870911
4870912
4870913
4870914
4870915
4870916
4870917
4870918
4870919

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Weston Solutions, Inc.
ELECTRONIC Tronox LLC
COPY TO
1 COPY TO Data Package Group

Attn: Tom Graan
Attn: Roy Widmann



Questions? Contact your Client Services Representative
Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Rachel R. Cochis

Rachel R. Cochis
Group Leader



Lancaster Laboratories Sample No. WW 4870905

MA3-MW37S-092006-07BKG Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS37 SDG#: KMA84-10BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a) anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b) fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a) pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h) anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k) fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 02:47	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870905

MA3-MW37S-092006-07BKG Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS37 SDG#: KMA84-10BKG

00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 09:59	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 02:47	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1



Lancaster Laboratories Sample No. WW 4870906

MA3-MW37S-092006-07MS Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS37 SDG#: KMA84-10MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	23.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	70.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	170.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	180.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	180.	0.90	ug/l	1
00784	Fluorene	86-73-7	19.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	5.9	0.080	ug/l	1
00789	Anthracene	120-12-7	2.8	0.040	ug/l	1
00807	Fluoranthene	206-44-0	2.9	0.040	ug/l	1
00811	Pyrene	129-00-0	19.	0.18	ug/l	1
00812	Benzo (a) anthracene	56-55-3	1.5	0.020	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	1.2	0.040	ug/l	1
00823	Benzo (a) pyrene	50-32-8	1.5	0.020	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	3.0	0.040	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	6.1	0.080	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	12.	0.10	ug/l	1
07409	Chrysene	218-01-9	5.9	0.080	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	1.2	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 03:08	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870906

MA3-MW37S-092006-07MS Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Troñox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS37	SDG#: KMA84-10MS					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 10:38	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 03:08	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1



Lancaster Laboratories Sample No. WW 4870907

MA3-MW37S-092006-07MSD Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOS37 SDG#: KMA84-10MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	23.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	69.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	170.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	180.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	180.	0.90	ug/l	1
00784	Fluorene	86-73-7	19.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	5.9	0.080	ug/l	1
00789	Anthracene	120-12-7	2.8	0.040	ug/l	1
00807	Fluoranthene	206-44-0	2.8	0.040	ug/l	1
00811	Pyrene	129-00-0	19.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	1.5	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	1.2	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	1.5	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	3.0	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	6.1	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	12.	0.10	ug/l	1
07409	Chrysene	218-01-9	5.9	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	1.2	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 03:28	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870907

MA3-MW37S-092006-07MSD Groundwater
092006-1,3 02687.007.007.0001

Moss American

Collected: 09/20/2006 11:08 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20

Reported: 10/03/2006 at 15:16

Discard: 12/03/2006

Tronox LLC

P.O. Box 268859

Oklahoma City OK 73126-8859

MOS37 SDG#: KMA84-10MSD

00774 PAH's in Water by HPLC

01146 GC VOA Water Prep

03337 PAH Water Extraction

SW-846 8310

SW-846 5030B

SW-846 3510C

1 09/27/2006 11:17

1 09/26/2006 03:28

1 09/22/2006 14:45

Mark A Clark

Martha L Seidel

Olivia I Santiago

1

1

1



Lancaster Laboratories Sample No. WW 4870908

MA3-TB-092006-17 Groundwater
 092006-1 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 08:00

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOSTB SDG#: KMA84-11TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 02:26	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 02:26	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870909

MA3-TG3-1-092006-03 Groundwater
 092006-1,4,5,6 02687.007.007.0001

Moss American
 Collected: 09/20/2006 09:20 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT31 SDG#: KMA84-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.30 J	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	0.016 J	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.6	mg/l	1
00273	Total Organic Carbon	n.a.	8.3	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	21.3	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.078	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.097	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870909

MA3-TG3-1-092006-03 Groundwater
 092006-1,4,5,6 02687.007.007.0001

Moss American

Collected: 09/20/2006 09:20 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT31 SDG#: KMA84-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:05	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:01	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 18:55	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 12:21	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:14	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846.8021B	1	09/26/2006 11:10	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846.8310	1	09/27/2006 13:52	Mark A Clark	1
01146	GC VOA Water Prep	SW-846.5030B	1	09/26/2006 11:10	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 08:50	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846.3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870910

MA3-TG3-2-092006-02 Groundwater
 092006-1,4,5,6 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT32 SDG#: KMA84-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	0.040 J	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.45 J	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.8	mg/l	1
00273	Total Organic Carbon	n.a.	7.8	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	22.4	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.88	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.49	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.079	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.079	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.098	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.079	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870910

MA3-TG3-2-092006-02 Groundwater
 092006-1,4,5,6 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 09:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT32 SDG#: KMA84-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:06	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:03	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 18:56	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 12:45	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:20	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 04:10	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/27/2006 14:31	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 04:10	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 08:50	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870911

MA3-TG3-3-092006-04 Groundwater
 092006-1,4,5,6 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 09:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT33 SDG#: KMA84-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	1.1	Detection Limit	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.022 J	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	1.8	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	4.6	0.80	mg/l	1
00273	Total Organic Carbon	n.a.	11.2	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	35.8	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	0.039 J	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

Surrogate recoveries were outside of QC limits for the HPLC PAH compounds. The analysis was repeated outside of the required hold time and surrogate recoveries met requirements. The data reported is from the initial extraction of the sample.



Lancaster Laboratories Sample No. WW 4870911

MA3-TG3-3-092006-04 Groundwater
 092006-1,4,5,6 02687.007.007.0001

Moss American

Collected: 09/20/2006 09:25 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT33 SDG#: KMA84-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:07	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:09	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 18:58	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:09	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:21	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 04:30	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 06:13	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 04:30	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 08:50	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870912

MA3-TG5-1-092006-15 Groundwater
 092006-1,2,4,8 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 15:29 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT51 SDG#: KMA84-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	N.D.	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	0.014 J	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.4	mg/l	1
00273	Total Organic Carbon	n.a.	3.8	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	11.0	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.51	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.041	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.041	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	0.027 J	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870912

MA3-TG5-1-092006-15 Groundwater
 092006-1,2,4,8 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 15:29 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT51 SDG#: KMA84-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:15	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:10	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:01	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:17	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:22	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 04:51	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 06:52	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 04:51	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870913

MA3-TG5-1-092006-15DP Groundwater
092006-1,8 02687.007.007.0001

Moss American
Collected: 09/20/2006 15:29 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MO5FD SDG#: KMA84-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.93	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52	ug/l	1
00785	Phenanthrene	85-01-8	0.44	0.083	ug/l	1
00789	Anthracene	120-12-7	0.063 J	0.041	ug/l	1
00807	Fluoranthene	206-44-0	1.2	0.041	ug/l	1
00811	Pyrene	129-00-0	0.99	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	0.29	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	0.16 J	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	0.18	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	0.096 J	0.083	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	0.16 J	0.10	ug/l	1
07409	Chrysene	218-01-9	0.29 J	0.083	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	0.084 J	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 05:11	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870913

MA3-TG5-1-092006-15DP Groundwater
092006-1,8 02687.007.007.0001

Moss American

Collected: 09/20/2006 15:29 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

M05FD	SDG#: KMA84-16					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 07:31	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 05:11	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1



Lancaster Laboratories Sample No. WW 4870914

MA3-TG5-2-092006-14 Groundwater
 092006-1,2,4,8 02687.007.007.0001

Moss American

Collected: 09/20/2006 15:20 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT52 SDG#: KMA84-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	Detection Limit	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.45 J	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.2	mg/l	1
00273	Total Organic Carbon	n.a.	5.7	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	15.0	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.96	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.53	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.085	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042	ug/l	1
00807	Fluoranthene	206-44-0	0.079 J	0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.085	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.11	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.085	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870914

MA3-TG5-2-092006-14 Groundwater
 092006-1,2,4,8 02687.007.007.0001

Moss American

Collected: 09/20/2006 15:20 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT52 SDG#: KMA84-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:16	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:11	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:03	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:25	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:23	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 05:32	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 08:10	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 05:32	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870915

MA3-TG5-3-092006-16 Groundwater
 092006-1,2,4,8 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 15:30 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT53 SDG#: KMA84-18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	N.D.	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	0.035	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	4.1	mg/l	1
00273	Total Organic Carbon	n.a.	6.5	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	15.7	2.6	mg/l	1
08213 BTEX (8021)						
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774 PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.89	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.49	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.079	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	0.095 J	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo (a) anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo (a) pyrene	50-32-8	0.044 J	0.020	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	N.D.	0.079	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	0.10 J	0.099	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.079	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870915

MA3-TG5-3-092006-16 Groundwater
 092006-1,2,4,8 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 15:30 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT53 SDG#: KMA84-18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:17	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:13	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:04	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:33	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:24	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 08:04	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 08:48	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 08:04	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870916

MA3-TG6-1-092006-11 Groundwater
 092006-1,2, 4,10 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 14:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT61 SDG#: KMA84-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
00217	Kjeldahl Nitrogen	7727-37-9	1.5	0.50		mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015		mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040		mg/l	1
00221	Ammonia Nitrogen	7664-41-7	0.51 J	0.20		mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	0.020 J	0.010		mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.5		mg/l	1
00273	Total Organic Carbon	n.a.	10.7	1.0		mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	0.30 J	0.25		mg/l	1
01553	Chemical Oxygen Demand	n.a.	29.5	2.6		mg/l	1
08213 BTEX (8021)							
00776	Benzene	71-43-2	N.D.	0.2		ug/l	1
00777	Toluene	108-88-3	N.D.	0.2		ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2		ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6		ug/l	1
00774 PAH's in Water by HPLC							
00775	Naphthalene	91-20-3	N.D.	1.3		ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4		ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.89		ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50		ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.079		ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040		ug/l	1
00807	Fluoranthene	206-44-0	0.041 J	0.040		ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18		ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020		ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040		ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020		ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040		ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.079		ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.099		ug/l	1
07409	Chrysene	218-01-9	N.D.	0.079		ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020		ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870916

MA3-TG6-1-092006-11 Groundwater
 092006-1,2, 4,10 02687.007.007.0001
 Moss American
 Collected:09/20/2006 14:05 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT61 SDG#: KMA84-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
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Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:17	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:14	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:05	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:41	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:26	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 08:25	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 09:27	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 08:25	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870917

MA3-TG6-2-092006-10 Groundwater
 092006-1,3,4,5 02687.007.007.0001

Moss American
 Collected: 09/20/2006 13:58 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT62 SDG#: KMA84-20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	N.D.	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	0.025 J	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.3	mg/l	1
00273	Total Organic Carbon	n.a.	8.6	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	21.7	2.6	mg/l	1
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	0.15 J	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	0.028 J	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	0.023 J	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870917

MA3-TG6-2-092006-10 Groundwater
 092006-1,3,4,5 02687.007.007.0001

Moss American

Collected: 09/20/2006 13:58 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT62 SDG#: KMA84-20

CAT No.	Analysis Name	CAS Number	As Received	As Received	Units	Dilution Factor
			Result	Method		

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:18	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:15	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:52	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:50	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:27	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 08:45	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 15:35	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 08:45	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870918

MA3-TG6-3-092006-12 Groundwater
 092006-1,3,4,5 02687.007.007.0001
 Moss American
 Collected: 09/20/2006 14:15 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT63 SDG#: KMA84-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
00217	Kjeldahl Nitrogen	7727-37-9	N.D.	0.50	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00221	Ammonia Nitrogen	7664-41-7	N.D.	0.20	mg/l	1
00226	Ortho-Phosphate as P	7723-14-0	N.D.	0.010	mg/l	1
00235	Biochemical Oxygen Demand	n.a.	N.D.	3.3	mg/l	1
00273	Total Organic Carbon	n.a.	8.0	1.0	mg/l	1
00345	Total Phosphorus as PO4 water	14265-44-2	N.D.	0.25	mg/l	1
01553	Chemical Oxygen Demand	n.a.	20.9	2.6	mg/l	1
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.91	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.51	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.081	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.041	ug/l	1
00807	Fluoranthene	206-44-0	0.079 J	0.041	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



Lancaster Laboratories Sample No. WW 4870918

MA3-TG6-3-092006-12 Groundwater
 092006-1,3,4,5 02687.007.007.0001

Moss American

Collected: 09/20/2006 14:15 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOT63 SDG#: KMA84-21

CAT No.	Analysis Name	CAS Number	As Received	As Received	Units	Dilution Factor
			Result	Method		

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution Factor
				Date and Time		
00217	Kjeldahl Nitrogen	EPA 351.2	1	09/25/2006 20:21	Venia B McFadden	1
00219	Nitrite Nitrogen	EPA 353.2	1	09/21/2006 22:16	Courtney A Shoff	1
00220	Nitrate Nitrogen	EPA 353.2	1	09/26/2006 19:54	Courtney A Shoff	1
00221	Ammonia Nitrogen	EPA 350.2	1	09/27/2006 18:00	Luz M Groff	1
00226	Ortho-Phosphate as P	EPA 365.3	1	09/22/2006 02:25	Daniel S Smith	1
00235	Biochemical Oxygen Demand	EPA 405.1	1	09/22/2006 07:43	Christopher M Cunningham	1
00273	Total Organic Carbon	EPA 415.1	1	09/28/2006 13:58	James S Mathiot	1
00345	Total Phosphorus as PO4 water	EPA 365.1	1	09/23/2006 11:28	Courtney A Shoff	1
01553	Chemical Oxygen Demand	EPA 410.2	1	09/26/2006 07:35	Susan A Engle	1
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 09:06	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 16:14	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 09:06	Martha L Seidel	1
01460	Total Kjeldahl Nitrogen Digest	EPA 351.2	1	09/25/2006 09:05	Nancy J Shoop	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1
08264	Total Phos as PO4 Prep (water)	EPA 365.1	1	09/22/2006 18:30	Carolyn M Mastropietro	1



Lancaster Laboratories Sample No. WW 4870919

MA3-FB-092006-18 Groundwater
 092006-10 02687.007.007.0001

Moss American
 Collected: 09/20/2006 15:45 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
 Reported: 10/03/2006 at 15:16
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

MOTFB SDG#: KMA84-22FB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo (a) anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo (b) fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo (a) pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz (a, h) anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno (1, 2, 3-cd) pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo (g, h, i) perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo (k) fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/26/2006 07:43	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4870919

MA3-FB-092006-18 Groundwater
092006-10 02687.007.007.0001

Moss American
Collected: 09/20/2006 15:45 by TW

Account Number: 11947

Submitted: 09/21/2006 09:20
Reported: 10/03/2006 at 15:16
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

MOTFB SDG#: KMA84-22FB*

00774	PAH's in Water by HPLC	SW-846 8310	1	09/28/2006 16:53	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/26/2006 07:43	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/22/2006 14:45	Olivia I Santiago	1



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/03/06 at 03:16 PM

Group Number: 1006616

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 06264105102A Nitrite Nitrogen	N.D.	0.015	4870909-4870910 mg/l	91		90-110		
Batch number: 06264105102B Nitrite Nitrogen	N.D.	0.015	4870911-4870912, 4870914-4870918 mg/l	91		90-110		
Batch number: 06265022601A Ortho-Phosphate as P	N.D.	0.010	4870909-4870912, 4870914-4870918 mg/l	101		95-105		
Batch number: 06265023501A Biochemical Oxygen Demand	N.D.		4870909-4870912, 4870914-4870918	108	114	85-115	5	8
Batch number: 06265110101A Total Phosphorus as PO4 w ater	N.D.	0.25	4870909-4870912, 4870914-4870918 mg/l	99		89-110		
Batch number: 06265WAG026 Naphthalene	N.D.	1.3	4870905-4870907, 4870909-4870919 ug/l	82		55-94		
Acenaphthylene	N.D.	1.4	ug/l	86		59-96		
Acenaphthene	N.D.	0.90	ug/l	87		60-116		
Fluorene	N.D.	0.50	ug/l	94		66-106		
Phenanthrene	N.D.	0.080	ug/l	96		67-115		
Anthracene	N.D.	0.040	ug/l	93		67-109		
Fluoranthene	N.D.	0.040	ug/l	93		70-112		
Pyrene	N.D.	0.18	ug/l	95		69-113		
Benzo (a) anthracene	N.D.	0.020	ug/l	99		73-114		
Benzo (b) fluoranthene	N.D.	0.040	ug/l	100		72-113		
Benzo (a) pyrene	N.D.	0.020	ug/l	101		68-112		
Dibenz (a, h) anthracene	N.D.	0.040	ug/l	91		30-121		
Indeno (1, 2, 3-cd) pyrene	N.D.	0.080	ug/l	102		60-111		
Benzo (g, h, i) perylene	N.D.	0.10	ug/l	91		9-127		
Chrysene	N.D.	0.080	ug/l	98		70-111		
Benzo (k) fluoranthene	N.D.	0.020	ug/l	101		72-119		
Batch number: 06268108101B Kjeldahl Nitrogen	N.D.	0.50	4870909-4870911 mg/l	93		90-110		
Batch number: 06268108102A Kjeldahl Nitrogen	N.D.	0.50	4870912, 4870914-4870918 mg/l	95		90-110		
Batch number: 06268A53A Benzene	N.D.	0.2	4870905-4870919 ug/l		106	86-119	4	30
Toluene	N.D.	0.2	ug/l	113	110	82-119	2	30
Ethylbenzene	N.D.	0.2	ug/l	113	111	81-119	2	30
Total Xylenes	N.D.	0.6	ug/l	115	112	82-120	2	30
Batch number: 06269106101B			4870909-4870912, 4870914-4870916					

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/03/06 at 03:16 PM

Group Number: 1006616

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Nitrate Nitrogen	N.D.	0.040	mg/l	107		89-110		
Batch number: 06269106102A Nitrate Nitrogen	N.D.	0.040	mg/l	108		89-110		
Batch number: 06269155301A Chemical Oxygen Demand				98		87-102		
Batch number: 06270022101A Ammonia Nitrogen	N.D.	0.20	mg/l	96	95	91-100	1	1
Batch number: 06271049511A Total Organic Carbon	N.D.	1.0	mg/l	99		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 06264105102A Nitrite Nitrogen	104		90-110			N.D.	N.D.	0 (1)	20
Batch number: 06264105102B Nitrite Nitrogen	104		90-110			N.D.	N.D.	0 (1)	20
Batch number: 06265022601A Ortho-Phosphate as P	99	104	91-110	5*	4	N.D.	N.D.	200* (1)	5
Batch number: 06265023501A Biochemical Oxygen Demand	113	108	67-144	5	9	454.	521.	14*	9
Batch number: 06265110101A Total Phosphorus as PO4 water	99		90-110			N.D.	N.D.	0 (1)	3
Batch number: 06265WAG026	Sample number(s): 4870905-4870907, 4870909-4870919 UNSPK: 4870905								
Naphthalene	86	86	54-112	0	30				
Acenaphthylene	89	89	63-104	0	30				
Acenaphthene	90	90	59-114	1	30				
Fluorene	96	96	66-102	0	30				
Phenanthrene	98	98	66-115	0	30				
Anthracene	95	95	68-104	0	30				
Fluoranthene	95	95	67-104	1	30				
Pyrene	96	96	66-106	1	30				
Benzo(a)anthracene	99	99	63-111	0	30				
Benzo(b)fluoranthene	99	100	71-106	1	30				
Benzo(a)pyrene	102	102	69-109	1	30				
Dibenz(a,h)anthracene	100	100	62-115	0	30				
Indeno(1,2,3-cd)pyrene	101	102	56-112	1	30				
Benzo(g,h,i)perylene	96	96	56-115	0	30				
Chrysene	99	98	69-107	0	30				

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/03/06 at 03:16 PM

Group Number: 1006616

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(k)fluoranthene	100	101	70-109	1	30				
Batch number: 06268108101B Kjeldahl Nitrogen	Sample number(s): 4870909-4870911 UNSPK: 4870911 BKG: 4870911 78* 90-110 1.1 1.2 1 (1) 7								
Batch number: 06268108102A Kjeldahl Nitrogen	Sample number(s): 4870912,4870914-4870918 UNSPK: P871577 BKG: P871577 65* 90-110 N.D. N.D. 0 (1) 7								
Batch number: 06268A53A Benzene	Sample number(s): 4870905-4870919 UNSPK: 4870905 114 113 78-131 0 30								
Toluene	115	115	78-129	1	30				
Ethylbenzene	115	115	75-133	0	30				
Total Xylenes	116	115	84-131	1	30				
Batch number: 06269106101B Nitrate Nitrogen	Sample number(s): 4870909-4870912,4870914-4870916 UNSPK: 4870916 BKG: 4870916 105 90-110 N.D. N.D. 0 (1) 2								
Batch number: 06269106102A Nitrate Nitrogen	Sample number(s): 4870917-4870918 UNSPK: P870220 BKG: P870220 109 90-110 0.82 0.84 3* 2								
Batch number: 06269155301A Chemical Oxygen Demand	Sample number(s): 4870909-4870912,4870914-4870918 UNSPK: 4870910 BKG: 4870910 91 89 60-129 1 5 22.4 21.3 5 (1) 8								
Batch number: 06270022101A Ammonia Nitrogen	Sample number(s): 4870909-4870912,4870914-4870918 BKG: P876309 34.3 33.5 3* 2								
Batch number: 06271049511A Total Organic Carbon	Sample number(s): 4870909-4870912,4870914-4870918 UNSPK: 4870910 BKG: 4870910 101 62-148 7.8 7.9 1 (1) 2								

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAH's in Water by HPLC

Batch number: 06265WAG026

	Nitrobenzene	Triphenylene
4870905	100	98
4870906	98	101
4870907	99	99
4870909	95	97
4870910	101	99
4870911	62*	60
4870912	98	96
4870913	101	83
4870914	101	103
4870915	97	100
4870916	97	96
4870917	100	99

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/03/06 at 03:16 PM

Group Number: 1006616

Surrogate Quality Control

4870918	97	97
4870919	98	95
Blank	100	102
LCS	102	100
MS	98	101
MSD	99	99

Limits: 71-128 55-130

Analysis Name: BTEX (8021)
Batch number: 06268A53A
Trifluorotoluene-P

4870905	96
4870906	97
4870907	97
4870908	96
4870909	96
4870910	95
4870911	96
4870912	97
4870913	96
4870914	96
4870915	97
4870916	96
4870917	96
4870918	95
4870919	95
Blank	96
LCS	95
LCSD	95
MS	97
MSD	97

Limits: 69-129

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Account # 11947 Group # 1006616 Sample # 4870905-19

COC ID: 09202006-1

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American
 W. O. 02687.007.007.0001
 Lab LANCASTER LABS
 TAT

Contact Name Tom Graan
 Contact Phone No. 847-918-4142
 Lab Contact C. SWEIGART
 Lab Phone 717-656-2308 X1527

353-2-N02	353-2-N03	415-1-TOC	8021B-BTEX	8021B-BTEX					
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Filtered Container Preservative

10ml-Glass Vial	1ml-Glass Vial	1ml-Round An	10ml-Glass Vial	10ml-Glass Vial
N/A	H2SO4	H3PO4	HCl	HCl

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	353-2-N02	353-2-N03	415-1-TOC	8021B-BTEX	8021B-BTEX				
	MA3-MW29S0920066	W		N	9/20/2006 11:00				X	X				
	MA3-MW37S0920067	W		N	9/20/2006 11:08				X	X				
	MA3-MW37S0920067MSD	W		Y	9/20/2006 11:08				X	X				
	MA3-MW9S0920068	W		N	9/20/2006 11:12				X	X				
	MA3-MWA0920061	W		N	9/20/2006 09:05				X	X				
	MA3-MWA0920061DP	W		N	9/20/2006 09:05				X	X				
	MA3-MWC0920069	W		N	9/20/2006 13:30				X	X				
	MA3-MWD0920065	W		N	9/20/2006 10:25				X	X				
	MA3-MWD0920065MSD	W		Y	9/20/2006 10:25				X	X				
	MA3-MWE09200613	W		N	9/20/2006 14:37				X	X				
	MA3-MWE09200613DP	W		N	9/20/2006 14:37				X	X				
	MA3-TB09200617	W		N	9/20/2006 08:00				X	X				
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X	X	X	X	X				
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X	X	X	X	X				
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X	X	X	X	X				
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X	X	X	X	X				
	MA3-TG5-109200615DP	W		N	9/20/2006 15:29				X	X				
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X	X	X	X	X				
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X	X	X	X	X				
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X	X	X	X	X				

Remarks/Comments

Sampled By T. Walls

Lab Use Only

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Property Preserved Y N

Received within Holding Time Y N

9 cooler ranges

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Walls</u>	<u>9-20-06/2006</u>					<u>Tom Graan</u>	<u>9/20/06 09:20</u>

Account# 11947 Group# 10060616 Sample# 4870905-19

COC ID: 09202006-1		Chain of Custody Record			WESTON <small>LABORATORY</small>		Page 2 of 2							
Client	<u>Kerr McGee</u>	Contact Name	<u>Tom Graan</u>		353.2-NO2	353.2-NO3	415.1-TOC	8021B-BTEX	8021B-BTEX					
Site Name	<u>Moss American</u>	Contact Phone No.	<u>847-918-4142</u>											
W. O.	<u>02687.007.007.0001</u>	Lab Contact	<u>C. SWEIGART</u>											
Lab	<u>LANCASTER LABS</u>	Lab Phone	<u>717-656-2308 X1527</u>											
TAT														
Filtered														
Container					10ml-Glass Vial 1ml-Glass Vial-Round An 0ml-Glass Vial 0ml-Glass Vial									
Preservative					N/A H2SO4 H3PO4 HCl HCl									
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected									
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X	X	X	X	X				
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X	X	X	X	X				

Remarks/Comments	Lab Use Only										
	COC Tape was present on outer package <input checked="" type="radio"/> Y <input type="radio"/> N				Received in good condition <input checked="" type="radio"/> Y <input type="radio"/> N						
	COC Tape was unbroken on outer package <input type="radio"/> Y <input checked="" type="radio"/> N				Labels indicate Properly Preserved <input type="radio"/> Y <input checked="" type="radio"/> N						
	COC Tape was present on sample <input type="radio"/> Y <input checked="" type="radio"/> N				Received within Holding Time <input type="radio"/> Y <input checked="" type="radio"/> N						
COC Tape was unbroken on sample <input type="radio"/> Y <input checked="" type="radio"/> N											
Temp of Cooler when Received, C		1		2		3		4		5	
Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time				
<u>T. walls</u>	<u>9-10-06/2000</u>										
Sampled By	<u>T. walls</u>										
								<u>Moss 300</u> <u>9/21/06</u> <u>Pro</u>			

Account# 11947 Group# 10066616 Sample# 4870905-19

COC ID: 09202006-2

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

350.2-NH3	351.2-TKN	365.1-TP	410.2-COD						

Filtered Container Preservative
 0ml-Round G H2SO4 0ml-Round G H2SO4 0ml-Round G H2SO4 0ml-Round G H2SO4

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	H2SO4	H2SO4	H2SO4	H2SO4
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X	X	X	X
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X	X	X	X
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X	X	X	X
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X	X	X	X

Remarks/Comments

Sampled By T. Walls

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

COC Tape was present on outer package Y N
 COC Tape was unbroken on outer package Y N
 COC Tape was present on sample Y N
 COC Tape was unbroken on sample Y N

Received in good condition Y N
 Labels indicate Property Preserved Y N
 Received within Holding Time Y N

cooler oranges. 2.1-5.0c

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Walls</u>	<u>9-20-06 / 2000</u>					<u>[Signature]</u>	<u>9/21/06 (0920)</u>

Account# 11947 Group# 10066616 Sample# 4870905-19

COC ID: 09202006-3

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

8310-PAHS																				
	Filtered																			
	Container	Oml. Amber G																		
Preservative	N/A																			
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected															
	MA3-MW37S0920067	W		N	9/20/2006 11:08	X														
	MA3-MW37S0920067MSD	W		Y	9/20/2006 11:08	X														
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X														
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X														

Remarks/Comments

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Property Preserved Y N

Received within Holding Time Y N

*9 cooler changes
2.1-5.0C*

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<i>T. Walls</i>	<i>9-20-06/2000</i>						
						<i>Ann Zol</i>	<i>9/21/06 @ 0900</i>

Sampled By T. Walls

Account # 11947 Group # 10066616 Sample # 48-70905-19

COC ID: 09202006-4

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American Contact Name Tom Graan
 W. O. 02687.007.007.0001 Contact Phone No. 847-918-4142
 Lab LANCASTER LABS Lab Contact C. SWEIGART
 TAT Lab Phone 717-656-2308 X1527

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	385-3-OP	405-1-BOD														
						Filtered	500ml-Plastic	500ml-Plastic													
						Container	N/A	N/A													
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X	X														
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X	X														
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X	X														
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X	X														
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X	X														
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X	X														
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X	X														
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X	X														
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X	X														

Remarks/Comments

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Properly Preserved Y N

Received within Holding Time Y N

9 cooled oranges
2.1-5.0C

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<i>T. Wells</i>	<i>9-20-06/2000</i>						
						<i>Tom Graan</i>	<i>9/21/06 (09:20)</i>

Sampled By T. Wells

Account # 11947 Group # 10066616 Sample # 4870905-19

COC ID: 09202006-5

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American Contact Name Tom Graan
 W. O. 02687.007.007.0001 Contact Phone No. 847-918-4142
 Lab LANCASTER LABS Lab Contact C. SWEIGART
 TAT Lab Phone 717-656-2308 X1527

350.2-NH3	361.2-TKN	365.1-TP	410.2-COD						
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Filtered Container Preservative
 0ml-Round G 0ml-Round G 0ml-Round G 0ml-Round G
 H2SO4 H2SO4 H2SO4 H2SO4

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	350.2-NH3	361.2-TKN	365.1-TP	410.2-COD
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X	X	X	X
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X	X	X	X
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X	X	X	X
	MA3-TG6-209200610	W		N	9/20/2006 13:58	X	X	X	X
	MA3-TG6-309200612	W		N	9/20/2006 14:15	X	X	X	X

Remarks/Comments

 Sampled By T. Walls

Lab Use Only

COC Tape was present on outer package Y N
 COC Tape was unbroken on outer package Y N
 COC Tape was present on sample Y N
 COC Tape was unbroken on sample Y N

Received in good condition Y N
 Labels indicate Property Preserved Y N
 Received within Holding Time Y N

Temp of Cooler when Received, C

1	2	3	4	5
---	---	---	---	---

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Walls</u>	<u>9-20-06/2006</u>						

9 cooler ranges 2.1-5.0c

Tom Graan 9/20/06

Account # 11947 Group # 1006593* Samples # 4870591-600* 18, 09-3-06

COC ID: 09202006-6

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American Contact Name Tom Graan
 W. O. 02687.007.007.0001 Contact Phone No. 847-918-4142
 Lab LANCASTER LABS Lab Contact C. SWEIGART
 TAT Lab Phone 717-656-2308 X1527

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	8310-PAHS	Filtered	Container	Preservative
						0mL Amber G			
						NA			
	MA3-MW29S0920066	W		N	9/20/2006 11:00	X			
	MA3-MW950920068	W		N	9/20/2006 11:12	X			
	MA3-TG3-10920063	W		N	9/20/2006 09:20	X			
	MA3-TG3-20920062	W		N	9/20/2006 09:05	X			
	MA3-TG3-30920064	W		N	9/20/2006 09:25	X			

Remarks/Comments

Sampled By T. Wells

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N *9 cooler changes*
 COC Tape was unbroken on outer package Y N
 Labels indicate Properly Preserved Y N
 COC Tape was present on sample Y N
 Received within Holding Time Y N *2.1-5.0c*
 COC Tape was unbroken on sample Y N

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Wells</u>	<u>9-20-06/ 2000</u>					<u>C. Sweigart</u>	<u>9/21/06 @ 0800</u>

Account# 11947 Group# 1006616 Sample# 4870905-19

COC ID: 09202006-8

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American
 W. O. 02687.007.007.0001
 Lab LANCASTER LABS
 TAT

Contact Name Tom Graan
 Contact Phone No. 847-918-4142
 Lab Contact C. SWEIGART
 Lab Phone 717-656-2308 X1527

8310-PANS	Filtered									
	Container	OmL Amber G								
	Preservative	N/A								
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected					
	MA3-TG5-109200615	W		N	9/20/2006 15:29	X				
	MA3-TG5-109200615DP	W		N	9/20/2006 15:29	X				
	MA3-TG5-209200614	W		N	9/20/2006 15:20	X				
	MA3-TG5-309200616	W		N	9/20/2006 15:30	X				

Remarks/Comments

Sampled By T. Falls

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
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COC Tape was present on outer package Y N
 COC Tape was unbroken on outer package Y N
 COC Tape was present on sample Y N
 COC Tape was unbroken on sample Y N

Received in good condition Y N
 Labels indicate Property Preserved Y N
 Received within Holding Time Y N

9 cooler changes
2.1-5.0C

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Falls</u>	<u>9-20-06/1000</u>					<u>[Signature]</u>	<u>9/21/06 @ 0920</u>

Account# 11947 Group# 1006616 Sample# 4870905-19

COC ID: 09202008-10

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American
 W. O. 02687.007.007.0001
 Lab LANCASTER LABS
 TAT

Contact Name Tom Graan
 Contact Phone No. 847-918-4142
 Lab Contact C. SWEIGART
 Lab Phone 717-656-2308 X1527

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	Filtered	Container	Preservative	8310-PAHS									
	MA3-FB09200618	W		N	9/20/2006 15:45	X	10ml-Glass Vial	HCl	X									
	MA3-MWC0920069	W		N	9/20/2006 13:30	X	L. Amber	NA	X									
	MA3-MWE09200613	W		N	9/20/2006 14:37	X			X									
	MA3-MWE09200613DP	W		N	9/20/2006 14:37	X			X									
	MA3-TG6-109200611	W		N	9/20/2006 14:05	X			X									

Remarks/Comments

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
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COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Property Preserved Y N

Received within Holding Time Y N

*9 cooler changes
2.1-5.0c*

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Walls	9-20-06/2006						

Sampled By T. Walls

Handwritten signatures and initials



ANALYTICAL RESULTS

Prepared for:

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

405-775-5429

Prepared by:

Lancaster Laboratories
 2425 New Holland Pike
 Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1006783. Samples arrived at the laboratory on Friday, September 22, 2006. The PO# for this group is ZAKWIKOKA90089.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MA3-FB-092106-10 Groundwater	4871942
MA3-MW30S-092106-2 Groundwater	4871943
MA3-MW5S-092106-1 Groundwater	4871944
MA3-MW5S-092106-1DP Groundwater	4871945
MA3-MWB-092106-11 Groundwater	4871946
MA3-MWF-092106-4BKG Groundwater	4871947
MA3-MWF-092106-4MS Groundwater	4871948
MA3-MWF-092106-4MSD Groundwater	4871949
MA3-MWG-092106-3 Groundwater	4871950
MA3-MWH-092106-6 Groundwater	4871951
MA3-MWI-092106-5 Groundwater	4871952
MA3-MWJ-092106-7 Groundwater	4871953
MA3-MWK-092106-8 Groundwater	4871954
MA3-TB-092106-6 Groundwater	4871955

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO Weston Solutions, Inc.
 ELECTRONIC Tronox LLC
 COPY TO
 1 COPY TO Data Package Group

Attn: Tom Graan
 Attn: Roy Widmann



Questions? Contact your Client Services Representative
Gwen A Birchall at (717) 656-2300

Respectfully Submitted,

Michele J. Smith
Michele J. Smith
Group Leader



Lancaster Laboratories Sample No. WW 4871942

MA3-FB-092106-10 Groundwater
092106-1 02687.007.007.0001

Moss American
Collected: 09/21/2006 13:10 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEFB SDG#: KMA86-01FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.038	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.038	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.038	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No: EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 06:11	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871942

MA3-FB-092106-10 Groundwater
092106-1 02687.007.007.0001

Moss American

Collected: 09/21/2006 13:10 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEFB	SDG#: KMA86-01FB				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 04:04	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 06:11	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871943

MA3-MW30S-092106-2 Groundwater
 092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:12 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:20
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AME30 SDG#: KMA86-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.94	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.52	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.083	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042	ug/l	1
00807	Fluoranthene	206-44-0	0.047 J	0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.083	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.083	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 08:15	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871943

MA3-MW30S-092106-2 Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:12 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AME30	SDG#: KMA86-02				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 04:43	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 08:15	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871944

MA3-MW5S-092106-1 Groundwater
 092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:03 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:20
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AMESS SDG#: KMA86-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
				Detection Limit		
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 08:36	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871944

MA3-MW5S-092106-1 Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:03 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AME5S	SDG#: KMA86-03					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 05:22	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 08:36	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871945

MA3-MW5S-092106-1DP Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:03 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEFD SDG#: KMA86-04FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Units	Dilution Factor
				Method	Detection Limit		
08213	BTEX (8021)						
00776	Benzene	71-43-2	N.D.		0.2	ug/l	1
00777	Toluene	108-88-3	N.D.		0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.		0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.		0.6	ug/l	1
00774	PAH's in Water by HPLC						
00775	Naphthalene	91-20-3	N.D.		1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.		1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.		0.87	ug/l	1
00784	Fluorene	86-73-7	N.D.		0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.		0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.		0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.		0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.		0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.		0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.		0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.		0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.		0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.		0.097	ug/l	1
07409	Chrysene	218-01-9	N.D.		0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.		0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 08:56	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871945

MA3-MW5S-092106-1DP Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:03 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

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Oklahoma City OK 73126-8859

AMEFD	SDG#: KMA86-04FD				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 06:01	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 08:56	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871946

MA3-MWB-092106-11 Groundwater
 092106-1 02687.007.007.0001

Moss American
 Collected: 09/21/2006 12:12 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:20
 Discard: 12/03/2006

Tronox LLC
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 Oklahoma City OK 73126-8859

AMEMB SDG#: KMA86-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.95	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.53	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.085	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.042	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.042	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.19	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.021	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.042	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.021	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.042	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.085	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.11	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.085	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.021	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 09:33	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871946

MA3-MWB-092106-11 Groundwater
092106-1 02687.007.007.0001

Moss American

Collected: 09/21/2006 12:12 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMB SDG#: KMA86-05

00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 07:57	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 09:33	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871947

MA3-MWF-092106-4BKG Groundwater
 092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:20
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AMEMF SDG#: KMA86-06BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method	Units	
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.88	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.49	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.078	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.098	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 06:52	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871947

MA3-MWF-092106-4BKG Groundwater
092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMF SDG#: KMA86-06BKG

00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 02:08	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 06:52	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871948

MA3-MWF-092106-4MS Groundwater
092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMF SDG#: KMA86-06MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	22.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	68.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	200.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	200.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	200.	0.91	ug/l	1
00784	Fluorene	86-73-7	21.	0.51	ug/l	1
00785	Phenanthrene	85-01-8	6.4	0.081	ug/l	1
00789	Anthracene	120-12-7	3.1	0.041	ug/l	1
00807	Fluoranthene	206-44-0	3.0	0.041	ug/l	1
00811	Pyrene	129-00-0	20.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	1.5	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	1.2	0.041	ug/l	1
00823	Benzo(a)pyrene	50-32-8	1.6	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	2.9	0.041	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	6.1	0.081	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	11.	0.10	ug/l	1
07409	Chrysene	218-01-9	6.1	0.081	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	1.2	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 07:13	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871948

MA3-MWF-092106-4MS Groundwater
092106-1,2 02687.007.007.0001

Moss American
Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
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Oklahoma City OK 73126-8859

AMEMF	SDG#: KMA86-06MS				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 02:46	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 07:13	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871949

MA3-MWF-092106-4MSD Groundwater
092106-1,2 02687.007.007.0001

Moss American
Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMF SDG#: KMA86-06MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Method Detection Limit	Units	
08213	BTEX (8021)					
00776	Benzene	71-43-2	23.	0.2	ug/l	1
00777	Toluene	108-88-3	23.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	23.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	70.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	180.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	190.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	190.	0.87	ug/l	1
00784	Fluorene	86-73-7	20.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	6.0	0.078	ug/l	1
00789	Anthracene	120-12-7	2.9	0.039	ug/l	1
00807	Fluoranthene	206-44-0	2.8	0.039	ug/l	1
00811	Pyrene	129-00-0	19.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	1.5	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	1.2	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	1.5	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	2.7	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	5.6	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	10.	0.097	ug/l	1
07409	Chrysene	218-01-9	5.8	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	1.2	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 07:34	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871949

MA3-MWF-092106-4MSD Groundwater
092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:40 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:20
Discard: 12/03/2006

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AMEMF SDG#: KMA86-06MSD

00774	PAH's in Water by HPLC	SW-846 8310
01146	GC VOA Water Prep	SW-846 5030B
03337	PAH Water Extraction	SW-846 3510C

1	09/30/2006 03:25	Mark A Clark	1
1	09/27/2006 07:34	Martha L Seidel	1
1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871950

MA3-MWG-092106-3 Groundwater
 092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:25 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:21
 Discard: 12/03/2006

Tronox LLC
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 Oklahoma City OK 73126-8859

AMEMG SDG#: KMA86-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.077	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.038	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.038	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.038	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.077	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.077	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 09:54	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871950

MA3-MWG-092106-3 Groundwater
092106-1,2 02687.007.007.0001

Moss American

Collected: 09/21/2006 09:25 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMG	SDG#: KMA86-07					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 08:36	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 09:54	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871951

MA3-MWH-092106-6 Groundwater
092106-1,3 02687.007.007.0001

Moss American
Collected: 09/21/2006 11:35 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMH SDG#: KMA86-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.2	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.3	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.86	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.48	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.076	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.038	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.038	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.17	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.038	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.038	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.076	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.096	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.076	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 10:56	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871951

MA3-MWH-092106-6 Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 11:35 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMH	SDG#: KMA86-08					
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 09:15	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 10:56	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871952

MA3-MWI-092106-5 Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 11:10 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMI SDG#: KMA86-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.88	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.49	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.078	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.039	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.039	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.019	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.039	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.019	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.039	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.078	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.097	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.078	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.019	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 15:46	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871952

MA3-MWI-092106-5 Groundwater
092106-1,3 02687.007.007.0001

Moss American

Collected: 09/21/2006 11:10 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMI	SDG#: KMA86-09				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 09:54	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 15:46	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871953

MA3-MWJ-092106-7 Groundwater
 092106-1,2 02687.007.007.0001

Moss American
 Collected: 09/21/2006 12:15 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:21
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AMEMJ SDG#: KMA86-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.3	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.4	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.90	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.50	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.080	ug/l	1
00789	Anthracene	120-12-7	N.D.	0.040	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.040	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.18	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.020	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.040	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.020	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.040	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.080	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.10	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.080	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.020	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 11:37	Martha L Seidel	1



Lancaster Laboratories Sample No. WW 4871953

MA3-MWJ-092106-7 Groundwater
092106-1,2 02687.007.007.0001

Moss American
Collected: 09/21/2006 12:15 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMJ	SDG#: KMA86-10				
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 10:32	Mark A Clark 1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 11:37	Martha L Seidel 1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr 1



Lancaster Laboratories Sample No. WW 4871954

MA3-MWK-092106-8 Groundwater
 092106-1 02687.007.007.0001

Moss American
 Collected: 09/21/2006 13:20 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:21
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AMEMK SDG#: KMA86-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1
00774	PAH's in Water by HPLC					
00775	Naphthalene	91-20-3	N.D.	1.4	ug/l	1
00782	Acenaphthylene	208-96-8	N.D.	1.5	ug/l	1
00783	Acenaphthene	83-32-9	N.D.	0.98	ug/l	1
00784	Fluorene	86-73-7	N.D.	0.54	ug/l	1
00785	Phenanthrene	85-01-8	N.D.	0.087	ug/l	1
00789	Anthracene	120-12-7	0.044 J	0.043	ug/l	1
00807	Fluoranthene	206-44-0	N.D.	0.043	ug/l	1
00811	Pyrene	129-00-0	N.D.	0.20	ug/l	1
00812	Benzo(a)anthracene	56-55-3	N.D.	0.022	ug/l	1
00818	Benzo(b)fluoranthene	205-99-2	N.D.	0.043	ug/l	1
00823	Benzo(a)pyrene	50-32-8	N.D.	0.022	ug/l	1
00895	Dibenz(a,h)anthracene	53-70-3	N.D.	0.043	ug/l	1
00898	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.087	ug/l	1
00907	Benzo(g,h,i)perylene	191-24-2	N.D.	0.11	ug/l	1
07409	Chrysene	218-01-9	N.D.	0.087	ug/l	1
07410	Benzo(k)fluoranthene	207-08-9	N.D.	0.022	ug/l	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle



Lancaster Laboratories Sample No. WW 4871954

MA3-MWK-092106-8 Groundwater
092106-1 02687.007.007.0001

Moss American

Collected: 09/21/2006 13:20 by TW

Account Number: 11947

Submitted: 09/22/2006 09:40
Reported: 10/03/2006 at 12:21
Discard: 12/03/2006

Tronox LLC
P.O. Box 268859
Oklahoma City OK 73126-8859

AMEMK SDG#: KMA86-11

No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 11:58	Martha L Seidel	1
00774	PAH's in Water by HPLC	SW-846 8310	1	09/30/2006 11:11	Mark A Clark	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 11:58	Martha L Seidel	1
03337	PAH Water Extraction	SW-846 3510C	1	09/25/2006 02:35	David V Hershey Jr	1



Lancaster Laboratories Sample No. WW 4871955

MA3-TB-092106-6 Groundwater
 092106-1 02687.007.007.0001
 Moss American
 Collected: 09/21/2006

Account Number: 11947

Submitted: 09/22/2006 09:40
 Reported: 10/03/2006 at 12:21
 Discard: 12/03/2006

Tronox LLC
 P.O. Box 268859
 Oklahoma City OK 73126-8859

AMETB SDG#: KMA86-12TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08213	BTEX (8021)					
00776	Benzene	71-43-2	N.D.	0.2	ug/l	1
00777	Toluene	108-88-3	N.D.	0.2	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	0.6	ug/l	1

State of Wisconsin Lab Certification No. EN 748

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08213	BTEX (8021)	SW-846 8021B	1	09/27/2006 06:32	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	09/27/2006 06:32	Martha L Seidel	1



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/03/06 at 12:21 PM

Group Number: 1006783

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 06266WAB026 Sample number(s): 4871942-4871954								
Naphthalene	N.D.	1.3	ug/l	93		55-94		
Acenaphthylene	N.D.	1.4	ug/l	93		59-96		
Acenaphthene	N.D.	0.90	ug/l	94		60-116		
Fluorene	N.D.	0.50	ug/l	98		66-106		
Phenanthrene	N.D.	0.080	ug/l	99		67-115		
Anthracene	N.D.	0.040	ug/l	95		67-109		
Fluoranthene	N.D.	0.040	ug/l	94		70-112		
Pyrene	N.D.	0.18	ug/l	94		69-113		
Benzo(a)anthracene	N.D.	0.020	ug/l	96		73-114		
Benzo(b)fluoranthene	N.D.	0.040	ug/l	96		72-113		
Benzo(a)pyrene	N.D.	0.020	ug/l	100		68-112		
Dibenz(a,h)anthracene	N.D.	0.040	ug/l	98		30-121		
Indeno(1,2,3-cd)pyrene	N.D.	0.080	ug/l	99		60-111		
Benzo(g,h,i)perylene	N.D.	0.10	ug/l	96		9-127		
Chrysene	N.D.	0.080	ug/l	95		70-111		
Benzo(k)fluoranthene	N.D.	0.020	ug/l	97		72-119		
Batch number: 06270A53A Sample number(s): 4871942-4871955								
Benzene	N.D.	0.2	ug/l	103	103	86-119	0	30
Toluene	N.D.	0.2	ug/l	106	105	82-119	1	30
Ethylbenzene	N.D.	0.2	ug/l	106	105	81-119	1	30
Total Xylenes	N.D.	0.6	ug/l	107	106	82-120	1	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 06266WAB026 Sample number(s): 4871942-4871954 UNSPK: 4871947									
Naphthalene	98	95	54-112	8	30				
Acenaphthylene	99	96	63-104	7	30				
Acenaphthene	99	96	59-114	7	30				
Fluorene	104*	101	66-102	7	30				
Phenanthrene	105	103	66-115	7	30				
Anthracene	101	99	68-104	6	30				
Fluoranthene	100	98	67-104	7	30				
Pyrene	99	97	66-106	6	30				
Benzo(a)anthracene	102	100	63-111	6	30				
Benzo(b)fluoranthene	101	99	71-106	6	30				
Benzo(a)pyrene	106	104	69-109	7	30				
Dibenz(a,h)anthracene	97	93	62-115	8	30				

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
 Reported: 10/03/06 at 12:21 PM

Group Number: 1006783

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Indeno(1,2,3-cd) pyrene	99	97	56-112	7	30				
Benzo(g,h,i)perylene	91	88	56-115	9	30				
Chrysene	101	100	69-107	6	30				
Benzo(k)fluoranthene	102	101	70-109	6	30				
Batch number: 06270A53A Sample number(s): 4871942-4871955 UNSPK: 4871947									
Benzene	110	114	78-131	3	30				
Toluene	113	115	78-129	2	30				
Ethylbenzene	113	116	75-133	2	30				
Total Xylenes	114	116	84-131	2	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAH's in Water by HPLC
 Batch number: 06266WAB026

	Nitrobenzene	Triphenylene
4871942	101	99
4871943	101	98
4871944	102	97
4871945	98	97
4871946	105	101
4871947	105	99
4871948	99	103
4871949	95	100
4871950	105	102
4871951	96	99
4871952	106	104
4871953	101	98
4871954	100	98
Blank	97	101
LCS	94	96
MS	99	103
MSD	95	100
Limits:	71-128	55-130

Analysis Name: BTEX (8021)
 Batch number: 06270A53A
 Trifluorotoluene-P

4871942	96
4871943	97
4871944	96
4871945	97
4871946	98
4871947	97

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.



Quality Control Summary

Client Name: Tronox LLC
Reported: 10/03/06 at 12:21 PM

Group Number: 1006783

Surrogate Quality Control

4871948	95
4871949	97
4871950	97
4871951	96
4871952	95
4871953	96
4871954	97
4871955	96
Blank	94
LCS	96
LCSD	96
MS	95
MSD	97

Limits: 69-129

***- Outside of specification**

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Flowcon 11747 Group# 1000183 Sample# 481174a-53

COC ID: 09212006-1

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

	8021B-BTEX	8021B-BTEX	8310-PAHS						
Filtered									
Container	10mL Glass Vial	10mL Glass Vial	10mL Amber G						
Preservative	N/A	N/A	N/A						

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	8021B-BTEX	8021B-BTEX	8310-PAHS						
	MA3-FB09210610	W		N	9/21/2006 13:10	X	X	X						
	MA3-MW30S0921062	W		N	9/21/2006 09:12	X	X							
	MA3-MW5S0921061	W		N	9/21/2006 09:03	X	X							
	MA3-MW5S0921061DP	W		N	9/21/2006 09:03	X	X							
	MA3-MWB09210611	W		N	9/21/2006 12:12	X	X	X						
	MA3-MWF0921064MSD	W		Y	9/21/2006 09:40	X	X							
	MA3-MWG0921063	W		N	9/21/2006 09:25	X	X							
	MA3-MWH0921066	W		N	9/21/2006 11:35	X	X							
	MA3-MWI0921065	W		N	9/21/2006 11:10	X	X							
	MA3-MWJ0921067	W		N	9/21/2006 12:15	X	X							
	MA3-MVK0921068	W		N	9/21/2006 13:20	X	X	X						
	MA3-TB0921069	W		N	9/21/2006	X	X							

Remarks/Comments

Sampled By T. Walls

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
4.1	4.0	3.1		

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Property Preserved Y N

Received within Holding Time Y N

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
T. Walls	9-21-06/1600						

Received By Passyok 9/22/06 0940

Account# 11947 Group# 1006783 Sample # 4871942-55

COC ID: 09212006-2

Chain of Custody Record



Client Kerr McGee
 Site Name Moss American
 W. O. 02687.007.007.0001
 Lab LANCASTER LABS
 TAT
 Contact Name Tom Graan
 Contact Phone No. 847-918-4142
 Lab Contact C. SWEIGART
 Lab Phone 717-656-2308 X1527

8310-PAHS																		
	Filtered																	
Container	Oml. Amber G																	
Preservative	N/A																	
Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected													
	MA3-MWF0921064MSD	W		Y	9/21/2006 09:40	X												
	MA3-MWG0921063	W		N	9/21/2006 09:25	X												
	MA3-MWJ0921067	W		N	9/21/2006 12:15	X												

Remarks/Comments

 Sampled By T. Wallis

Lab Use Only

COC Tape was present on outer package Y N
 Received in good condition Y N
 COC Tape was unbroken on outer package Y N
 Labels indicate Property Preserved Y N
 COC Tape was present on sample Y N
 Received within Holding Time Y N
 COC Tape was unbroken on sample Y N

Temp of Cooler when Received, C							
1	2	3	4	5			
4.1	4.0	3.1					
Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Wallis</u>	<u>9-21-06 1100</u>						
				<u>[Signature]</u>	<u>9/22/06 (0894)</u>		

Account # 1145 Group # 101010 Sample # 4171172-55

COC ID: 09212006-3

Chain of Custody Record



Client Kerr McGee

Site Name Moss American

W. O. 02687.007.007.0001

Lab LANCASTER LABS

TAT

Contact Name Tom Graan

Contact Phone No. 847-918-4142

Lab Contact C. SWEIGART

Lab Phone 717-656-2308 X1527

Lab ID	Sample ID	Matrix	PID	MS/MSD	Date-Time Collected	8310-PAHS																
						Filtered																
						Container	0ml. Amber G															
Preservative	N/A																					
	MA3-MW30S0921062	W		N	9/21/2006 09:12	X																
	MA3-MW3S0921061	W		N	9/21/2006 09:03	X																
	MA3-MW5S0921061DP	W		N	9/21/2006 09:03	X																
	MA3-MWH0921066	W		N	9/21/2006 11:35	X																
	MA3-MWT0921065	W		N	9/21/2006 11:10	X																

Remarks/Comments

Sampled By T. Walls

Lab Use Only

Temp of Cooler when Received, C

1	2	3	4	5
4.1	4.0	3.1		

COC Tape was present on outer package Y N

COC Tape was unbroken on outer package Y N

COC Tape was present on sample Y N

COC Tape was unbroken on sample Y N

Received in good condition Y N

Labels indicate Property Preserved Y N

Received within Holding Time Y N

Relinquished By	Date / Time	Received By	Date / Time	Relinquished By	Date / Time	Received By	Date / Time
<u>T. Walls</u>	<u>9-21-06/1600</u>						
						<u>Passy</u>	<u>9/22/06 08140</u>