

**RIZZO**  
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A TETRA TECH COMPANY

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June 30, 2006

U.S. Environmental Protection Agency  
EPA-NE  
RGP-NOC Processing  
Municipal Assistance Unit (CMU)  
One Congress Street, Suite 1,100  
Boston, Massachusetts 02114-2023

**Re: Notice of Intent**  
**NPDES Remediation General Permit**  
**Construction Dewatering**  
**25 Wheeler Street**  
**Cambridge, Massachusetts**  
**MADEP RTN 3-25232**

Dear Sir or Madam:

On behalf of World 114 Nominee Trust (owner), the owner of the above referenced property, and World Realty and Development, Ltd. (WRD), the operator of the proposed construction groundwater dewatering, treatment and discharge system located at 25 Wheeler Street in Cambridge, Massachusetts, Rizzo Associates, Inc. (RAI) is submitting this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP). For the purpose of this NOI, WRD is considered the sole permittee with full design and operational control of the dewatering, treatment and discharge system. This NOI has been prepared in accordance with the provisions of the NPDES RGP (Federal Register Volume 70, No. 174) and related guidance documentation provided by the U.S. EPA.

### **Introductory Site Information**

The property located at 25 Wheeler Street in Cambridge, Massachusetts (the Site) is the subject of a proposed redevelopment and construction project scheduled for implementation during the summer and fall of 2006. The Site is an approximately 52,800 square foot parcel of land previously occupied by a brick building constructed on slab. The Site building structure was an approximately 25,000 square foot commercial building which included a 3,000 square foot second floor with finished office space. A landscaped area is located along Wheeler Street to the east of the building, with paved parking and loading areas on the northern and southern sides of the parcel. The Site has previously been used by M.E. Baker, a company that designs and builds engineered systems for the electronics fabrications and surface finishing industries, including

process controls and waste treatment units. The company provided equipment and supplies to the printed circuit board, semiconductor and metal finishing industries. The Site use by M.E. Baker terminated in March 2006 and the Site building structure was demolished in May 2006 to allow for redevelopment of the property.

A U.S. Geological Survey (USGS) topographic map (Site Location Map) and a Site Plan showing the Site and adjacent properties have been attached to this NOI for reference. Work relevant to this NOI will include construction dewatering activities related to excavation for the foundation of the proposed future Site building structure, in addition minor excavations and dewatering activities may be necessary to facilitate utility installations and/or relocations at the Site. Details of proposed dewatering activities and discharge locations are provided in the following sections.

The Site has been identified by the Massachusetts Department of Environmental Protection (DEP) as a Disposal Site in accordance with the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000). The Site was assigned Release Tracking Number (RTN) 3-25232 by the DEP following identification of petroleum hydrocarbon compounds, polycyclic aromatic hydrocarbons (PAHs) and heavy metals at concentrations exceeding the MCP Reportable Concentrations. The Site achieved regulatory closure following extensive investigation activities which included: installation of soil borings and groundwater monitoring wells; collection and laboratory analysis of soil and groundwater samples; a groundwater elevation survey; and conducting a human health and environmental risk characterization. The risk assessment completed for the Site determined that a condition of "no significant risk" to human health or the environment is applicable for the Disposal Site for all conditions evaluated. It was also determined that concentrations of PAHs and metals were present at concentrations consistent with background concentrations for soil in urban areas. In addition, petroleum hydrocarbon contamination identified at the Site was attributed, at least in part, to several releases of petroleum products (fuel oil and gasoline) which occurred at neighboring or adjacent properties. A Class B-1 Response Action Outcome (RAO) Statement dated December 20, 2005 was submitted to the DEP. Under the MCP a Class B-1 RAO applies to disposal sites where remedial actions have not been conducted because a level of "no significant risk" exists and no Activity and Use Limitation is necessary to ensure the existence or maintenance of a level of "no significant risk".

### **Applicability of the NPDES RGP**

The construction activities proposed for the Site are not due to a remedial action under the MCP; rather soil excavation and dewatering activities are necessary to facilitate construction and redevelopment of the Site. Under the DEP Policy #WSC-00-425 "*Construction of Buildings in Contaminated Areas*", construction activities that occur at sites with a valid Class B-1 RAO are

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not considered remedial actions under the MCP. Construction and redevelopment activities are subject only to the Remediation Waste Management and 'anti-degradation' provisions of the MCP (310 CMR 40.0030). The Site has been identified as a Disposal Site in accordance with Massachusetts state regulations due to the presence of soil and groundwater at the Site which contains detectable concentrations of oil and hazardous materials (as defined by the MCP) exceeding MCP Reportable Concentrations. In order to comply with the above referenced provisions of the MCP and due to the potential presence of oil and hazardous materials in the discharge waters, dewatering activities are required to be conducted in accordance with the NPDES RGP.

Coverage under the NPDES RGP is necessary due to the identified presence of petroleum hydrocarbon-contaminated groundwater due to regional contamination and the presence of soil containing fill materials (granular soils containing coal and/or wood ash, brick, concrete and other debris) at the Site containing elevated concentrations PAHs and heavy metals, typically described as "urban fills". We have determined that the proposed discharge is eligible for coverage under the NPDES RGP in accordance with Part I, Section A, 1(c) of the NPDES RGP.

### **Facility Permitting Information**

As part of general construction activities the owner and WRD have applied for coverage under the U.S. EPA Construction Storm Water General Permit (CSWGP). General construction activities undertaken at the Site are covered by the CSWGP. WRD will also implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the CSWGP. The SWPPP prepared for the Site includes measures to mitigate potential impacts caused by storm water run-off at the construction site to nearby receptors including: surface water bodies, wetlands, storm water drainage structures, and other sensitive areas.

Since the proposed discharge is not a remedial action under the MCP the discharge is not exempt from permitting under the DEP Bureau of Resource Protection Watershed Permitting Program for discharges from remediation and miscellaneous contaminated sites (BRP WM 12). A Notice of Intent for coverage under BRP WM 12, the requisite DEP transmittal form and permit application fee are being submitted to the DEP concurrently with submittal of this NOI to EPA.

### **Proposed Discharge Information**

This NPDES RGP will cover discharges from construction dewatering activities. Dewatering will be conducted from one or more locations at the construction site. The groundwater will be pumped from the excavation(s) via a dewatering system to an on-site water treatment system described below. The dewatering system may include sumps, well points or trenches with wrapped collection structures to minimize the amount of suspended sediment pumped to the

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treatment system, or equivalent technologies. This discharge is expected to be intermittent, with maximum flows during initial dewatering of the excavation(s) and limited flows to maintain the dewatered state during completion of excavation and construction activities. The initial discharge point identified at the Site is a drop inlet to the City of Cambridge storm water drainage system, a municipal separate storm sewer system located adjacent to the Site. The drop inlet directs water to a 72-inch dedicated storm water drainage pipe oriented along Wheeler Street east of the Site where the discharge will combine with the flows from storm water drainage from the surrounding properties and roadways. The identified portion of the City of Cambridge storm water drainage system is identified by the City of Cambridge as CAM-004. The City of Cambridge indicates that this is a sewer separation area and the storm water flows are not mixed with wastewater flows during wet weather events. The portion of the City of Cambridge storm water drainage system identified for the project subsequently discharges to Alewife Brook located approximately 2,000 feet north of the Site at an outfall identified by the City of Cambridge as D45OF0000. The location of the proposed discharge to the storm drainage system (on-site drop inlet structure) is at longitude -71°08'40" and latitude 42°23'24". The outfall location where the storm water drainage system discharges to Alewife Brook is at longitude -71°08'35" and latitude 42°23'51". These locations are also specified in the attached NOI form. A drawing depicting the City of Cambridge storm water drainage system which will be the discharge point from the facility is included as an attachment to this document.

Sources of intake water will include groundwater encountered within the construction site. No process wastewater or other sources of intake water will contribute to inflows to the dewatering and treatment system discharging to Alewife Brook.

### **Contaminant Information**

Two water samples representing the proposed influent stream to the groundwater dewatering and treatment system were collected by RAI and submitted for laboratory analysis at Alpha Analytical Laboratories of Westborough, Massachusetts for parameters required to be analyzed under the NPDES RGP. A table summarizing the laboratory analysis results, a site plan showing sample locations, and Laboratory Certificates of Analysis are attached to this NOI.

The results of laboratory analysis of the proposed influent stream indicated that the following compounds may be present in the remedial discharge waters at the following maximum concentrations:

- Total Suspended Solids (TSS) (200,000 ug/L)
- Cyanide (11 ug/L)
- BTEX (12 ug/L)
- Tert-butyl alcohol (TBA) (190 ug/L)

- Polycyclic Aromatic Hydrocarbons (PAHs) (30 ug/L)
- Total metals including: antimony (0.6 ug/L), arsenic (5.4 ug/L), total chromium (0.8 ug/L), copper (1.7 ug/L), lead (1.7 ug/L), nickel (4.5 ug/L), selenium (2 ug/L), zinc (47.1 ug/L), iron (60,000 ug/L)

The detected influent concentrations for cyanide, benzene, PAHs, lead and iron exceed the NPDES RGP effluent limitations listed in Appendix III of the NPDES RGP. Concentrations of some detected metals (lead and iron) have the potential to exceed the NPDES RGP effluent limits at a zero dilution factor. In accordance with the guidance documentation, a dilution factor of 1.4 was calculated for discharge to the Alewife Brook and the dilution range applicable to the Site was determined to be 0-5. Following determination of the appropriate dilution factor lead and iron have the potential to exceed the NPDES RGP effluent limits at the calculated dilution factor.

In addition, laboratory analysis for several compounds resulted in elevated detection limits (exceeding NPDES minimum levels) due to dilutions necessary because of elevated target compounds.

### **Treatment System Information**

The water removed from the excavations will require treatment using readily available technologies such as settlement, filtration and adsorption in order to achieve effluent concentrations below the NPDES discharge limitations prior to discharge to the receiving waters. The proposed wastewater treatment train will consist of a minimum of one 21,000 gallon fractionation (frac) tank to allow adequate retention time for solids to settle and separate. If residence time within the frac tank is not sufficient to allow for adequate settlement of solids within one frac tanks prior to discharge, additional frac tanks or additional treatment including the addition of filtration units (sand filters, bag filters and/or cartridge filters) may be used to remove or drop-out suspended solids. The frac tanks will be pumped via pumps capable of pumping up to 300 gallons per minute (gpm) or 0.67 cubic feet per second (CFS) through the entire treatment train. The pumps will initially direct water through, one bag filter unit equipped with a filter with minimum aperture size of 50 microns. Following flow through the primary cartridge filters water will be directed through a second bag filter unit equipped with a filter with minimum aperture size of 25 microns. A contingency will be included for the addition of additional bag filters in parallel and/or additional bag filters equipped with disposable bag filters or cartridge filter units with smaller filter sizes should metals or suspended solids be detected at concentrations exceeding the NPDES RGP discharge limits or at levels that may expend the downgradient filters (carbon filters). Following solids removal, the water will be pumped through a 1,000 pound liquid phase granular activated carbon (GAC) filter. A contingency will be included for additional carbon vessels in parallel or in series should the 1,000 pound unit fail

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to adequately remove concentrations of VOCs, PAHs, or other contaminants to concentrations below the NPDES RGP discharge limits. The treatment system will have sample ports to collect water samples from the system influent (prior to frac tanks), system midpoint (between carbon units) and system effluent (downstream from carbon units). A schematic of the proposed treatment system train has been attached to the NOI form included with this letter.

The design maximum flow of the proposed treatment system is approximately 300 gpm (0.67 CFS). This design maximum flow is primarily restricted by the filter units including: bag filters, and liquid phase GAC filters. We estimate the average flow through the treatment system to be approximately 100 to 150 gpm (0.22 to 0.34 CFS).

Following treatment, the effluent water will be discharged to the City of Cambridge storm drainage system (a municipal separate storm water system) for subsequent discharge to Alewife Brook. Since discharge will occur indirectly to Alewife Brook following flow through the storm drainage system piping, energy dissipation measures are not necessary to prevent erosion of the banks, water course and sediments of the surface water bodies.

The dewatering and treatment system will be operated by a Massachusetts certified Wastewater Treatment Plant Operator with a minimum certification of Grade II.

### **Receiving Surface Water Information**

Effluent from the remedial system discharge will be directed through one or more discharge pipe(s) which direct the discharge(s) to the municipal storm drainage system which directs water via underground piping for eventual discharge to Alewife Brook. According to the available Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the Site is not located within 500 feet of the 100 year flood boundary.

Alewife Brook comprises tributary water body with drainage into the Mystic River which eventually drains into Boston Harbor. The Massachusetts State surface water quality classification for Alewife Brook is Class B.

The Alewife Brook is not used as a drinking water supply and is classified as a Class B surface water body. The seven day-ten year low flow (7Q10) was determined using the USGS "Streamstats" online database. The 7Q10 of the receiving water reported by Streamstats is 0.29 CFS. A copy of the report generated by Streamstats is included as an attachment to this NOI.

Alewife Brook (listing ID#7138250) is listed as Massachusetts Category 5 Water (waters requiring a total maximum daily load (TMDL)). The TMDL is identified for segment ID MA71-04\_2004 which is described as the outlet of Little Pond in Belmont, to the confluence with the Mystic River in Arlington/Somerville. The TMDL is required due to the presence of the

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following pollutants: metals, nutrients, organic enrichment/low dissolved oxygen, pathogens, oil and grease, and taste odor and color (objectionable deposits). This segment includes the discharge point for this proposed construction dewatering system.

### **Endangered and Threatened Species and/or Critical Habitat**

There are currently no endangered and/or threatened species and/or critical habitats of concern located at the Site as identified under the NPDES RGP listed in Part I A(4) including the: shortnose sturgeon, dwarf wedge mussel, bog turtle, and the northern redbelly cooter. In order to determine whether the Site is located in an area of federally one or more listed endangered and/or threatened species or critical habitat research was conducted using the Massachusetts Division of Fish and Wildlife online database and the Massachusetts MASSGIS online database. The results of this research indicated that Middlesex County is not listed as critical habitat for any of the above listed species. In addition, the Site is not located within an area of Critical Environmental Concern. Middlesex county is listed as habitat for the bald eagle, a threatened species. However, the bald eagle is not present in the City of Cambridge. The online database search indicated that the Site is located approximately 500 feet from state listed core habitat and supporting natural landscape areas associated with Fresh Pond. The Site is not located within 500 feet of any state certified vernal pools or protected wetlands habitat. A copy of the geographic information systems (GIS) maps generated from the MASSGIS database (Bureau of Waste Site Cleanup Site Scoring Map and the BioMap produced by the Natural Heritage and Endangered Species Program) are included as an appendix to this document. In addition, a copy of the Rare Species listing obtained from the Massachusetts Division of Fish and Wildlife database is included with this document.

### **Impacts to Locations of Historic Significance**

In order to determine whether the discharge to Alewife Brook will have the potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places research was completed using the National Register of Historic Places (NRHP) online database, the National Register Information System (NIRS). The NIRS search identified several locations listed on the National Register of Historic Places in the City of Cambridge. The search identified one location (the Alewife Brook Parkway) which is listed on the NRHP. The Alewife Brook Parkway is a part of the Metropolitan Park System of Greater Boston and includes open space and areas for public recreation. A copy of the report generated from the online database is included as an attachment to this document.

The results of our research did not any identify properties listed on the National Register of Historic Places located in the path of the discharge or within the construction limits required for the discharge. The Alewife Brook Parkway is not in the path of the discharge or within the

proposed construction limits. In addition, dewatering activities at the construction site are not expected to adversely impact the Alewife Brook Parkway.

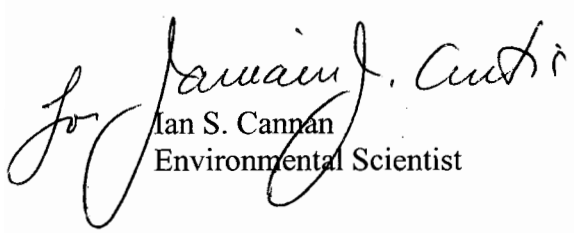
### Request for Coverage Under NPDES RGP

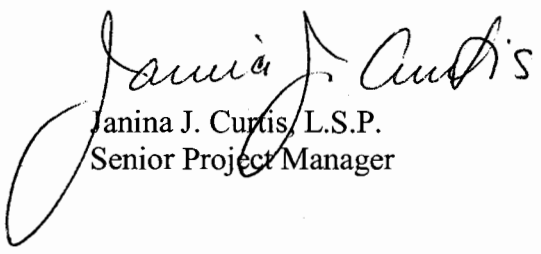
- On behalf of the owner and WRD, RAI hereby requests coverage under the NPDES Remediation General Permit for discharges of remedial waste water to above referenced discharge points, from construction dewatering and treatment operations at the Site. Sampling and laboratory analysis of the proposed wastewater influent stream has indicated the likely presence of the following compounds in the remedial wastewater: total suspended solids (TSS) (200,000 ug/L), cyanide (11 ug/L), BTEX (12 ug/L), tert-butyl alcohol (TBA) (190 ug/L), Polycyclic Aromatic Hydrocarbons (PAHs) (30 ug/L), antimony (0.6 ug/L), arsenic (5.4 ug/L), total chromium (0.8 ug/L), copper (1.7 ug/L), lead (1.7 ug/L), nickel (4.5 ug/L), selenium (2 ug/L), zinc (47.1 ug/L) and iron (60,000 ug/L)

The attached NOI form provides additional information pertaining to this NOI letter and appropriate signatures of the treatment system operator and sole permittee (WRD). Discharge of wastewater is anticipated to begin in July 2006 and be completed by December 2006. Upon receipt of notification from EPA and mobilization of the appropriate treatment system components, the remedial dewatering operations, treatment, and discharge will commence under the NPDES RGP in accordance with sampling and monitoring requirements determined by the EPA.

Please contact me at (508) 903-2000 or contact Mr. Mark Coppola at (617) 969-4154 if you have any questions.

Very truly yours,

  
Ian S. Cannan  
Environmental Scientist

  
Janina J. Curtis, L.S.P.  
Senior Project Manager

CC: Massachusetts Department of Environmental Protection, Bureau of Resource Protection

City of Cambridge, Public Works Department (Engineering, Supervisor of Maintenance and Engineering, Superintendent of Streets, Commissioner of Inspectional Services)

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## B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

### 1. General site information. Please provide the following information about the site:

|                                                                                              |                                       |                                                                                                                                                |                      |
|----------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| a) Name of <b>facility/site</b> :<br>Construction Dewatering                                 |                                       | Facility/site address:                                                                                                                         |                      |
| Location of <b>facility/site</b> :<br>longitude: <u>71°08'41"</u> latitude: <u>42°23'23"</u> | Facility SIC code(s):<br>NA           | Street:<br>25 Wheeler Street                                                                                                                   |                      |
| b) Name of <b>facility/site owner</b> : World 114 Nominee Trust                              |                                       | Town: Cambridge                                                                                                                                |                      |
| Email address of owner:<br>m.coppola@worldrealtydevelopment.com                              | State:<br>MA                          | Zip:<br>02138                                                                                                                                  | County:<br>Middlesex |
| Telephone no. of facility/site <b>owner</b> : (617) 969-4154                                 |                                       | <b>Owner</b> is (check one): 1. Federal ____ 2. State/Tribal ____<br>3. Private <input checked="" type="checkbox"/> 4. other, if so, describe: |                      |
| Fax no. of facility/site <b>owner</b> : (617) 969-5772                                       |                                       |                                                                                                                                                |                      |
| Address of <b>owner</b> (if different from site):                                            |                                       |                                                                                                                                                |                      |
| Street: 327A Watertown Street                                                                |                                       |                                                                                                                                                |                      |
| Town: Newton                                                                                 | State: MA                             | Zip: 02458                                                                                                                                     | County: Middlesex    |
| c) Legal name of <b>operator</b> :<br>World Realty & Development, Ltd.                       | Operator telephone no: (617) 969-4154 |                                                                                                                                                |                      |
|                                                                                              | Operator fax no.: (617) 969-5772      | Operator email:<br>m.coppola@worldrealtydevelopment.com                                                                                        |                      |
| Operator contact name and title: Mark Coppola                                                |                                       |                                                                                                                                                |                      |

|                                                       |        |              |         |
|-------------------------------------------------------|--------|--------------|---------|
| Address of <b>operator</b> (if different from owner): |        | Street: same |         |
| Town: same                                            | State: | Zip:         | County: |

d) Check "yes" or "no" for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Yes \_\_\_ No ☒, if "yes," number:

2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes \_\_\_ No ☒, if "yes," date and tracking #:

3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes \_\_\_ No ☒

4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes \_\_\_ No ☒

|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ___ No <input checked="" type="checkbox"/></p> <p>If "yes," please list:</p> <p>1. site identification # assigned by the state of NH or MA:</p> <p>2. permit or license # assigned:</p> <p>3. state agency contact information: name, location, and telephone number:<br/>MADEP Northeast Region (978) 694-3200</p> | <p>f) Is the site/facility covered by any other EPA permit, including:</p> <p>1. multi-sector storm water general permit? Y ___ N <input checked="" type="checkbox"/>, if Y, number:</p> <p>2. phase I or II construction storm water general permit? Y <input checked="" type="checkbox"/> N ___, if Y, number: MAR100000</p> <p>3. individual NPDES permit? Y ___ N <input checked="" type="checkbox"/>, if Y, number:</p> <p>4. any other water quality related permit? Y ___ N <input checked="" type="checkbox"/>, if Y, number:</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**2. Discharge information.** Please provide information about the discharge, (attaching additional sheets as needed) including:

|                                                                                                                                                                                                                                                                                                                                                                    |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Describe the discharge activities for which the owner/applicant is seeking coverage:<br>see attached letter                                                                                                                                                                                                                                                     |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| b) Provide the following information about each discharge:                                                                                                                                                                                                                                                                                                         | 1) Number of discharge points:<br>1 | 2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow <u>0.67</u><br>Average flow <u>0.34</u> Is maximum flow a <b>design value</b> ? Y <input checked="" type="checkbox"/> N ___<br>For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.<br>estimated design flows as described in attached letter |
| 3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>71°08'46"</u> lat. <u>42°23'24"</u> ; pt.2: long. <u>71°08'35"</u> lat. <u>42°23'51"</u> ; pt.3: long. _____ lat. _____;<br>pt.4: long. _____ lat. _____; pt.5: long. _____ lat. _____; pt.6: long. _____ lat. _____; pt.7: long. _____ lat. _____; pt.8: long. _____ lat. _____; etc. |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |                                                                                                                                                                                                                                                                                                                                                                  |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Address of <b>operator</b> (if different from owner):                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        | Street:                                                                                                                                                                                                                                                                                                                                                          |         |
| Town:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | State: | Zip:                                                                                                                                                                                                                                                                                                                                                             | County: |
| d) Check "yes" or "no" for the following:<br>1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No___, if "yes," number:<br>2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No___, if "yes," date and tracking #:<br>3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes___ No___<br>4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes___ No___ |        |                                                                                                                                                                                                                                                                                                                                                                  |         |
| e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes___ No___<br>If "yes," please list:<br>1. site identification # assigned by the state of NH or MA:<br>2. permit or license # assigned:<br>3. state agency contact information: name, location, and telephone number:                                                                                                                                                                            |        | f) Is the site/facility covered by any other EPA permit, including:<br>1. multi-sector storm water general permit? Y___ N___, if Y, number:<br>2. phase I or II construction storm water general permit? Y___ N___, if Y, number:<br>3. individual NPDES permit? Y___ N___, if Y, number:<br>4. any other water quality related permit? Y___ N___, if Y, number: |         |

**2. Discharge information.** Please provide information about the discharge, (attaching additional sheets as needed) including:

|                                                                                                                                                                                                                                                                                  |                                |                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Describe the discharge activities for which the owner/applicant is seeking coverage:                                                                                                                                                                                          |                                |                                                                                                                                                                                                                                                                                                                                              |
| b) Provide the following information about each discharge:                                                                                                                                                                                                                       | 1) Number of discharge points: | 2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow_____<br>Average flow_____. Is maximum flow a <b>design value</b> ? Y___ N___<br>For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. |
| 3) Latitude and longitude of each discharge within 100 feet: pt.1:long.____ lat.____; pt.2: long.____ lat.____; pt.3: long.____ lat.____;<br>pt.4:long.____ lat.____; pt.5: long.____ lat.____; pt.6:long.____ lat.____; pt.7: long.____ lat.____; pt.8:long.____ lat.____; etc. |                                |                                                                                                                                                                                                                                                                                                                                              |

|                                                                                                                                                                                                                                                   |                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 4) If hydrostatic testing, total volume of the discharge (gals):                                                                                                                                                                                  | 5) Is the discharge intermittent_____ or seasonal_____?<br>Is discharge ongoing      Yes _____ No _____? |
| c) Expected dates of discharge (mm/dd/yy): start_____ end_____                                                                                                                                                                                    |                                                                                                          |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including:<br>1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). |                                                                                                          |

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

|                                 |                             |                                   |                           |                                 |                                        |                                    |
|---------------------------------|-----------------------------|-----------------------------------|---------------------------|---------------------------------|----------------------------------------|------------------------------------|
| Gasoline Only                   | VOC Only                    | Primarily Metals                  | Urban Fill Sites          | Contaminated Sumps              | Mixed Contaminants                     | Aquifer Testing                    |
| Fuel Oils (and Other Oils) only | VOC with Other Contaminants | Petroleum with Other Contaminants | Listed Contaminated Sites | Contaminated Dredge Condensates | Hydrostatic Testing of Pipelines/Tanks | Well Development or Rehabilitation |

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

| PARAMETER                       | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily value     |           |
|---------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                 |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 1. Total Suspended Solids       |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 2. Total Residual Chlorine      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 3. Total Petroleum Hydrocarbons |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 4. Cyanide                      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 5. Benzene                      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 6. Toluene                      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 7. Ethylbenzene                 |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 8. (m,p,o) Xylenes              |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 9. Total BTEX <sup>4</sup>      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |

<sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

| PARAMETER                                        | Believe<br>Absent | Believe<br>Present | # of<br>Samples<br>(1 min-<br>imum) | Type of<br>Sample (e.g.,<br>grab) | Analytical<br>Method<br>Used<br>(method #) | Minimum<br>Level (ML) of<br>Test Method | Maximum daily value     |           | Avg. daily value        |           |
|--------------------------------------------------|-------------------|--------------------|-------------------------------------|-----------------------------------|--------------------------------------------|-----------------------------------------|-------------------------|-----------|-------------------------|-----------|
|                                                  |                   |                    |                                     |                                   |                                            |                                         | concentration<br>(ug/l) | mass (kg) | concentration<br>(ug/l) | mass (kg) |
| 10. Ethylene Dibromide<br>(1,2- Dibromo-methane) |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 11. Methyl-tert-Butyl<br>Ether (MtBE)            |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 12. tert-Butyl Alcohol<br>(TBA)                  |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 13. tert-Amyl Methyl<br>Ether (TAME)             |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 14. Naphthalene                                  |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 15. Carbon Tetra-<br>chloride                    |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 16. 1,4 Dichlorobenzene                          |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 17. 1,2 Dichlorobenzene                          |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 18. 1,3 Dichlorobenzene                          |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 19. 1,1 Dichloroethane                           |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 20. 1,2 Dichloroethane                           |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 21. 1,1 Dichloroethylene                         |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 22. cis-1,2 Dichloro-<br>ethylene                |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 23. Dichloromethane<br>(Methylene Chloride)      |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |
| 24. Tetrachloroethylene                          |                   |                    |                                     |                                   |                                            |                                         |                         |           |                         |           |

| PARAMETER                                                    | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily Value     |           |
|--------------------------------------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                                              |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 25. 1,1,1 Trichloroethane                                    |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 26. 1,1,2 Trichloroethane                                    |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 27. Trichloroethylene                                        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 28. Vinyl Chloride                                           |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 29. Acetone                                                  |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 30. 1,4 Dioxane                                              |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 31. Total Phenols                                            |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 32. Pentachlorophenol                                        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 33. Total Phthalates <sup>5</sup> (Phthalate esthers)        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate] |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)     |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| a. Benzo(a) Anthracene                                       |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| b. Benzo(a) Pyrene                                           |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| c. Benzo(b)Fluoranthene                                      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| d. Benzo(k) Fluoranthene                                     |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| e. Chrysene                                                  |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |

---

<sup>5</sup>The sum of individual phthalate compounds.

| PARAMETER                                                                | Believe<br>Absent | Believe<br>Present | # of<br>Samples<br>(1 min-<br>imum) | Type of<br>Sample (e.g.,<br>grab) | Analytical<br>Method Used<br>(method #) | Minimum<br>Level (ML) of<br>Test Method | Maximum daily value     |           | Average daily value     |           |
|--------------------------------------------------------------------------|-------------------|--------------------|-------------------------------------|-----------------------------------|-----------------------------------------|-----------------------------------------|-------------------------|-----------|-------------------------|-----------|
|                                                                          |                   |                    |                                     |                                   |                                         |                                         | concentration<br>(ug/l) | mass (kg) | concentration<br>(ug/l) | mass (kg) |
| <b>f. Dibenzo(a,h)<br/>anthracene</b>                                    |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>g. Indeno(1,2,3-cd)<br/>Pyrene</b>                                    |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>36. Total Group II<br/>Polycyclic Aromatic<br/>Hydrocarbons (PAH)</b> |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>h. Acenaphthene</b>                                                   |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>i. Acenaphthylene</b>                                                 |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>j. Anthracene</b>                                                     |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>k. Benzo(ghi) Perylene</b>                                            |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>l. Fluoranthene</b>                                                   |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>m. Fluorene</b>                                                       |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>n. Naphthalene-</b>                                                   |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>o. Phenanthrene</b>                                                   |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>p. Pyrene</b>                                                         |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>37. Total Polychlorinated<br/>Biphenyls (PCBs)</b>                    |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>38. Antimony</b>                                                      |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>39. Arsenic</b>                                                       |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>40. Cadmium</b>                                                       |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>41. Chromium III</b>                                                  |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |
| <b>42. Chromium VI</b>                                                   |                   |                    |                                     |                                   |                                         |                                         |                         |           |                         |           |



| PARAMETER         | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily value     |           |
|-------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                   |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 43. Copper        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 44. Lead          |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 45. Mercury       |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 46. Nickel        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 47. Selenium      |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 48. Silver        |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 49. Zinc          |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| 50. Iron          |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |
| Other (describe): |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |

c) For discharges where **metals** are believed present, please fill out the following:

|                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Step 1:</i> Do any of the metals in the influent have a <b>reasonable potential</b> to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y____ N____</p>                                                                                                                                                                                             | <p>If yes, which metals?</p>                                                                                                                                                                                                                                                                                                                                                |
| <p><i>Step 2:</i> For any metals which have <b>reasonable potential</b> to exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor (DF)</b> using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI.<br/> What is the dilution factor for applicable metals?<br/> Metals: _____<br/><br/> DF: _____</p> | <p>Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b>. Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?<br/> Y____ N____ If “Yes,” list which metals:</p> |

|    | parameter                | absent | present | # of samples | type of sample | method  | min level | max daily conc (ug/L) | value mass (kg) | Avg daily conc (ug/L) | value mass (kg) |
|----|--------------------------|--------|---------|--------------|----------------|---------|-----------|-----------------------|-----------------|-----------------------|-----------------|
| 51 | 1-methylnaphthalene      |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 14                    | 0.0229          | 7.1                   | 0.0059          |
| 52 | 2-methylnaphthalene      |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 0.19                  | 0.0003          | 0.195                 | 0.0002          |
| 53 | perylene                 |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 0.37                  | 0.0006          | 0.285                 | 0.0002          |
| 54 | 2,6 - dimethylnapthalene |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 1.7                   | 0.0028          | 0.95                  | 0.0008          |
| 55 | 1-methylphenanthrene     |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 0.66                  | 0.0011          | 0.43                  | 0.0004          |
| 56 | benzo (e) pyrene         |        | x       | 2            | grab           | 8270C-M | 0.2 ug/L  | 1.3                   | 0.0021          | 0.75                  | 0.0006          |

**4. Treatment system information.** Please describe the treatment system using separate sheets as necessary, including:

|                                                                                                                                                                                                                                                                                                                 |              |                |                          |                    |            |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|--------------------------|--------------------|------------|------------|
| a) A description of the treatment system, including a schematic of the proposed or existing treatment system:                                                                                                                                                                                                   |              |                |                          |                    |            |            |
| b) Identify each applicable treatment unit (check all that apply):                                                                                                                                                                                                                                              | Frac. tank   | Air stripper   | Oil/water separator      | Equalization tanks | Bag filter | GAC filter |
|                                                                                                                                                                                                                                                                                                                 | Chlorination | Dechlorination | Other (please describe): |                    |            |            |
| c) Proposed <b>average</b> and <b>maximum flow rates</b> (gallons per minute) for the discharge and the <b>design flow rate(s)</b> (gallons per minute) of the treatment system:<br>Average flow rate of discharge _____ Maximum flow rate of treatment system _____ Design flow rate of treatment system _____ |              |                |                          |                    |            |            |
| d) A description of chemical additives being used or planned to be used (attach MSDS sheets):                                                                                                                                                                                                                   |              |                |                          |                    |            |            |

**5. Receiving surface water(s).** Please provide information about the receiving water(s), using separate sheets as necessary:

|                                                                                                             |              |                   |                 |                 |                |                   |
|-------------------------------------------------------------------------------------------------------------|--------------|-------------------|-----------------|-----------------|----------------|-------------------|
| a) Identify the discharge pathway:                                                                          | Direct _____ | Within facility__ | Storm drain____ | River/brook____ | Wetlands _____ | Other (describe): |
| b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: |              |                   |                 |                 |                |                   |

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

1. For multiple discharges, number the discharges sequentially.

2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water

The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water \_\_\_\_\_,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water \_\_\_\_\_ cfs

Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes\_\_\_\_ No\_\_\_\_ If yes, for which pollutant(s)?

Is there a TMDL? Yes\_\_\_\_ No\_\_\_\_ If yes, for which pollutant(s)?

**6. Results of Consultation with Federal Services:** Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes\_\_\_\_ No\_\_\_\_

Has any consultation with the federal services been completed? No\_\_\_\_ or is consultation underway? Yes\_\_\_\_ No\_\_\_\_

What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):

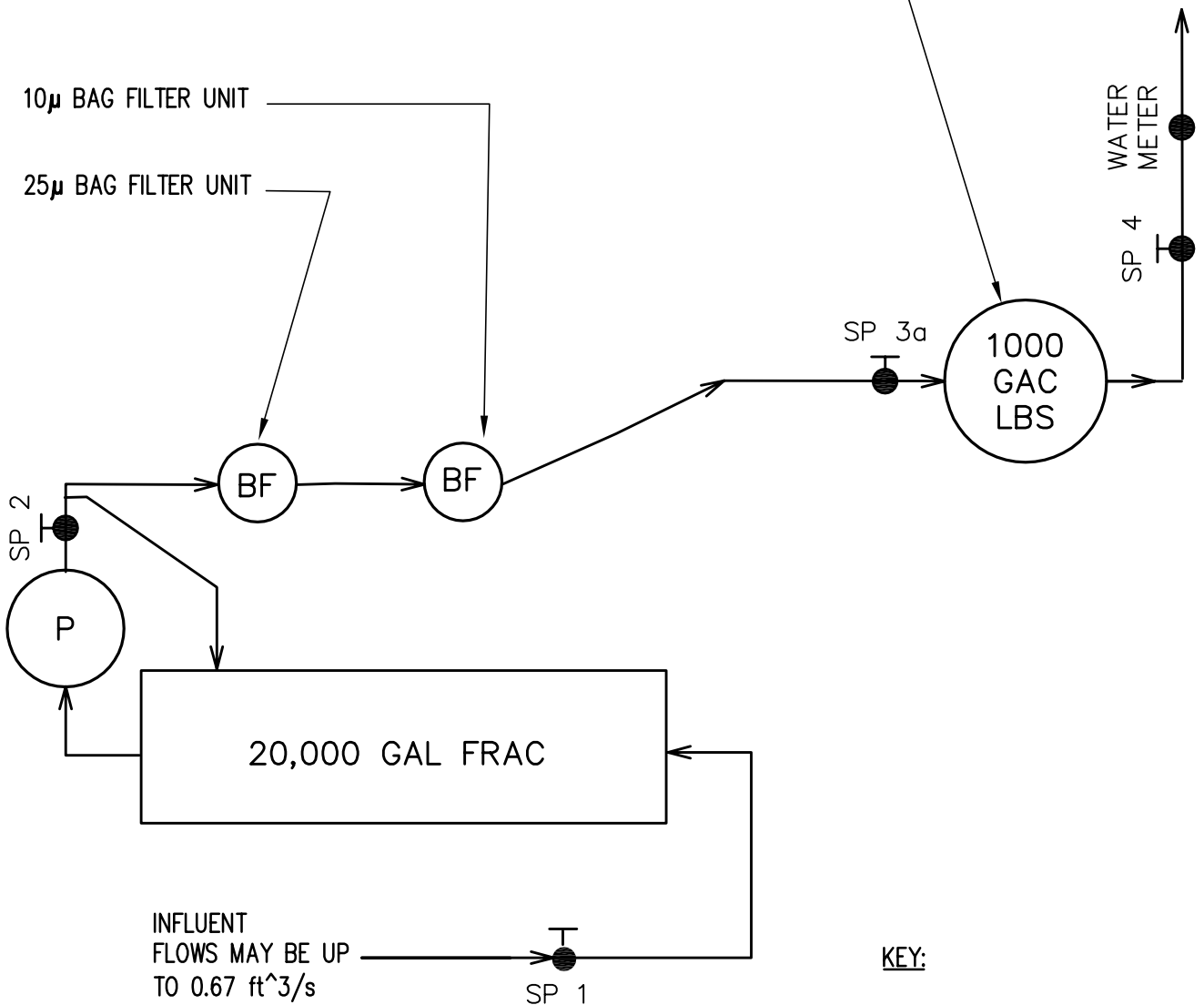
a “no jeopardy” opinion? \_\_\_\_\_ or written concurrence \_\_\_\_\_ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?

Yes\_\_\_\_ No\_\_\_\_ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes\_\_\_\_ No\_\_\_\_

GAC TREATMENT THROUGH ONE UNIT  
UNLESS EFFLUENT LIMITS ARE EXCEEDED

DISCHARGE TO  
CATCH BASIN



**KEY:**

- GAC LIQUID PHASE GRANULAR ACTIVATED CARBON
- BF BAG FILTER
- SP SAMPLE PORT
- P PUMP

J:\Project\2523\NPDES\Process Flow Diagram

25 Wheeler Street  
Cambridge, Massachusetts

Not to Scale

**RIZZO**  
ASSOCIATES

A TETRA TECH COMPANY

Process Flow Diagram

Figure

**7. Supplemental information. :**

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Facility/Site Name: 25 Wheeler Street, Cambridge, Massachusetts

Operator signature: *Michael D. Gypula*

Title: TRUSTEE

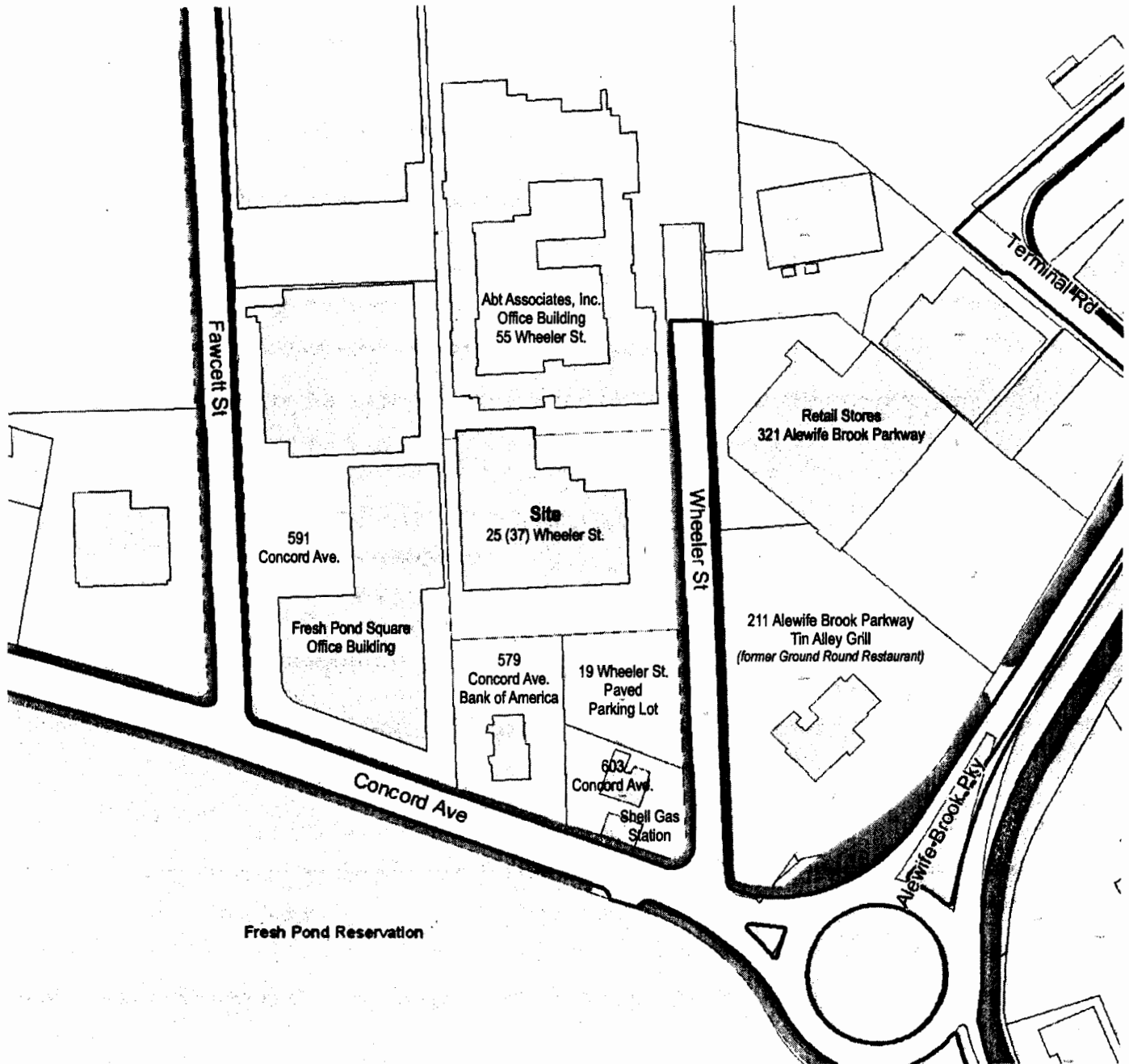
Date: 6/28/06



25 Wheeler Street  
Cambridge, Massachusetts





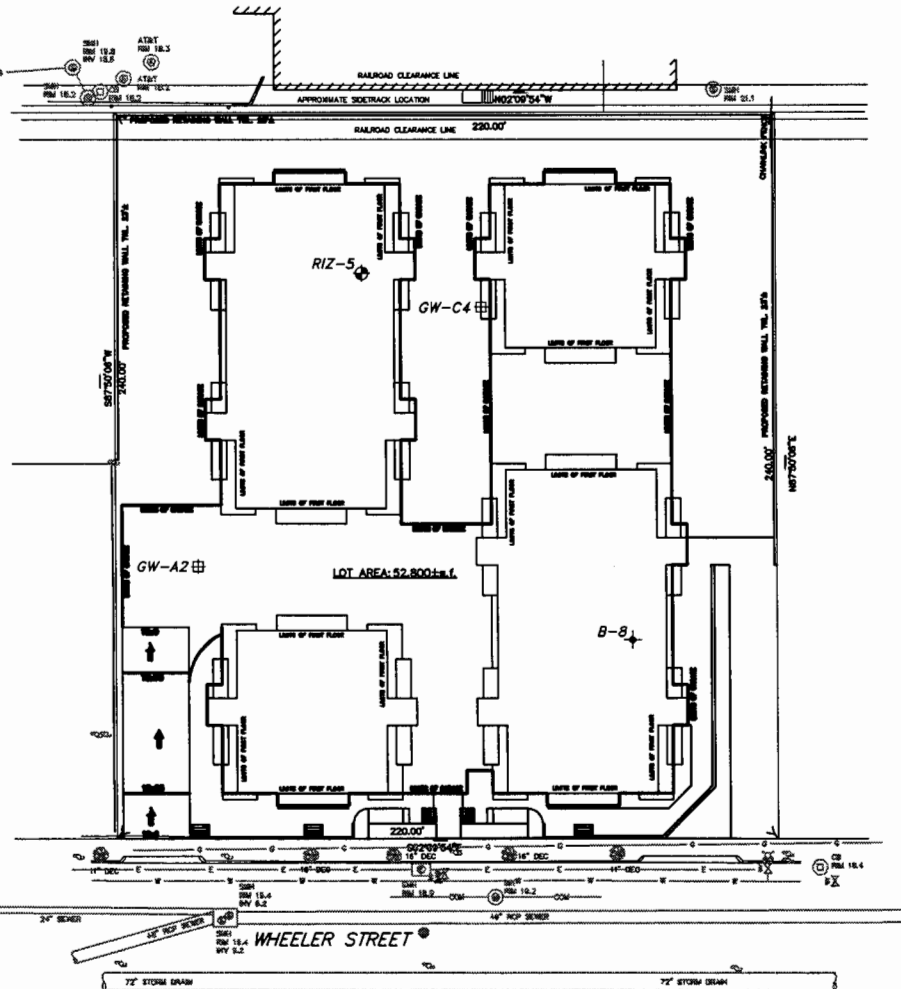


Not To Scale

25 Wheeler Street  
Cambridge, Massachusetts

# **LEGEND**

- RIZ-5  MONITORING WELL LOCATION
- B-8  SOIL BORING LOCATION
- GW-A2  TEST PIT & GROUNDWATER SAMPLING LOCATION



**RIZZO ASSOCIATES**  
 A TETRA TECH COMPANY  
 130 Franklin Street  
 Hartford, CT 06103-2428  
 860.546.4420  
 www.rizzo.com

Project No.  
 37 Wheeler Street  
 Cambridge, MA

Scale 1" = 40'  
 Site Plan with  
 Groundwater Sample  
 Locations

Scale in Feet  
 0 40  
 1" = 40'

Drawn: 6/20/08  
 1

# MA DEP - Bureau of Waste Site Cleanup

SITE NAME:

Site Scoring Map: 500 feet & 0.5 Mile Radii

25 Wheeler Street  
CAMBRIDGE, MA 02138  
4694973n 323476ew

Site Location



The information shown on this map is the best available at the date of printing. Please refer to the data source descriptions document.



Massachusetts  
Geographic  
Information  
System

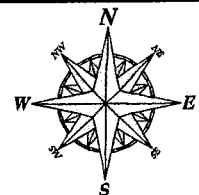
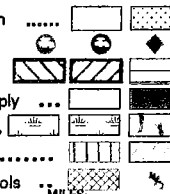


Massachusetts Executive Office of Environmental Affairs - 2005



Roads: Limited Access, Divided, Major Road, Connector, Street, Track, Trail  
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct  
Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dams  
Potentially Productive Aquifers: Medium, High Yield  
Non-Potential Drinking Water Source Area: Medium, High Yield

EPA Sole Source Aquifer; FEMA 100-year floodplain  
Public Water Supplies: Ground, Surface, Non Community  
Approved Zone 2; MWPA; Surface Water Supply Zone A  
Hydrography: Water Features, Public Surface Water Supply  
Wetlands: Fresh, Salt, NHESP Wetlands Habitat  
Protected Open Space; ACEC  
DEP Permitted Solid Waste Facilities; Certified Vernal Pools



SCALE 1:15000

0 1/2 1/2 KILOMETERS

May 05, 2005

**RIZZO**  
**ASSOCIATES**

A TETRA TECH COMPANY

One Grant Street  
Framingham, MA 01701-9005  
(508) 903-2000  
(508) 903-2001 fax  
www.rizzo.com

JOB 25 Wheeler Street 1272523003-005  
SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SCALE \_\_\_\_\_

Alewile Brook -  $7Q_{10} = 0.29 \text{ ft}^3/\text{sec}$  - from streamstats

- TMDL required - metals, nutrients, organic enrichment, low DO  
pathogens, oil & grease, Taste & odor & color  
(objectionable deposits)

$Q_d$  = max discharge flow rate  
= 300 gpm = 0.67 cfs

$Q_s = 7Q_{10} = 0.29 \text{ ft}^3/\text{sec}$

DF = dilution factor  
=  $(Q_d + Q_s) / Q_d$   
=  $(0.67 + 0.29) / 0.67$   
= 1.4

Facility Location - Lat -  $42^\circ 23' 23''$   
Long -  $-71^\circ 08' 41''$

- same lat/long for discharge to drop inlet to storm drain

Discharge Location - storm drain outfall to Alewife Brook

Lat -  $42^\circ 23' 51''$   
Long -  $-71^\circ 08' 35''$

outfall ID = CAM004/401

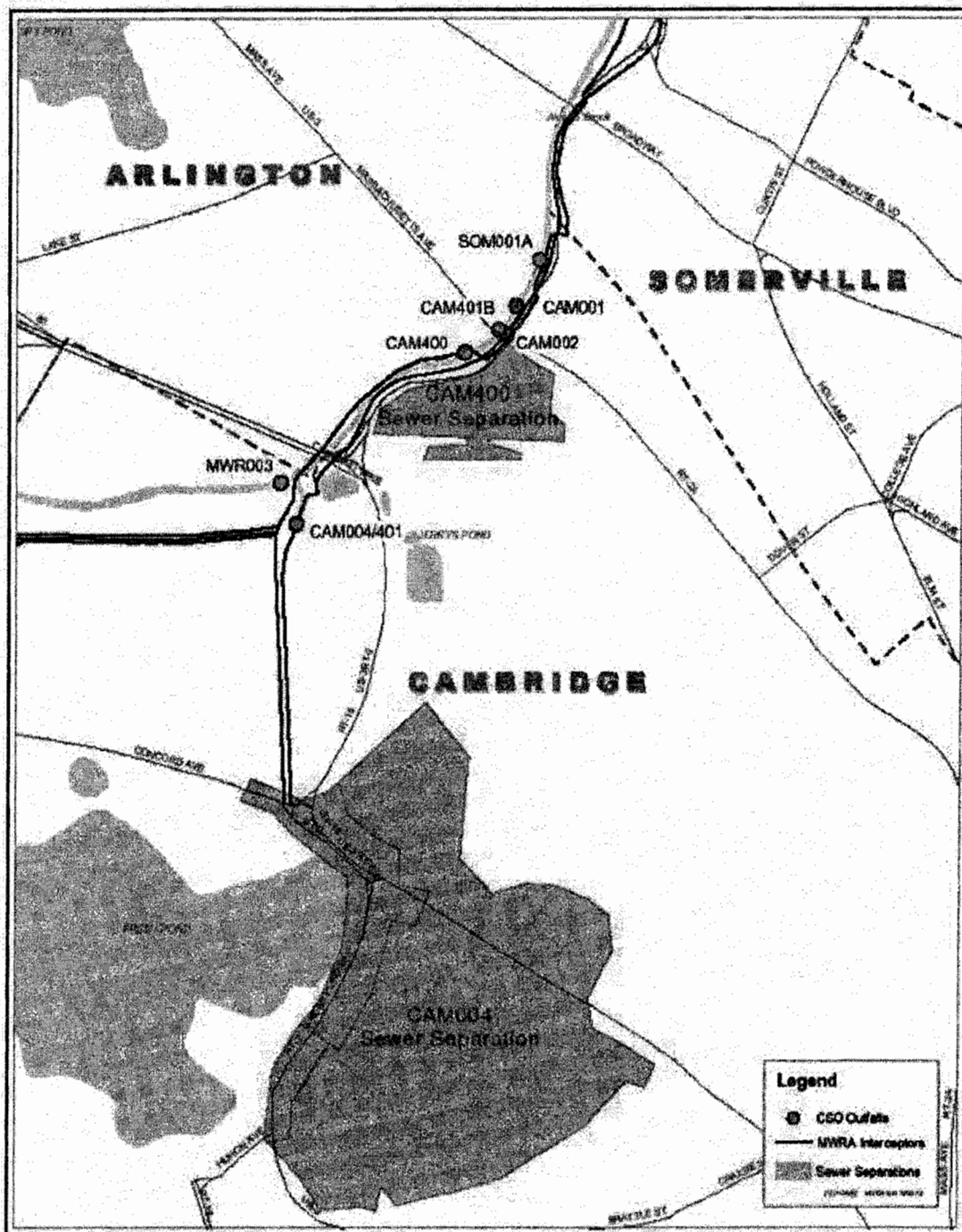
- storm drain drop inlet on-site

Lat -  $42^\circ 23' 24''$   
Long -  $-71^\circ 08' 40''$



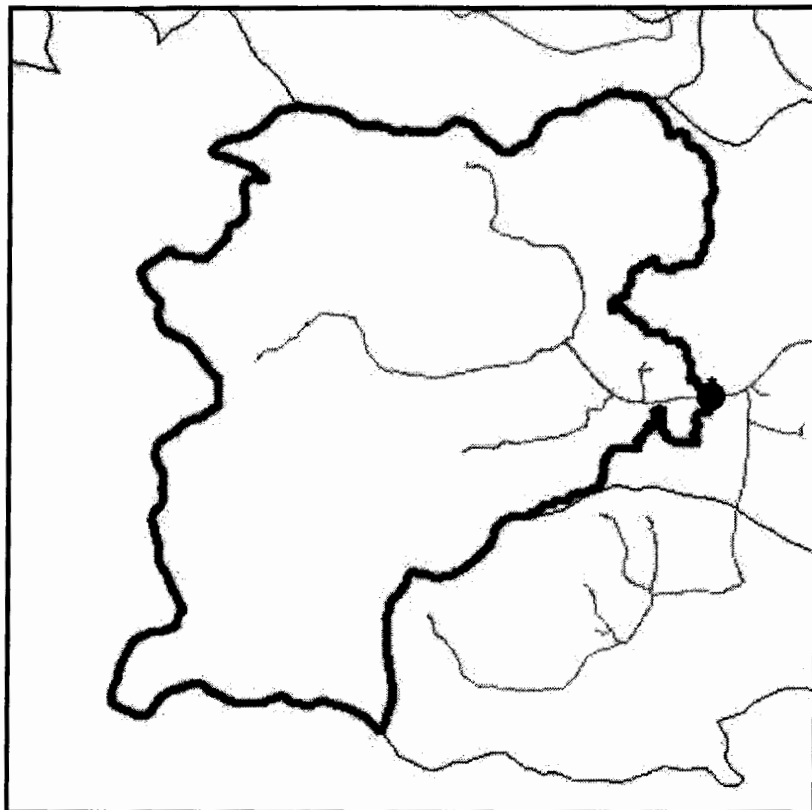
All data is provided for graphic representation only. The City of Cambridge expressly disclaims all warranties of any type, expressed or implied, including, but not limited to, any warranty as to the accuracy of the data, merchantability, or fitness for a particular purpose.

## CSO Outfalls along the Little River/Alewife Brook





## Streamflow Statistics Report



**Date:** Mon Jun 26 18:25:13 2006

**Latitude:** 42.397

**Longitude:** -71.1462

**Measured Basin Characteristics:**

**Drainage Area (square miles):** 4.14

**Stratified Drift Area (square miles):** 1.67

**Stream Length (miles):** 4.43

**Slope (percent):** 2.60

**Region:** 0

| Statistic                | Estimated streamflow,<br>ft <sup>3</sup> /s | 90% Prediction interval |         |
|--------------------------|---------------------------------------------|-------------------------|---------|
|                          |                                             | Minimum                 | Maximum |
| 99-percent duration flow | 0.28                                        | 0.07                    | 1.07    |
| 98-percent duration flow | 0.40                                        | 0.11                    | 1.37    |
| 95-percent duration flow | 0.62                                        | 0.19                    | 1.94    |
| 90-percent duration flow | 1.07                                        | 0.40                    | 2.79    |
| 85-percent duration flow | 1.24                                        | 0.46                    | 3.31    |
| 80-percent duration flow | 1.64                                        | 0.66                    | 4.01    |



|                                 |      |      |      |
|---------------------------------|------|------|------|
| <b>75-percent duration flow</b> | 1.71 | 0.70 | 4.12 |
| <b>70-percent duration flow</b> | 2.13 | 0.85 | 5.25 |
| <b>60-percent duration flow</b> | 3.09 | 1.08 | 8.76 |
| <b>50-percent duration flow</b> | 4.06 | 1.92 | 8.55 |
| <b>7-day, 2-year low flow</b>   | 0.59 | 0.18 | 1.89 |
| <b>7-day, 10-year low flow</b>  | 0.29 | 0.07 | 1.12 |
| <b>August median flow</b>       | 1.32 | 0.47 | 3.62 |

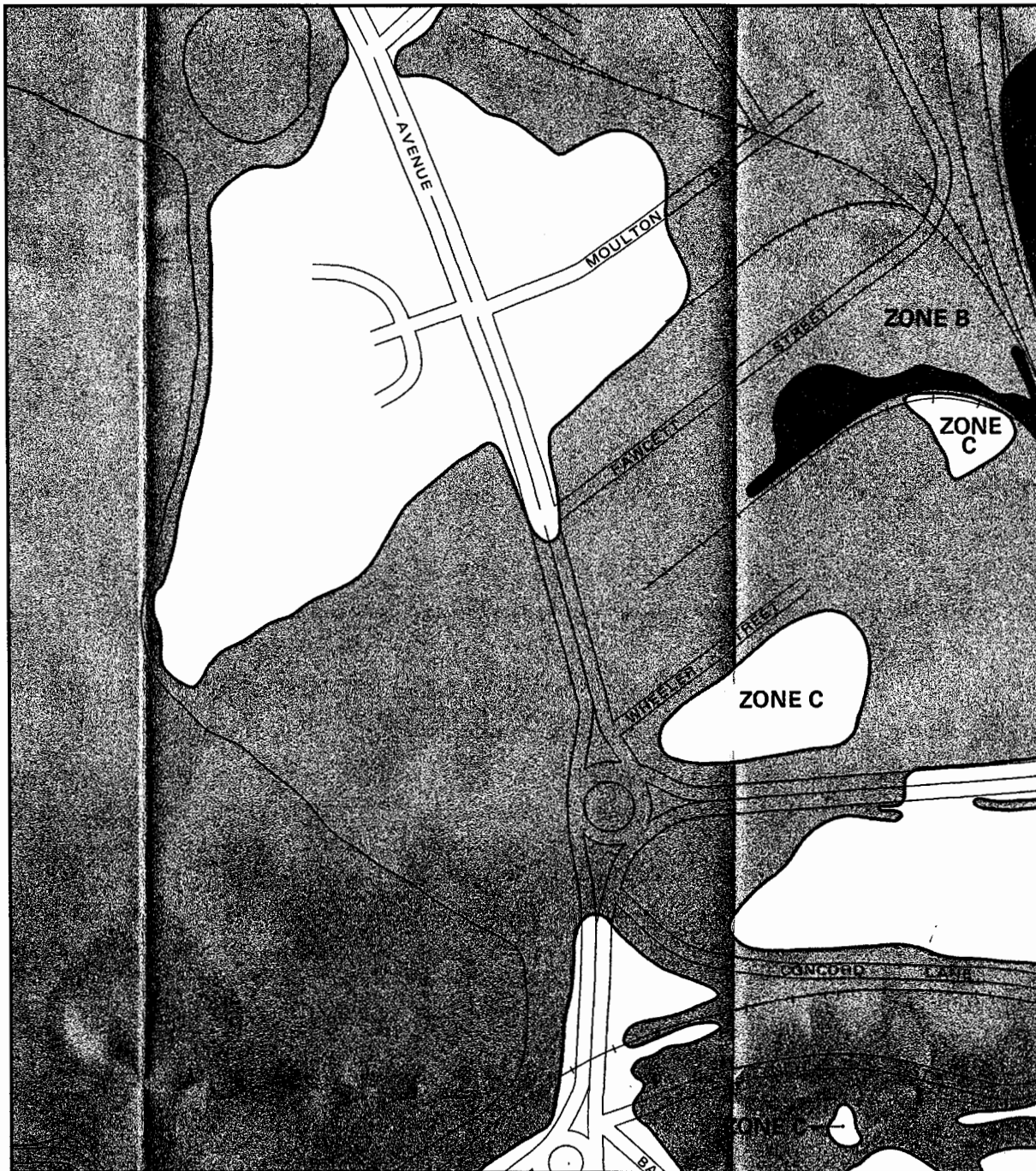
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U.S. Department of the Interior, U.S. Geological Survey  
10 Bearfoot Road  
Northborough, MA 01532  
(508) 490-5000

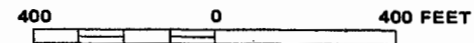
Maintainer: [webmaster@mass1.er.usgs.gov](mailto:webmaster@mass1.er.usgs.gov)

## Massachusetts Category 5 Waters "Waters requiring a TMDL"

| NAME                             | SEGMENT ID   | DESCRIPTION                                                                                                                                  | SIZE       | POLLUTANT NEEDING TMDL [EPA APPROVAL DATE/DOCUMENT CONTROL NUMBER]                                                                                                            |
|----------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Winthrop Bay (70908)             | MA70-10_2004 | From the tidal flats at Coleridge Street, East Boston to a line between Logan International Airport and Point Shirley, East Boston/Winthrop. | 1.7 sq mi  | -Pathogens                                                                                                                                                                    |
| <b>Boston Harbor:<br/>Mystic</b> |              |                                                                                                                                              |            |                                                                                                                                                                               |
| Aberjona River (7138350)         | MA71-01_2004 | Source just south of Birch Meadow Drive, Reading to inlet Upper Mystic Lake at Mystic Valley Parkway, Winchester.                            | 9.2 miles  | -Cause Unknown<br>-Unionized Ammonia<br>-Nutrients<br>-Organic enrichment/Low DO<br>-(Other habitat alterations*)<br>-Pathogens                                               |
| Alewife Brook (7138250)          | MA71-04_2004 | Outlet of Little Pond, Belmont to confluence with Mystic River, Arlington/Somerville.                                                        | 2.3 miles  | -Metals<br>-Nutrients<br>-Organic enrichment/Low DO<br>-Pathogens<br>-Oil and grease<br>-Taste, odor and color<br>-(Objectionable deposits*)                                  |
| Blacks Nook (71005)              | MA71005_2004 | Cambridge                                                                                                                                    | 2.2 acres  | -Nutrients<br>-Noxious aquatic plants                                                                                                                                         |
| Chelsea River (7138100)          | MA71-06_2004 | Confluence with Mill Creek, Chelsea/Revere to confluence with Mystic River, Chelsea/East Boston/Charlestown.                                 | 0.39 sq mi | -Priority organics<br>-Unionized Ammonia<br>-Organic enrichment/Low DO<br>-Pathogens<br>-Oil and grease<br>-Taste, odor and color<br>-Turbidity<br>-(Objectionable deposits*) |
| Clay Pit Pond (71011)            | MA71011_2004 | Belmont                                                                                                                                      | 11.9 acres | -Pesticides                                                                                                                                                                   |
| Ell Pond (71014)                 | MA71014_2004 | Melrose                                                                                                                                      | 23.3 acres | -Nutrients<br>-Pathogens<br>-Suspended solids                                                                                                                                 |
| Horn Pond (71019)                | MA71019_2004 | Woburn                                                                                                                                       | 108 acres  | -Nutrients<br>-Organic enrichment/Low DO<br>-Noxious aquatic plants                                                                                                           |
| Judkins Pond (71021)             | MA71021_2004 | Winchester                                                                                                                                   | 2.8 acres  | -Nutrients<br>-Organic enrichment/Low DO<br>-Pathogens                                                                                                                        |
| Lower Mystic Lake (71027)        | MA71027_2004 | Arlington                                                                                                                                    | 92.8 acres | -Cause Unknown<br>-Organic enrichment/Low DO<br>-Salinity/TDS/chlorides                                                                                                       |
| Malden River (7138200)           | MA71-05_2004 | Headwaters south of Exchange Street, Malden to confluence with Mystic River, Everett/Medford.                                                | 2.5 miles  | -Organic enrichment/Low DO<br>-Pathogens<br>-Oil and grease<br>-Taste, odor and color<br>-Suspended solids<br>-(Objectionable deposits*)                                      |



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY OF  
CAMBRIDGE,  
MASSACHUSETTS  
MIDDLESEX COUNTY

PANEL 1 OF 3  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
250186 0001 B

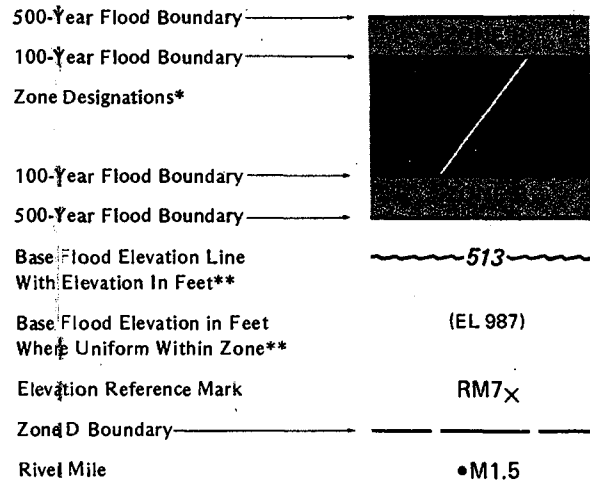
EFFECTIVE DATE:  
JULY 5, 1982



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

## KEY TO MAP



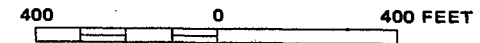
\*\*Referenced to the National Geodetic Vertical Datum of 1929

## \*EXPLANATION OF ZONE DESIGNATIONS

| ZONE   | EXPLANATION                                                                                                                                                                                                                                                                                      |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A      | Areas of 100-year flood; base flood elevations and flood hazard factors not determined.                                                                                                                                                                                                          |
| AQ     | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.                                                                                                                      |
| AH     | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.                                                                                                                             |
| A1-A30 | Areas of 100-year flood; base flood elevations and flood hazard factors determined.                                                                                                                                                                                                              |
| A99    | Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.                                                                                                                                            |
| B      | Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading) |
| C      | Areas of minimal flooding. (No shading)                                                                                                                                                                                                                                                          |
| D      | Areas of undetermined, but possible, flood hazards.                                                                                                                                                                                                                                              |



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

## FIRM FLOOD INSURANCE RATE MAP

CITY OF  
CAMBRIDGE,  
MASSACHUSETTS  
MIDDLESEX COUNTY

PANEL 1 OF 3  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
250186 0001 B

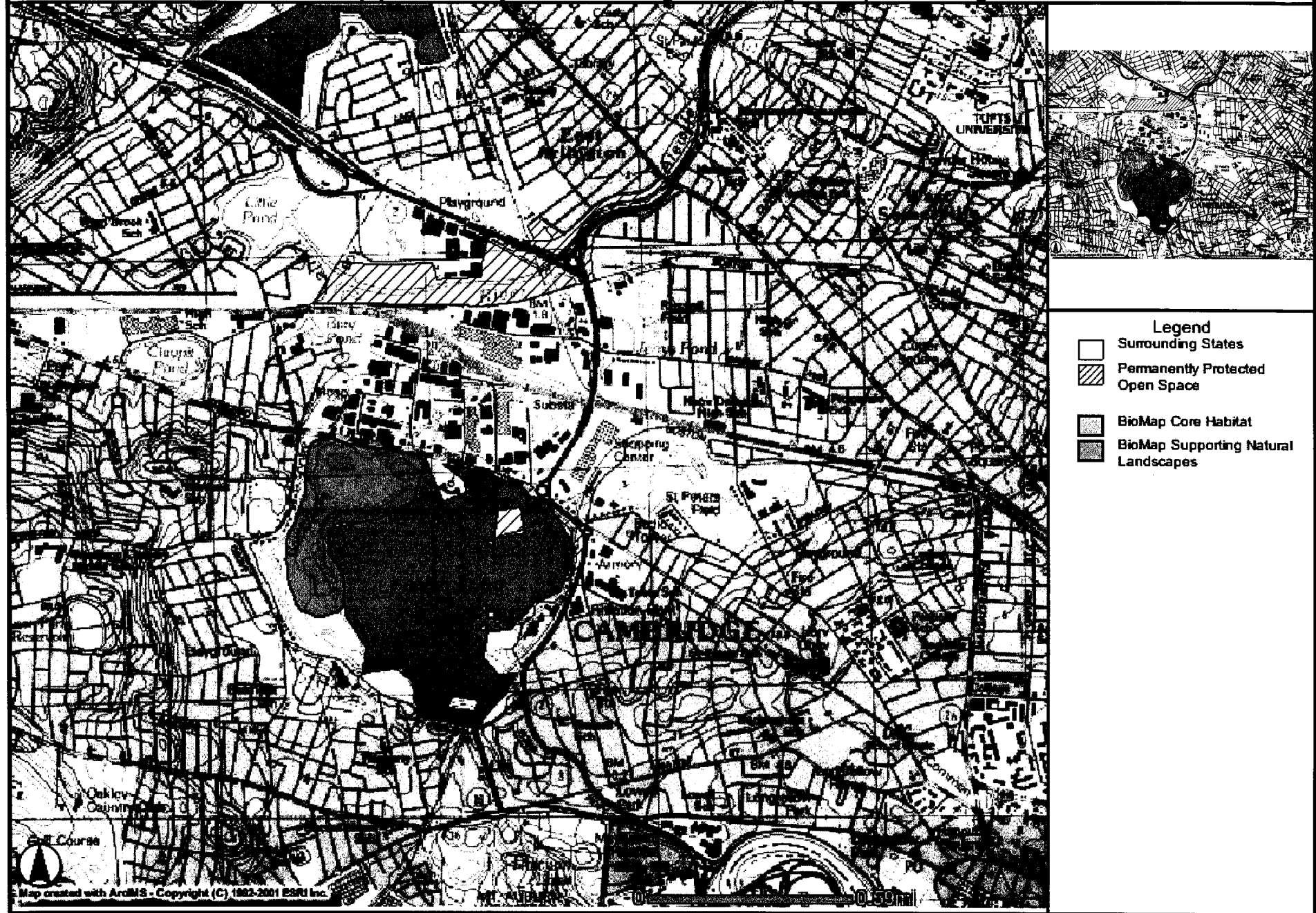
EFFECTIVE DATE:  
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## BioMap produced by Natural Heritage &amp; Endangered Species Program



## *Rare Species by Town "C"*

The 'Most Recent Obs' field represents the most recent observation of a species in a town. However, many rare species are difficult to detect even though they are present, and Natural Heritage does not conduct methodical species surveys in each town on a consistent basis. Therefore, the fact that the 'Most Recent Obs' for a species may be several years old should not lead to the interpretation that the species no longer occurs in a town.

Click on a town below to view state listed species for that town. To print the species for a particular town, highlight the species using your mouse, go to Print under the File Menu, click on 'Selection' under 'Print Range' and click OK.

Click on your browser's "Back" button to return to previous page.

|                             |                            |                              |                                |                              |                           |                              |
|-----------------------------|----------------------------|------------------------------|--------------------------------|------------------------------|---------------------------|------------------------------|
| ● <a href="#">Cambridge</a> | ● <a href="#">Carver</a>   | ● <a href="#">Chelmsford</a> | ● <a href="#">Chesterfield</a> | ● <a href="#">Clarksburg</a> | ● <a href="#">Colrain</a> | ● <a href="#">Cummington</a> |
| ● <a href="#">Canton</a>    | ● <a href="#">Charlton</a> | ● <a href="#">Cheshire</a>   | ● <a href="#">Chicopee</a>     | ● <a href="#">Clinton</a>    | ● <a href="#">Concord</a> |                              |
| ● <a href="#">Carlisle</a>  | ● <a href="#">Chatham</a>  | ● <a href="#">Chester</a>    | ● <a href="#">Chilmark</a>     | ● <a href="#">Cohasset</a>   | ● <a href="#">Conway</a>  |                              |

| Town      | Taxonomic Group | Scientific Name           | Common Name                   | State Rank | Federal Rank | Most Recent Observation |
|-----------|-----------------|---------------------------|-------------------------------|------------|--------------|-------------------------|
| CAMBRIDGE | Amphibian       | Ambystoma laterale        | Blue-spotted Salamander       | SC         |              | 1917                    |
| CAMBRIDGE | Amphibian       | Scaphiopus holbrookii     | Eastern Spadefoot             | T          |              | 1892                    |
| CAMBRIDGE | Beetle          | Cicindela duodecimguttata | Twelve-spotted Tiger Beetle   | SC         |              | 1932                    |
| CAMBRIDGE | Beetle          | Desmocerus palliatus      | Elderberry Long-horned Beetle | SC         |              | 1933                    |
| CAMBRIDGE | Bird            | Ammodramus henslowii      | Henslow's Sparrow             | E          |              | 1871                    |
| CAMBRIDGE | Bird            | Botaurus lentiginosus     | American Bittern              | E          |              | 1906                    |
| CAMBRIDGE | Bird            | Cistothorus platensis     | Sedge Wren                    | E          |              | 1840                    |
| CAMBRIDGE | Bird            | Gallinula chloropus       | Common Moorhen                | SC         | (PS)         | 1890                    |
| CAMBRIDGE | Bird            | Ixobrychus exilis         | Least Bittern                 | E          |              | 1890                    |
| CAMBRIDGE | Bird            | Tyto alba                 | Barn Owl                      | SC         |              | 1949                    |
| CAMBRIDGE | Butterfly/Moth  | Eacles imperialis         | Imperial Moth                 | T          |              | 1934                    |
| CAMBRIDGE | Butterfly/Moth  | Erynnis persius persius   | Persius Duskywing             | E          |              | 1880                    |
| CAMBRIDGE | Fish            | Notropis bifrenatus       | Bridle Shiner                 | SC         |              | 1928                    |
| CAMBRIDGE | Mussel          | Ligumia nasuta            | Eastern Pondmussel            | SC         |              | 1940                    |
| CAMBRIDGE | Reptile         | Clemmys guttata           | Spotted Turtle                | SC         |              | 1900                    |
| CAMBRIDGE | Reptile         | Clemmys insculpta         | Wood Turtle                   | SC         |              | 1900                    |
| CAMBRIDGE | Reptile         | Terrapene carolina        | Eastern Box Turtle            | SC         |              | 1892                    |
| CAMBRIDGE | Segmented Worm  | Macrobdella sestetia      | New England Medicinal Leech   | SC         |              | 1800                    |
| CAMBRIDGE | Vascular Plant  | Carex gracilescens        | Slender Woodland Sedge        | E          |              | 1891                    |

|           |                |                                         |                            |    |          |
|-----------|----------------|-----------------------------------------|----------------------------|----|----------|
| CAMBRIDGE | Vascular Plant | Carex recta                             | Saline Sedge               | E  | 1858     |
| CAMBRIDGE | Vascular Plant | Cyperus engelmannii                     | Engelmann's Umbrella-sedge | T  | 2002     |
| CAMBRIDGE | Vascular Plant | Gentiana andrewsii                      | Andrews' Bottle Gentian    | E  | 1854     |
| CAMBRIDGE | Vascular Plant | Isoetes lacustris                       | Lake Quillwort             | E  | historic |
| CAMBRIDGE | Vascular Plant | Platanthera flava var. herbiola         | Pale Green Orchis          | T  | historic |
| CAMBRIDGE | Vascular Plant | Potamogeton friesii                     | Fries' Pondweed            | E  | 1880     |
| CAMBRIDGE | Vascular Plant | Sagittaria montevidensis ssp. spongiosa | Estuary Arrowhead          | E  | 1870     |
| CAMBRIDGE | Vascular Plant | Scirpus longii                          | Long's Bulrush             | T  | 1913     |
| CAMBRIDGE | Vascular Plant | Suaeda calceoliformis                   | American Sea-blite         | SC | 1912     |
| CAMBRIDGE | Vascular Plant | Viola brittoniana                       | Britton's Violet           | T  | 1843     |



**Index by State and City**

National Register Information System

06/27/2006 20:53:38

No filter

Include filter in navigation ☐

| Row | STATE ▾ | COUNTY ▾  | RESOURCE NAME ▾                        | ADDRESS ▾                                                       | CITY ▾    | LISTED ▾   | MULTIPLE ▾                                     |
|-----|---------|-----------|----------------------------------------|-----------------------------------------------------------------|-----------|------------|------------------------------------------------|
| 1   | MA      | Middlesex | 1767 Milestones                        | Between Boston and Springfield along Old Post Rd.               | Cambridge | 1971-04-07 |                                                |
| 2   | MA      | Middlesex | Abbot, Edwin, House                    | 1 Follen St.                                                    | Cambridge | 1979-05-10 |                                                |
| 3   | MA      | Middlesex | Aborn, John, House                     | 41 Orchard St.                                                  | Cambridge | 1982-04-13 | Cambridge MRA                                  |
| 4   | MA      | Middlesex | Alewife Brook Parkway                  | Alewife Brook Parkway                                           | Cambridge | 2004-03-18 | Metropolitan Park System of Greater Boston MPS |
| 5   | MA      | Middlesex | Almshouse                              | 41 Orchard St.                                                  | Cambridge | 1982-04-13 | Cambridge MRA                                  |
| 6   | MA      | Middlesex | American Net and Twine Company Factory | 155 2nd St.                                                     | Cambridge | 1982-04-01 | Cambridge MRA                                  |
| 7   | MA      | Middlesex | Ash Street Historic District           | Ash St. and Ash St. Place between Brattle and Mount Auburn Sts. | Cambridge | 1982-04-13 | Cambridge MRA                                  |
| 8   | MA      | Middlesex | Athenaeum Press                        | 215 1st St.                                                     | Cambridge | 1982-04-13 | Cambridge MRA                                  |
| 9   | MA      | Middlesex | Atwood, Ephraim, House                 | 110 Hancock St.                                                 | Cambridge | 1983-06-30 | Cambridge MRA                                  |
| 10  | MA      | Middlesex | Austin Hall                            | Harvard University campus                                       | Cambridge | 1972-04-19 |                                                |

Page 1





ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220 www.alpha lab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

**Client:** Rizzo Associates

**Laboratory Job Number:** L0608869

**Address:** 1 Grant Street

Framingham, MA 01701-9005

**Date Received:** 23-JUN-2006

**Attn:** Mr. Bill Phelps

**Date Reported:** 30-JUN-2006

**Project Number:** 1272523003-005

**Delivery Method:** Client

**Site:** 25 WHEELER ST

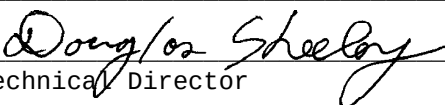
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| ALPHA SAMPLE NUMBER | CLIENT IDENTIFICATION | SAMPLE LOCATION |
|---------------------|-----------------------|-----------------|
| L0608869-01         | C4                    | CAMBRIDGE, MA   |
| L0608869-02         | A2                    | CAMBRIDGE, MA   |
| L0608869-03         | TRIP BLANK            | CAMBRIDGE, MA   |

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

---

Authorized by:

  
Technical Director

**ALPHA ANALYTICAL LABORATORIES  
NARRATIVE REPORT**

**Laboratory Job Number: L0608869**

---

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

**Hexavalent Chromium**

L0608869-02 and the associated duplicate are reported with elevated detection limit due to a matrix.

L0608869-01 and -02 were analyzed for total chromium with results -01: 0.00289 mg/l and -02: 0.00208 mg/l.

The WG244507 MS % recovery is outside the acceptance criteria for the method due to matrix interference.

**Metals**

The WG244358-2 MS % recovery for Fe is invalid because the sample concentration is greater than four times the spike amount added.

**PAH-LOW**

L0608842-09, -10, -11, -12 and -14:

The requested limits were not achieved for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene and Indeno(1,2,3-cd)pyrene.

**Semi-Volatile Organics**

L0608842-09, -10, -11, -12 and -14:

The requested limits were not achieved for Nitrobenzene, Aniline, 4-Chloroaniline, 2,4-Dichlorophenol, 2-Nitrophenol, 4-Nitrophenol, 2,4-Dinitrophenol, Phenol, 2-Methylphenol, 2,4,5-Trichlorophenol.

The WG244291 LCS has a high recovery for 2,4-Dinitrotoluene.

**PCB**

The WG244510 method blank and ms have the surrogate recoveries for Decachlorobiphenyl below acceptance criteria. The ms also has the Aroclor 1260 s recovery below acceptance criteria. All other spike compounds and surrogates are within acceptance criteria. The samples are non-detect, no further action was taken.

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0608869-01

Date Collected: 23-JUN-2006 08:30

C4

Date Received : 23-JUN-2006

Sample Matrix: WATER

Date Reported : 30-JUN-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 7-Amber,4-Plastic,4-Vial

| PARAMETER                      | RESULT | UNITS | RDL    | REF METHOD  | DATE<br>PREP ANAL     | ID |
|--------------------------------|--------|-------|--------|-------------|-----------------------|----|
| Solids, Total Suspended        | 220    | mg/l  | 10     | 4 160.2     | 0627 14:45            | ST |
| Cyanide, Total                 | 0.005  | mg/l  | 0.005  | 4 335.2     | 0626 09:50 0626 20:04 | DD |
| Chlorine, Total Residual       | ND     | mg/l  | 0.05   | 4 330.1     | 0623 17:27            | DP |
| TPH                            | ND     | mg/l  | 4.40   | 74 1664A    | 0626 15:30 0627 10:30 | AT |
| Phenolics, Total               | ND     | mg/l  | 0.03   | 4 420.1     | 0627 11:15            | AT |
| Chromium, Hexavalent           | ND     | mg/l  | 0.02   | 30 3500CR-D | 0623 19:00 0623 19:00 | AI |
| Total Metals                   |        |       |        |             |                       |    |
| Antimony, Total                | 0.0006 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Arsenic, Total                 | 0.0054 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Cadmium, Total                 | ND     | mg/l  | 0.0002 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Chromium, Total                | 0.0006 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Copper, Total                  | 0.0010 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Iron, Total                    | 55     | mg/l  | 0.05   | 19 200.7    | 0626 20:00 0627 17:35 | CF |
| Lead, Total                    | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Mercury, Total                 | ND     | mg/l  | 0.0002 | 4 245.2     | 0628 22:45 0629 17:10 | HG |
| Nickel, Total                  | 0.0045 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Selenium, Total                | 0.002  | mg/l  | 0.001  | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Silver, Total                  | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Zinc, Total                    | 0.0471 | mg/l  | 0.0050 | 1 6020      | 0626 20:00 0627 22:37 | BM |
| Pesticides by GC 504           |        |       |        | 14 504.1    | 0628 09:30 0628 13:37 | SS |
| 1,2-Dibromoethane              | ND     | ug/l  | 0.020  |             |                       |    |
| Volatile Organics by GC/MS 624 |        |       |        | 5 624       | 0629 11:24            | MM |
| Methylene chloride             | ND     | ug/l  | 5.0    |             |                       |    |
| 1,1-Dichloroethane             | ND     | ug/l  | 1.5    |             |                       |    |
| Chloroform                     | ND     | ug/l  | 1.5    |             |                       |    |
| Carbon tetrachloride           | ND     | ug/l  | 1.0    |             |                       |    |
| 1,2-Dichloropropane            | ND     | ug/l  | 3.5    |             |                       |    |
| Dibromochloromethane           | ND     | ug/l  | 1.0    |             |                       |    |
| 1,1,2-Trichloroethane          | ND     | ug/l  | 1.5    |             |                       |    |
| 2-Chloroethylvinyl ether       | ND     | ug/l  | 10.    |             |                       |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-01  
C4

| PARAMETER                             | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP ANAL        | ID |
|---------------------------------------|----------|-------|-------------|------------|--------------------------|----|
| Volatile Organics by GC/MS 624 cont'd |          |       |             | 5 624      | 0629 11:24 MM            |    |
| Tetrachloroethene                     | ND       | ug/l  | 1.5         |            |                          |    |
| Chlorobenzene                         | ND       | ug/l  | 3.5         |            |                          |    |
| Trichlorofluoromethane                | ND       | ug/l  | 5.0         |            |                          |    |
| 1,2-Dichloroethane                    | ND       | ug/l  | 1.5         |            |                          |    |
| 1,1,1-Trichloroethane                 | ND       | ug/l  | 2.0         |            |                          |    |
| Bromodichloromethane                  | ND       | ug/l  | 1.0         |            |                          |    |
| trans-1,3-Dichloropropene             | ND       | ug/l  | 1.5         |            |                          |    |
| cis-1,3-Dichloropropene               | ND       | ug/l  | 1.5         |            |                          |    |
| Bromoform                             | ND       | ug/l  | 1.0         |            |                          |    |
| 1,1,2,2-Tetrachloroethane             | ND       | ug/l  | 1.0         |            |                          |    |
| Benzene                               | ND       | ug/l  | 1.0         |            |                          |    |
| Toluene                               | ND       | ug/l  | 1.0         |            |                          |    |
| Ethylbenzene                          | ND       | ug/l  | 1.0         |            |                          |    |
| Chloromethane                         | ND       | ug/l  | 10.         |            |                          |    |
| Bromomethane                          | ND       | ug/l  | 5.0         |            |                          |    |
| Vinyl chloride                        | ND       | ug/l  | 2.0         |            |                          |    |
| Chloroethane                          | ND       | ug/l  | 2.0         |            |                          |    |
| 1,1-Dichloroethene                    | ND       | ug/l  | 1.0         |            |                          |    |
| trans-1,2-Dichloroethene              | ND       | ug/l  | 1.5         |            |                          |    |
| cis-1,2-Dichloroethene                | ND       | ug/l  | 1.0         |            |                          |    |
| Trichloroethene                       | ND       | ug/l  | 1.0         |            |                          |    |
| 1,2-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |                          |    |
| 1,3-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |                          |    |
| 1,4-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |                          |    |
| p/m-Xylene                            | ND       | ug/l  | 2.0         |            |                          |    |
| o-xylene                              | ND       | ug/l  | 1.0         |            |                          |    |
| Xylene (Total)                        | ND       | ug/l  | 2.0         |            |                          |    |
| Styrene                               | ND       | ug/l  | 1.0         |            |                          |    |
| Acetone                               | ND       | ug/l  | 10.         |            |                          |    |
| Carbon disulfide                      | ND       | ug/l  | 5.0         |            |                          |    |
| 2-Butanone                            | ND       | ug/l  | 10.         |            |                          |    |
| Vinyl acetate                         | ND       | ug/l  | 20.         |            |                          |    |
| 4-Methyl-2-pentanone                  | ND       | ug/l  | 10.         |            |                          |    |
| 2-Hexanone                            | ND       | ug/l  | 10.         |            |                          |    |
| Acrolein                              | ND       | ug/l  | 8.0         |            |                          |    |
| Acrylonitrile                         | ND       | ug/l  | 10.         |            |                          |    |
| Methyl tert butyl ether               | ND       | ug/l  | 20          |            |                          |    |
| 1,4-Dioxane                           | ND       | ug/l  | 2000        |            |                          |    |
| Tert-Butyl Alcohol                    | 190      | ug/l  | 100         |            |                          |    |
| Tertiary-Amyl Methyl Ether            | ND       | ug/l  | 20.         |            |                          |    |
| Surrogate(s)                          | Recovery |       | QC Criteria |            |                          |    |
| Pentafluorobenzene                    | 94.0     | %     | 80-120      |            |                          |    |
| Fluorobenzene                         | 98.0     | %     | 80-120      |            |                          |    |
| 4-Bromofluorobenzene                  | 98.0     | %     | 80-120      |            |                          |    |
| SVOC's by GC/MS 8270                  |          |       |             | 1 8270C    | 0626 13:15 0628 19:47 RL |    |
| Acenaphthene                          | ND       | ug/l  | 5.0         |            |                          |    |
| Benzidine                             | ND       | ug/l  | 50.         |            |                          |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-01  
C4

| PARAMETER                   | RESULT | UNITS | RDL | REF METHOD | DATE  |            | ID            |
|-----------------------------|--------|-------|-----|------------|-------|------------|---------------|
|                             |        |       |     |            | PREP  | ANAL       |               |
| SVOC's by GC/MS 8270 cont'd |        |       |     | 1          | 8270C | 0626 13:15 | 0628 19:47 RL |
| 1,2,4-Trichlorobenzene      | ND     | ug/l  | 5.0 |            |       |            |               |
| Hexachlorobenzene           | ND     | ug/l  | 5.0 |            |       |            |               |
| Bis(2-chloroethyl)ether     | ND     | ug/l  | 5.0 |            |       |            |               |
| 1-Chloronaphthalene         | ND     | ug/l  | 5.0 |            |       |            |               |
| 2-Chloronaphthalene         | ND     | ug/l  | 6.0 |            |       |            |               |
| 1,2-Dichlorobenzene         | ND     | ug/l  | 5.0 |            |       |            |               |
| 1,3-Dichlorobenzene         | ND     | ug/l  | 5.0 |            |       |            |               |
| 1,4-Dichlorobenzene         | ND     | ug/l  | 5.0 |            |       |            |               |
| 3,3'-Dichlorobenzidine      | ND     | ug/l  | 50. |            |       |            |               |
| 2,4-Dinitrotoluene          | ND     | ug/l  | 6.0 |            |       |            |               |
| 2,6-Dinitrotoluene          | ND     | ug/l  | 5.0 |            |       |            |               |
| Azobenzene                  | ND     | ug/l  | 5.0 |            |       |            |               |
| Fluoranthene                | ND     | ug/l  | 5.0 |            |       |            |               |
| 4-Chlorophenyl phenyl ether | ND     | ug/l  | 5.0 |            |       |            |               |
| 4-Bromophenyl phenyl ether  | ND     | ug/l  | 5.0 |            |       |            |               |
| Bis(2-chloroisopropyl)ether | ND     | ug/l  | 5.0 |            |       |            |               |
| Bis(2-chloroethoxy)methane  | ND     | ug/l  | 5.0 |            |       |            |               |
| Hexachlorobutadiene         | ND     | ug/l  | 10. |            |       |            |               |
| Hexachlorocyclopentadiene   | ND     | ug/l  | 10. |            |       |            |               |
| Hexachloroethane            | ND     | ug/l  | 5.0 |            |       |            |               |
| Isophorone                  | ND     | ug/l  | 5.0 |            |       |            |               |
| Naphthalene                 | ND     | ug/l  | 5.0 |            |       |            |               |
| Nitrobenzene                | ND     | ug/l  | 5.0 |            |       |            |               |
| NDPA/DPA                    | ND     | ug/l  | 15. |            |       |            |               |
| n-Nitrosodi-n-propylamine   | ND     | ug/l  | 5.0 |            |       |            |               |
| Bis(2-ethylhexyl)phthalate  | ND     | ug/l  | 10. |            |       |            |               |
| Butyl benzyl phthalate      | ND     | ug/l  | 5.0 |            |       |            |               |
| Di-n-butylphthalate         | ND     | ug/l  | 5.0 |            |       |            |               |
| Di-n-octylphthalate         | ND     | ug/l  | 5.0 |            |       |            |               |
| Diethyl phthalate           | ND     | ug/l  | 5.0 |            |       |            |               |
| Dimethyl phthalate          | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(a)anthracene          | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(a)pyrene              | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(b)fluoranthene        | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(k)fluoranthene        | ND     | ug/l  | 5.0 |            |       |            |               |
| Chrysene                    | ND     | ug/l  | 5.0 |            |       |            |               |
| Acenaphthylene              | ND     | ug/l  | 5.0 |            |       |            |               |
| Anthracene                  | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(ghi)perylene          | ND     | ug/l  | 5.0 |            |       |            |               |
| Fluorene                    | ND     | ug/l  | 5.0 |            |       |            |               |
| Phenanthrene                | ND     | ug/l  | 5.0 |            |       |            |               |
| Dibenzo(a,h)anthracene      | ND     | ug/l  | 5.0 |            |       |            |               |
| Indeno(1,2,3-cd)pyrene      | ND     | ug/l  | 7.0 |            |       |            |               |
| Pyrene                      | ND     | ug/l  | 5.0 |            |       |            |               |
| Benzo(e)pyrene              | ND     | ug/l  | 5.0 |            |       |            |               |
| Biphenyl                    | ND     | ug/l  | 5.0 |            |       |            |               |
| Perylene                    | ND     | ug/l  | 5.0 |            |       |            |               |
| Aniline                     | ND     | ug/l  | 10. |            |       |            |               |
| 4-Chloroaniline             | ND     | ug/l  | 5.0 |            |       |            |               |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-01  
C4

| PARAMETER                      | RESULT | UNITS | RDL | REF METHOD | DATE  |            | ID            |
|--------------------------------|--------|-------|-----|------------|-------|------------|---------------|
|                                |        |       |     |            | PREP  | ANAL       |               |
| SVOC's by GC/MS 8270 cont'd    |        |       |     | 1          | 8270C | 0626 13:15 | 0628 19:47 RL |
| 1-Methylnaphthalene            | ND     | ug/l  | 5.0 |            |       |            |               |
| 2-Nitroaniline                 | ND     | ug/l  | 5.0 |            |       |            |               |
| 3-Nitroaniline                 | ND     | ug/l  | 5.0 |            |       |            |               |
| 4-Nitroaniline                 | ND     | ug/l  | 7.0 |            |       |            |               |
| Dibenzofuran                   | ND     | ug/l  | 5.0 |            |       |            |               |
| a,a-Dimethylphenethylamine     | ND     | ug/l  | 50. |            |       |            |               |
| Hexachloropropene              | ND     | ug/l  | 10. |            |       |            |               |
| Nitrosodi-n-butylamine         | ND     | ug/l  | 10. |            |       |            |               |
| 2-Methylnaphthalene            | ND     | ug/l  | 5.0 |            |       |            |               |
| 1,2,4,5-Tetrachlorobenzene     | ND     | ug/l  | 20. |            |       |            |               |
| Pentachlorobenzene             | ND     | ug/l  | 20. |            |       |            |               |
| a-Naphthylamine                | ND     | ug/l  | 20. |            |       |            |               |
| b-Naphthylamine                | ND     | ug/l  | 20. |            |       |            |               |
| Phenacetin                     | ND     | ug/l  | 10. |            |       |            |               |
| Dimethoate                     | ND     | ug/l  | 20. |            |       |            |               |
| 4-Aminobiphenyl                | ND     | ug/l  | 10. |            |       |            |               |
| Pentachloronitrobenzene        | ND     | ug/l  | 10. |            |       |            |               |
| Isodrin                        | ND     | ug/l  | 10. |            |       |            |               |
| p-Dimethylaminoazobenzene      | ND     | ug/l  | 10. |            |       |            |               |
| Chlorobenzilate                | ND     | ug/l  | 20. |            |       |            |               |
| 3-Methylcholanthrene           | ND     | ug/l  | 20. |            |       |            |               |
| Ethyl Methanesulfonate         | ND     | ug/l  | 15. |            |       |            |               |
| Acetophenone                   | ND     | ug/l  | 20. |            |       |            |               |
| Nitrosodipiperidine            | ND     | ug/l  | 20. |            |       |            |               |
| 7,12-Dimethylbenz(a)anthracene | ND     | ug/l  | 10. |            |       |            |               |
| n-Nitrosodimethylamine         | ND     | ug/l  | 50. |            |       |            |               |
| 2,4,6-Trichlorophenol          | ND     | ug/l  | 5.0 |            |       |            |               |
| p-Chloro-m-cresol              | ND     | ug/l  | 5.0 |            |       |            |               |
| 2-Chlorophenol                 | ND     | ug/l  | 6.0 |            |       |            |               |
| 2,4-Dichlorophenol             | ND     | ug/l  | 10. |            |       |            |               |
| 2,4-Dimethylphenol             | ND     | ug/l  | 10. |            |       |            |               |
| 2-Nitrophenol                  | ND     | ug/l  | 20. |            |       |            |               |
| 4-Nitrophenol                  | ND     | ug/l  | 10. |            |       |            |               |
| 2,4-Dinitrophenol              | ND     | ug/l  | 20. |            |       |            |               |
| 4,6-Dinitro-o-cresol           | ND     | ug/l  | 20. |            |       |            |               |
| Pentachlorophenol              | ND     | ug/l  | 20. |            |       |            |               |
| Phenol                         | ND     | ug/l  | 7.0 |            |       |            |               |
| 2-Methylphenol                 | ND     | ug/l  | 6.0 |            |       |            |               |
| 3-Methylphenol/4-Methylphenol  | ND     | ug/l  | 6.0 |            |       |            |               |
| 2,4,5-Trichlorophenol          | ND     | ug/l  | 5.0 |            |       |            |               |
| 2,6-Dichlorophenol             | ND     | ug/l  | 10. |            |       |            |               |
| Benzoic Acid                   | ND     | ug/l  | 50. |            |       |            |               |
| Benzyl Alcohol                 | ND     | ug/l  | 10. |            |       |            |               |
| Carbazole                      | ND     | ug/l  | 5.0 |            |       |            |               |
| Pyridine                       | ND     | ug/l  | 50. |            |       |            |               |
| 2-Picoline                     | ND     | ug/l  | 20. |            |       |            |               |
| Pronamide                      | ND     | ug/l  | 20. |            |       |            |               |
| Methyl methanesulfonate        | ND     | ug/l  | 20. |            |       |            |               |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-01  
C4

| PARAMETER                   | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP ANAL        | ID |
|-----------------------------|----------|-------|-------------|------------|--------------------------|----|
| <hr/>                       |          |       |             |            |                          |    |
| SVOC's by GC/MS 8270 cont'd |          |       |             |            |                          |    |
|                             |          |       |             | 1 8270C    | 0626 13:15 0628 19:47 RL |    |
| Surrogate(s)                | Recovery |       | QC Criteria |            |                          |    |
| 2-Fluorophenol              | 37.0     | %     | 21-120      |            |                          |    |
| Phenol-d6                   | 35.0     | %     | 10-120      |            |                          |    |
| Nitrobenzene-d5             | 68.0     | %     | 23-120      |            |                          |    |
| 2-Fluorobiphenyl            | 60.0     | %     | 43-120      |            |                          |    |
| 2,4,6-Tribromophenol        | 80.0     | %     | 10-120      |            |                          |    |
| 4-Terphenyl-d14             | 85.0     | %     | 33-120      |            |                          |    |
| PAH by GC/MS SIM 8270M      |          |       |             |            |                          |    |
|                             |          |       |             | 1 8270C-M  | 0626 13:15 0629 14:05 RL |    |
| Acenaphthene                | ND       | ug/l  | 0.20        |            |                          |    |
| 2-Chloronaphthalene         | ND       | ug/l  | 0.20        |            |                          |    |
| Fluoranthene                | ND       | ug/l  | 0.20        |            |                          |    |
| Hexachlorobutadiene         | ND       | ug/l  | 0.50        |            |                          |    |
| Naphthalene                 | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(a)anthracene          | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(a)pyrene              | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(b)fluoranthene        | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(k)fluoranthene        | ND       | ug/l  | 0.20        |            |                          |    |
| Chrysene                    | ND       | ug/l  | 0.20        |            |                          |    |
| Acenaphthylene              | ND       | ug/l  | 0.20        |            |                          |    |
| Anthracene                  | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(ghi)perylene          | ND       | ug/l  | 0.20        |            |                          |    |
| Fluorene                    | ND       | ug/l  | 0.20        |            |                          |    |
| Phenanthrene                | ND       | ug/l  | 0.20        |            |                          |    |
| Dibenzo(a,h)anthracene      | ND       | ug/l  | 0.20        |            |                          |    |
| Indeno(1,2,3-cd)Pyrene      | ND       | ug/l  | 0.20        |            |                          |    |
| Pyrene                      | ND       | ug/l  | 0.20        |            |                          |    |
| 1-Methylnaphthalene         | ND       | ug/l  | 0.20        |            |                          |    |
| 2-Methylnaphthalene         | ND       | ug/l  | 0.20        |            |                          |    |
| Pentachlorophenol           | ND       | ug/l  | 0.80        |            |                          |    |
| Hexachlorobenzene           | ND       | ug/l  | 0.80        |            |                          |    |
| Perylene                    | ND       | ug/l  | 0.20        |            |                          |    |
| Biphenyl                    | ND       | ug/l  | 0.20        |            |                          |    |
| 2,6-Dimethylnaphthalene     | ND       | ug/l  | 0.20        |            |                          |    |
| 1-Methylphenanthrene        | ND       | ug/l  | 0.20        |            |                          |    |
| Benzo(e)Pyrene              | ND       | ug/l  | 0.20        |            |                          |    |
| Hexachloroethane            | ND       | ug/l  | 0.80        |            |                          |    |
| Surrogate(s)                | Recovery |       | QC Criteria |            |                          |    |
| 2-Fluorophenol              | 42.0     | %     | 21-120      |            |                          |    |
| Phenol-d6                   | 35.0     | %     | 10-120      |            |                          |    |
| Nitrobenzene-d5             | 60.0     | %     | 23-120      |            |                          |    |
| 2-Fluorobiphenyl            | 50.0     | %     | 43-120      |            |                          |    |
| 2,4,6-Tribromophenol        | 65.0     | %     | 10-120      |            |                          |    |
| 4-Terphenyl-d14             | 48.0     | %     | 33-120      |            |                          |    |
| Polychlorinated Biphenyls   |          |       |             |            |                          |    |
|                             |          |       |             | 5 608      | 0627 19:30 0629 21:56 JB |    |
| Aroclor 1016                | ND       | ug/l  | 0.284       |            |                          |    |
| Aroclor 1221                | ND       | ug/l  | 0.284       |            |                          |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-01  
C4

| PARAMETER                        | RESULT   | UNITS | RDL         | REF METHOD | DATE |            | ID         |    |
|----------------------------------|----------|-------|-------------|------------|------|------------|------------|----|
|                                  |          |       |             |            | PREP | ANAL       |            |    |
| Polychlorinated Biphenyls cont'd |          |       |             | 5          | 608  | 0627 19:30 | 0629 21:56 | JB |
| Aroclor 1232                     | ND       | ug/l  | 0.284       |            |      |            |            |    |
| Aroclor 1242                     | ND       | ug/l  | 0.284       |            |      |            |            |    |
| Aroclor 1248                     | ND       | ug/l  | 0.284       |            |      |            |            |    |
| Aroclor 1254                     | ND       | ug/l  | 0.284       |            |      |            |            |    |
| Aroclor 1260                     | ND       | ug/l  | 0.284       |            |      |            |            |    |
| Surrogate(s)                     | Recovery |       | QC Criteria |            |      |            |            |    |
| 2,4,5,6-Tetrachloro-m-xylene     | 75.0     | %     | 30-150      |            |      |            |            |    |
| Decachlorobiphenyl               | 47.0     | %     | 30-150      |            |      |            |            |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I



**ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

**Laboratory Sample Number:** L0608869-02

**Date Collected:** 23-JUN-2006 09:00

A2

**Date Received :** 23-JUN-2006

**Sample Matrix:** WATER

**Date Reported :** 30-JUN-2006

**Condition of Sample:** Satisfactory

**Field Prep:** None

**Number & Type of Containers:** 7-Amber,4-Plastic,4-Vial

| PARAMETER                      | RESULT | UNITS | RDL    | REF METHOD  | DATE       |            | ID |
|--------------------------------|--------|-------|--------|-------------|------------|------------|----|
|                                |        |       |        |             | PREP       | ANAL       |    |
| Solids, Total Suspended        | 200    | mg/l  | 10     | 4 160.2     |            | 0627 14:45 | ST |
| Cyanide, Total                 | 0.011  | mg/l  | 0.005  | 4 335.2     | 0626 09:50 | 0626 20:05 | DD |
| Chlorine, Total Residual       | ND     | mg/l  | 0.05   | 4 330.1     |            | 0623 17:27 | DP |
| TPH                            | ND     | mg/l  | 4.40   | 74 1664A    | 0626 15:30 | 0627 10:30 | AT |
| Phenolics, Total               | ND     | mg/l  | 0.03   | 4 420.1     |            | 0627 11:15 | AT |
| Chromium, Hexavalent           | ND     | mg/l  | 0.10   | 30 3500CR-D | 0623 19:00 | 0623 19:00 | AI |
| Total Metals                   |        |       |        |             |            |            |    |
| Antimony, Total                | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Arsenic, Total                 | 0.0052 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Cadmium, Total                 | ND     | mg/l  | 0.0002 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Chromium, Total                | 0.0008 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Copper, Total                  | 0.0009 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Iron, Total                    | 60     | mg/l  | 0.05   | 19 200.7    | 0626 20:00 | 0627 17:48 | CF |
| Lead, Total                    | 0.0017 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Mercury, Total                 | ND     | mg/l  | 0.0002 | 4 245.2     | 0628 22:45 | 0629 17:12 | HG |
| Nickel, Total                  | 0.0040 | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Selenium, Total                | 0.002  | mg/l  | 0.001  | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Silver, Total                  | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Zinc, Total                    | 0.0068 | mg/l  | 0.0050 | 1 6020      | 0626 20:00 | 0627 22:54 | BM |
| Pesticides by GC 504           |        |       |        | 14 504.1    | 0628 09:30 | 0628 13:59 | SS |
| 1,2-Dibromoethane              | ND     | ug/l  | 0.020  |             |            |            |    |
| Volatile Organics by GC/MS 624 |        |       |        | 5 624       |            | 0629 12:00 | MM |
| Methylene chloride             | ND     | ug/l  | 5.0    |             |            |            |    |
| 1,1-Dichloroethane             | ND     | ug/l  | 1.5    |             |            |            |    |
| Chloroform                     | ND     | ug/l  | 1.5    |             |            |            |    |
| Carbon tetrachloride           | ND     | ug/l  | 1.0    |             |            |            |    |
| 1,2-Dichloropropane            | ND     | ug/l  | 3.5    |             |            |            |    |
| Dibromochloromethane           | ND     | ug/l  | 1.0    |             |            |            |    |
| 1,1,2-Trichloroethane          | ND     | ug/l  | 1.5    |             |            |            |    |
| 2-Chloroethylvinyl ether       | ND     | ug/l  | 10.    |             |            |            |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-02  
A2

| PARAMETER                             | RESULT   | UNITS | RDL         | REF METHOD | DATE  |                          | ID |
|---------------------------------------|----------|-------|-------------|------------|-------|--------------------------|----|
|                                       |          |       |             |            | PREP  | ANAL                     |    |
| Volatile Organics by GC/MS 624 cont'd |          |       |             | 5          | 624   | 0629 12:00 MM            |    |
| Tetrachloroethene                     | ND       | ug/l  | 1.5         |            |       |                          |    |
| Chlorobenzene                         | ND       | ug/l  | 3.5         |            |       |                          |    |
| Trichlorofluoromethane                | ND       | ug/l  | 5.0         |            |       |                          |    |
| 1,2-Dichloroethane                    | ND       | ug/l  | 1.5         |            |       |                          |    |
| 1,1,1-Trichloroethane                 | ND       | ug/l  | 2.0         |            |       |                          |    |
| Bromodichloromethane                  | ND       | ug/l  | 1.0         |            |       |                          |    |
| trans-1,3-Dichloropropene             | ND       | ug/l  | 1.5         |            |       |                          |    |
| cis-1,3-Dichloropropene               | ND       | ug/l  | 1.5         |            |       |                          |    |
| Bromoform                             | ND       | ug/l  | 1.0         |            |       |                          |    |
| 1,1,2,2-Tetrachloroethane             | ND       | ug/l  | 1.0         |            |       |                          |    |
| Benzene                               | 5.6      | ug/l  | 1.0         |            |       |                          |    |
| Toluene                               | 1.9      | ug/l  | 1.0         |            |       |                          |    |
| Ethylbenzene                          | ND       | ug/l  | 1.0         |            |       |                          |    |
| Chloromethane                         | ND       | ug/l  | 10.         |            |       |                          |    |
| Bromomethane                          | ND       | ug/l  | 5.0         |            |       |                          |    |
| Vinyl chloride                        | ND       | ug/l  | 2.0         |            |       |                          |    |
| Chloroethane                          | ND       | ug/l  | 2.0         |            |       |                          |    |
| 1,1-Dichloroethene                    | ND       | ug/l  | 1.0         |            |       |                          |    |
| trans-1,2-Dichloroethene              | ND       | ug/l  | 1.5         |            |       |                          |    |
| cis-1,2-Dichloroethene                | ND       | ug/l  | 1.0         |            |       |                          |    |
| Trichloroethene                       | ND       | ug/l  | 1.0         |            |       |                          |    |
| 1,2-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |       |                          |    |
| 1,3-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |       |                          |    |
| 1,4-Dichlorobenzene                   | ND       | ug/l  | 5.0         |            |       |                          |    |
| p/m-Xylene                            | 2.2      | ug/l  | 2.0         |            |       |                          |    |
| o-xylene                              | 1.2      | ug/l  | 1.0         |            |       |                          |    |
| Xylene (Total)                        | 3.5      | ug/l  | 2.0         |            |       |                          |    |
| Styrene                               | ND       | ug/l  | 1.0         |            |       |                          |    |
| Acetone                               | ND       | ug/l  | 10.         |            |       |                          |    |
| Carbon disulfide                      | ND       | ug/l  | 5.0         |            |       |                          |    |
| 2-Butanone                            | ND       | ug/l  | 10.         |            |       |                          |    |
| Vinyl acetate                         | ND       | ug/l  | 20.         |            |       |                          |    |
| 4-Methyl-2-pentanone                  | ND       | ug/l  | 10.         |            |       |                          |    |
| 2-Hexanone                            | ND       | ug/l  | 10.         |            |       |                          |    |
| Acrolein                              | ND       | ug/l  | 8.0         |            |       |                          |    |
| Acrylonitrile                         | ND       | ug/l  | 10.         |            |       |                          |    |
| Methyl tert butyl ether               | ND       | ug/l  | 20          |            |       |                          |    |
| 1,4-Dioxane                           | ND       | ug/l  | 2000        |            |       |                          |    |
| Tert-Butyl Alcohol                    | 130      | ug/l  | 100         |            |       |                          |    |
| Tertiary-Amyl Methyl Ether            | ND       | ug/l  | 20          |            |       |                          |    |
| Surrogate(s)                          | Recovery |       | QC Criteria |            |       |                          |    |
| Pentafluorobenzene                    | 98.0     | %     | 80-120      |            |       |                          |    |
| Fluorobenzene                         | 102      | %     | 80-120      |            |       |                          |    |
| 4-Bromofluorobenzene                  | 98.0     | %     | 80-120      |            |       |                          |    |
| SVOC's by GC/MS 8270                  |          |       |             | 1          | 8270C | 0626 13:15 0628 19:22 RL |    |
| Acenaphthene                          | ND       | ug/l  | 4.8         |            |       |                          |    |
| Benzidine                             | ND       | ug/l  | 48.         |            |       |                          |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-02  
A2

| PARAMETER                   | RESULT | UNITS | RDL | REF METHOD | DATE  |            | ID            |
|-----------------------------|--------|-------|-----|------------|-------|------------|---------------|
|                             |        |       |     |            | PREP  | ANAL       |               |
| SVOC's by GC/MS 8270 cont'd |        |       |     | 1          | 8270C | 0626 13:15 | 0628 19:22 RL |
| 1,2,4-Trichlorobenzene      | ND     | ug/l  | 4.8 |            |       |            |               |
| Hexachlorobenzene           | ND     | ug/l  | 4.8 |            |       |            |               |
| Bis(2-chloroethyl)ether     | ND     | ug/l  | 4.8 |            |       |            |               |
| 1-Chloronaphthalene         | ND     | ug/l  | 4.8 |            |       |            |               |
| 2-Chloronaphthalene         | ND     | ug/l  | 5.7 |            |       |            |               |
| 1,2-Dichlorobenzene         | ND     | ug/l  | 4.8 |            |       |            |               |
| 1,3-Dichlorobenzene         | ND     | ug/l  | 4.8 |            |       |            |               |
| 1,4-Dichlorobenzene         | ND     | ug/l  | 4.8 |            |       |            |               |
| 3,3'-Dichlorobenzidine      | ND     | ug/l  | 48. |            |       |            |               |
| 2,4-Dinitrotoluene          | ND     | ug/l  | 5.7 |            |       |            |               |
| 2,6-Dinitrotoluene          | ND     | ug/l  | 4.8 |            |       |            |               |
| Azobenzene                  | ND     | ug/l  | 4.8 |            |       |            |               |
| Fluoranthene                | 5.3    | ug/l  | 4.8 |            |       |            |               |
| 4-Chlorophenyl phenyl ether | ND     | ug/l  | 4.8 |            |       |            |               |
| 4-Bromophenyl phenyl ether  | ND     | ug/l  | 4.8 |            |       |            |               |
| Bis(2-chloroisopropyl)ether | ND     | ug/l  | 4.8 |            |       |            |               |
| Bis(2-chloroethoxy)methane  | ND     | ug/l  | 4.8 |            |       |            |               |
| Hexachlorobutadiene         | ND     | ug/l  | 9.6 |            |       |            |               |
| Hexachlorocyclopentadiene   | ND     | ug/l  | 9.6 |            |       |            |               |
| Hexachloroethane            | ND     | ug/l  | 4.8 |            |       |            |               |
| Isophorone                  | ND     | ug/l  | 4.8 |            |       |            |               |
| Naphthalene                 | ND     | ug/l  | 4.8 |            |       |            |               |
| Nitrobenzene                | ND     | ug/l  | 4.8 |            |       |            |               |
| NDPA/DPA                    | ND     | ug/l  | 14. |            |       |            |               |
| n-Nitrosodi-n-propylamine   | ND     | ug/l  | 4.8 |            |       |            |               |
| Bis(2-ethylhexyl)phthalate  | ND     | ug/l  | 9.6 |            |       |            |               |
| Butyl benzyl phthalate      | ND     | ug/l  | 4.8 |            |       |            |               |
| Di-n-butylphthalate         | ND     | ug/l  | 4.8 |            |       |            |               |
| Di-n-octylphthalate         | ND     | ug/l  | 4.8 |            |       |            |               |
| Diethyl phthalate           | ND     | ug/l  | 4.8 |            |       |            |               |
| Dimethyl phthalate          | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(a)anthracene          | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(a)pyrene              | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(b)fluoranthene        | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(k)fluoranthene        | ND     | ug/l  | 4.8 |            |       |            |               |
| Chrysene                    | ND     | ug/l  | 4.8 |            |       |            |               |
| Acenaphthylene              | ND     | ug/l  | 4.8 |            |       |            |               |
| Anthracene                  | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(ghi)perylene          | ND     | ug/l  | 4.8 |            |       |            |               |
| Fluorene                    | ND     | ug/l  | 4.8 |            |       |            |               |
| Phenanthrene                | 5.1    | ug/l  | 4.8 |            |       |            |               |
| Dibenzo(a,h)anthracene      | ND     | ug/l  | 4.8 |            |       |            |               |
| Indeno(1,2,3-cd)pyrene      | ND     | ug/l  | 6.7 |            |       |            |               |
| Pyrene                      | ND     | ug/l  | 4.8 |            |       |            |               |
| Benzo(e)pyrene              | ND     | ug/l  | 4.8 |            |       |            |               |
| Biphenyl                    | ND     | ug/l  | 4.8 |            |       |            |               |
| Perylene                    | ND     | ug/l  | 4.8 |            |       |            |               |
| Aniline                     | ND     | ug/l  | 9.6 |            |       |            |               |
| 4-Chloroaniline             | ND     | ug/l  | 4.8 |            |       |            |               |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-02  
A2

| PARAMETER                      | RESULT | UNITS | RDL | REF METHOD | DATE  |            | ID            |
|--------------------------------|--------|-------|-----|------------|-------|------------|---------------|
|                                |        |       |     |            | PREP  | ANAL       |               |
| SVOC's by GC/MS 8270 cont'd    |        |       |     | 1          | 8270C | 0626 13:15 | 0628 19:22 RL |
| 1-Methylnaphthalene            | 14     | ug/l  | 4.8 |            |       |            |               |
| 2-Nitroaniline                 | ND     | ug/l  | 4.8 |            |       |            |               |
| 3-Nitroaniline                 | ND     | ug/l  | 4.8 |            |       |            |               |
| 4-Nitroaniline                 | ND     | ug/l  | 6.7 |            |       |            |               |
| Dibenzofuran                   | ND     | ug/l  | 4.8 |            |       |            |               |
| a,a-Dimethylphenethylamine     | ND     | ug/l  | 48. |            |       |            |               |
| Hexachloropropene              | ND     | ug/l  | 9.6 |            |       |            |               |
| Nitrosodi-n-butylamine         | ND     | ug/l  | 9.6 |            |       |            |               |
| 2-Methylnaphthalene            | ND     | ug/l  | 4.8 |            |       |            |               |
| 1,2,4,5-Tetrachlorobenzene     | ND     | ug/l  | 19. |            |       |            |               |
| Pentachlorobenzene             | ND     | ug/l  | 19. |            |       |            |               |
| a-Naphthylamine                | ND     | ug/l  | 19. |            |       |            |               |
| b-Naphthylamine                | ND     | ug/l  | 19. |            |       |            |               |
| Phenacetin                     | ND     | ug/l  | 9.6 |            |       |            |               |
| Dimethoate                     | ND     | ug/l  | 19. |            |       |            |               |
| 4-Aminobiphenyl                | ND     | ug/l  | 9.6 |            |       |            |               |
| Pentachloronitrobenzene        | ND     | ug/l  | 9.6 |            |       |            |               |
| Isodrin                        | ND     | ug/l  | 9.6 |            |       |            |               |
| p-Dimethylaminoazobenzene      | ND     | ug/l  | 9.6 |            |       |            |               |
| Chlorobenzilate                | ND     | ug/l  | 19. |            |       |            |               |
| 3-Methylcholanthrene           | ND     | ug/l  | 19. |            |       |            |               |
| Ethyl Methanesulfonate         | ND     | ug/l  | 14. |            |       |            |               |
| Acetophenone                   | ND     | ug/l  | 19. |            |       |            |               |
| Nitrosodipiperidine            | ND     | ug/l  | 19. |            |       |            |               |
| 7,12-Dimethylbenz(a)anthracene | ND     | ug/l  | 9.6 |            |       |            |               |
| n-Nitrosodimethylamine         | ND     | ug/l  | 48. |            |       |            |               |
| 2,4,6-Trichlorophenol          | ND     | ug/l  | 4.8 |            |       |            |               |
| p-Chloro-m-cresol              | ND     | ug/l  | 4.8 |            |       |            |               |
| 2-Chlorophenol                 | ND     | ug/l  | 5.7 |            |       |            |               |
| 2,4-Dichlorophenol             | ND     | ug/l  | 9.6 |            |       |            |               |
| 2,4-Dimethylphenol             | ND     | ug/l  | 9.6 |            |       |            |               |
| 2-Nitrophenol                  | ND     | ug/l  | 19. |            |       |            |               |
| 4-Nitrophenol                  | ND     | ug/l  | 9.6 |            |       |            |               |
| 2,4-Dinitrophenol              | ND     | ug/l  | 19. |            |       |            |               |
| 4,6-Dinitro-o-cresol           | ND     | ug/l  | 19. |            |       |            |               |
| Pentachlorophenol              | ND     | ug/l  | 19. |            |       |            |               |
| Phenol                         | ND     | ug/l  | 6.7 |            |       |            |               |
| 2-Methylphenol                 | ND     | ug/l  | 5.7 |            |       |            |               |
| 3-Methylphenol/4-Methylphenol  | ND     | ug/l  | 5.7 |            |       |            |               |
| 2,4,5-Trichlorophenol          | ND     | ug/l  | 4.8 |            |       |            |               |
| 2,6-Dichlorophenol             | ND     | ug/l  | 9.6 |            |       |            |               |
| Benzoic Acid                   | ND     | ug/l  | 48. |            |       |            |               |
| Benzyl Alcohol                 | ND     | ug/l  | 9.6 |            |       |            |               |
| Carbazole                      | ND     | ug/l  | 4.8 |            |       |            |               |
| Pyridine                       | ND     | ug/l  | 48. |            |       |            |               |
| 2-Picoline                     | ND     | ug/l  | 19. |            |       |            |               |
| Pronamide                      | ND     | ug/l  | 19. |            |       |            |               |
| Methyl methanesulfonate        | ND     | ug/l  | 19. |            |       |            |               |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-02  
A2

| PARAMETER                   | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP ANAL        | ID |
|-----------------------------|----------|-------|-------------|------------|--------------------------|----|
| SVOC's by GC/MS 8270 cont'd |          |       |             |            |                          |    |
|                             |          |       |             | 1 8270C    | 0626 13:15 0628 19:22 RL |    |
| Surrogate(s)                | Recovery |       | QC Criteria |            |                          |    |
| 2-Fluorophenol              | 37.0     | %     | 21-120      |            |                          |    |
| Phenol-d6                   | 35.0     | %     | 10-120      |            |                          |    |
| Nitrobenzene-d5             | 72.0     | %     | 23-120      |            |                          |    |
| 2-Fluorobiphenyl            | 67.0     | %     | 43-120      |            |                          |    |
| 2,4,6-Tribromophenol        | 67.0     | %     | 10-120      |            |                          |    |
| 4-Terphenyl-d14             | 78.0     | %     | 33-120      |            |                          |    |
| PAH by GC/MS SIM 8270M      |          |       |             |            |                          |    |
|                             |          |       |             | 1 8270C-M  | 0626 13:15 0629 14:46 RL |    |
| Acenaphthene                | 1.1      | ug/l  | 0.19        |            |                          |    |
| 2-Chloronaphthalene         | ND       | ug/l  | 0.19        |            |                          |    |
| Fluoranthene                | 4.3      | ug/l  | 0.19        |            |                          |    |
| Hexachlorobutadiene         | ND       | ug/l  | 0.48        |            |                          |    |
| Naphthalene                 | 0.48     | ug/l  | 0.19        |            |                          |    |
| Benzo(a)anthracene          | 1.4      | ug/l  | 0.19        |            |                          |    |
| Benzo(a)pyrene              | 1.3      | ug/l  | 0.19        |            |                          |    |
| Benzo(b)fluoranthene        | 2.3      | ug/l  | 0.19        |            |                          |    |
| Benzo(k)fluoranthene        | 1.6      | ug/l  | 0.19        |            |                          |    |
| Chrysene                    | 2.0      | ug/l  | 0.19        |            |                          |    |
| Acenaphthylene              | ND       | ug/l  | 0.19        |            |                          |    |
| Anthracene                  | 0.84     | ug/l  | 0.19        |            |                          |    |
| Benzo(ghi)perylene          | 1.2      | ug/l  | 0.19        |            |                          |    |
| Fluorene                    | 1.0      | ug/l  | 0.19        |            |                          |    |
| Phenanthrene                | 3.8      | ug/l  | 0.19        |            |                          |    |
| Dibenzo(a,h)anthracene      | 0.37     | ug/l  | 0.19        |            |                          |    |
| Indeno(1,2,3-cd)Pyrene      | 1.2      | ug/l  | 0.19        |            |                          |    |
| Pyrene                      | 4.2      | ug/l  | 0.19        |            |                          |    |
| 1-Methylnaphthalene         | 8.5      | ug/l  | 0.19        |            |                          |    |
| 2-Methylnaphthalene         | 0.19     | ug/l  | 0.19        |            |                          |    |
| Pentachlorophenol           | ND       | ug/l  | 0.76        |            |                          |    |
| Hexachlorobenzene           | ND       | ug/l  | 0.76        |            |                          |    |
| Perylene                    | 0.37     | ug/l  | 0.19        |            |                          |    |
| Biphenyl                    | ND       | ug/l  | 0.19        |            |                          |    |
| 2,6-Dimethylnaphthalene     | 1.7      | ug/l  | 0.19        |            |                          |    |
| 1-Methylphenanthrene        | 0.66     | ug/l  | 0.19        |            |                          |    |
| Benzo(e)Pyrene              | 1.3      | ug/l  | 0.19        |            |                          |    |
| Hexachloroethane            | ND       | ug/l  | 0.76        |            |                          |    |
| Surrogate(s)                | Recovery |       | QC Criteria |            |                          |    |
| 2-Fluorophenol              | 40.0     | %     | 21-120      |            |                          |    |
| Phenol-d6                   | 35.0     | %     | 10-120      |            |                          |    |
| Nitrobenzene-d5             | 60.0     | %     | 23-120      |            |                          |    |
| 2-Fluorobiphenyl            | 59.0     | %     | 43-120      |            |                          |    |
| 2,4,6-Tribromophenol        | 44.0     | %     | 10-120      |            |                          |    |
| 4-Terphenyl-d14             | 54.0     | %     | 33-120      |            |                          |    |
| Polychlorinated Biphenyls   |          |       |             |            |                          |    |
|                             |          |       |             | 5 608      | 0627 19:30 0629 22:25 JB |    |
| Aroclor 1016                | ND       | ug/l  | 0.281       |            |                          |    |
| Aroclor 1221                | ND       | ug/l  | 0.281       |            |                          |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

**Laboratory Sample Number:** L0608869-02  
A2

| PARAMETER                        | RESULT   | UNITS | RDL         | REF METHOD | DATE |            | ID         |    |
|----------------------------------|----------|-------|-------------|------------|------|------------|------------|----|
|                                  |          |       |             |            | PREP | ANAL       |            |    |
| Polychlorinated Biphenyls cont'd |          |       |             | 5          | 608  | 0627 19:30 | 0629 22:25 | JB |
| Aroclor 1232                     | ND       | ug/l  | 0.281       |            |      |            |            |    |
| Aroclor 1242                     | ND       | ug/l  | 0.281       |            |      |            |            |    |
| Aroclor 1248                     | ND       | ug/l  | 0.281       |            |      |            |            |    |
| Aroclor 1254                     | ND       | ug/l  | 0.281       |            |      |            |            |    |
| Aroclor 1260                     | ND       | ug/l  | 0.281       |            |      |            |            |    |
| Surrogate(s)                     | Recovery |       | QC Criteria |            |      |            |            |    |
| 2,4,5,6-Tetrachloro-m-xylene     | 74.0     | %     | 30-150      |            |      |            |            |    |
| Decachlorobiphenyl               | 49.0     | %     | 30-150      |            |      |            |            |    |

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0608869-03

TRIP BLANK

Sample Matrix:

WATER

Date Collected: 05-JUN-2006 14:55

Date Received : 23-JUN-2006

Date Reported : 30-JUN-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

| PARAMETER | RESULT | UNITS | RDL | REF METHOD | DATE<br>PREP ANAL | ID |
|-----------|--------|-------|-----|------------|-------------------|----|
|-----------|--------|-------|-----|------------|-------------------|----|

\*\*\*\*\* THIS SAMPLE IS ON HOLD \*\*\*\*\*

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

**Laboratory Job Number: L0608869**

| Parameter                                                                    | Value 1 | Value 2 | Units | RPD | RPD Limits |
|------------------------------------------------------------------------------|---------|---------|-------|-----|------------|
| Solids, Total Suspended for sample(s) 01-02 (L0608889-01, WG244387-2)        |         |         |       |     |            |
| Solids, Total Suspended                                                      | 130     | 120     | mg/l  | 8   | 20         |
| Cyanide, Total for sample(s) 01-02 (L0608669-02, WG244243-4)                 |         |         |       |     |            |
| Cyanide, Total                                                               | ND      | ND      | mg/l  | NC  | 30         |
| Chlorine, Total Residual for sample(s) 01-02 (L0608869-01, WG244154-3)       |         |         |       |     |            |
| Chlorine, Total Residual                                                     | ND      | ND      | mg/l  | NC  |            |
| TPH for sample(s) 01-02 (L0608890-01, WG244338-4)                            |         |         |       |     |            |
| TPH                                                                          | 13.3    | 12.7    | mg/l  | 5   | 34         |
| Phenolics, Total for sample(s) 01-02 (L0608869-02, WG244462-4)               |         |         |       |     |            |
| Phenolics, Total                                                             | ND      | ND      | mg/l  | NC  |            |
| Chromium, Hexavalent for sample(s) 01-02 (L0608869-02, WG244507-4)           |         |         |       |     |            |
| Chromium, Hexavalent                                                         | ND      | ND      | mg/l  | NC  |            |
| Total Metals for sample(s) 01-02 (L0608869-01, WG244357-1)                   |         |         |       |     |            |
| Antimony, Total                                                              | 0.0006  | ND      | mg/l  | NC  | 20         |
| Arsenic, Total                                                               | 0.0054  | 0.0053  | mg/l  | 0   | 20         |
| Cadmium, Total                                                               | ND      | ND      | mg/l  | NC  | 20         |
| Chromium, Total                                                              | 0.0006  | 0.0006  | mg/l  | 3   | 20         |
| Copper, Total                                                                | 0.0010  | 0.0010  | mg/l  | 5   | 20         |
| Lead, Total                                                                  | ND      | ND      | mg/l  | NC  | 20         |
| Nickel, Total                                                                | 0.0045  | 0.0045  | mg/l  | 1   | 20         |
| Selenium, Total                                                              | 0.002   | 0.002   | mg/l  | 1   | 20         |
| Silver, Total                                                                | ND      | ND      | mg/l  | NC  | 20         |
| Zinc, Total                                                                  | 0.0471  | 0.0459  | mg/l  | 3   | 20         |
| Total Metals for sample(s) 01-02 (L0608869-01, WG244358-1)                   |         |         |       |     |            |
| Iron, Total                                                                  | 55      | 55      | mg/l  | 0   |            |
| Total Metals for sample(s) 01-02 (L0608943-01, WG244703-3)                   |         |         |       |     |            |
| Mercury, Total                                                               | ND      | ND      | mg/l  | NC  |            |
| Volatile Organics by GC/MS 624 for sample(s) 01-02 (L0608869-01, WG244948-2) |         |         |       |     |            |
| Methylene chloride                                                           | ND      | ND      | ug/l  | NC  | 30         |
| 1,1-Dichloroethane                                                           | ND      | ND      | ug/l  | NC  | 30         |
| Chloroform                                                                   | ND      | ND      | ug/l  | NC  | 30         |
| Carbon tetrachloride                                                         | ND      | ND      | ug/l  | NC  | 30         |
| 1,2-Dichloropropane                                                          | ND      | ND      | ug/l  | NC  | 30         |
| Dibromochloromethane                                                         | ND      | ND      | ug/l  | NC  | 30         |
| 1,1,2-Trichloroethane                                                        | ND      | ND      | ug/l  | NC  | 30         |
| 2-Chloroethylvinyl ether                                                     | ND      | ND      | ug/l  | NC  | 30         |
| Tetrachloroethene                                                            | ND      | ND      | ug/l  | NC  | 30         |
| Chlorobenzene                                                                | ND      | ND      | ug/l  | NC  | 30         |
| Trichlorofluoromethane                                                       | ND      | ND      | ug/l  | NC  | 30         |
| 1,2-Dichloroethane                                                           | ND      | ND      | ug/l  | NC  | 30         |



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

**Laboratory Job Number: L0608869**

**Continued**

| Parameter                                                                    | Value 1  | Value 2 | Units | RPD         | RPD Limits |
|------------------------------------------------------------------------------|----------|---------|-------|-------------|------------|
| Volatile Organics by GC/MS 624 for sample(s) 01-02 (L0608869-01, WG244948-2) |          |         |       |             |            |
| 1,1,1-Trichloroethane                                                        | ND       | ND      | ug/l  | NC          | 30         |
| Bromodichloromethane                                                         | ND       | ND      | ug/l  | NC          | 30         |
| trans-1,3-Dichloropropene                                                    | ND       | ND      | ug/l  | NC          | 30         |
| cis-1,3-Dichloropropene                                                      | ND       | ND      | ug/l  | NC          | 30         |
| Bromoform                                                                    | ND       | ND      | ug/l  | NC          | 30         |
| 1,1,2,2-Tetrachloroethane                                                    | ND       | ND      | ug/l  | NC          | 30         |
| Benzene                                                                      | ND       | ND      | ug/l  | NC          | 30         |
| Toluene                                                                      | ND       | ND      | ug/l  | NC          | 30         |
| Ethylbenzene                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Chloromethane                                                                | ND       | ND      | ug/l  | NC          | 30         |
| Bromomethane                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Vinyl chloride                                                               | ND       | ND      | ug/l  | NC          | 30         |
| Chloroethane                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| 1,1-Dichloroethene                                                           | ND       | ND      | ug/l  | NC          | 30         |
| trans-1,2-Dichloroethene                                                     | ND       | ND      | ug/l  | NC          | 30         |
| cis-1,2-Dichloroethene                                                       | ND       | ND      | ug/l  | NC          | 30         |
| Trichloroethene                                                              | ND       | ND      | ug/l  | NC          | 30         |
| 1,2-Dichlorobenzene                                                          | ND       | ND      | ug/l  | NC          | 30         |
| 1,3-Dichlorobenzene                                                          | ND       | ND      | ug/l  | NC          | 30         |
| 1,4-Dichlorobenzene                                                          | ND       | ND      | ug/l  | NC          | 30         |
| p/m-Xylene                                                                   | ND       | ND      | ug/l  | NC          | 30         |
| o-Xylene                                                                     | ND       | ND      | ug/l  | NC          | 30         |
| XYLENE (TOTAL)                                                               | ND       | ND      | ug/l  | NC          | 30         |
| Styrene                                                                      | ND       | ND      | ug/l  | NC          | 30         |
| Acetone                                                                      | ND       | ND      | ug/l  | NC          | 30         |
| Carbon disulfide                                                             | ND       | ND      | ug/l  | NC          | 30         |
| 2-Butanone                                                                   | ND       | ND      | ug/l  | NC          | 30         |
| Vinyl acetate                                                                | ND       | ND      | ug/l  | NC          | 30         |
| 4-Methyl-2-pentanone                                                         | ND       | ND      | ug/l  | NC          | 30         |
| 2-Hexanone                                                                   | ND       | ND      | ug/l  | NC          | 30         |
| Acrolein                                                                     | ND       | ND      | ug/l  | NC          | 30         |
| Acrylonitrile                                                                | ND       | ND      | ug/l  | NC          | 30         |
| Methyl tert butyl ether                                                      | ND       | ND      | ug/l  | NC          | 30         |
| 1,4-Dioxane                                                                  | ND       | ND      | ug/l  | NC          | 30         |
| tert-Butyl Alcohol                                                           | 190      | 210     | ug/l  | 10          | 30         |
| Tertiary-Amyl Methyl Ether                                                   | ND       | ND      | ug/l  | NC          | 30         |
| Surrogate(s)                                                                 | Recovery |         |       | QC Criteria |            |
| Pentafluorobenzene                                                           | 94.0     | 91.0    | %     | 80-120      |            |
| Fluorobenzene                                                                | 98.0     | 97.0    | %     | 80-120      |            |
| 4-Bromofluorobenzene                                                         | 98.0     | 93.0    | %     | 80-120      |            |
| Polychlorinated Biphenyls for sample(s) 01-02 (L0608869-01, WG244510-4)      |          |         |       |             |            |
| Aroclor 1016                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Aroclor 1221                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Aroclor 1232                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Aroclor 1242                                                                 | ND       | ND      | ug/l  | NC          | 30         |
| Aroclor 1248                                                                 | ND       | ND      | ug/l  | NC          | 30         |

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

**Laboratory Job Number: L0608869**

**Continued**

| Parameter                                                               | Value 1  | Value 2 | Units | RPD | RPD Limits  |
|-------------------------------------------------------------------------|----------|---------|-------|-----|-------------|
| Polychlorinated Biphenyls for sample(s) 01-02 (L0608869-01, WG244510-4) |          |         |       |     |             |
| Aroclor 1254                                                            | ND       | ND      | ug/l  | NC  | 30          |
| Aroclor 1260                                                            | ND       | ND      | ug/l  | NC  | 30          |
| Surrogate(s)                                                            | Recovery |         |       |     | QC Criteria |
| 2,4,5,6-Tetrachloro-m-xylene                                            | 75.0     | 65.0    | %     |     | 30-150      |
| Decachlorobiphenyl                                                      | 47.0     | 33.0    | %     |     | 30-150      |

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0608869**

| Parameter                                                           | % Recovery | QC Criteria |
|---------------------------------------------------------------------|------------|-------------|
| Cyanide, Total LCS for sample(s) 01-02 (WG244243-2)                 |            |             |
| Cyanide, Total                                                      | 103        | 90-110      |
| Chlorine, Total Residual LCS for sample(s) 01-02 (WG244154-2)       |            |             |
| Chlorine, Total Residual                                            | 100        |             |
| TPH LCS for sample(s) 01-02 (WG244338-2)                            |            |             |
| TPH                                                                 | 85         | 64-132      |
| Phenolics, Total LCS for sample(s) 01-02 (WG244462-2)               |            |             |
| Phenolics, Total                                                    | 90         |             |
| Chromium, Hexavalent LCS for sample(s) 01-02 (WG244507-2)           |            |             |
| Chromium, Hexavalent                                                | 98         |             |
| Total Metals LCS for sample(s) 01-02 (WG244357-4)                   |            |             |
| Antimony, Total                                                     | 97         | 80-120      |
| Arsenic, Total                                                      | 96         | 80-120      |
| Cadmium, Total                                                      | 104        | 80-120      |
| Chromium, Total                                                     | 101        | 80-120      |
| Copper, Total                                                       | 100        | 80-120      |
| Lead, Total                                                         | 100        | 80-120      |
| Nickel, Total                                                       | 104        | 80-120      |
| Selenium, Total                                                     | 101        | 80-120      |
| Silver, Total                                                       | 96         | 80-120      |
| Zinc, Total                                                         | 102        | 80-120      |
| Total Metals LCS for sample(s) 01-02 (WG244358-4)                   |            |             |
| Iron, Total                                                         | 98         |             |
| Total Metals LCS for sample(s) 01-02 (WG244703-1)                   |            |             |
| Mercury, Total                                                      | 108        |             |
| Pesticides by GC 504 LCS for sample(s) 01-02 (WG244628-2)           |            |             |
| 1,2-Dibromoethane                                                   | 97         |             |
| 1,2-Dibromo-3-chloropropane                                         | 93         |             |
| Volatile Organics by GC/MS 624 LCS for sample(s) 01-02 (WG244948-3) |            |             |
| Methylene chloride                                                  | 129        | 10-221      |
| 1,1-Dichloroethane                                                  | 131        | 59-155      |
| Chloroform                                                          | 117        | 51-138      |
| Carbon tetrachloride                                                | 129        | 70-140      |
| 1,2-Dichloropropane                                                 | 120        | 10-210      |
| Dibromochloromethane                                                | 112        | 53-149      |
| 1,1,2-Trichloroethane                                               | 119        | 52-150      |
| 2-Chloroethylvinyl ether                                            | 94         | 10-305      |
| Tetrachloroethene                                                   | 112        | 64-148      |
| Chlorobenzene                                                       | 119        | 37-160      |
| Trichlorofluoromethane                                              | 138        | 17-181      |

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0608869

Continued

| Parameter                                                           | % Recovery | QC Criteria |
|---------------------------------------------------------------------|------------|-------------|
| Volatile Organics by GC/MS 624 LCS for sample(s) 01-02 (WG244948-3) |            |             |
| 1,2-Dichloroethane                                                  | 127        | 49-155      |
| 1,1,1-Trichloroethane                                               | 128        | 52-162      |
| Bromodichloromethane                                                | 117        | 35-155      |
| trans-1,3-Dichloropropene                                           | 120        | 17-183      |
| cis-1,3-Dichloropropene                                             | 118        | 10-227      |
| Bromoform                                                           | 122        | 45-169      |
| 1,1,2,2-Tetrachloroethane                                           | 132        | 46-157      |
| Benzene                                                             | 117        | 37-151      |
| Toluene                                                             | 112        | 47-150      |
| Ethylbenzene                                                        | 126        | 37-162      |
| Chloromethane                                                       | 137        | 10-273      |
| Bromomethane                                                        | 83         | 10-242      |
| Vinyl chloride                                                      | 175        | 10-251      |
| Chloroethane                                                        | 90         | 14-230      |
| 1,1-Dichloroethene                                                  | 124        | 10-234      |
| trans-1,2-Dichloroethene                                            | 122        | 54-156      |
| cis-1,2-Dichloroethene                                              | 121        | 60-140      |
| Trichloroethene                                                     | 117        | 71-157      |
| 1,2-Dichlorobenzene                                                 | 130        | 18-190      |
| 1,3-Dichlorobenzene                                                 | 127        | 59-156      |
| 1,4-Dichlorobenzene                                                 | 130        | 18-190      |
| p/m-Xylene                                                          | 129        | 40-160      |
| o-Xylene                                                            | 125        | 40-160      |
| XYLENE (TOTAL)                                                      | 128        | 40-160      |
| Styrene                                                             | 118        | 40-160      |
| Acetone                                                             | 117        | 40-160      |
| Carbon disulfide                                                    | 128        | 40-160      |
| 2-Butanone                                                          | 111        | 40-160      |
| Vinyl acetate                                                       | 72         | 40-160      |
| 4-Methyl-2-pentanone                                                | 103        | 40-160      |
| 2-Hexanone                                                          | 104        | 40-160      |
| Acrolein                                                            | 135        | 40-160      |
| Acrylonitrile                                                       | 105        | 40-160      |
| Surrogate(s)                                                        |            |             |
| Pentafluorobenzene                                                  | 93         | 80-120      |
| Fluorobenzene                                                       | 97         | 80-120      |
| 4-Bromofluorobenzene                                                | 104        | 80-120      |
| SVOC's by GC/MS 8270 LCS for sample(s) 01-02 (WG244291-2)           |            |             |
| Acenaphthene                                                        | 72         | 46-118      |
| 1,2,4-Trichlorobenzene                                              | 60         | 39-98       |
| 2-Chloronaphthalene                                                 | 71         | 40-140      |
| 1,2-Dichlorobenzene                                                 | 55         | 40-140      |
| 1,4-Dichlorobenzene                                                 | 53         | 36-97       |
| 2,4-Dinitrotoluene                                                  | 100        | 24-96       |
| 2,6-Dinitrotoluene                                                  | 105        | 40-140      |
| Fluoranthene                                                        | 88         | 40-140      |

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0608869**

Continued

| Parameter                                                      | % Recovery | QC Criteria |
|----------------------------------------------------------------|------------|-------------|
| SVOC's by GC/MS 8270 LCS for sample(s) 01-02 (WG244291-2)      |            |             |
| 4-Chlorophenyl phenyl ether                                    | 82         | 40-140      |
| n-Nitrosodi-n-propylamine                                      | 54         | 41-116      |
| Butyl benzyl phthalate                                         | 103        | 40-140      |
| Anthracene                                                     | 76         | 40-140      |
| Pyrene                                                         | 82         | 26-127      |
| Hexachloropropene                                              | 55         | 40-140      |
| P-Chloro-M-Cresol                                              | 74         | 23-97       |
| 2-Chlorophenol                                                 | 54         | 27-123      |
| 2-Nitrophenol                                                  | 62         | 30-130      |
| 4-Nitrophenol                                                  | 49         | 10-80       |
| 2,4-Dinitrophenol                                              | 84         | 30-130      |
| Pentachlorophenol                                              | 80         | 9-103       |
| Phenol                                                         | 27         | 12-110      |
| Surrogate(s)                                                   |            |             |
| 2-Fluorophenol                                                 | 39         | 21-120      |
| Phenol-d6                                                      | 35         | 10-120      |
| Nitrobenzene-d5                                                | 68         | 23-120      |
| 2-Fluorobiphenyl                                               | 69         | 43-120      |
| 2,4,6-Tribromophenol                                           | 81         | 10-120      |
| 4-Terphenyl-d14                                                | 91         | 33-120      |
| PAH by GC/MS SIM 8270M LCS for sample(s) 01-02 (WG244290-2)    |            |             |
| Acenaphthene                                                   | 79         | 46-118      |
| 2-Chloronaphthalene                                            | 76         |             |
| Fluoranthene                                                   | 100        |             |
| Anthracene                                                     | 76         |             |
| Pyrene                                                         | 90         | 26-127      |
| Pentachlorophenol                                              | 64         | 9-103       |
| Surrogate(s)                                                   |            |             |
| 2-Fluorophenol                                                 | 52         | 21-120      |
| Phenol-d6                                                      | 49         | 10-120      |
| Nitrobenzene-d5                                                | 94         | 23-120      |
| 2-Fluorobiphenyl                                               | 79         | 43-120      |
| 2,4,6-Tribromophenol                                           | 70         | 10-120      |
| 4-Terphenyl-d14                                                | 117        | 33-120      |
| Polychlorinated Biphenyls LCS for sample(s) 01-02 (WG244510-2) |            |             |
| Aroclor 1016                                                   | 97         | 40-140      |
| Aroclor 1260                                                   | 112        | 40-140      |
| Surrogate(s)                                                   |            |             |
| 2,4,5,6-Tetrachloro-m-xylene                                   | 80         | 30-150      |
| Decachlorobiphenyl                                             | 61         | 30-150      |

**ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0608869**

**Continued**

| <b>Parameter</b>                                                                          | <b>% Recovery</b> | <b>QC Criteria</b> |
|-------------------------------------------------------------------------------------------|-------------------|--------------------|
| <b>Cyanide, Total SPIKE for sample(s) 01-02 (L0608577-02, WG244243-3)</b>                 |                   |                    |
| Cyanide, Total                                                                            | 66                | 80-120             |
| <b>TPH SPIKE for sample(s) 01-02 (L0608932-01, WG244338-3)</b>                            |                   |                    |
| TPH                                                                                       | 84                | 64-132             |
| <b>Phenolics, Total SPIKE for sample(s) 01-02 (L0608697-01, WG244462-3)</b>               |                   |                    |
| Phenolics, Total                                                                          | 97                |                    |
| <b>Chromium, Hexavalent SPIKE for sample(s) 01-02 (L0608869-02, WG244507-3)</b>           |                   |                    |
| Chromium, Hexavalent                                                                      | 0                 |                    |
| <b>Total Metals SPIKE for sample(s) 01-02 (L0608869-01, WG244357-2)</b>                   |                   |                    |
| Antimony, Total                                                                           | 104               | 80-120             |
| Arsenic, Total                                                                            | 101               | 80-120             |
| Cadmium, Total                                                                            | 105               | 80-120             |
| Chromium, Total                                                                           | 101               | 80-120             |
| Copper, Total                                                                             | 100               | 80-120             |
| Lead, Total                                                                               | 103               | 80-120             |
| Nickel, Total                                                                             | 103               | 80-120             |
| Selenium, Total                                                                           | 97                | 80-120             |
| Silver, Total                                                                             | 96                | 80-120             |
| Zinc, Total                                                                               | 103               | 80-120             |
| <b>Total Metals SPIKE for sample(s) 01-02 (L0608869-01, WG244358-2)</b>                   |                   |                    |
| Iron, Total                                                                               | 0                 |                    |
| <b>Total Metals SPIKE for sample(s) 01-02 (L0608943-01, WG244703-2)</b>                   |                   |                    |
| Mercury, Total                                                                            | 118               |                    |
| <b>Pesticides by GC 504 SPIKE for sample(s) 01-02 (L0608628-02, WG244628-3)</b>           |                   |                    |
| 1,2-Dibromoethane                                                                         | 97                |                    |
| 1,2-Dibromo-3-chloropropane                                                               | 95                |                    |
| <b>Volatile Organics by GC/MS 624 SPIKE for sample(s) 01-02 (L0608869-01, WG244948-1)</b> |                   |                    |
| Methylene chloride                                                                        | 94                | 10-221             |
| 1,1-Dichloroethane                                                                        | 94                | 59-155             |
| Chloroform                                                                                | 85                | 51-138             |
| Carbon tetrachloride                                                                      | 85                | 70-140             |
| 1,2-Dichloropropane                                                                       | 87                | 10-210             |
| Dibromochloromethane                                                                      | 81                | 53-149             |
| 1,1,2-Trichloroethane                                                                     | 92                | 52-150             |
| 2-Chloroethylvinyl ether                                                                  | 100               | 10-305             |
| Tetrachloroethene                                                                         | 85                | 64-148             |
| Chlorobenzene                                                                             | 83                | 37-160             |
| Trichlorofluoromethane                                                                    | 99                | 17-181             |
| 1,2-Dichloroethane                                                                        | 94                | 49-155             |
| 1,1,1-Trichloroethane                                                                     | 85                | 52-162             |
| Bromodichloromethane                                                                      | 84                | 35-155             |

**ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE BATCH SPIKE ANALYSES**

**Laboratory Job Number: L0608869**

**Continued**

| <b>Parameter</b>                                                                          | <b>% Recovery</b> | <b>QC Criteria</b> |
|-------------------------------------------------------------------------------------------|-------------------|--------------------|
| <b>Volatile Organics by GC/MS 624 SPIKE for sample(s) 01-02 (L0608869-01, WG244948-1)</b> |                   |                    |
| trans-1,3-Dichloropropene                                                                 | 82                | 17-183             |
| cis-1,3-Dichloropropene                                                                   | 82                | 10-227             |
| Bromoform                                                                                 | 80                | 45-169             |
| 1,1,2,2-Tetrachloroethane                                                                 | 93                | 46-157             |
| Benzene                                                                                   | 84                | 35-151             |
| Toluene                                                                                   | 88                | 47-150             |
| Ethylbenzene                                                                              | 86                | 37-162             |
| Chloromethane                                                                             | 118               | 10-273             |
| Bromomethane                                                                              | 81                | 10-242             |
| Vinyl chloride                                                                            | 122               | 10-251             |
| Chloroethane                                                                              | 98                | 14-230             |
| 1,1-Dichloroethene                                                                        | 92                | 10-234             |
| trans-1,2-Dichloroethene                                                                  | 90                | 54-156             |
| cis-1,2-Dichloroethene                                                                    | 89                | 60-140             |
| Trichloroethene                                                                           | 83                | 71-157             |
| 1,2-Dichlorobenzene                                                                       | 85                | 18-190             |
| 1,3-Dichlorobenzene                                                                       | 84                | 59-156             |
| 1,4-Dichlorobenzene                                                                       | 84                | 18-190             |
| p/m-Xylene                                                                                | 86                | 40-160             |
| o-Xylene                                                                                  | 86                | 40-160             |
| XYLENE (TOTAL)                                                                            | 86                | 40-160             |
| Styrene                                                                                   | 77                | 40-160             |
| Acetone                                                                                   | 116               | 40-160             |
| Carbon disulfide                                                                          | 86                | 40-160             |
| 2-Butanone                                                                                | 106               | 40-160             |
| Vinyl acetate                                                                             | 57                | 40-160             |
| 4-Methyl-2-pentanone                                                                      | 107               | 40-160             |
| 2-Hexanone                                                                                | 109               | 40-160             |
| Acrolein                                                                                  | 153               | 40-160             |
| Acrylonitrile                                                                             | 112               | 40-160             |
| Surrogate(s)                                                                              |                   |                    |
| Pentafluorobenzene                                                                        | 89                | 80-120             |
| Fluorobenzene                                                                             | 92                | 80-120             |
| 4-Bromofluorobenzene                                                                      | 95                | 80-120             |
| <b>Polychlorinated Biphenyls SPIKE for sample(s) 01-02 (L0608869-01, WG244510-3)</b>      |                   |                    |
| Aroclor 1016                                                                              | 43                | 40-140             |
| Aroclor 1260                                                                              | 38                | 40-140             |
| Surrogate(s)                                                                              |                   |                    |
| 2,4,5,6-Tetrachloro-m-xylene                                                              | 39                | 30-150             |
| Decachlorobiphenyl                                                                        | 23                | 30-150             |

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH MS/MSD ANALYSIS**

**Laboratory Job Number: L0608869**

| Parameter                                                            | MS % | MSD % | RPD | RPD Limit | MS/MSD Limits |
|----------------------------------------------------------------------|------|-------|-----|-----------|---------------|
| SVOC's by GC/MS 8270 for sample(s) 01-02 (L0608842-09, WG244291-4)   |      |       |     |           |               |
| Acenaphthene                                                         | 85   | 76    | 11  | 30        | 46-118        |
| 1,2,4-Trichlorobenzene                                               | 76   | 67    | 13  | 30        | 39-98         |
| 2-Chloronaphthalene                                                  | 85   | 76    | 11  | 30        | 40-140        |
| 1,2-Dichlorobenzene                                                  | 62   | 62    | 0   | 30        | 40-140        |
| 1,4-Dichlorobenzene                                                  | 62   | 58    | 7   | 30        | 36-97         |
| 2,4-Dinitrotoluene                                                   | 100  | 93    | 7   | 30        | 24-96         |
| 2,6-Dinitrotoluene                                                   | 110  | 100   | 10  | 30        | 40-140        |
| Fluoranthene                                                         | 93   | 89    | 4   | 30        | 40-140        |
| 4-Chlorophenyl phenyl ether                                          | 89   | 85    | 5   | 30        | 40-140        |
| n-Nitrosodi-n-propylamine                                            | 62   | 53    | 16  | 30        | 41-116        |
| Butyl benzyl phthalate                                               | 110  | 110   | 0   | 30        | 40-140        |
| Anthracene                                                           | 80   | 76    | 5   | 30        | 40-140        |
| Pyrene                                                               | 89   | 85    | 5   | 30        | 26-127        |
| Hexachloropropene                                                    | 80   | 71    | 12  | 30        | 40-140        |
| p-Chloro-M-Cresol                                                    | 87   | 85    | 2   | 30        | 23-97         |
| 2-Chlorophenol                                                       | 62   | 58    | 7   | 30        | 27-123        |
| 2-Nitrophenol                                                        | 69   | 65    | 6   | 30        | 30-130        |
| 4-Nitrophenol                                                        | 82   | 76    | 8   | 30        | 10-80         |
| 2,4-Dinitrophenol                                                    | 93   | 91    | 2   | 30        | 30-130        |
| Pentachlorophenol                                                    | 100  | 93    | 7   | 30        | 9-103         |
| Phenol                                                               | 47   | 42    | 11  | 30        | 12-110        |
| Surrogate(s)                                                         |      |       |     |           |               |
| 2-Fluorophenol                                                       | 55   | 52    | 6   |           | 21-120        |
| Phenol-d6                                                            | 61   | 56    | 9   |           | 10-120        |
| Nitrobenzene-d5                                                      | 75   | 69    | 8   |           | 23-120        |
| 2-Fluorobiphenyl                                                     | 82   | 73    | 12  |           | 43-120        |
| 2,4,6-Tribromophenol                                                 | 92   | 84    | 9   |           | 10-120        |
| 4-Terphenyl-d14                                                      | 96   | 88    | 9   |           | 33-120        |
| PAH by GC/MS SIM 8270M for sample(s) 01-02 (L0608842-09, WG244290-4) |      |       |     |           |               |
| Acenaphthene                                                         | 85   | 80    | 6   | 40        | 46-118        |
| 2-Chloronaphthalene                                                  | 80   | 71    | 12  | 40        |               |
| Fluoranthene                                                         | 93   | 93    | 0   | 40        |               |
| Anthracene                                                           | 85   | 85    | 0   | 40        |               |
| Pyrene                                                               | 85   | 80    | 6   | 40        | 26-127        |
| Pentachlorophenol                                                    | 91   | 82    | 10  | 40        | 9-103         |
| Surrogate(s)                                                         |      |       |     |           |               |
| 2-Fluorophenol                                                       | 71   | 66    | 7   |           | 21-120        |
| Phenol-d6                                                            | 82   | 74    | 10  |           | 10-120        |
| Nitrobenzene-d5                                                      | 101  | 92    | 9   |           | 23-120        |
| 2-Fluorobiphenyl                                                     | 86   | 79    | 8   |           | 43-120        |
| 2,4,6-Tribromophenol                                                 | 66   | 63    | 5   |           | 10-120        |
| 4-Terphenyl-d14                                                      | 108  | 104   | 4   |           | 33-120        |



**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

**Laboratory Job Number: L0608869**

| PARAMETER                                       | RESULT | UNITS | RDL    | REF METHOD  | DATE<br>PREP ANAL     | ID |
|-------------------------------------------------|--------|-------|--------|-------------|-----------------------|----|
| Blank Analysis for sample(s) 01-02 (WG244387-1) |        |       |        |             |                       |    |
| Solids, Total Suspended                         | ND     | mg/l  | 5.0    | 4 160.2     | 0627 14:45            | ST |
| Blank Analysis for sample(s) 01-02 (WG244243-1) |        |       |        |             |                       |    |
| Cyanide, Total                                  | ND     | mg/l  | 0.005  | 4 335.2     | 0626 09:50 0626 18:38 | DD |
| Blank Analysis for sample(s) 01-02 (WG244154-1) |        |       |        |             |                       |    |
| Chlorine, Total Residual                        | ND     | mg/l  | 0.05   | 4 330.1     | 0623 17:27            | DP |
| Blank Analysis for sample(s) 01-02 (WG244338-1) |        |       |        |             |                       |    |
| TPH                                             | ND     | mg/l  | 4.00   | 74 1664A    | 0626 15:30 0627 10:30 | AT |
| Blank Analysis for sample(s) 01-02 (WG244462-1) |        |       |        |             |                       |    |
| Phenolics, Total                                | ND     | mg/l  | 0.03   | 4 420.1     | 0627 11:15            | AT |
| Blank Analysis for sample(s) 01-02 (WG244507-1) |        |       |        |             |                       |    |
| Chromium, Hexavalent                            | ND     | mg/l  | 0.02   | 30 3500CR-D | 0623 19:00 0623 19:00 | AI |
| Blank Analysis for sample(s) 01-02 (WG244357-3) |        |       |        |             |                       |    |
| Total Metals                                    |        |       |        |             |                       |    |
| Antimony, Total                                 | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Arsenic, Total                                  | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Cadmium, Total                                  | ND     | mg/l  | 0.0002 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Chromium, Total                                 | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Copper, Total                                   | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Lead, Total                                     | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Nickel, Total                                   | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Selenium, Total                                 | ND     | mg/l  | 0.001  | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Silver, Total                                   | ND     | mg/l  | 0.0005 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Zinc, Total                                     | ND     | mg/l  | 0.0050 | 1 6020      | 0626 20:00 0627 22:26 | BM |
| Blank Analysis for sample(s) 01-02 (WG244358-3) |        |       |        |             |                       |    |
| Total Metals                                    |        |       |        |             |                       |    |
|                                                 |        |       |        | 19 200.7    |                       |    |
| Iron, Total                                     | ND     | mg/l  | 0.05   | 19 200.7    | 0626 20:00 0627 17:28 | CF |

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| PARAMETER                                       | RESULT | UNITS | RDL    | REF METHOD | DATE<br>PREP ANAL     | ID |
|-------------------------------------------------|--------|-------|--------|------------|-----------------------|----|
| Blank Analysis for sample(s) 01-02 (WG244703-4) |        |       |        |            |                       |    |
| Total Metals                                    |        |       |        |            |                       |    |
| Mercury, Total                                  | ND     | mg/l  | 0.0002 | 4 245.2    | 0628 22:45 0629 16:41 | HG |
| Blank Analysis for sample(s) 01-02 (WG244628-1) |        |       |        |            |                       |    |
| Pesticides by GC 504                            |        |       |        |            |                       |    |
|                                                 |        |       |        | 14 504.1   | 0628 09:30 0628 10:58 | SS |
| 1,2-Dibromoethane                               | ND     | ug/l  | 0.020  |            |                       |    |
| 1,2-Dibromo-3-chloropropane                     | ND     | ug/l  | 0.020  |            |                       |    |
| Blank Analysis for sample(s) 01-02 (WG244948-4) |        |       |        |            |                       |    |
| Volatile Organics by GC/MS 624                  |        |       |        |            |                       |    |
|                                                 |        |       |        | 5 624      | 0629 08:24            | MM |
| Methylene chloride                              | ND     | ug/l  | 5.0    |            |                       |    |
| 1,1-Dichloroethane                              | ND     | ug/l  | 1.5    |            |                       |    |
| Chloroform                                      | ND     | ug/l  | 1.5    |            |                       |    |
| Carbon tetrachloride                            | ND     | ug/l  | 1.0    |            |                       |    |
| 1,2-Dichloropropane                             | ND     | ug/l  | 3.5    |            |                       |    |
| Dibromochloromethane                            | ND     | ug/l  | 1.0    |            |                       |    |
| 1,1,2-Trichloroethane                           | ND     | ug/l  | 1.5    |            |                       |    |
| 2-Chloroethylvinyl ether                        | ND     | ug/l  | 10.    |            |                       |    |
| Tetrachloroethene                               | ND     | ug/l  | 1.5    |            |                       |    |
| Chlorobenzene                                   | ND     | ug/l  | 3.5    |            |                       |    |
| Trichlorofluoromethane                          | ND     | ug/l  | 5.0    |            |                       |    |
| 1,2-Dichloroethane                              | ND     | ug/l  | 1.5    |            |                       |    |
| 1,1,1-Trichloroethane                           | ND     | ug/l  | 2.0    |            |                       |    |
| Bromodichloromethane                            | ND     | ug/l  | 1.0    |            |                       |    |
| trans-1,3-Dichloropropene                       | ND     | ug/l  | 1.5    |            |                       |    |
| cis-1,3-Dichloropropene                         | ND     | ug/l  | 1.5    |            |                       |    |
| Bromoform                                       | ND     | ug/l  | 1.0    |            |                       |    |
| 1,1,2,2-Tetrachloroethane                       | ND     | ug/l  | 1.0    |            |                       |    |
| Benzene                                         | ND     | ug/l  | 1.0    |            |                       |    |
| Toluene                                         | ND     | ug/l  | 1.0    |            |                       |    |
| Ethylbenzene                                    | ND     | ug/l  | 1.0    |            |                       |    |
| Chloromethane                                   | ND     | ug/l  | 10.    |            |                       |    |
| Bromomethane                                    | ND     | ug/l  | 5.0    |            |                       |    |
| Vinyl chloride                                  | ND     | ug/l  | 2.0    |            |                       |    |
| Chloroethane                                    | ND     | ug/l  | 2.0    |            |                       |    |
| 1,1-Dichloroethene                              | ND     | ug/l  | 1.0    |            |                       |    |
| trans-1,2-Dichloroethene                        | ND     | ug/l  | 1.5    |            |                       |    |
| cis-1,2-Dichloroethene                          | ND     | ug/l  | 1.0    |            |                       |    |
| Trichloroethene                                 | ND     | ug/l  | 1.0    |            |                       |    |
| 1,2-Dichlorobenzene                             | ND     | ug/l  | 5.0    |            |                       |    |
| 1,3-Dichlorobenzene                             | ND     | ug/l  | 5.0    |            |                       |    |
| 1,4-Dichlorobenzene                             | ND     | ug/l  | 5.0    |            |                       |    |
| p/m-Xylene                                      | ND     | ug/l  | 2.0    |            |                       |    |
| o-xylene                                        | ND     | ug/l  | 1.0    |            |                       |    |
| Xylene (Total)                                  | ND     | ug/l  | 2.0    |            |                       |    |
| Styrene                                         | ND     | ug/l  | 1.0    |            |                       |    |

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| PARAMETER                                       | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP ANAL        | ID |
|-------------------------------------------------|----------|-------|-------------|------------|--------------------------|----|
| Blank Analysis for sample(s) 01-02 (WG244948-4) |          |       |             |            |                          |    |
| Volatile Organics by GC/MS 624 cont'd           |          |       |             | 5 624      | 0629 08:24 MM            |    |
| Acetone                                         | ND       | ug/l  | 10.         |            |                          |    |
| Carbon disulfide                                | ND       | ug/l  | 5.0         |            |                          |    |
| 2-Butanone                                      | ND       | ug/l  | 10.         |            |                          |    |
| Vinyl acetate                                   | ND       | ug/l  | 20.         |            |                          |    |
| 4-Methyl-2-pentanone                            | ND       | ug/l  | 10.         |            |                          |    |
| 2-Hexanone                                      | ND       | ug/l  | 10.         |            |                          |    |
| Acrolein                                        | ND       | ug/l  | 8.0         |            |                          |    |
| Acrylonitrile                                   | ND       | ug/l  | 10.         |            |                          |    |
| Methyl tert butyl ether                         | ND       | ug/l  | 20.         |            |                          |    |
| 1,4-Dioxane                                     | ND       | ug/l  | 2000        |            |                          |    |
| Tert-Butyl Alcohol                              | ND       | ug/l  | 100         |            |                          |    |
| Tertiary-Amyl Methyl Ether                      | ND       | ug/l  | 20.         |            |                          |    |
| Surrogate(s)                                    | Recovery |       | QC Criteria |            |                          |    |
| Pentafluorobenzene                              | 100      | %     | 80-120      |            |                          |    |
| Fluorobenzene                                   | 102      | %     | 80-120      |            |                          |    |
| 4-Bromofluorobenzene                            | 98.0     | %     | 80-120      |            |                          |    |
| Blank Analysis for sample(s) 01-02 (WG244291-1) |          |       |             |            |                          |    |
| SVOC's by GC/MS 8270                            |          |       |             | 1 8270C    | 0626 13:15 0628 11:51 RL |    |
| Acenaphthene                                    | ND       | ug/l  | 5.0         |            |                          |    |
| Benzidine                                       | ND       | ug/l  | 50.         |            |                          |    |
| 1,2,4-Trichlorobenzene                          | ND       | ug/l  | 5.0         |            |                          |    |
| Hexachlorobenzene                               | ND       | ug/l  | 5.0         |            |                          |    |
| Bis(2-chloroethyl)ether                         | ND       | ug/l  | 5.0         |            |                          |    |
| 1-Chloronaphthalene                             | ND       | ug/l  | 5.0         |            |                          |    |
| 2-Chloronaphthalene                             | ND       | ug/l  | 6.0         |            |                          |    |
| 1,2-Dichlorobenzene                             | ND       | ug/l  | 5.0         |            |                          |    |
| 1,3-Dichlorobenzene                             | ND       | ug/l  | 5.0         |            |                          |    |
| 1,4-Dichlorobenzene                             | ND       | ug/l  | 5.0         |            |                          |    |
| 3,3'-Dichlorobenzidine                          | ND       | ug/l  | 50.         |            |                          |    |
| 2,4-Dinitrotoluene                              | ND       | ug/l  | 6.0         |            |                          |    |
| 2,6-Dinitrotoluene                              | ND       | ug/l  | 5.0         |            |                          |    |
| Azobenzene                                      | ND       | ug/l  | 5.0         |            |                          |    |
| Fluoranthene                                    | ND       | ug/l  | 5.0         |            |                          |    |
| 4-Chlorophenyl phenyl ether                     | ND       | ug/l  | 5.0         |            |                          |    |
| 4-Bromophenyl phenyl ether                      | ND       | ug/l  | 5.0         |            |                          |    |
| Bis(2-chloroisopropyl)ether                     | ND       | ug/l  | 5.0         |            |                          |    |
| Bis(2-chloroethoxy)methane                      | ND       | ug/l  | 5.0         |            |                          |    |
| Hexachlorobutadiene                             | ND       | ug/l  | 10.         |            |                          |    |
| Hexachlorocyclopentadiene                       | ND       | ug/l  | 10.         |            |                          |    |
| Hexachloroethane                                | ND       | ug/l  | 5.0         |            |                          |    |
| Isophorone                                      | ND       | ug/l  | 5.0         |            |                          |    |
| Naphthalene                                     | ND       | ug/l  | 5.0         |            |                          |    |
| Nitrobenzene                                    | ND       | ug/l  | 5.0         |            |                          |    |
| NDPA/DPA                                        | ND       | ug/l  | 15.         |            |                          |    |

**ALPHA ANALYTICAL LABORATORIES**  
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| PARAMETER                                       | RESULT | UNITS | RDL | REF METHOD | DATE       |            | ID |
|-------------------------------------------------|--------|-------|-----|------------|------------|------------|----|
|                                                 |        |       |     |            | PREP       | ANAL       |    |
| Blank Analysis for sample(s) 01-02 (WG244291-1) |        |       |     |            |            |            |    |
| SVOC's by GC/MS 8270 cont'd                     |        |       |     | 1 8270C    | 0626 13:15 | 0628 11:51 | RL |
| n-Nitrosodi-n-propylamine                       | ND     | ug/l  | 5.0 |            |            |            |    |
| Bis(2-ethylhexyl)phthalate                      | ND     | ug/l  | 10. |            |            |            |    |
| Butyl benzyl phthalate                          | ND     | ug/l  | 5.0 |            |            |            |    |
| Di-n-butylphthalate                             | ND     | ug/l  | 5.0 |            |            |            |    |
| Di-n-octylphthalate                             | ND     | ug/l  | 5.0 |            |            |            |    |
| Diethyl phthalate                               | ND     | ug/l  | 5.0 |            |            |            |    |
| Dimethyl phthalate                              | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(a)anthracene                              | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(a)pyrene                                  | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(b)fluoranthene                            | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(k)fluoranthene                            | ND     | ug/l  | 5.0 |            |            |            |    |
| Chrysene                                        | ND     | ug/l  | 5.0 |            |            |            |    |
| Acenaphthylene                                  | ND     | ug/l  | 5.0 |            |            |            |    |
| Anthracene                                      | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(ghi)perylene                              | ND     | ug/l  | 5.0 |            |            |            |    |
| Fluorene                                        | ND     | ug/l  | 5.0 |            |            |            |    |
| Phenanthrene                                    | ND     | ug/l  | 5.0 |            |            |            |    |
| Dibenzo(a,h)anthracene                          | ND     | ug/l  | 5.0 |            |            |            |    |
| Indeno(1,2,3-cd)pyrene                          | ND     | ug/l  | 7.0 |            |            |            |    |
| Pyrene                                          | ND     | ug/l  | 5.0 |            |            |            |    |
| Benzo(e)pyrene                                  | ND     | ug/l  | 5.0 |            |            |            |    |
| Biphenyl                                        | ND     | ug/l  | 5.0 |            |            |            |    |
| Perylene                                        | ND     | ug/l  | 5.0 |            |            |            |    |
| Aniline                                         | ND     | ug/l  | 10. |            |            |            |    |
| 4-Chloroaniline                                 | ND     | ug/l  | 5.0 |            |            |            |    |
| 1-Methylnaphthalene                             | ND     | ug/l  | 5.0 |            |            |            |    |
| 2-Nitroaniline                                  | ND     | ug/l  | 5.0 |            |            |            |    |
| 3-Nitroaniline                                  | ND     | ug/l  | 5.0 |            |            |            |    |
| 4-Nitroaniline                                  | ND     | ug/l  | 7.0 |            |            |            |    |
| Dibenzofuran                                    | ND     | ug/l  | 5.0 |            |            |            |    |
| a,a-Dimethylphenethylamine                      | ND     | ug/l  | 50. |            |            |            |    |
| Hexachloropropene                               | ND     | ug/l  | 10. |            |            |            |    |
| Nitrosodi-n-butylamine                          | ND     | ug/l  | 10. |            |            |            |    |
| 2-Methylnaphthalene                             | ND     | ug/l  | 5.0 |            |            |            |    |
| 1,2,4,5-Tetrachlorobenzene                      | ND     | ug/l  | 20. |            |            |            |    |
| Pentachlorobenzene                              | ND     | ug/l  | 20. |            |            |            |    |
| a-Naphthylamine                                 | ND     | ug/l  | 20. |            |            |            |    |
| b-Naphthylamine                                 | ND     | ug/l  | 20. |            |            |            |    |
| Phenacetin                                      | ND     | ug/l  | 10. |            |            |            |    |
| Dimethoate                                      | ND     | ug/l  | 20. |            |            |            |    |
| 4-Aminobiphenyl                                 | ND     | ug/l  | 10. |            |            |            |    |
| Pentachloronitrobenzene                         | ND     | ug/l  | 10. |            |            |            |    |
| Isodrin                                         | ND     | ug/l  | 10. |            |            |            |    |
| p-Dimethylaminoazobenzene                       | ND     | ug/l  | 10. |            |            |            |    |
| Chlorobenzilate                                 | ND     | ug/l  | 20. |            |            |            |    |
| 3-Methylcholanthrene                            | ND     | ug/l  | 20. |            |            |            |    |

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| PARAMETER                                       | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP | DATE<br>ANAL | ID |
|-------------------------------------------------|----------|-------|-------------|------------|--------------|--------------|----|
| Blank Analysis for sample(s) 01-02 (WG244291-1) |          |       |             |            |              |              |    |
| SVOC's by GC/MS 8270 cont'd                     |          |       |             | 1 8270C    | 0626 13:15   | 0628 11:51   | RL |
| Ethyl Methanesulfonate                          | ND       | ug/l  | 15.         |            |              |              |    |
| Acetophenone                                    | ND       | ug/l  | 20.         |            |              |              |    |
| Nitrosodipiperidine                             | ND       | ug/l  | 20.         |            |              |              |    |
| 7,12-Dimethylbenz(a)anthracene                  | ND       | ug/l  | 10.         |            |              |              |    |
| n-Nitrosodimethylamine                          | ND       | ug/l  | 50.         |            |              |              |    |
| 2,4,6-Trichlorophenol                           | ND       | ug/l  | 5.0         |            |              |              |    |
| p-Chloro-m-cresol                               | ND       | ug/l  | 5.0         |            |              |              |    |
| 2-Chlorophenol                                  | ND       | ug/l  | 6.0         |            |              |              |    |
| 2,4-Dichlorophenol                              | ND       | ug/l  | 10.         |            |              |              |    |
| 2,4-Dimethylphenol                              | ND       | ug/l  | 10.         |            |              |              |    |
| 2-Nitrophenol                                   | ND       | ug/l  | 20.         |            |              |              |    |
| 4-Nitrophenol                                   | ND       | ug/l  | 10.         |            |              |              |    |
| 2,4-Dinitrophenol                               | ND       | ug/l  | 20.         |            |              |              |    |
| 4,6-Dinitro-o-cresol                            | ND       | ug/l  | 20.         |            |              |              |    |
| Pentachlorophenol                               | ND       | ug/l  | 20.         |            |              |              |    |
| Phenol                                          | ND       | ug/l  | 7.0         |            |              |              |    |
| 2-Methylphenol                                  | ND       | ug/l  | 6.0         |            |              |              |    |
| 3-Methylphenol/4-Methylphenol                   | ND       | ug/l  | 6.0         |            |              |              |    |
| 2,4,5-Trichlorophenol                           | ND       | ug/l  | 5.0         |            |              |              |    |
| 2,6-Dichlorophenol                              | ND       | ug/l  | 10.         |            |              |              |    |
| Benzoic Acid                                    | ND       | ug/l  | 50.         |            |              |              |    |
| Benzyl Alcohol                                  | ND       | ug/l  | 10.         |            |              |              |    |
| Carbazole                                       | ND       | ug/l  | 5.0         |            |              |              |    |
| Pyridine                                        | ND       | ug/l  | 50.         |            |              |              |    |
| 2-Picoline                                      | ND       | ug/l  | 20.         |            |              |              |    |
| Pronamide                                       | ND       | ug/l  | 20.         |            |              |              |    |
| Methyl methanesulfonate                         | ND       | ug/l  | 20.         |            |              |              |    |
| Surrogate(s)                                    | Recovery |       | QC Criteria |            |              |              |    |
| 2-Fluorophenol                                  | 39.0     | %     | 21-120      |            |              |              |    |
| Phenol-d6                                       | 35.0     | %     | 10-120      |            |              |              |    |
| Nitrobenzene-d5                                 | 72.0     | %     | 23-120      |            |              |              |    |
| 2-Fluorobiphenyl                                | 67.0     | %     | 43-120      |            |              |              |    |
| 2,4,6-Tribromophenol                            | 72.0     | %     | 10-120      |            |              |              |    |
| 4-Terphenyl-d14                                 | 89.0     | %     | 33-120      |            |              |              |    |
| Blank Analysis for sample(s) 01-02 (WG244290-1) |          |       |             |            |              |              |    |
| PAH by GC/MS SIM 8270M                          |          |       |             | 1 8270C-M  | 0626 13:15   | 0628 23:49   | RL |
| Acenaphthene                                    | ND       | ug/l  | 0.20        |            |              |              |    |
| 2-Chloronaphthalene                             | ND       | ug/l  | 0.20        |            |              |              |    |
| Fluoranthene                                    | ND       | ug/l  | 0.20        |            |              |              |    |
| Hexachlorobutadiene                             | ND       | ug/l  | 0.50        |            |              |              |    |
| Naphthalene                                     | ND       | ug/l  | 0.20        |            |              |              |    |
| Benzo(a)anthracene                              | ND       | ug/l  | 0.20        |            |              |              |    |
| Benzo(a)pyrene                                  | ND       | ug/l  | 0.20        |            |              |              |    |
| Benzo(b)fluoranthene                            | ND       | ug/l  | 0.20        |            |              |              |    |

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| PARAMETER                                       | RESULT   | UNITS | RDL         | REF METHOD | DATE<br>PREP | DATE<br>ANAL | ID |
|-------------------------------------------------|----------|-------|-------------|------------|--------------|--------------|----|
| Blank Analysis for sample(s) 01-02 (WG244290-1) |          |       |             |            |              |              |    |
| PAH by GC/MS SIM 8270M cont'd                   |          |       |             | 1 8270C-M  | 0626 13:15   | 0628 23:49   | RL |
| Benzo(k)fluoranthene                            | ND       | ug/l  | 0.20        |            |              |              |    |
| Chrysene                                        | ND       | ug/l  | 0.20        |            |              |              |    |
| Acenaphthylene                                  | ND       | ug/l  | 0.20        |            |              |              |    |
| Anthracene                                      | ND       | ug/l  | 0.20        |            |              |              |    |
| Benzo(ghi)perylene                              | ND       | ug/l  | 0.20        |            |              |              |    |
| Fluorene                                        | ND       | ug/l  | 0.20        |            |              |              |    |
| Phenanthrene                                    | ND       | ug/l  | 0.20        |            |              |              |    |
| Dibenzo(a,h)anthracene                          | ND       | ug/l  | 0.20        |            |              |              |    |
| Indeno(1,2,3-cd)Pyrene                          | ND       | ug/l  | 0.20        |            |              |              |    |
| Pyrene                                          | ND       | ug/l  | 0.20        |            |              |              |    |
| 1-Methylnaphthalene                             | ND       | ug/l  | 0.20        |            |              |              |    |
| 2-Methylnaphthalene                             | ND       | ug/l  | 0.20        |            |              |              |    |
| Pentachlorophenol                               | ND       | ug/l  | 0.80        |            |              |              |    |
| Hexachlorobenzene                               | ND       | ug/l  | 0.80        |            |              |              |    |
| Perylene                                        | ND       | ug/l  | 0.20        |            |              |              |    |
| Biphenyl                                        | ND       | ug/l  | 0.20        |            |              |              |    |
| 2,6-Dimethylnaphthalene                         | ND       | ug/l  | 0.20        |            |              |              |    |
| 1-Methylphenanthrene                            | ND       | ug/l  | 0.20        |            |              |              |    |
| Benzo(e)Pyrene                                  | ND       | ug/l  | 0.20        |            |              |              |    |
| Hexachloroethane                                | ND       | ug/l  | 0.80        |            |              |              |    |
| Surrogate(s)                                    | Recovery |       | QC Criteria |            |              |              |    |
| 2-Fluorophenol                                  | 44.0     | %     | 21-120      |            |              |              |    |
| Phenol-d6                                       | 39.0     | %     | 10-120      |            |              |              |    |
| Nitrobenzene-d5                                 | 85.0     | %     | 23-120      |            |              |              |    |
| 2-Fluorobiphenyl                                | 70.0     | %     | 43-120      |            |              |              |    |
| 2,4,6-Tribromophenol                            | 65.0     | %     | 10-120      |            |              |              |    |
| 4-Terphenyl-d14                                 | 119      | %     | 33-120      |            |              |              |    |
| Blank Analysis for sample(s) 01-02 (WG244510-1) |          |       |             |            |              |              |    |
| Polychlorinated Biphenyls                       |          |       |             | 5 608      | 0627 19:30   | 0629 20:02   | JB |
| Aroclor 1016                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1221                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1232                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1242                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1248                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1254                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Aroclor 1260                                    | ND       | ug/l  | 0.250       |            |              |              |    |
| Surrogate(s)                                    | Recovery |       | QC Criteria |            |              |              |    |
| 2,4,5,6-Tetrachloro-m-xylene                    | 84.0     | %     | 30-150      |            |              |              |    |
| Decachlorobiphenyl                              | 22.0     | %     | 30-150      |            |              |              |    |

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**REFERENCES**

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**REFERENCES**

**GLOSSARY OF TERMS AND SYMBOLS**

REF       Reference number in which test method may be found.  
METHOD   Method number by which analysis was performed.  
ID        Initials of the analyst.  
ND        Not detected in comparison to the reported detection limit.  
NI        Not Ignitable.  
ug/cart   Micrograms per Cartridge.

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